

**PROCEEDINGS THE FOURTH INTERNATIONAL CONFERENCE ON
SUSTAINABLE ECONOMIC DEVELOPMENT
AND BUSINESS MANAGEMENT
IN THE CONTEXT OF GLOBALISATION**

(SEDBM-4)

ACADEMY OF FINANCE

HO CHI MINH NATIONAL ACADEMY OF POLITICS

UNIVERSITY OF GREENWICH

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Welcome Notes

Dear Friends and Colleagues,

We are pleased to welcome you to the **International Conference: “Sustainable economic development and business management in the context of globalisation” (SEDBM 4)**, which is jointly organized by *Academy of Finance (Vietnam)*, *Institute of Economics - Ho Chi Minh National Academy of Politics* and *University of Greenwich (United Kingdom)*.

As a result of Academy of Finance, Institute of Economics - Ho Chi Minh National Academy of Politics and University of Greenwich’s close collaboration with international partners, the International Conference SEDBM 4 brings together the world- leading experts in finance, accounting, audit, economic and business administration, serving as a point of convergence for researchers, practitioners and policy-makers to meet, share and exchange their ideas. The International Conference SEDBM 4 will strive to offer not only plenty of networking opportunities, providing you with the opportunity to interact with the leading researchers from both academia and universities, but also an environment to engage in stimulating discussions about research topics and practices. We are especially honoured to have:

Dr. John Bruce Wells - *Deloitte’s Chief of Party for the USAgency for International Development (USAID) Vietnam Low Emission Energy Program II (V-LEEP II)*

Prof. Dr. Su Dinh Thanh - *Principal of University of Economics Ho Chi Minh City.*

We are indebted to members of the Organizing Committee particularly, **Professor. Nguyen Trong Co** (*President of Academy of Finance, Vietnam*), for their support to make this International Conference a great success.

We wish you all an intellectually stimulating and productive conference!

On behalf of the Organizing Committee,

National Teacher. Assoc. Prof. Nguyen Trong Co

ACADEMY OF FINANCE



The Academy of Finance (AOF) is a public and research-oriented university, subordinated to the Ministry of Finance, Vietnam. The AOF was officially established under Decision No 120/2001/ QD-TTg dated August 17th, 2001 of the Prime Minister by integrating the Hanoi University of Finance and Accounting (founded in 1963), the Finance Research Institution (founded in 1961) and the Financial Training Center (founded in 1995). The main site of the Academy of Finance is located in Hanoi.

The mission of Academy of Finance is to provide expertise in research and training of professional finance and accounting to the society, the mission has been defined for our 55-year history with outstanding achievements and contributions branded by our lecturers, researchers and students. The AOF established self-evaluation council since 2006 according to regulations of MOET Vietnam. This council significantly helped improve the academic performance, and in April 2016, AOF was accredited by Center for Education Accreditation (CEA) – Association of Vietnam Universities and Colleges (AVUC). The accreditation result was published according to the Decision 10/QD-KDCLGD dated February 20th, 2017 of AVUC ranking AOF in top 5 best universities in Vietnam. The Academy of Finance offer a high quality of training and research through 14 faculties: Fundamental Sciences, Political theories, Public Finance, Tax and Customs, Corporate Finance, Banking and Insurance, International Finance, Accounting, Business administration, economic Information. Languages, Economics, Master and Doctoral training, Part-time training, two centers: Center for Languages and Informatics Training, Information Technology Center, 2 research institutes: Institute for International Finance Education (IIFE) and Institute of Economics and Finance and 13 support divisions.

AOF offers a rich training programs included ordinary undergraduate/graduate programs spread in 06 academic majors: Finance and Banking, Accounting and Auditing, Business Administration, Management Information, Economic and Financial English, Economics. The AOF also offer to international and

Vietnamese students with different choices partially/totally taught in English such as High Advanced Program or Dual Degree Programme (DDP - a Joint Training Programme between the Academy of Finance (Institute of International Finance Education) and the University of Greenwich (UK). Throughout its history, AOF's qualified scientists and lecturers have been supporting more than 85,000 students including 5,000 masters and 300 doctors and additionally 500 international students for Laos and Cambodia in the last 55 years. Significantly, a large number of AOF's graduates are leaders of the Government, ministries, local authorities and businesses. The academy has also been recognized for conducting thousands of valuable research projects for the policy makers in economic development of the State. The rich tradition and custom makes AOF unique among the other universities and colleges in Vietnam and attracts thousands of learners to study at the academy annually.

The valuable contributions of AOF to the development of the State in training and doing research has been respected publicly, the academy has been recognized with national unique awards. Many AOF alumni are key people in the Government and Local Administrations. In the process of globalization and the advent of the Industry 4.0, the AOF Management Board sets out following major development directions:

- Intensively develop training and research performance, maximize the core values to adapt to the emerging demands of the intellectual economy and the Industry 4.0.
- Diversify training courses, renovate academic management measures, improve the professional capacity, and improve self-study spirit with creativity and experience.
- Improve the research capacity in the manner that harmonizes fundamental studies with applied studies. Actively and comprehensively integrate into regionalization and globalization process regarding training, capacity building and research activities.
- Conduct academic management reform in close relation with financial autonomy and social accountability, create a new academic environment with high openness, creativity and internationalism, continuously attract excellent staffs and scholars to work and do research at AOF.

UNIVERSITY OF GREENWICH



The University of Greenwich is a public and research-oriented university located in London, in the United Kingdom. It has three campuses in London and Kent, England. These are located at Greenwich, in the grounds of the Old Royal Naval College, and in Avery Hill and Medway. Previous names include Woolwich Polytechnic and Thames Polytechnic.

The university's range of subjects includes architecture, business, computing, mathematics, education, engineering, humanities, maritime studies, natural sciences, pharmacy and social sciences.

The university dates back to November 1891, when Woolwich Polytechnic, the second-oldest polytechnic in the United Kingdom, opened in Woolwich. In 1970, Woolwich Polytechnic merged with part of Hammersmith College of Art and Building to form Thames Polytechnic. In the following years, Dartford College (1976), Avery Hill College (1985), Garnett College (1987) and parts of Goldsmiths College and the City of London College (1988) were incorporated.

In 1992, Thames Polytechnic was granted university status by the UK government (together with various other polytechnics) and renamed University of Greenwich in 1993. In 2001, the university gave up its historic main campus in the Bathway Quarter in Woolwich, relocating to its current main campus in Greenwich, a UNESCO World Heritage site on the banks of the River Thames, and close to the financial centres of the City and Canary Wharf. The location is genuinely unique combining the advantages of such a beautiful and historic setting with being 15 minutes by light rail from the centre of London.

The campus is home to the Business School and the Faculty of Liberal Arts and Sciences. The campus also includes university's Greenwich Maritime Institute, a specialist maritime management, policy and history teaching and research institute.

The Business School at the University of Greenwich combines strengths in teaching and research with an emphasis on equipping our students with the practical knowledge and skills sought by employers. It offers a comprehensive range of high-quality undergraduate degrees through five departments: Accounting & Finance; International Business & Economics; Human Resources & Organisational Behaviour; Marketing, Events & Tourism; Systems Management & Strategy. Many of the programmes are accredited by key UK professional bodies and course content is constantly revised to reflect current business priorities and the demands of employers.

The campus has a large library at Stockwell Street in the centre of Greenwich which houses an extensive collection of books and journals, language labs and a 300-PC computing facility. Other facilities include specialist computer laboratories including one at Dreadnought centre, a TV studio and editing suites. The Stephen Lawrence Gallery at the Stockwell Street building, showcases the work of contemporary artists and is linked to the Department for Creative Arts.



Ho Chi Minh National Academy of Politics is a national Centre for training and researching on political theories and a consultancy body of the Communist Party of Vietnam. The Academy has four Sub-academies in across Vietnam and the Academy of journalism and propaganda with nearly 2,200 employees. Since its initial foundation as a Party school under the name of Nguyen Ai Quoc, the Ho Chi Minh National Academy of Politics has gone through its 68 years of development.

As the subordinate organization of both the Central Executive Committee of the Vietnam Communist Party and the Government, subjected to ongoing and direct leadership of the Politburo and the Secretariat, Ho Chi Minh National Academy of Politics has made significant contribution to the Party's cause of cadre training and theoretical research, the revolutionary cause of national liberation and the construction and protection of the Socialist Republic of Vietnam. The development of the Academy has always been closely linked to the revolutionary cause of the Party and the People. Over the years, consistent with the strategic goals and missions, the Ho Chi Minh National Academy of Politics has always been in line with its strategic missions and goals, fulfilled the political tasks assigned by the Party, the State and the People. The Academy has always held onto and taken the lead in the political, ideological and theoretical fronts, thus protecting the core values of Marxism, Leninism, Ho Chi Minh Thought and guidelines of the Party. Generations of the Academy's graduates have well performed their job in different fields of politics, economy, society, culture, external affairs, security and national defence, etc. Many of them are holding key positions in the political system of the country. During its history, the Academy has made great contributed to the personnel training and theoretical research of the Party, served the revolution for national liberation, construction socialism and protected the Socialist Republic of Vietnam. In the 21st century - the century of globalization, information and knowledge sharing and intellectual integration has intensified the demand for training the leaders, managers and strategic cadres for the Party and State; central and local organizations and institutions. This is both the challenge and opportunity for the Academy to continue its mission in academic and scientific affairs, building on the history and traditions and contributing to the glorious cause of the Party and the nation.

Institute of Economics, Ho Chi Minh National Academy of Politics was founded in 1960 and has been in charge of providing courses of economic development and economic management to high-ranking officials in the political system of Vietnam. The Institute also has Master and Ph.D. programs in economic development and economic management. Currently, the Institute has about 38 employees, including 11 associate professors, 11 Doctors of Economics, 14 masters and 2 bachelors. The Institute and its faculties have published hundreds of books and articles in national and international journals.

NATIONAL TEACHER. ASSOCIATE PROFESSOR. NGUYEN TRONG CO PRESIDENT OF THE ACADEMY OF FINANCE



National teacher. Assoc. Prof. Nguyen Trong Co is the President of the Academy of Finance. He has been working for the Academy of Finance since he was young and played different roles as Lecturer, Head of Financial Analysis Department, Deputy Head of Human Resources Department before becoming Vice President of the Academy of Finance. He was nominated as the President of Academy of Finance in 2014 and has been in that position so far.

He is the Editor of the Journal of Finance and Accounting Research and serves the Scientific Board of

Finance Research Sector as Vice President and a member of *Scientific Board of Banking Research Sector*.

He was also nominated as honor member of FCPA Australia.

Assoc. Prof. Nguyen Trong Co is the author/coauthor of more than 21 valuable text books and supplementary materials such as “Financial Analysis”, Finance Publishing House, 2017, “Auditing management and Usage of mineral resources for sustainable development in Viet Nam”, Finance Publishing House, 2016 and etc.

He has researched actively with more than 20 research projects spread on different fields: Corporate Finance and public finance, and Technological Markets. In the Academy of Finance, he has published more than 70 articles in both local journals and international journals.

DR. NICK HAND
DIRECTOR OF PARTNERSHIPS AND INTERNATIONAL IN THE UNIVERSITY OF
GREENWICH BUSINESS SCHOOL



Nick Hand qualified with the ACCA in 1993, holds a Masters degree in Operational Research and is a Senior Fellow of the Higher Education Academy. Nick is Director of Partnerships and International in the University of Greenwich Business School.

He was previously the Head of Department of Accounting and subsequently spent six years posted overseas, based in China, developing the Business School's international partnerships. He has substantial experience in the development of academic programmes both at the UK campus and at partner institutions internationally and particular in the South-East/East Asia region. Nick's research interests are in the areas of efficiency measurement and his publications are mainly in this area and particularly in the area of the application of mathematical models of measuring bank efficiency.

ASSOC PROF. DR. BUI VAN HUYEN
DIRECTOR OF THE INSTITUTE OF ECONOMICS, HO CHI MINH ACADEMY OF POLITICS



Assoc Prof, Dr. Bui Van Huyen is Director of the Institute of Economics, Ho Chi Minh Academy of Politics. He serves as a member of Central Theoretical Council. He has been in the profession of lecturing and doing research in the field of economics for 25 years at the Institute of Economics and other institutions. He has expertise and experience in teaching and doing research on economic management and economic institutions. He is the author or co-author of more than ten books and textbooks and has published more than 50 articles in national and international economic journals.

KEYNOTE SPEAKERS
DR. JOHN BRUCE WELLS



Dr. John Bruce Wells is Deloitte’s Chief of Party for the US Agency for International Development (USAID) Vietnam Low Emission Energy Program II (V-LEEP II) that helps assess and implement policies that accelerate deployment of solutions that promote clean energy in Vietnam.

Prior to serving USAID on several programs in Asia, he was a Partner with ERM Indonesia, the President of Citizens International, and the Director of Private Sector Initiatives for Chemonics. In these roles he helped global companies such as BP, Exxon Mobil and Vale meet their corporate sustainability commitments in developing country operations. He was also founder and President of The Bruce Company, a two-time Inc. 500 firm that helped launch premier partnerships such as Energy Star; and helped launch the U.S. Green Building Council which operates the LEED building certification program.

KEYNOTE SPEAKERS

PROF.DR. SU DINH THANH



Prof.Dr. Su Dinh Thanh - Principal of University of Economics Ho Chi Minh City
Former Editor-in-Chief of the Journal of Asian Business and Economic Studies (JABES)

Mr. Su has over 30 years of teaching and research experience in finance and banking. Recently, Mr. Su has a significant contribution to developing JABES as a Vietnam's first international journal, which is published on Emerald.

He has been serving academies and universities, and giving lectures and seminars to several universities, and invited by many universities to present papers or conduct seminars. He is the chairman of international conference ACBES (UEH) in 2018, 2019 and 2020. He has published 10 books and published more than one hundred papers including papers published in Economic Analysis and Policy, Research in International Business and Finance, International Economics, Annals of Public and Cooperative Economics, Centre of Sociological Research, Finance Research Letters, Climate and Development, International Journal of Energy Economics and Policy, Theoretical Economics Letters, Journal of Chinese Economic and Business Studies, Review of development finance, International Journal of Energy Economics and Policy, Economic Systems, Journal of Economic Development.

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INTRODUCTORY REMARK OF THE 4TH INTERNATIONAL CONFERENCE ON SUSTAINABLE ECONOMIC DEVELOPMENT AND BUSINESS DEVELOPMENT IN THE CONTEXT OF GLOBALIZATION (SEDBM 4)

The harmony between economic growth and socio-economic development based on social equality, development and appropriate exploitation and use of natural resources in align with environment protection and ecology system improvement is an urgent problem that plays essential role for every nation. Sustainable development is determined a strategic orientation for all countries in the age of science and technology revolution as well as in the process of globalization. In the globalization process, the implementation of three strategic sustainable development goals has become inevitable, nonetheless, the realization of these goals is not easy. More importantly, the mutual contribution of all global countries to “turn global sustainable development goals into reality” is needed. We need insights to the nature, content, meaning as well as the implementation approaches to conceive the relationship between modern socio-economic development and environment protection. The modern world is facing significant changes with multiple events taking place quickly and unpredictably which bring about both great opportunities and substantial challenges. The world is also facing an unprecedented threat in history, changing the mode of production, business, commerce, and all aspects of social life, along with the relationship of forces that is gradually shifting to a new situation. To adapt to the new order and take advantage of opportunities from this process, the establishment of a “flexible” economic system by diversifying global supply chains, promoting free trade agreements, and strengthening the multilateral trading system is essential. The Covid-19 pandemic has exposed the weaknesses of globalization. The measures to block economic activities or other emergency response policies to prevent the pandemic have caused sudden disruption of trade activities and disruption of some global supply chains in the short term. Although there are doubts about the sustainability of globalization, analysts still believe that the trend of international cooperation and integration is an irreversible process, especially when the the countries are aiming to restore the post-pandemic economy. Supply chain restructuring, “repatriation” of essential sectors, building resilience against potential “headwinds” are said to be top priorities in economic policies of global countries in the next years. As an economy with high openness and deep integration into the region and the world, Vietnam will face multiple impacts and challenges from the deep decline in economic growth and the shift of the world economic order. Therefore, adapting to the transformation of the world economic order, actively participating in the process of shaping “new rules” of the game is a requirement that cannot be ignored. The Fourth Industrial Revolution, along with globalization and international integration, are still two major trends that profoundly influence the development process of mankind. The interweaving

of integration processes brings the world to a “matrix structure” of free trade agreements (FTAs) on many lines and levels, including new generation FTAs. Therefore, Vietnam needs to continue the trend of accelerating international economic integration and digital transformation to catch the Fourth Industrial Revolution. The determination, consensus, and improvement of the state management in the strategy of economic development, rational exploitation and use of natural resources, and environmental protection are of extreme importance. At the same time, Vietnam also needs international coordination and cooperation in the implementation of the strategic goals of sustainable development in the 21st century. The Covid-19 pandemic has been evolving very complicatedly with many new variants, infecting millions of people, devastating the world economy, but it also made many amazing changes, exceeding previous forecasts. The fight against the pandemic still lies ahead, but the end will come, and the post-Covid-19 world economic changes are also taking shape, being special concern of researchers and countries. Realizing the importance of the issue, the Academy of Finance organizes the annual international conference “*Sustainable economic development and business management in the context of globalization*”. After organizing the three previous conferences, we have enriched the experience to organize international seminars as well as confirmed the research capacity of Vietnamese scientists in general and the Academy of Finance’s scientists in particular. Moreover, the Academy of Finance affirms its ability to meet modern infrastructure and technology in organizing online research and training activities as well as international cooperation. In 2021, although the Covid 19 pandemic is complicated and unpredictable, with careful preparation and creative ways, the Academy of Finance continues to coordinate with the University of Greenwich (UK), the Institute of Economics under the Ho Chi Minh National Academy of Politics to organize the fourth international conference “Sustainable economic development and business management in the context of globalization” (SEDBM 2021). The conference receives more than 140 articles and we have selected 131 articles to be published in the conference proceedings. The conference attracts the participation of various scientists and researchers from universities, academies, research institutes...and the participation of top economic researchers and economic experts from national and international agencies.

The Conference Organizing Committee would like to thank the delegates and scientists for your enthusiastic participation and contribution to the success of the conference. Analytics, comments and assessments, forecasts, solutions, etc. on sustainable economic and business development in the context of globalization are of great value for the development of the world, the region as well as Vietnam in the current context.

We wish all delegates, researchers and scientists good health, happiness and success.

Thank you very much,

ORGANIZING COMMITTEE

BANKING SECTOR AND ECONOMIC GROWTH – WHICH HYPOTHESIS IS VERIFIED IN VIETNAM?

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Abstract: *This study examines the effect of banking sector development on the economic growth of Vietnam over the period from 1997 to 2019. Using Vector Error Correction Modelling (VECM), the study finds the statistical evidence supporting the supply-leading hypothesis about the causal relationship between banking sector development and economic growth. The findings emphasize the critical role of monetary supply and credit to private sector in the economic growth of Vietnam.*

Keywords: *Banking sector, development, economic growth, interest rate, VECM, Vietnam.*

1. INTRODUCTION

Economic growth is the critical for all countries over the world, especially developing countries, since these countries have to maintain high economic growth for overcoming economic problems such as unemployment, poverty, low living standards, and inflation (Abusharbeh, 2017). The major importance of banking sector to the economic growth can be explained by the intermediation role of commercial banks. Through channeling investment funds from savers to the users that yield the highest return, banking sector contributes to the specialization and division of labor (Todaro 2003). Armenta (2007) indicated some benefits of commercial banks to economic growth such as risk pooling and transferring, enhance liquidity and information flow through the use of more sophisticated financial products and technology.

A buck of previous studies examined the relationship between banking sector development and economic growth. The supply-leading hypothesis emphasizes the causal effect of the banking sector on the economic growth. This school of thought is led by Schumpeter (1911) and confirmed in the studies of Patrick (1966), Thornton (1994), Kar et al. (2011), Hsueh et al. (2013), Menyah et al. (2014), Halicioglu (2007), Dhungana (2014), Arbusharbeh (2017). Another hypothesis, the demand-following, examines the impact of economic growth on the development of financial market, including banking sector. It is discussed in the study of Robinson (1952), Greenwood & Jovanovic (1990), Levine (1997), Liang & Teng (2006), Odhiambo (2008, 2010). Scholars also concern about the bidirectional relationship between the banking sector and economic growth. Hussein (1996) found two-way causal relationship between banking indicators and economic growth. Similar findings were reported by Jun (2012), Chow & Fung (2011), Pradhan et al. (2014).

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The debate about which hypothesis is relevant to explain the relationship between banking sector and economic growth continues attracting many studies. Literature has been enriched through empirical evidences in various research settings, especially from emerging and developing countries, where the banking sector is critical for the economic development.

The banking sector plays a key role for the economic growth of Vietnam likewise many other developing countries. Since 2000, Vietnam's GDP per capita growth has been in the highest group over the world, at the annual rate of 6.4%. In line with the remarkable performance improvement of the whole economy, Vietnam banking sector has witnessed a significant increase. The bank assets in 2018 mostly doubled GDP. Credit growth through banking system has been increasing since 2015. Average Return on Equity (ROE) in 2017 was 17.63%, higher than other Asian developing countries at the same development level. However, there is an argument that the rapid expansion of the banking sector may destroy the economic growth of Vietnam in the long run. Banking sector is dominating Vietnam financial market. The credit to deposit ratio of Vietnam banking sector is around 7 times over past 5 years, together with the decrease in bank's Z-score since 2010. These data show the heavy dependence of financing sources for investment on the banking sector. Therefore, the crash of the banking sector would significantly impact on Vietnam economic growth.

Empirical studies on the relationship between banking sector and Vietnam economic growth seem to be sparse, and report mixed results. Nguyen et al. (2020) showed a causal relationship between the banking sector development and the real estate market. Bui (2020) found the positive effect of economic growth on the Vietnam financial market development. Le et al. (2019) found the significant effect of financial market development on economic growth in ASEAN+3 countries, including Vietnam. Le et al. (2020) reported the short-term positive effect of the banking depth on the economic growth of Vietnam, and the negative one in the long run due to the macro influencers.

The purpose of our paper is to find which hypothesis is valid for the relationship between the banking sector development and Vietnam economic growth. Literature has indicated that the supply-leading hypothesis is more relevant than the others in developing markets. In this paper, we examine the short and long-run validity of the supply-leading hypothesis, and the existence of demand-pulling hypothesis in Vietnam situation. Our study contributes to the extant literature on relationship between banking sector and economic growth with three main points. First, it enriches studies on emerging and low-income countries with an empirical evidence on one of the fastest growing economies in the world – Vietnam. Second, we test the hypotheses on a wider sample than other similar studies in Vietnam using Vector-Error Correction Model (VECM) instead of the standard VAR estimator in the study of Le et al. (2021) or Autoregressive Distributed Lag (ARDL) approach in the study of Bui (2020). We expand the time range compared to other studies on the finance-growth relationship in Vietnam to provide a comprehensive insight and increase the estimate accuracy. Third, we specify the validity of the supply-leading hypothesis in Vietnam through finding the long-term adjustment and examining the adjusting mechanism.

We organize the paper into 5 parts. Part 1 elaborates the rationale of the research topic. Part 2 is literature review and hypothesis development. Part 3 presents data and methodology. Empirical results and discussion are presented in Part 4. Part 5 is the place for conclusion and managerial implications.

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

The leading role of the banking sector in the economic growth was emphasized in the early work of Schumpeter (1911). The author argued that through mobilizing and channeling funds efficiently, banks provide businesses with credit capital, which will be invested in physical assets, new production techniques, facilitating technological innovation, and setting conditions for creative destruction process (King & Levine, 1993; Allen & Ndikumana, 1998). Through the capital directing function, banking sector is expected to contribute to economic growth. That is the supply-leading hypothesis for finance – growth relationship. McKinnon (1973) and Shaw (1973) argued that a repressed financial system characterized by interest rate ceiling, directed credit policies and high reserve requirement, hindered an economic growth. Therefore, financial development is expected to be the positive influencer of economic growth. Bencivenga and Smith (1991) developed the endogenous growth model with multiple assets and found the growth boosting function of financial intermediaries. Banks could enhance asset liquidity and mitigate specific risk through diversification and pooling, which results in higher economic growth.

Empirical studies on the finance – growth nexus have found supporting evidences for the supply-leading hypothesis in emerging and developing countries. Cole et al. (2008) found banking sector return positively correlates with the economic growth in 38 countries from 1973 to 2001. This relationship became stronger in the developing countries. The finding supports the supply-leading hypothesis and validates this hypothesis in the developing economies. Koivu (2002) reported the negative impact of marginal interest rate on economic growth in 25 developing countries over the period 1993-2000. Frikha & MacMillian (2016) found the supporting effect of conventional banks on GDP in 10 developing countries. Medjahed & Gherbi (2016) stated the negative short and long run impact of banking sector development on growth of 11 MENA countries from 1980 to 2021. Prochniak & Wasiak (2017) verified the positive relationship between banking system and economic growth in 28 EU and 34 OECD countries from 1993 to 2013. Bongini et al. (2017) indicated that foreign banks foster economic growth of Central, Eastern and South Eastern European Countries (CESEE) between 1995- 2014. Le et al. (2019) reported supporting evidence for the the supply-leading hypothesis in ASEAN+3 countries.

For a particular economy, Alfara (2012) validated the supply-leading hypothesis in Palestine on the period from 1995 to 2001. Abusharbeh (2017) found supporting evidence for the supply-leading hypothesis in Palestine using quarterly data from 2000 to 2015. Halicioglu (2007) found the unidirectional causation from development to economic growth in Turkey using annual data from 1968 to 2005. Dhungana (2014) found the causal relationship between commercial banks and economic growth in Nepal during the period 1994 to 2012 in the long run. Jung (2017) confirmed the leading role of financial development in economic growth of South Korea over the period from 1961 to 2013.

On the alternative side, Robinson (1952), Friedman & Schwartz (1963) stated that economic growth facilitated the financial market development. That is the demand-pulling hypothesis, which focuses on the demand side of the financial market. This argument is rested on the positive relationship between the level of financial development and the real national income. Economic growth is a basis for the higher demand for new and innovative financial products, which can positively effect on the development of financial market. Liang & Teng (2006) investigated the

relationship between financial development and economic growth for China over the period 1952-2001 using VAR framework. The empirical result suggests that there exists a unidirectional causality from economic growth to financial development in China. Zhao (2017) investigated the impact of financial development of economic output using data from 286 Chinese cities between 2007 – 2014. The finding revealed that financial development did not have any significantly positive effects on Chinese economic growth. Mhadhbi (2014) reported mixed results in 27 medium-income countries over the period from 1970 to 2012. Three countries supported supply-leading hypothesis, six countries supported demand-following hypothesis, and 21 countries showed no impact of economic growth on the financial development. Caporale et al. (2009) showed no influence of the economic growth on the financial development in 10 European countries from 1994 to 1997.

The two-way causal relationship between the financial development/banking sector and economic growth is reported in several studies. Wood (1993), Demetriades & Hussein (1996), Akinboade (1998), Dritsakis & Adamopoulos (2004), Demrgic-Kunt & Levin (2001), Calderon & Liu (2003), Mhadhbi (2014), confirmed the mutual relationship between the banking sector and the economic growth. Owdeh (2012) found the dual causality relationship between banking sector growth and economic development in Lebanon from period of 1992-2011. Hung Manh Pham & Phuong Minh Nguyen (2020) showed the two-way Granger causality relationship between credit and GDP of Vietnam. Patrick (1966) mentioned the stage-of-development hypothesis, which proposes that the direction of causality relationship between financial development and economic growth varies with the stage of development. Greenwood & Jovanovic (1990) indicated the dual link between intermediaries and growth depends on the development stage of an economy. The supply-leading role of financial agents enable efficient capital allocation and lower transaction costs, which promotes the economic growth at the early stage of development. However, the demand-pulling hypothesis becomes dominant as financial structure is well-developed and an economy reaches to the maturity. Iyare et al. (2005) reported the mix results on the Caribbean economies in short run, and stated that empirical evidences differed by both country specific features and selected variables. Liang & Reichert (2006) studied the relationship between economic growth and banking sector development on the sample including 20 advanced countries and 70 emerging countries from 1996 to 2002. This paper found strong supply-leading relationship between financial development and aggregate output, and this effect is depreciated by the stage of development. At some point of economic growth cycle, there exists the inverse effect of economic growth on financial market development. Jun (2012) reported a significant dual relationship between finance and growth in 27 Asian economies. Chow & Fung (2011) found most countries have switching between finance-leading and economic leading stage. Pradhan & Arvin (2016) also pointed out the mutual relationship in ASEAN countries for the period 1961-2012.

It could be seen from previous studies on the relationship between banking sector and economic growth that banking sector plays the critical role in an economy growth. However, literature has witnessed a long debate on which hypothesis is valid in reality. The empirical evidences vary with country specific characteristics, estimation method, and proxy measurement. The studies on developing countries in general and Vietnam in particular found strong supporting evidences for the supply-leading hypothesis. In case of Vietnam, one of the fastest growing economies over the

world recently, we hypothesized that the banking sector development positively contributes to the economic growth, yet this causality effect in a short run might differ from in a long run. We conduct an empirical test to explore the existence of turning point in a long run, leading to the exchange between the supply-leading hypothesis and the demand-pulling hypothesis.

3. DATA AND METHODOLOGY

3.1. Data

The study uses annual time series data from 1997 to 2019. Data are collected from the annual reports of World Bank Indicators (WBI). We measure the banking industry development through 3 variables: Private credit ratio (RDG), Broad money ratio (RM2G), Interest rate spread (IRS); and use Gross Domestic Product (GDP) as a proxy for economic growth.

3.2. Model and Variables

The following hypothetical econometric model is employed:

$$\Delta GDP_t = \beta_0 + \sum_{i=1}^p \beta_1 \Delta(GDP)_{t-i} + \sum_{i=1}^p \beta_2 \Delta(IRS)_{t-i} + \sum_{i=1}^p \beta_3 \Delta(RM2G)_{t-i} + \sum_{i=1}^p \beta_4 \Delta(RDG)_{t-i} + \delta ECT_{t-i} + u_t$$

Where:

Δ is the difference operator,

p is the optimal lag length,

ECT is the error correction term,

δ is its coefficient,

u is the error term of the model.

Table 1. An explanation of variables in the model

Variable	Meaning	Measurement
	The growth of Real GDP in Year T compared to Year (T-1)	
	Real GDP growth rate lag one year	
	This variable reflects the banking sector efficiency.	
	This variable reflects use of currency in relation to the increase in bank deposit volume.	
	This variable refers to the role of credit capital in an economy and the channeling activity of banks as financial intermediaries.	

3.3. Estimation Methodology

We use VECM instead of standard VAR since VAR estimator is based on stationary series, which can lead to the possibility of losing information about the relationship among integrated series. VECM provides a means by which a proportion of the disequilibrium in the short run is corrected. Thus, error correction mechanism is a means to reconcile the short-run and long-run behaviors of the variables (Gujarati & Porter, 2009). The size of the error correction term indicates the speed of adjustment of any disequilibrium towards a long run equilibrium state. VECM also enables the determination of the short and long run Granger causalities between the cointegrated variables.

4. RESULTS AND DISCUSSION

4.1. VECM model estimate

Table 2. Descriptive statistics of variables in the study

Variable	GDP	IRS	RDG	RM2G
Mean	6.445784	3.421512	79.85064	93.32238
Median	6.423238	2.968	85.63969	99.79859
Maximum	8.152084	6.896667	137.9121	164.8683
Minimum	4.773587	1.925	19.84884	22.50731
Std. Dev.	0.829794	1.299058	38.03291	43.73365
Skewness	-0.069487	1.203062	-0.121026	0.023801
Kurtosis	2.48951	3.727502	1.723744	1.906129
Jarque-Bera	0.268251	6.055415	1.617109	1.148869
Probability	0.87448	0.048427	0.445502	0.563023
Sum	148.253	78.69478	1836.565	2146.415
Sum Sq. Dev.	15.14829	37.12612	31823.05	42077.9

Table 2 reports the descriptive statistics of variables in the study. We conduct stationary test first to examine the problem of unstationary data. Table 2 presents the augmented Dicky-Fuller (ADF) test for unit root and stationarity on all the variables at levels and first difference. The test shows that the variable GDP has a unit root. The null hypothesis for the first difference of variables is rejected at p-value < 1%, indicating that all the variables are integrated of the same order, I(1).

Table 3. Stationary Tests of all the variables at level and first difference

Variable	GDP	IRS	RM2G	RDG	D(GDP)	D(IRS)	D(RM2G)	D(RDG)
ADF test	-3.656	-2.097	-0.357	-0.560	-6.599	-4.561	-5.723	-4.359
p-value	0.0128	0.2473	0.9006	0.8605	0.000	0.002	0.0001	0.0029

Next, we select the lag length. Five lag length selection criteria, including AIC, SC, LR, FPE and HQ revealed that the optimal lag length for the models is two. It is used in the subsequent cointegration test, Granger Causality Test, and VECM. The result is shown in Table 4.

Table 4. Lag length criteria selection

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-224.5581	NA	33396.8	21.76744	21.96639	21.81061
1	-165.8578	89.44806	593.776	17.70074	18.69552	17.91663
2	-140.0623	29.48051*	285.1241*	16.76784*	18.55845*	17.15645*

(*) significant at p-value < 5%

Table 5 reports the Trace test and the Max-Eigen test. There is one cointegration equation at p-value < 5%. Therefore, we might conclude that the variables in the model have a long-run equilibrium relationship.

Table 5. Co-integration test

Hypothesized No. of CE(s)	Eigen Value	Trace Test		Max-Eigen Test	
		Trace Statistic	0.05 Critical Value	Max-Eigen Statistic	0.05 Critical Value
None*	0.849906	65.1822	47.85613	37.92987	27.58434
At most 1	0.635813	27.25233	29.79707	20.20177	21.13162
At most 2	0.263839	7.050565	15.49471	6.126128	14.2646

Table 6 summarizes the short run relationship and the adjustment to the long run. In the short run, the four explanatory variables: D(GDP(-2)), D(IRS (-2)), D(RM2G(-2)), and D(RDG(-2)) show statistically significant relationship with D(GDP), and the ECT(-1) significant at p-value <5%. This indicates that all the change in the ratio of private credit, broad money and average interest spread makes impact on the GDP growth at least 2 years. Moreover, the imbalance in the short-term variation of economic growth will be fixed at the rate of -0.77% for ECT.

The models with D(IRS) and D(RM2G) as the dependent variables, only D(RM2G (-1)) has statistical significance at p-value < 5%.

The ECT coefficients indicate the adjustment to the long run and the long run causality. They are expected to be significantly negative. Only the model with D(RDG) as the dependent variable, ECT(-1) is negative, significant at p-value <5%. That means the adjustment to the long run is only in this model. Other models report the expected sign yet no statistically significant coefficients are reported.

Table 6. The results of VECM model

Error Correction:	D(GDP)	D(IRS)	D(RM2G)	D(RDG)
ECT (-1)	-0.769276 **	-0.249571	-4.250826	-6.964836**
	-0.18016	-0.33151	-2.6266	-2.93686
	[-4.26989]	[-0.75284]	[-1.61838]	[-2.37152]
D (GDP (-1))	0.365548*	-0.451493	-0.128421	-0.252943
	-0.21277	-0.3915	-3.10195	-3.46836
	[1.71806]	[-1.15323]	[-0.04140]	[-0.07293]
D (GDP (-2))	-0.521002**	0.148482	-0.445329	-1.15385
	-0.16897	-0.31092	-2.46346	-2.75446
	[-3.08334]	[0.47756]	[-0.18077]	[-0.41890]
D (IRS (-1))	0.185325	0.504138	3.612538	4.158349
	-0.19964	-0.36735	-2.91059	-3.2544
	[0.92828]	[1.37236]	[1.24117]	[1.27776]
D (IRS (-2))	0.460153**	-0.481613	3.451273	5.857601
	-0.20398	-0.37534	-2.97387	-3.32515
	[2.25584]	[-1.28315]	[1.16053]	[1.76160]
D (RM2G (-1))	-0.059399	0.032902	-1.126445**	-1.173338
	-0.03737	-0.06876	-0.54483	-0.60919
	[-1.58945]	[0.47847]	[-2.06751]	[-1.92606]

D (RM2G (-2))	-0.081641**	-0.085507	0.105749	-0.043341
	-0.02869	-0.0528	-0.41833	-0.46774
	[-2.84526]	[-1.61954]	[0.25279]	[-0.09266]
D (RDG (-1))	0.041173	-0.008655	0.680427	1.134334
	-0.0348	-0.06403	-0.5073	-0.56723
	[1.18325]	[-0.13517]	[1.34126]	[1.99979]
D (RDG (-2))	0.076988**	0.078864	-0.577069	0.00595
	-0.03249	-0.05979	-0.4737	-0.52965
	[2.36946]	[1.31909]	[-1.21822]	[0.01123]
C	0.440788	-0.154895	13.68188*	8.718648**
	-0.21923	-0.40338	-3.19609	-3.57362
	[2.01066]	[-0.38399]	[4.28082]	[2.43972]

Note: T-statistic in []

(*), (**): Significant at 10% and 5% respectively

4.2. Granger Causality Test

We clarify the causal relationship between banking business and economic growth in Vietnam through the Granger causality testing. The analytical results only show that the economic growth affects the banking sector in the long run through D(RDG) and D (RM2G), and no inverse effects. Furthermore, the change in private credit ratio would be the statistical predictor for the broad money ratio in the long run.

Table 7. Granger Causality Test

Null Hypothesis:	Obs.	F-Statistic	Prob.
DIRS does not Granger Cause DGDP	20	1.30442	0.3004
DGDP does not Granger Cause DIRS		2.51019	0.1147
DRDG does not Granger Cause DGDP	20	0.42298	0.6627
DGDP does not Granger Cause DRDG		1.24975	0.0412**
DRM2G does not Granger Cause DGDP	20	0.42949	0.6586
DGDP does not Granger Cause DRM2G		0.42689	0.0469**
DRDG does not Granger Cause DIRS	20	0.23521	0.7933
DIRS does not Granger Cause DRDG		0.5688	0.578
DRM2G does not Granger Cause DIRS	20	1.33454	0.2928
DIRS does not Granger Cause DRM2G		0.07313	0.9298
DRM2G does not Granger Cause DRDG	20	0.56561	0.5797
DRDG does not Granger Cause DRM2G		3.88553	0.0437**

(**): 5% level of significance

4.3. Long run relationship examination

After estimating the model and testing Granger causality, we test the stability and sustainability of VECM model, the problem of Auto correlation and Heteroskedasticity, and the normal distribution of residuals. The results show that VECM model satisfies the requirements, no auto correlation and no problem of Heteroskedasticity (See Appendix).

The analysis of impulse response indicates that when the ratio of broad money increase 1%, the growth of GDP will decrease 0.317% in the first year and reach the bottom of nearly 0.6% in the sixth year, and fluctuate at the decreasing rate of 0.356% from year 7. The change in private credit ratio and interest spread have smaller influences on GDP growth in the range of [-0.239%; -0.162%] and [-0.27%; -0.113%], respectively. Regarding IRS and RM2G, the GDP growth has a positive effect on the changes of two variables in the long-term at average rate of 0.195% and 0.62% respectively. The variation in GDP growth and interest spread have a negative effect on the private credit ratio, especially at year 2 this ratio decreases at nearly 7% and 4% with 1% increase in GDP growth and interest spread.

The analysis of variance decomposition of GDP at the end of the 10th year shows that the change of GDP growth is explained by the private credit ratio at 12.75% and the broad money ratio at significant amount of 36.5%. This reflects that the broad money ratio is the factor having a sustainable long-term effect on GDP growth.

Table 8. Variance Decomposition of GDP

Period	S.E.	GDP	IRS	RM2G	RDG
1	0.451666	100	0	0	0
2	0.676437	53.31687	16.17175	21.9474	8.563977
3	0.849254	34.91085	18.78113	37.22452	9.083498
4	1.032721	35.01547	21.27394	30.05059	13.66001
5	1.260657	39.73561	17.12767	30.22419	12.91253
6	1.507257	37.5935	12.55076	35.9959	13.85985
7	1.63085	39.68304	10.99901	35.76662	13.55133
8	1.732623	39.97465	11.23768	35.59082	13.19684
9	1.820029	39.49849	11.4281	36.45069	12.62271
10	1.887448	38.93081	11.7271	36.5876	12.7545

5. CONCLUSION AND MANAGERIAL IMPLICATIONS

VECM estimates show that the banking sector business activities has causal relationship with economic growth of Vietnam in both short run and long run. Empirical result verifies the supply-leading hypothesis in the case of Vietnam. The finding is consistent with previous studies on the finance – growth relationship in emerging and developing markets. Liang & Reichert (2006) on the study on advanced and emerging/developing countries found the supply-leading impact in emerging/developing countries is relatively larger. The positive impact of Interest Spread on the economic growth in a short run emphasizes the importance of banking sector efficiency to the economic growth. Nguyen (2020) expressed the strong impact of bank efficiency on GDP of Vietnam. The result also shows that the Vietnamese economy in at the rapid growing stage, which

- *Auto correlation test*

Table 2. VEC Residual Serial Correlation LM Tests

Lags	LM-Stat	p-value
1	15.97837	0.4545
2	9.369394	0.8974
3	14.24135	0.5807
4	15.14428	0.5141
5	15.29821	0.5029
6	25.42139	0.0627

- *Heteroskedasticity test: Chi-sq (180) = 187.3929; p-value = 0.3374*

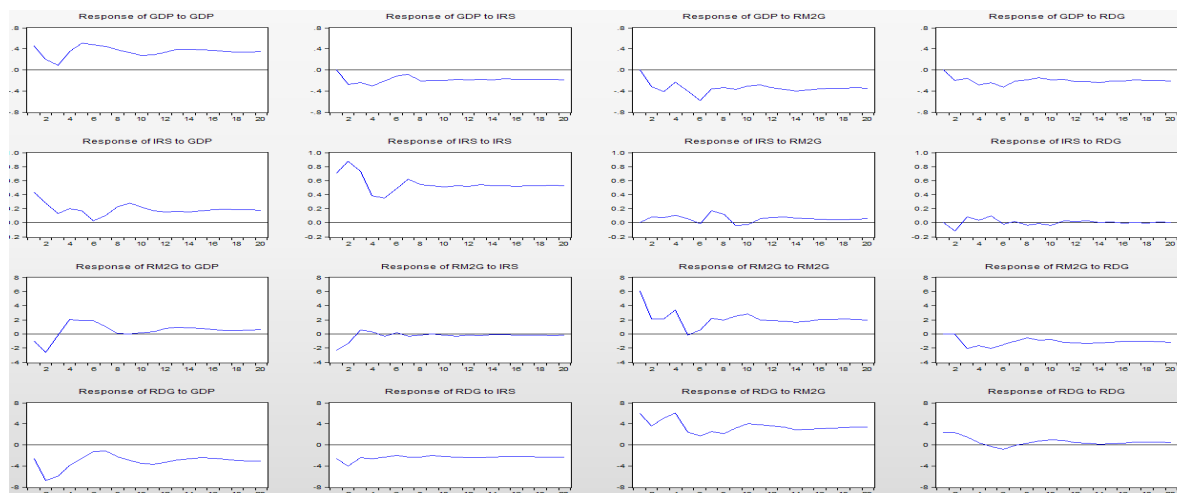
- *Normal distribution of residual test*

Table 3. VEC Residual Normality Tests

Component	Jarque-Bera	df	p-value
1	1.84884	2	0.3968
2	1.432355	2	0.4886
3	37.50575	2	0.3225
4	1.028765	2	0.5979
Joint	41.81571	8	0

- *Impulse Response*

Figure 2: Impulse Response to GDP



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THE AUTONOMY OF PUBLIC MUSEUMS AS SEEN FROM STAKEHOLDER THEORY

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Abstract: *The autonomy of public museums should be established based on a full understanding of museums' stakeholders. With the utilization of the stakeholder theory, we have identified three parties that affect the autonomy of a public museum: governing bodies (power); the museum (legitimacy); and communities (urgency). When the autonomy of museums has been established through discussion among these three stakeholders, it will not only achieve short-term benefits, but it will also create long-term benefits for future generations.*

Keywords: *autonomy, public museum, stakeholder theory.*

1. INTRODUCTION

New Public Management (NPM), which was introduced in the early 1980s in Western countries, caused profound changes in the way public services have been provided in many countries. NPM affirms the superiority of private sector management techniques over public sector management techniques. It focuses on factors such as competition, price, customer satisfaction, and results measurement (Osborne, 2006) (Torfing, 2013). In the context of the economic recession, fiscal deficit and tight public spending requirements, NPM has brought a few positive impacts to public management activities such as increasing the quality of public services, meeting people's needs at a lower cost (Torfing, 2013) (Riege, 2006) and clear quantitative measures to evaluate the output of public services, thereby affecting the activities of the supply organization to maximize the benefits of public services (Hatry, 2002) (Ammons, 2008).

However, NPM's disaggregated approach characterized by decentralization, agencification, contracting out, and privatization in public service delivery has come under heavy criticism (Hood, 1992) (Torfing, 2013) (Osborne, 2006) (Bao, 2013). In the context of the nature of the state being pluralistic, focusing on management according to market-oriented principles only increases some economic benefits but does not increase the whole society's benefits (Osborne, 2006). As NPM profoundly concentrated on management techniques and cutting costs, significant social factors including professional standards, cooperation/coordination, traditional characteristics, and values have been overlooked (Klenk, 2019). This merely undermines long-term social benefits especially in areas such as education, health care, and culture (Larbi, 1999).

Under the influence of NPM, public museums have shifted their focus from collecting and preserving heritage to focusing on the audience (Gilmore, 2002). The shift in the purpose and priorities of museums has created an impact on the nature of museum management from managing

^{1,2} Academy for Finance.

collections to customer-oriented management (Gilmore, 2002) (Thomson, 2014). In order to achieve the new goal, a series of changes in the way museums are managed have been implemented in many countries towards increasing the autonomy of public museums. The management techniques of the private sector are applied in public museums for only one purpose - to satisfy the needs of the customer. This invisibly has narrowed the scope of museums' stakeholders; hence, museums focus only on their customers. All these changes have raised many contradictions such as: (i) the conflict between the task of collecting and preserving the collections and the task of displaying and exhibiting to satisfy the entertainment needs of customers; (ii) the conflict between new market-oriented management techniques, standards, and ethics in professional activities; (iii) the conflict between new managers and researchers; and (iv) the conflict between the needs of the present and the needs of the future generations (Gilmore, 2002) (Kann-Rasmussen, 2021) (Thomson, 2014). All the mentioned contradictions will be further exacerbated as the autonomy of public museums increases, thus, the public funding available to them is reduced. In connection with these, determining the degree of autonomy of museums is crucial and must be given enough consideration.

In this study, we utilized stakeholder theory to identify stakeholders in establishing the autonomy of public museums. Public museums in Vietnam are an illustrative example to analyze the relationship between stakeholders in establishing autonomy of museums. As our objective, we answered the question: how will museum missions be affected when the establishment of autonomy of public museums does not consider the needs of all stakeholders?

The next section of the study is composed of four parts: the theory of stakeholders; the application of the theory of stakeholders to the case of museums; analysis of the case of public museums in Vietnam; and the contributions of this study.

2. STAKEHOLDER THEORY

Stakeholder theory was first introduced by Freeman in 1984 in which he defined a stakeholder as "any group or individual who can affect or is affected by the achievement of organization's objectives" (Mitchell, 1997). Over time, the theory of stakeholders has been developed in many different directions and applied in many fields including the field of public policy. The changes of public policies and major policies often require contributions and support from many stakeholders, who may have different views on what policies should be implemented (Riege, 2006). The consultation of stakeholders in shaping policy helps to remove potential hindrance and reduce risks. The risks come from regulations that only serve a specific group of interests rather than the general interests of society, that leads to achieve higher social efficiency.

There are three distinctive characteristics proposed by Freeman to define stakeholder roles: power, legitimacy, and urgency (Mitchell, 1997). *Power* is the ability of its owner to accomplish desired outputs. Power is divided into 4 types: (i) coercive power, based on the resources used to exercise power; (ii) violent power, based on the physical resources of force; (iii) utilitarian power, based on the material or financial resources; and (iv) normative power, based on the symbolic resources. *Legitimacy* is defined by Suchman (1995) as the actions of an entity are desirable, proper, or appropriate within some socially constructed system or norms, values, beliefs, and definitions, or a desirable social good. *Urgency* is the level of priority that stakeholders require to be addressed immediately. Urgency has two significant properties: (i) time sensitivity - managers'

delay in handling stakeholder requests is unacceptable; and (ii) criticality – the importance of the request being placed as a top priority for resolution by the stakeholders.

3. APPLYING STAKEHOLDER THEORY TO THE CASE OF MUSEUMS

In the application of the stakeholder theory, Elsorady (2018) cited McLean (1997) in the diverse list of museum stakeholders such as government, local government, business, means of mass communication, economic growth organizations, museum authorities, staff, board members, volunteers, and the community. Gilmore (2002) argued that the shift in focus of museums has led to an important stakeholder for museums today - the customer, who either visited or not visited a museum. Additionally, Elsorady (2018) classified museum stakeholders into three groups: visitors, governing bodies, and communities. Thomson (2014) argued that the Ministry of Culture and the National Auditing Authority are the strongest stakeholders in the operation of public museums in Sweden, while other potential stakeholders seem to be ignored such as researchers, museum associations, funders, and the community. Halcro (2008) used a scale to assess the importance of museums stakeholders in rural Scotland. The results of the study showed that governing bodies, staffs, and local authorities (as sponsors) are the most important stakeholders. The least important stakeholders are banks, United Kingdom Government, and European Commission. Meanwhile, local clients, local communities, local travel agents, tourists, volunteers, researchers, charities, suppliers are classified as the neutral important stakeholders.

A stakeholder model that combines all three characteristics (power, legitimacy, and urgency) was developed by Mitchell (1997). The model of museum stakeholders is shown in Table 1.

Table 1. Model of stakeholders in public museums

Stakeholder theory	Power	Legitimacy	Urgency	Public museum stakeholders
1. Latent stakeholder				
Dormant stakeholder	x			Governing bodies. Benefactors who sponsor an exhibition without any pre-conditions.
Discretionary stakeholder		x		Researchers, Staffs.
Demanding stakeholder			x	Visitors, communities.
2. Expectant stakeholder				
Domiant stakeholder	x	x		Managers, investors, museum association.
Dangerous stakeholder	x		x	Vandals
Dependent stakeholder		x	x	Communities, visitors.
3. Definitive stakeholder	x	x	x	Often emerges from the expectant stakeholder.

Source: Mitchell (1997) and authors

Stakeholders in establishing the autonomy of public museums

Delegation in public services is at the heart of many NPM public sector reforms (Overman, 2016). It is the partial transfer of decision powers over a public task from an organization that is directly controlled by the legislature or executive to another public or private organization. Organizations may engage in delegation at the national, regional, or local level (Overman, 2016). According to Overman (2016), two of the four ideal types of delegation are decentralization and agencification. Decentralization refers to the decentralization of tasks from higher levels of

government to lower levels, so the tasks are still performed by the public sector. Agencification refers to the establishment of self-governing bodies outside the hierarchy of a ministry (Yesilkagit, 2004). In developing countries, the process of agencification means not only the creation of new agencies but also an increase in the autonomy of existing public organizations. The analysis showed that governing bodies have the power to establish the autonomy of public museums – a public sector organization.

Museums were established with the primary mission of collecting and preserving heritage to provide information and transfer knowledge to the community (Gilmore, 2002) (Thomson, 2014). The International Council of Museums defined museum as a non-profit, permanent institution in the service of society and its development, open to the public that acquires, conserves, researches, communicates and exhibits the intangible heritage of humanity and its environment for the purposes of education, study, and enjoyment (ICOM, 2007). As such, the museum has legitimacy to consider decisions related to its operations. However, according to Pierre Bourdieu's theory, the autonomy of a cultural organization, including museums, is determined by its ability to decide what and how to produce (Kann-Rasmussen, 2021). The quality of such cultural products must be assessed by experts. Furthermore, the autonomy of cultural organizations is being strongly reduced by the influence of market factors on their activities. The evaluation of the performance of museums is based on outcome indicators such as number of visitors, revenue rather than on the value or meaning that the collections bring. In other words, the legitimacy of museums must be considered when establishing their own autonomy.

A broad group of researchers, visitors (customers), funders, museum associations, and the public are all subjects with diverse museum interests. We decided to provide a general term - community, and their urgency for two main reasons. First, museum is not only established to collect and preserve collections, but also a meeting place for the purpose of research, study, and enjoyment. Second, museum helps in preserving collections not just for the present generations but also for the future generations. The community does not only want to visit a museum for leisure and study, but they also want to value and preserve collections for the future generations.

4. THE AUTONOMY OF PUBLIC MUSEUMS IN VIETNAM

Public museums in Vietnam are one of the types of public service units established to provide public services in Vietnam. According to management decentralization, public museums in Vietnam are divided into three: (i) national museums (under the Ministry of Culture, Sports and Tourism); (ii) specialized museums belonging to central ministries, branches and socio-political organizations; and (iii) specialized museums belong to units under ministries, branches, central socio-political organizations, and provincial-level museums.

Public museums in Vietnam have experienced over 15 years of implementing the autonomy mechanism of public non-business units since Decree 43/2006/ND-CP was issued by the Government. This Decree has granted autonomy in performing professional tasks, organizational structure, personnel, and finance to public non-business units. Then in 2015, the Government of Vietnam issued Decree 16/2015/ND-CP with specific regulations on the roadmap for implementing the autonomy mechanism of public non-business units. Decree 16 classifies public museums into four groups according to their degree of autonomy such as self-financed for recurrent and investment expenditures, self-financed for recurrent expenditures, partially self-financed for

recurrent expenditures, and budgetary state-funded recurrent expenditures. As the financial autonomy of public museums increases, they will also have greater autonomy in carrying out their professional duties, organizational structure, and personnel.

The establishment of the autonomy of Vietnamese public museums is decided by governing bodies. Under the Decree 43, governing bodies have the power to decide on the autonomy of public museums. The public museum must develop an implementation plan according to the decision of governing bodies. According to the Decree 16, public museums must develop autonomy plans in accordance with their actual conditions, and submit them to governing bodies for approval.

Case 1: Power combined with urgency but not legitimacy

War Remnants Museum, under the management of the Department of Culture and Sports of Ho Chi Minh City, is one of the first provincial museums in Vietnam to be granted financial autonomy. According to the decision of the People's Committee of Ho Chi Minh City, the museum began to be self-financed on November 13, 2014. However, the city has not funded the museum since January 1, 2014. The sudden decision of the city government caused great difficulties for the museum at that time. The museum was forced to be financially self-sufficient while the necessary conditions were not sufficient because it does not have professional accountants and marketing staff, its leadership lacks the management skills of the private sector, and it does not have any funding from other sponsors. Museums had to downsize without public funding. The museum must lay off staff (10 employees / 60 employees must quit), reduce wages, and reduce expenses for the museum's professional activities. As a result, the quantity and quality of the museum's professional activities were reduced, and even the staffs were greatly affected.

In order to overcome that difficult period, the War Remnants Museum focused on innovating and exploiting the strength of on-site exhibitions with attractive and topical topics to increase ticket sales. The museum published publications and catalogs introducing the museum in four different languages. Food and coffee services were also provided in the narrow premises of the museum. With all these efforts, the financial situation of the museum gradually improved as the number of visitors increased day by day. However, even when financial autonomy was granted on paper, real autonomy was still incomplete. The operation of the museum still faces many difficulties even up to this day because it is not fully adapted to the market mechanism. The regulations of some cities are not suitable for museums in an autonomous circumstance, such as the price of tickets is being determined by the city's people's council.

Case 2: Power combined with legitimacy but not with urgency

Museums of Hai Duong, Nghe An, Bac Lieu, Quang Binh, and many other provincial museums are fully funded by the local budget. The establishment of autonomy of these museums is based on the proposal of museums and the power of the governing bodies but it does not consider the urgency of the community. It has created great inertia that prevents museums from developing. Hai Duong museum has a huge area of 8000m² but only has a few dozen visitors per day. Bac Lieu museum has only a few visitors per month. Nghe An museum holds about 30,000 artifacts, including national treasures, but there has never been any display of artifacts to welcome visitors. Quang Binh museum is not open to visitors. These museums only perform a single task of "storehouse" for artifacts. The absence of researchers and visitors has made these museums unable to meet the community's urgency in disseminating knowledge.

Case 3: Power combines with legitimacy to respond to an urgent need.

In 2019, the People's Committee of Quang Ninh province decided to grant financial autonomy to the Quang Ninh Museum based on the museum's proposal when they met the necessary conditions. The museum has a diverse and rich collections of artifacts, which are regularly added, including many national treasures. The museum also organizes many thematic exhibitions to disseminate knowledge about the local history and culture to students, residents, and tourists. All of the mentioned factors have helped the museum to attract many visitors (average of about 7,000 visitors per month) even as the price of tickets to the museum increases. In this case, definitive stakeholder was formed in establishing the autonomy of the Quang Ninh Museum. The autonomy of the museum has met the needs of stakeholders: governing bodies, the museums, and communities. Quang Ninh Museum has fulfilled the missions of a museum: collecting, preserving, researching, displaying, and introducing heritage and artifacts to serve the needs of research, study and visit of communities.

5. DISCUSSION AND CONTRIBUTION

This study derives from an analysis of the pros and cons of applying private sector performance assessment and management techniques to public service delivery organizations. We have found that applying market-oriented management techniques to public museums has only resolved the relationship between museums and their governing bodies, other museums, and their customers. However, a broader community including researchers, museum associations, the public, and future generations have not received sufficient attention.

We have found that the cause of this phenomenon is the lack of adequate linkages among stakeholders in establishing autonomy of museums. When the autonomy of museums based on the authority of the state agency has been combined with the urgency of existing communities (the need of visitors to enjoy more of the museum's services), museums can be in a difficult situation. When the autonomy of museums based on the power of governing bodies combined with the legitimacy of museums but fail to meet the urgency of the community, museums are literally a "storehouse" containing artifacts. Lastly, when the autonomy of museums ensures a combination of power, legitimacy, and solving urgent problems, the museum has fulfilled its mission.

Our study provided understanding of museum stakeholders and confirmed the need to fully consider museum stakeholders. This study does not only promote short-term benefits, but also create long-term benefits for future generations.

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INNOVATION IN THOUGHT AND VISION: CREATING A RESOURCE FOR NATIONAL SOCIO-ECONOMIC DEVELOPMENT IN THE PERIOD OF 2021 – 2030

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Abstract: *The path of more than 35 years of Doimoi has brought Vietnam several striking achievements in socio-economics. Otherwise, there are also various difficulties, especially in unpredictable changes both within the countries and at the international level. Successfully overcoming these challenges is necessary to have innovation in thought and vision. This research summarizes recent achievements, points out difficulties that we have to face. Based on these findings, the research proposes a couple of recommendations on the innovation of strategic thought and vision in terms of national leadership and management with the expectation to help Vietnam develop further in the future.*

Keywords: *Innovation, vision, resource, development, Vietnam*

INTRODUCTION

After more than 35 years of Doi Moi, our self-comparing economic achievements are strikingly impressive. The economy of Vietnam successfully got out of poverty, developed from an agricultural, small, and obsolete economy with the GDP per capita is around US\$ 250 at the beginning of the reform and promoted the industrialization and modernization process. The GDP scale is continuously increasing, reached to US\$ 343.6 billion in 2020, which helps Vietnam to become the fourth largest economy in ASEAN. Since 2008, Vietnam has no longer been a low-income country. From the situation of food shortage, Vietnam has ensured national food security and became a world-leading exporter of rice and many other agricultural products. Industry developed at a quite fast pace. The share of industry and service has continuously increased and recently accounts for about 85% of total GDP. The total import-export turnover sharply increased, in 2020, reaching over US\$ 540 billion. Foreign exchange reserve sharply increased, reaching 100 billion USD in 2020. Foreign investment rapidly increased. The total value of registering projects was nearly 395 billion USD by the end of 2020. These achievements help create a solid foundation for Vietnam to improve the cooperation with other countries based on the interests of each country and for the mutual peace, cooperation, and development in the region and all over the world.

However, it is indisputable that, by that period, Japan became a high-developed country, South Korea was a member of the G20, and Singapore was an Asian “dragon”, while Vietnam is only a low, medium-income nation. In order to become a developed–industrialized country in 2045, there is necessarily a breakthrough to develop, or will never get out of the low, medium-income trap.

The recent weakest issue is the mindset of many cadres and party members who are unwilling or do not want to change and dare not to face risks and challenges. Therefore, it isn’t easy to have

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any leap or breakthrough for development. According to the philosophical principle of dialectical materialism, we need to realize that movement is a type of development and all changes can add more value. Only change occurrence will make us develop, walk abreast with great countries in the whole five continents. Until now, the Asian mentality tends to obey orders, to be afraid of changes or criticism (introverts). Therefore, it isn't easy to propose breakthrough policies and solutions. In contrast, Western people (extroverts) always want to do new things, do not want to repeat things, always take and exploit development opportunities, then as a result, they develop very quickly.

From 2021 to 2030, three essential problems emerge for Vietnam's socio-economic development: thought, vision and industrialization, modernization, and resources for development.

1. THE OVERVIEW OF THE COUNTRY AFTER 35 YEARS OF DOI MOI

Achievements:

The country successfully got out of socio-economic crisis and underdevelopment, became a developing country at a medium-income level, and accelerated industrialization, modernization, and international integration. The economy has grown well, the socialist-oriented market economy was gradually formed and developed. Politics and society are stable; national defense and security are strengthened.

- Culture and society have developing steps, the national façade and people's lives changed a lot, average income per capita increased. Socialist democracy is promoted and expanded. Great national unity is consolidated and strengthened.

- Party reinforcement, the rule of law state, and the whole political system have been promoted. In all aspects, the country's strength is raised, independence, sovereignty, unity, territorial integrity, and the socialist regime are upheld.

- Foreign affairs are increasingly expanded and deepened, position and prestige of Vietnam in the international arena are enhanced. Opportunities, potentiality, reputation, and position are unprecedented as it is today.

Challenges for the development of Vietnam:

First, Vietnam is a low medium-income country

Vietnamese GDP of 2018 is ranked 136 out of 188 countries in the world; of 2019 is US\$ 3,442/person/year; of 2020 is US\$ 3,521/person/year¹, approximately 64 percent of the middle-income countries. In other words, our per capita income is still in the group of low medium-income countries.

Recently, the gap in development between us and other Asian countries, such as Thailand is 8 years, and South Korea is 40 years; we are currently standing higher than Laos, Cambodia, and Myanmar in the Southeast Asia Region. Therefore, we must utilize all opportunities, exploit internal resources for development; otherwise, we would fall further behind other countries in the region and all over the world.

Second, fundamental factors for development and economic growth are still weak

Although the policy for industrialization and modernization was promulgated quite early, the implementation pace was slow. It did not associate with developing a knowledge-based economy,

¹ Communist Party of Vietnam (2021), Document of the 13th National Congress of Deputies, National Political Publishing House of Truth, Hanoi, 2021, T1, p.218.

lack of fundamental industries, core technology. The development planning for fundamental and supporting industries did not have a clear strategy and poor efficiency.

- The socio-economic infrastructure is still limited, weak, backward, and lacks connectivity. The urban development is of low quality and inconsistent. Industrialization, modernization of agriculture, and rural development are still slow.

- Resources are not fully utilized, the internal resources of science and technology are not enough to master the imported technologies, new technologies, core technologies, etc.

Third, the economy is slowly moving upward and depends much on traditional factors

- The economic restructuring is slow, the economic growth model reform, productivity, and quality improvement do not yield significant results.

The national economy highly depends on traditional mining factors, mainly simple, low-quality, quantity-based labor, which has not yet exploited many skilled workers.

- The growth motive relies heavily on the foreign direct investment sector. In 2019, the domestic sector reached US\$ 82.10 billion, increased by 17.7%, accounted for 31.2% of total import-export turnover, while the foreign investment sector reached US\$ 181.35 billion, risen 4.2%, accounted for 68.8% (the proportion decreased by 2.5 percentage points compared to the previous year).

- The transportation infrastructure has been slowly developed, hitherto, after many years, it has not been possible to construct the North-South expressway and the North-South high-speed railway. However, the national geographical shape is 2,000 km in length, covering 150 parallel, which must be considered the crucial route and motivation for development (not the lack of investment capital but the lack of breakthrough thought strategic vision). Therefore, we have missed the opportunity for a breakthrough to build it about 15 – 20 years ago.

Forth, economic restructuring, growth model renovation are slow

- Competitive capacity is at the medium level, critical criteria for sustainable development. In 2019, Vietnam ranked 89/141 on institutions, 101/141 on transparency, 77/141 on infrastructure, 76/141 on innovation, 131/180 on environmental management capacity, etc.

- Exportation, trade, investment rely on FDI (FDI accounts for approximately 70% of export value, 50% of industrial outputs, supporting industries slowly develop, connection to the FDI sector is limited).

Input materials are greatly dependent on a few markets; for example, imports from China account for 30% of the total import turnover, making the Vietnamese market vulnerable to the fluctuation of the world political and economic situations. Especially in the past two years, the world has been strongly influenced by the COVID-19 pandemic, leading to a breakdown of the global supply chain, which greatly affects many domestic manufacturing industries.

Fifth, policy-making and implementation are problematic

- Some legal regulations are unsynchronized, inconsistent, overlapping. The contradictions overlaps between laws, laws, and decrees, and circulars still occur, causing difficulties in application and implementation. Only in terms of the investment sector, the Prime Minister's Advisory Group pointed out the entanglements of the current provisions in nine laws (including Investment Law, Housing Law, Environmental Protection Law, Real Estate Trading Law, Law on Land, Construction Law, Bidding Law, Civil Law, Law on State Capital Usage and Management) and by-law

documents. This overlapping and entanglement cause many troubles, time and financial expense, and loss of opportunities for investors, inhibiting the breakthrough of the national economy.

- Policy implementation is slow. Policy analysis and evaluation are sporadic, fragmentary, formalistic. Not much research is highly qualified in terms of content, quality, and scale to make policy breakthroughs in each field.

The main reason for this situation is due to slow institutional reform, lack of drastic implementation. When assessing the causes of weaknesses that existed in the tenure of the 12th National Party Congress, our Party soundly emphasized: “Directing and organizing the implementation are still weak, slowly improve; The capacity to institutionalize policies and resolutions is still limited, and the organizational and implementation capacity of officials has not met the requirements, implementing laws and resolutions slow and inefficient”¹.

2. INNOVATION IN THOUGHTS AND VISION FOR THE DEVELOPMENT OF VIETNAM TO 2030 - 2045

Vietnam is at an important point of time for quick and sustainable development, prevent from falling into the low medium income trap. Therefore, we must take an active role in deciding our future (How to go? When to arrive? What are the decisive conditions? What are the resources for implementation?). It is necessary for new thinking, the new approach in a positive direction. In 2020, we successfully controlled the COVID – 19 pandemic, which shows Vietnam’s effective solutions and strategies when “fighting” the COVID-19 invisible enemy. Residents’ feelings quickly gained from bewilderment, panic, and even fear to more trust, balance, and assurance when we speedily quarantined, isolated suspected, and infected people. The Party and Government accumulated the people’s great unity to fight against the COVID-19 enemy. Other countries have highly appreciated this achievement in implementing decisive, drastic, throughout efforts in preventing and controlling the epidemic has been highly appreciated by other countries. They also expressed appreciation for the recent achievements of Vietnam, which is an affirmation of Vietnamese strength in the country’s construction task under the leadership of the Communist Party of Vietnam. However, the fourth spreading wave of COVID-19 pandemic across the country is facing us in front of an unprecedented challenge. Keeping successfully controlling the pandemic is a reagent of our leading ability and national solidarity, creating an opportunity for us to break through, rise, and successfully execute the 13th National Party Congress Resolution, which will bring the country to be fast and sustainable development.

- It is necessarily aware that the world will be changing, so Vietnam can not stand aside, fall behind the trend. We need to follow the new game, in the new playground. In order to do so, it is crucial to invest significantly in building a consistent, developed infrastructure in both economics and society, to concentrate on developing high-quality human resources, to prioritize training labor on leadership and management and in vital fields; to accelerate the national digital transformation, build and develop the digital economy and digital society. It is a once-in-a-lifetime opportunity, especially in the unpredictable and complicating context of the COVID-19 epidemic, we are clearly aware of the importance of staying connected by a digital platform. Because of it, life has changed in all aspects, from economy, culture, society to state management. These changes affirm that the digital economy is gradually replacing the physical economy. The physical economy must be

¹ Communist Party of Vietnam, Documents of the 13th National Congress of Deputies, National Political Publishing House of Truth, Hanoi, 2021, T1, p.94.

digitized and integrated with the digital economy in order to exist. Intense investment in science, technology, innovation, and creativity is joining the new structure and order (production, supply). After the COVID-19 pandemic, we might have to wait for very long to have a good time like today (when the world is slowing down).

- **All decisions need to be determined accurately and timely** because time is always both a friend and an enemy, our difficulties are favorable for others. To correct the wrong things can not be called change or reform. Alternatively, we can proactively create opportunities (political stability, safety). If one wants to go fast, one must choose the right path, then plan it well; instead of demolishing and rebuilding, plan well, not rebuild. It is necessary to get rid of the idea to forbid if can not manage, ignore if can not forbid. The goal of the national policy must be to bring happiness to everyone.

- **It is necessary to have an overall strategic view for rapid and sustainable development of the country based on technology, innovation, and digital transformation:** The motivation for development are science and technology; creativeness and innovation with goals to people and for people. The 13th National Party Congress document emphasized: “Fast and sustainable development relies mainly on science and technology, innovation and digital transformation. It is necessary to renew thinking and action, proactively grasping promptly and effectively opportunities of the Fourth Industrial Revolution in association with the international integration to restructure the economy, develop digital economy and digital society, consider it as a decisive factor to improve productivity, quality, efficiency, and competitiveness”¹.

Developing high-quality human resources: The world needs high-quality human resources, while Vietnam has an abundant but lack of high-quality labor force. By 2030, Vietnam will transform into an aging population structure, so we only have 10 years to exploit this advantage. Otherwise, we will fall into the situation of *a not-rich but aging population*. It is necessary to innovate in the training of high-quality human resources for innovation and creation, focusing on categorizing students who graduated high school but do not choose to start their career by going to university

- **Market is the most important mechanism to ensure the efficient allocation and usage of resources.** We have not invested much in potential regions for the growth poles of the economy but still kept the thought of egalitarianism or “each province is a fortress” which is only suitable in the situation of war or disease prevention. Recently, there has been a tendency of racing to build airports and seaports among provinces? For example, is it necessary for Ha Tinh to build an airport? When the distance between Vinh airport (Nghe An) and Ha Tinh city is very close (about more than 50 km). New thinking for development is *to create supply to have demand*, not from demand to create supply. We have the mindset of “nesting” to welcome the “eagle” which is a new mindset, but frankly, many countries in the world have been doing it for a long time, the case of the UAE is a vivid example to make Dubai become the world financial center.

- **Saving issues (first stage for development):** We used to have trends to build cement factories, sugar cane factories, airports, seaports, highways, etc. in every province. It is necessary to unify the awareness and opinion: National highways must be built, provinces only need to build high-speed

¹ Communist Party of Vietnam, Documents of the 13th National Congress of Deputies, National Political Publishing House of Truth, Hanoi, 2021, T1, p.214.

roads (branch roads) connecting to national highways. New thinking is required in site clearance to build a 6-10-lane North-South expressway, which is the main “lifeline” of the country’s economy. One-time site clearance, one-time investment to prevent expansion and upgrade activities in the future is a good measure of saving for the State budget.

- ***Need to form a world financial center in Vietnam:*** We have an opportunity when several world financial centers are overloaded, investors want to find new markets. Moreover, the time zone of Vietnam is not similar to 21 other current financial centers in the world. Meanwhile, we all know that the cash flow is circulating 24/7, we can organize and control the cash flow for development and have the opportunity to participate in the financial world. The candidates to build this international financial center can be Da Nang city or Thu Duc city...

- ***Pay attention to solving urban traffic congestion:*** Urban traffic in Hanoi and Ho Chi Minh City is currently a bottleneck for economic development in the two main growth poles of the country. To solve this situation, it is necessary to have a breakthrough thought to reduce and eliminate old motorbikes, not to ban them but set necessary environmental requirements for circulation. The state purchases old vehicles, imposes heavy taxes on registration of new ones, restricts the development of private means of transportation, and develops urban public transport such as buses, subways, etc.

- ***Changing on management thinking, national governance:*** Convert from pre-inspection to post-inspection (promoting development). Eliminate the thought that to forbid if can not manage, then switch to the experimental mechanism and allow to operate. Regulation 22/QĐ-TW dated July 28, 2021 of the Party requires: “Inspection and supervision must promptly detect new and positive factors to promote, protect the right things, protect good people, cadres who dare to think, dare to do, dare to take responsibility, dare to make breakthroughs for the mutual benefits”¹. This is a timely regulation to encourage, motivate and create a mechanism for the renewal of thinking in governance, leading the career of national renewal, without formalizing bureaucratic, economic relationships need to be promoted settlement by mediation and civil courts.

- ***Refresh the thinking on agricultural development:*** Resolution of the 13th National Party Congress emphasized: “Promoting agricultural restructuring, exploiting and taking advantages of tropical agriculture, developing large-scale commodity agriculture towards modernized, specialized and high-quality cultivation. To develop high-tech agriculture, organic agriculture, ecological agriculture...”² towards highly efficient agriculture, product optimization rather than output maximization. High technology is not the final goal but a means to efficiency. Restructure products to meet the needs of the world market: high nutritional value (vegetables, meat, eggs, dairy, seafood), processed food, furniture, organic products, dietary supplements, cosmetics. Vietnam’s agriculture cannot continue to maintain its advantage by exploiting resources and cheap prices. It is necessary to prepare for new competitiveness when participating in the deeper and broader international integration, especially when we have fully participated in new-generation free trade agreements such as EVFTA, RCEP, and CPTPP, etc. Develop the processing industry for agricultural, forestry products, and seafood, build value chain linkages, and promulgate appropriate

¹ Ban Chấp hành Trung ương, QĐ 22/QĐ-TW ngày 28/7/2021 “Quy định về công tác kiểm tra, giám sát và kỷ luật Đảng”

² Đảng Cộng sản Việt Nam, Văn kiện Đại hội đại biểu toàn quốc lần thứ XIII, Nhà xuất bản Chính trị quốc gia, Sự thật, Hà Nội, 2021, T1, tr.241.

insurance policies to handle risks and increasingly strong market fluctuations. Ensure compliance with increasingly stringent market regulations in terms of the global market's economic, social, and environmental aspects.

- ***For the development of industrialization and modernization***

- Need to change the mindset from Made in Vietnam (produced in Vietnam) to Make in Vietnam (designed, manufactured in Vietnam), emphasizing innovation, adding value, participating more deeply in the global value chain. Invest in technology, technological transfer, ownership, and creation. Rapidly and intensively develop several fundamental industries to meet the needs of the economy's production materials and equipment: energy industry, mechanical - engineering industry, metallurgical industry, etc. simultaneous to pay attention to developing a number of core industries using new and high technologies such as electronics and telecommunication, robot manufacturing industry, automatically integrated equipment, remote control; software industry; pharmaceutical industry, etc. Completing the socialist-oriented market mechanism.

- To form large domestic economic groups in industrial production (both state-owned and private), with strong potential, enough regional and international competitiveness, to play the leading and pervasive role supporting Vietnam's industrial development.

- To develop supporting industries, gradually reducing the external dependence. To promulgate a statute on supporting industries. To attract foreign direct investment comes together with supporting domestic industry to improve the level of development by mechanisms and policies to facilitate the conditions of development.

CONCLUSION

Based on the right theoretical foundation and closely followed the changing reality, it is the factor that ensures the feasibility of the new vision. On the principle that practice is the criterion of truth, the Communist Party of Vietnam is always aware of the great importance of summarizing practices to develop theories, resolving obstacles in ideological perception, and discover good experiences and useful paradigms. It is possible to proactively and timely approve policies to effectively solve new problems arising in practice; well resolving, ensuring the harmony of major relationships in politics, economy, society, technology, environment, etc., reflecting the law of innovation and development in Vietnam. Faced with new situations and tasks, our Party must be aware of the more importance of people's practical creativity, encourage people to be creative, from new experiences among the people to develop theories and policies to guide the implementation of new practices.

Starting from reality, sticking to the vivid reality that keeps changing over time in the new context of the world, of the region, and of the country, the Party have been leading the renewal of Vietnam's development thinking to match the trend of developing market economy, international integration, inclusive development, and sustainability, etc.; effectively exploiting the world's development achievements, especially the achievements of the fourth industrial revolution; selectively absorbing the progressive values of humankind in terms of comprehensive human development, for the sake of the people, taking the people as the center, to people and for people, etc., in accordance with the development of the philosophy of Vietnam and with the noble and humane nature of socialism.

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MEASURING THE NON-LINEARITY OF CALORIE – INCOME RELATIONSHIP: AN INTERNATIONAL PERSPECTIVE

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Abstract: *Based on the theoretical framework of the contemporary economic growth model, this paper shows the potential non-linearity relationship between national income and national calorie-intake. This relationship has caught a lot of attention of researchers and policymakers worldwide. Utilizing a unique dataset of more than 100 countries in the world from 1961 to 2001, this paper demonstrates empirical evidence of the non-linearity relationship by groups of food items and by regions. The empirical results show a consistent non-linearity relationship between national income and national calorie intake within regions and groups of food items. Comparing this paper's results to previous findings based on microdata and expenditure data, the author found a pattern that exhibited a critical point where increased income will likely decrease calorie-intake.*

Key words: *National income, national calorie-intake, non-linearity relationship, international perspective*

1. INTRODUCTION

Policies aimed at better nutrition and reducing starvation remain among the most broadly accepted policies globally, as highlighted by Banerjee (2016) and Hawkes et al. (2017). These policies, which are implementing in different nations, can be codified as (i) subsidize for basic food-stuffs; (ii) cash transfer; (iii) food vouchers; (iv) conditional financing. Their effectiveness depends on the program design approach (Banerjee, 2016) or the sensitivity of food demand to the variation of income (Trinh et al., 2018). A considerable number of researches in development and health economics deal with estimating the effect of income on food demand measured by calories and has brought controversial results. The shape of the relationship between calories and income relies on the design of relevant policies. It could be linear, convex, or concave (Banerjee, 2016).

This paper is an attempt to measure the non-linearity of the calories-income relationship at the international level. It is believed that the shape of the relationship should be non-linearity, especially in quadratic shape. The insight underneath this shape is that calorie intake will increase when income increases for low income consumers. Ravallion (1990) shows that calorie intake increases along with the increase of income to a threshold. Beyond the threshold, increases in income will unlikely affect calorie intake or even decrease.

The structure of this paper is as follows. Section 2 presents a brief literature review. Section 3 gives a theoretical framework used in this paper. Section 4 demonstrates the model and data utilized in this study. Results offer empirical results in section 5. Special attention is devoted to discussion results and providing policy implications in section 6. Section 7 concludes.

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2. LITERATURE REVIEW

Following Ravallion (1990), many studies address the non-linearity of calorie-income relationship by estimating the classical quadratic function where log-income is the main independent variable. Log-income's estimated coefficient shows the elasticity of income to calorie intake and non-linearity is captured by including the square of log-income. Ogundari et al. (2013) show that 86 among 99 elasticity recorded were estimated by using this parametric specification.

Some scholars have claimed that the relationship of calorie-income is not significantly different from zero. It implies that consumers are consistently maintaining their level of calorie intake as income varies (Behrman et al., 1987; Behrman et al., 1984; Bouis, 1994; Skoufias et al., 2009). These authors conclude that income arbitrated policies do not have much effect on calorie intake goals. However, many scholars have argued the existence of positive and statistical significance of calorie-income relationship. They also emphasize that income increase might go along with the rise in calorie intake in developing countries (Abdulai et al., 2004; Deaton, 1997; Gibson et al., 2002; Subramanian et al., 1996). In a recent study, Skoufias et al. (2009) show a complex result where income elasticity is positively and statistically significant using Ordinal Least Square strategy but is almost zero when the instrumental variable is employed to control addressing measurement error issues. Therefore, the debate on the shape of the relationship between calorie intake and income remains unresolved due to different estimated results in the field.

Although there are different results among schools of thought regarding the calorie-income relationship, an equally critical reflection that is of importance is the shape of the relationship between calorie intake and income. Deaton et al. (2009) and Deaton et al. (2010) show that cereal intake likely decreases with increasing income as food intake is varied. Therefore, an increase in income has likely brought to changes in diet toward to higher nutrient content. This insight basically motivates the investigation of the non-linearity of calorie-income relationship at the macro level to address the national demand for food commodities, as well as the impact of income on food consumption measured by calorie intake (Abdulai et al., 2004; Banks et al., 1997; Huang et al., 2009; Skoufias et al., 2009; Trinh et al., 2018).

Although this topic is moderately crucial, hypothetical positions are quite different, and the practical assessments of the matter have led to a little consensus among scholars worldwide. Theoretically, the effective wage hypothesis implies that workers' productivity depends on their income through calorie intake, which their earnings allow them to consume. According to this school of thought, which is attributable to Leibenstein (1966); Mirrlees (1975).

This research is related to a growing literature that uses Engel curve approaches to infer various aspects of economic growth. Aguiar et al. (2015) use Engel curves to derive an alternative estimate of the growth in US consumption inequality. Almås (2012) uses Engel curves to estimate biases in purchasing power parity statistics. Young (2012) uses related methods to generate alternative estimates of African growth. Bils et al. (1998) use Engel curve method to test the predictions of various business cycle models. Nakamura et al. (2016) utilize the same method to construct alternative estimates of Chinese growth and inflation.

This paper aims to contribute to the literature on estimating the non-linearity calorie-income relationship at the national level.

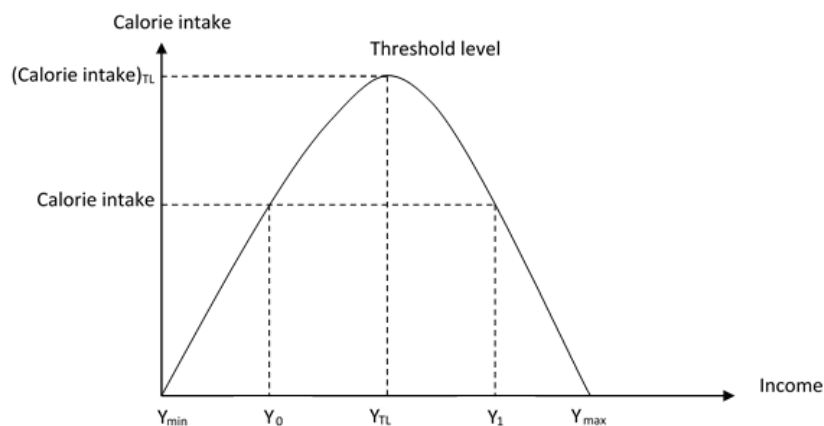
3. THEORETICAL FRAMEWORK

Inadequate calorie intake is a direct criterion of poverty because lacking calorie intake is associated with poor diets that increase malnutrition and decrease health and future income. Within economic literature, two theories are usually used to describe the calorie-income relationship: the Engel curve framework and the efficiency wage hypothesis. The Engel curve framework assumes that calorie intake is determined by income growth, while the efficiency wage hypothesis theorizes that income growth is determined by calorie intake channeling via increases in work productivity or efficiency (Leibenstein, 1957; Stiglitz, 1976). The wage-productivity relationship has two parts: (i) the relationship between income and calorie intake; (ii) the relationship between calorie intake and productivity (Leibenstein, 1957).

Contemporary economic thoughts have proposed that income growth can improve and eventually eradicate food poverty (WorldBank, 1980). Accordingly, with large calorie-income elasticity, Reutlinger (1986) suggests that economic policies designed for economic growth and increasing the total income of all poor people in the specific nations are effective long-term strategies to dwindle undernourishment, especially in developing countries. On the other hand, with a small calorie-income elasticity, Ogundari et al. (2013) suggest a very limited room for economic policies in alleviating food poverty. On the circumstances, Abdulai et al. (2004) recommend that economic policies including a mix of food prices, household demographic distributions, and household income are more likely to increase households' calorie intake demand.

The non-linearity relationship between calorie intake and income is normally captured as a quadratic shape (Deaton et al., 2009; Leibenstein, 1957; Ogundari et al., 2013; Trinh et al., 2018). The rationale of this shape can be described as follows. *Firstly*, an increase in income will increase calorie intake accordingly until total calorie intake reaches a threshold. Subsequently, an increase in income does not lead to an increase of calorie intake. *Secondly*, the demand for calorie intake will reach a threshold and then decrease because of the limitation of humans. At a certain age, people will tend to decrease their demand for calorie intake due to the deterioration of the digestive system. Therefore, income might continuously increase, but calorie intake might moderately decrease.

Figure 1. Non-linearity relationship between calorie intake and income



Source: Author's compilation

4. MODEL AND DATA

4.1. Model

4.1.1. Non-linearity of calorie-income relationship from the production function

It is assumed that there is no difference between countries in terms of ways of manufacturing and all economies have a similar technical level. It is also assumed that all workers around the world have a comparable quality of skills and knowledge. Therefore, the production function of the world economy is in Cobb-Douglas specification as follows:

$$Y_{i,t} = A_{i,t}^{\gamma} K_{i,t}^{\alpha} (\theta L)_{i,t}^{\beta} E_{i,t} \quad (1)$$

Where $0 < \alpha, \beta < 1$, $Y_{i,t}$ is total income of country i in the time t , $A_{i,t}$ is total factor productivity of country i in the time t , $K_{i,t}$ is total capital of country i in the time t , $(\theta L)_{i,t}$ is total calorie intake of people in country i in the time t , θ is total calorie intake of a person in country i in the time t , $E_{i,t}$ is “measure of our ignorance”. Divide both sides of (1) by $A_{i,t} E_{i,t} K_{i,t}^{\alpha}$ and solve for $(\theta L)_{i,t}$ to get

$$(\theta L)_{i,t} = A_{i,t}^{-\gamma/\beta} E_{i,t}^{-1/\beta} K_{i,t}^{-\alpha/\beta} Y_{i,t}^{1/\beta} \quad (2)$$

Taking logarithm both sides of (2) yields:

$$\log(\theta L)_{i,t} = -\frac{\gamma}{\beta} \log(A_{i,t}) - \frac{\alpha}{\beta} \log(K_{i,t}) + \frac{1}{\beta} \log(Y_{i,t}) + \left(-\frac{1}{\beta} \log(E_{i,t})\right) \quad (3)$$

From equation (3), since $0 < \beta < 1$ then $\frac{1}{\beta} > 1$, it is assumed that the relationship between total calorie intake and total income should be in a non-linearity shape. A quick test of this assumption via OLS regression is provided as follows:

Dependent variable	Log(TCI)	Log(TCI: cereals)	Log(TCI: fruits)	Log(TCI: meats)	Log(TCI: oil)	Log(TCI: roots)
Log (TFP)	-0.853*** (0.059)	-0.853*** (0.072)	-0.352*** (0.068)	-0.824*** (0.045)	-0.577*** (0.053)	-1.305*** (0.106)
Log (Capital)	-0.481*** (0.030)	-0.610*** (0.037)	-0.497*** (0.035)	-0.224*** (0.023)	-0.299*** (0.027)	-0.431*** (0.051)
Log (TI)	1.217*** (0.032)	1.312*** (0.039)	1.233*** (0.036)	1.068*** (0.025)	1.112*** (0.029)	1.095*** (0.051)
Constant	8.278*** (0.086)	7.852*** (0.108)	5.735*** (0.115)	4.734*** (0.051)	5.761*** (0.071)	5.747*** (0.170)
R ²	0.7668	0.6466	0.6911	0.9037	0.8400	0.4705
F - statistics	3329.45	1859.13	2218.43	12768.25	6306.96	920.89
N	3,521	3,521	3,521	3,521	3,521	3,521
Note:						
- robust standard errors are in parentheses;						
- ***: statistically significant at 1%.						
- TI, TCI: “total income” and “total calorie intake” respectively.						

Table 1. A Quick test for non-linearity of calorie-income relationship

Source: Author's estimation.

From table 1, estimated coefficients of the logarithm of total income variable range from 1.068 to 1.312 in response to total calorie intake and food categories. It implies that the relationship between total calorie intake and total income can be in a non-linearity shape.

4.1.2. Empirical strategy

Following Abdulai et al. (2004) and Trinh et al. (2018), most relevant researches about measuring the non-linearity of calorie-income relationship, use the classical double-log specification as follows:

$$\log(TCI_{i,t}) = \alpha_0 + \alpha_1 \log(TI_{i,t}) + \alpha_2 (\log(TI_{i,t}))^2 + \sum_{j=1}^J \beta_j Z_{i,j,t} + \varepsilon_{i,t} \quad (4)$$

Where $TCI_{i,t}$ is total calorie intake of country i at the time t ; $TI_{i,t}$ is total income of country i at the time t ; $Z_{i,j,t}$ is character j of country i at the time t and $j \in \{1,2,3 \dots J\}$ — a set of J characters of country i that are relevant to calorie intake; $\mu_{i,t}$ is country i fixed effect; $\varepsilon_{i,t}$ is error term; α_m and β_j is estimated coefficient.

Employ seemingly unrelated regression (SUR) strategy as major workhorse, the empirical strategy will be implemented as follows:

$$\begin{aligned} \begin{bmatrix} \log(TCI_{i,t}) \\ \log(TCI_{i,t}) \end{bmatrix} &= \begin{bmatrix} 0 \\ \alpha_0 \end{bmatrix} + \begin{bmatrix} \gamma_1 \\ \alpha_1 \end{bmatrix} \log(TI_{i,t}) + \begin{bmatrix} \gamma_2 \\ \alpha_2 \end{bmatrix} (\log(TI_{i,t}))^2 + \\ &+ \begin{bmatrix} \gamma_3 \\ \beta_1 \end{bmatrix} life_expectancy_{i,t} + \sum_{j=2}^J \begin{bmatrix} 0 \\ \beta_j \end{bmatrix} Z_{i,j,t} + \begin{bmatrix} \varepsilon_{i,t} \\ \varepsilon_{i,t} \end{bmatrix} \quad (5) \end{aligned}$$

The model given by specification (2) represents a system of Engel curves of the various calorie intake, which are seen to be allied through their random error terms, so establishing a system of seemingly unrelated regression equations (SURE) to be estimated. The above terms in equation (2) could be basic estimation where the basic setting is walking to the stage with a very fundamental environment. On the other hand, the below terms in equation (2) is the full estimation where the more complex setting is established. Major variables and their co-variables are including in one equation to control other effects from environments. In the empirical strategy, co-variables have been selected exclusively from calorie-related variables available to collect. Four variables are suitable for this selection, including (i) human capital: measured by average years of schooling; (ii) life expectancy; (iii) average body mass index of male: the measured potential of obesity status of male within nations; (iv) average body mass index of female: measured potential of obesity status of female within nations. Although these co-variables are not main interest of this paper, they provide very good proxies for output-oriented variables.

Using the system equations (2), this research will estimate the relationship between total calorie intake and income at national level using SURE that allowed testing the correlation between equation's error terms to finding out the appropriate shape of the relationship. The modeling framework first accounted for differences between regions by estimating the effect of total national income to total national calorie intake. To account for differences in regions, system of equations (2) are estimated within six regions. In the next step, this paper looks at the different patterns of non-linearity of calorie-income relationship per food category in different regions. This step will provide a deeper snapshot in measuring the non-linearity of calorie-income relationship.

4.2. Data

This research relies on several reliable sources of data including: (i) Penn World Table version 9.0; (ii) FAOSTAT; (iii) World Health Organization, Global Health Observatory; (iv) United Nation Population Division. Penn World Table provides a rich source of macroeconomic variable such as national TI at constant and current prices. National TI has been converted to common currency, USD, using purchasing-power-parity exchange rates, so TI is comparable across countries (Feenstra et al., 2015). In Penn World Table, national TI, average years of schooling, population are three variables employed by this study.

The dependent variable of this study, national nutrition, is taken from FAOSTAT. It covers a period from year 1961 to 2014 for approximately 190 countries across six continents. FAOSTAT provides only daily calories intake per person for different countries. To make total calories intake variable for each nation, this paper uses the following formula:

$$\text{National total calorie intake} = \text{daily calorie intake} \times 365 \text{ days} \times \text{population} \quad (6)$$

Average body mass index (BMI henceforth) of male and female at national level has been taken from World Health Organization, Global Health Observatory. It covers period from year 1975 to 2014. In addition, life expectancy data is derived from United Nation Population Division and it covers the period from year 1950 to 2014.

Variable	N	Mean	Median	SD	Min	Max
Log (TCI)	5,550	15.37	15.48	2.04	6.61	21.05
Log (TCI: cereals)	5,518	14.51	14.59	2.05	9.04	20.48
Log (TCI: fruits)	5,518	12.82	13.04	2.01	6.53	18.43
Log (TCI: meats)	5,550	13.18	13.22	2.02	7.43	19.34
Log (TCI: oil)	5,550	13.80	13.87	2.01	8.20	19.23
Log (TCI: roots)	5,549	12.21	12.46	2.27	4.99	18.44
Log (TI)	9,439	10.30	10.29	2.31	2.09	16.66
[Log (TI)] ²	9,439	111.52	105.79	47.44	4.37	277.47
Log (Capital)	9,409	11.387	11.362	2.323	3.429	18.029
Human Capital	7,867	2.03	1.92	0.71	1.01	3.73
Life expectancy	11,049	61.68	64.69	12.24	18.91	83.48
Average BMI of male	6,877	23.64	23.95	2.21	18.50	29.07
Average BMI of female	6,840	24.27	24.62	2.45	17.15	30.65

Table 2. Data summary

Source: Author's calculation

5. EMPIRICAL RESULTS

5.1. Non-linearity relationship of total national intake and income

Table 3 reports the result of the basic model to find out the existence of a quadratic relationship between calorie intake and the total income of a nation. All estimated coefficients are statistically significant at a high level ($p < 0.01$). As expected, calorie intake and income exposure have a non-linearity relationship despite the low value of the estimated coefficient of the logarithm of total income square. A negative or positive and significantly different from zero value of the test statistics

of the logarithm of total income and logarithm of total income square imply an inverse U shape of a full quadratic function, like the shape in figure 1. Thus, the relationship appears to be concave for the whole sample. The result contributes to the debate on how total calorie consumption responds to total income in different countries at the national level. This clearly shows that income-mediated policies can impact total calorie intake goals up to a threshold of total income in the world.

Dependent variable is Log (TCI)		
	Equation 1	Equation 2
Log (TI)	2.754*** (0.016)	2.756*** (0.016)
[Log (TI)] ²	-0.083*** (0.001)	-0.083*** (0.001)
Life expectancy	-0.061*** (0.002)	-0.062*** (0.002)
Human capital		0.0002*** (0.00002)
Average BMI of male		0.0001*** (0.0000)
Average BMI of female		0.0001*** (0.0000)
Constant		-0.016*** (0.0002)
R ²	0.9973	0.7595
Breusch-Pagan test of independence (henceforth BG test)		3353.999
N		3,354
Note: - standard errors are in parentheses; - ***: statistically significant at 1%.		

Table 3. Basic model

Source: Author's estimation.

Table 4 reports the estimated results across continents. The aim of table 3 is to find out the patterns of the non-linearity of calorie-income relationship at the national level in different regions worldwide. The form of the equation is confirmed from the Asian to Oceania continents, where the differences are only in the value of estimated coefficients. These results contribute to the debate on how income affects calorie intake in different countries. They clearly show that income has a different magnitude to calorie intake among continents. The Oceania continent's countries demonstrate the highest magnitude of the logarithm of total revenue and its square, while America's countries enjoy the lowest magnitude.

The pattern of non-linearity of calorie-income relationships across continents demonstrates a sharing trend. The estimated coefficients of square logarithm of total income are statistically significant at a high level ($p < 0.01$). Additionally, all negative estimated coefficients show that the relationship between calorie intake and national income exposures is a concave shape. Consequently, there exists a maximum point in the function of calorie intake and national income in

this study period. For six regions, the income elasticity display a consistent pattern across regions, ranging from 4.610 ($p < 0.01$) for Oceania countries to 2.030 ($p < 0.01$) for American countries and income square elasticity are ranging from -0.2 ($p < 0.01$) for Oceania countries to -0.052 ($p < 0.01$) for American countries. On average, Oceania countries display the largest income elasticity to calorie intake, while American countries show the lowest elasticity of calorie intake.

Controlling variables including life expectancy, human capital, average BMI for males, and average BMI for females do not significantly affect total national calorie intake in almost six regions. It implies that there could be a convergence among regions in terms of food consumption. In fact, diet is different between nations due to culture, but ingredients. Additionally, people in different countries consume food differently, but their nutritional intake is converged independently.

These controlling variables provide further information surrounding calorie-income relationship. Calorie intake might be affected by age and health (proxied by life expectancy) or education (proxied by human capital) or just obesity awareness of the nations (measured by average BMI for male and female).

Dependent variable is Log (TCI)						
	Asia	Europe	Africa	Caribbean	America	Oceania
Equation 1						
Log (TI)	2.820*** (0.054)	2.731*** (0.065)	2.775*** (0.029)	2.781*** (0.082)	2.017*** (0.029)	2.611*** (0.263)
[Log (TI)] ²	-0.080*** (0.003)	-0.078*** (0.003)	-0.098*** (0.002)	-0.097*** (0.006)	-0.052*** (0.001)	-0.086*** (0.010)
Life expectancy	-0.079*** (0.005)	-0.070*** (0.005)	-0.035*** (0.003)	-0.047*** (0.005)	0.001 (0.003)	-0.038 (0.023)
Equation 2						
Log (TI)	2.820*** (0.054)	2.744*** (0.065)	2.782*** (0.029)	2.633*** (0.093)	2.030*** (0.029)	4.610*** (0.832)
[Log (TI)] ²	-0.080*** (0.003)	-0.080*** (0.003)	-0.098*** (0.002)	-0.089*** (0.006)	-0.052*** (0.001)	-0.200*** (0.032)
Life expectancy	-0.079*** (0.005)	-0.069*** (0.005)	-0.035*** (0.003)	-0.051*** (0.005)	0.002 (0.003)	0.032 (0.074)
Human capital	0.0003 (0.0003)	0.002*** (0.0002)	0.001*** (0.0002)	0.196*** (0.012)	0.003*** (0.0003)	0.018 (0.166)
Average BMI of male	0.0002 (0.0002)	0.0005*** (0.0002)	0.000 (0.000)	0.000 (0.003)	0.001*** (0.0002)	0.398* (0.241)
Average BMI of female	0.001*** (0.0001)	-0.002*** (0.0001)	0.0002*** (0.00002)	-0.027*** (0.004)	-0.001*** (0.000)	-0.461*** (0.119)
Constant	-0.071*** (0.003)	-0.076*** (0.005)	-0.039*** (0.001)	1.187*** (0.198)	-0.094*** (0.003)	-11.31*** (1.794)
R ²	0.7145	0.8852	0.6714	0.8721	0.9388	0.5567
BG test	806.994	713.991	1076.998	134.896	539.986	80.230
N	807	714	1,077	135	540	81
Note: - standard errors are in parentheses; - ***, *: statistically significant at 1%, 10% respectively.						

Table 4. By regions

Source: Author's estimation.

5.2. Patterns of non-linearity of calorie-income relationship

From table 5, we can see the common trend of the relationship between total calorie intake by food categories and total national income. Calorie intake from cereals has the highest effect on total income, while calorie intake from meat has the lowest effect on total income. When the logarithm of total income increases by one point, logarithms of total calorie intake from cereals, fruits, meat, oil, and roots increase by 2.748, 2.321, 1.812, 1.747 and 2.115 points, respectively. The result reflects that income does have a stronger effect on total consumption on cereals than meat within the time frame from 1961 to 2001. In the real-life, people tend to use less oil than other food ingredients, so the effect of total income on total calorie intake from oil is the lowest among food categories in this study.

The non-linearity relationship between the logarithm of total income and the logarithm of total calorie-intake is consistent among different food groups. The empirically positive linearity and negative non-linearity relationship between the logarithm of total income and logarithm of total calorie-intake supports the theoretical relationship between the dependent variable and independent variables. The U-shape relationship shows its highest value between the logarithm of total income and total calorie intake from cereals, while its lowest value is in the oil category. Based on empirical results, we could see the U-shape relationship holds for different categories of food. This implies that all categories of food have an identical relationship with income. Every nation needs to produce at a certain level of food because people need a specific amount of cereals, fruits, meat, oil, and roots. If the production of these food groups increases over a certain level, the nation must sacrifice a part of its income to maintain the balance level.

Life expectancy has a negative effect on all groups of food-intake. This result does hold in equations 1 and 2 when controlling variables have been added into model. The negative effect of life expectancy and logarithm of total calorie-intake: cereals, fruits, meat, oil, and roots does imply that when people live longer, their needs on food-intake will decrease rather than increase or hold. It shows that in a country with more aging people, its demand for food-intake will decrease considerably. For a country in the progress of walking to an aging country, the government needs to consider the declining demand for food intake.

	Log (TCI: cereals)	Log (TCI: fruits)	Log (TCI: meats)	Log (TCI: oil)	Log (TCI: roots)
Equation 1					
Log (TI)	2.746*** (0.018)	2.319*** (0.017)	1.811*** (0.013)	2.157*** (0.014)	2.543*** (0.025)
[Log (TI)] ²	-0.083*** (0.001)	-0.063*** (0.001)	-0.041*** (0.001)	-0.056*** (0.001)	-0.073*** (0.001)
Life expectancy	-0.075*** (0.002)	-0.067*** (0.002)	-0.014*** (0.001)	-0.037*** (0.001)	-0.095*** (0.002)
Equation 2					
Log (TI)	2.748*** (0.018)	2.321*** (0.017)	1.812*** (0.013)	1.747*** (0.030)	2.115*** (0.053)
[Log (TI)] ²	-0.083*** (0.001)	-0.063*** (0.001)	-0.041*** (0.001)	-0.037*** (0.001)	-0.054*** (0.002)
Human capital	0.0004*** (0.0000)	0.001*** (0.000)	-0.0001*** (0.0000)	-0.048*** (0.016)	0.135*** (0.028)

Life expectancy	-0.075*** (0.002)	-0.067*** (0.002)	-0.014*** (0.001)	-0.032*** (0.001)	-0.092*** (0.003)
Average BMI of male	0.0002*** (0.0000)	0.000 (0.000)	0.00004*** (0.0000)	-0.025*** (0.007)	-0.006 (0.013)
Average BMI of female	0.000 (0.000)	0.0001*** (0.0000)	0.0001*** (0.0000)	0.001 (0.005)	-0.064*** (0.008)
Constant	-0.013*** (0.0002)	-0.012*** (0.0003)	-0.008*** (0.0002)	2.561*** (0.158)	3.564*** (0.280)
R ²	0.6951	0.7493	0.8542	0.8332	0.5989
BG test	3353.999	3353.998	3353.998	2509.106	2534.491
N	3,354	3,354	3,354	3,354	3,354
Note: - standard errors are in parentheses; - ***: statistically significant at 1%.					

Table 5. Patterns of non-linearity of calorie-income relationship by type of foods

Source: Author's estimation

Human capital does have different effects on each group of food-intake. Human capital has the strongest effect on the logarithm of total calorie-intake: roots, while this variable has the lowest effect on the logarithm of total calorie-intake: oil. The estimated coefficient of human capital has a positive value on the logarithm of total calorie-intake: cereals, fruits, and roots; and has a negative value on the logarithm of total calorie-intake: meat and oil.

6. DISCUSSION

This investigation provides evidence on the non-linearity relationship between national income and national calorie-intake on a sample of more than 180 countries worldwide within a time frame from 1961 – 2001. It is found that there is a strong U-shape relationship between national income and national calorie-intake. For example, an increase in logarithm of national income by 1 point was estimated to increase the logarithm of national calorie-intake most strongly in countries in the Oceania region globally; and countries in Oceania have had the highest absolute value. This paper also identified evidence that national income affects moderately to national calorie intake when controlling variables including life expectancy, human capital, BMI has been undertaken. This paper also identified evidence that national income effects national calorie-intake differently to varied groups of food intake, while the U-shape has been maintained.

How do this paper's findings compare to previous studies? This paper does find important similarities with previous papers when the author provides evidence for a non-linearity relationship between national income and national calorie-intake. But overall, the paper's estimated coefficients of national income are lower on average. The main differences in results are: (i) this paper found the similar patterns of non-linearity relationship between national income and national calorie-intake on the whole world and different continents; (ii) this paper found the similar patterns of non-linearity relationship between national income and national calorie-intake of different types of foods; (iii) in prior studies, researchers provide analysis based on major microdata while this paper offers an analysis based on macrodata built up by a reliable group of researchers or international organizations.

This paper's findings for cereals deserve some consideration. Cereals make up the largest share of global agricultural products. Thus, countries with a high value of relationship between

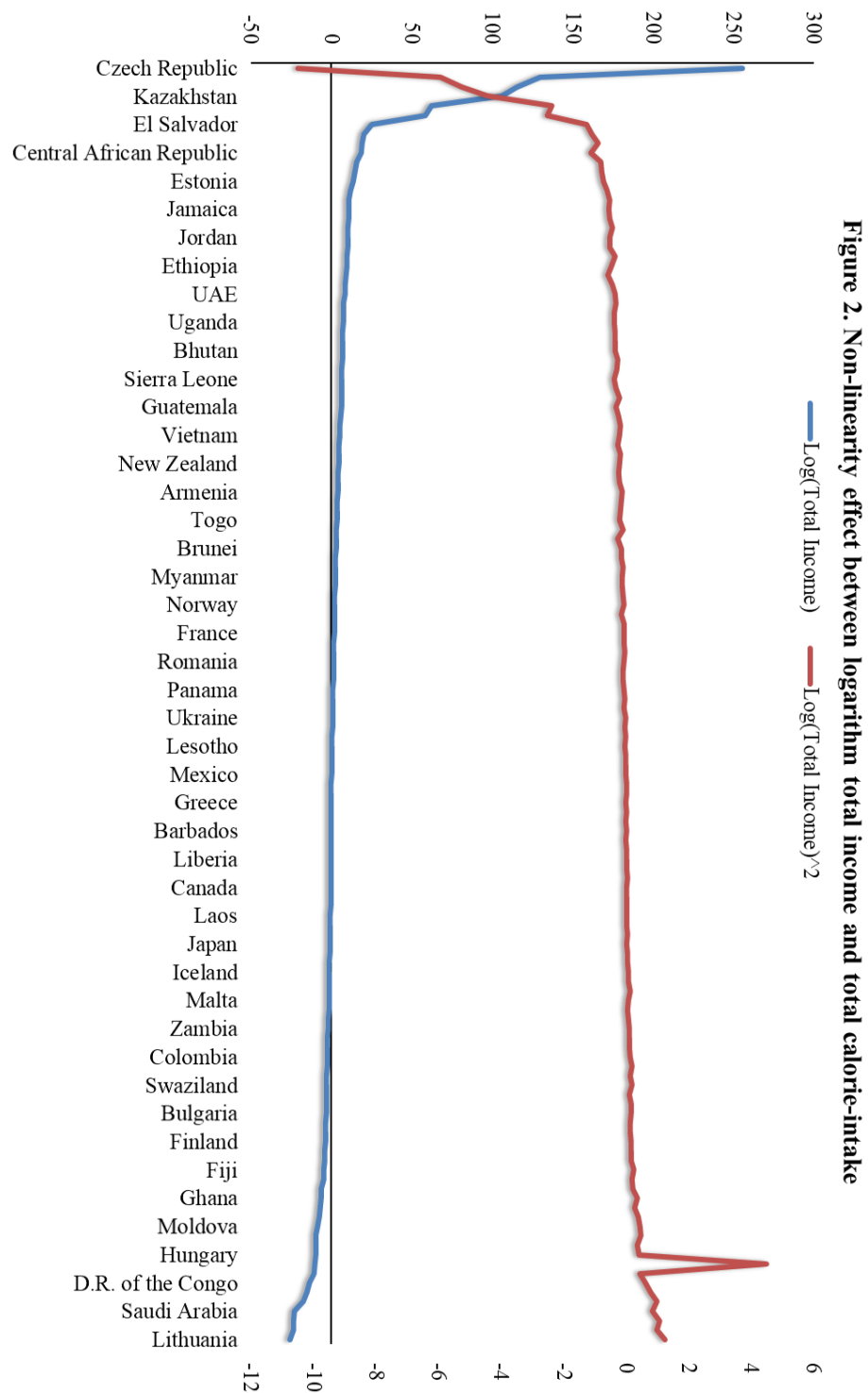
cereals intake and national income might be drivers for the market of cereals, such as China, India, Indonesia, US, Nigeria and Vietnam. In these nations, some cereals might be viewed as a traditional (and inferior) good by the public and would be influenced much more than the other countries. Still, the author does not have a chance to evaluate separately.

Our national income effect estimates suggest that national income growth is likely to cause an increase in intake of cereals, fruits and roots globally and a slight lower in meat and oil. The paper's income-elasticity results suggest that further economic growth and prosperity might not improve people's dietary habits in countries on different continents. This is consistent with international analyses of time trends in calorie-intake patterns from 1990 to 2010 such as Imamura et al. (2015); Muhammad et al. (2017). In figure 2, this paper shows the estimated coefficient of linearity and non-linearity relationship between national income and national calorie-intake in a set of countries. It can be seen from the figure that there are several countries in the world where the relationship between income and calorie-intake is non-linearity, while in several countries, this relationship might not be existed.

This paper's results are based on an unbalanced panel analysis within a limited time frame, so they should be interpreted with caution when considering economic growth over time. The invariability of income across different groups of food items within regions might have affected results. Results were also affected by the use of representatives for human health and educational conditions for controlling purposes.

7. CONCLUSION

In conclusion, this paper provides novel global evidence for the non-linearity relationship between national income and national calorie-intake. Several observed relationships occur to represent deeper preferences for specific food items that governments' officials could utilize as they might consider methods to incentivize the development or decline of agricultural productions based on their income level. These findings might offer several suggestions to national strategies that counter worsening diets that accompany economic development and make food consumption reflect the total health, national income, and national societal costs of food intake.



Source: Author's estimation

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WHAT AFFECT FIRMS' BRIBERY? AN EMPIRICAL ANALYSIS OF SMALL AND MEDIUM FIRMS IN VIETNAM

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Abstract: *This paper aims to explore the determinants of bribery among small and medium firms in Vietnam. We find that whether or not a firm bribe depends on its size, age, and exporter. The engagement in bribery is less likely if the firm is a household firm or owned by a single owner. Business environment also affect firms' decision as firms are more likely to bribe if competition is fierce. Surprisingly, we find that firms in provinces with higher PCI are more likely to bribe. We also find that the share is negatively correlated with firm size and growth rate and positively correlated with PCI. The findings give additional evidence to the literature of bribery determinants of firms.*

Keywords: *Bribery, Vietnam, SMEs, Logit model*

1. INTRODUCTION

Vietnam has experienced rapid economic growth in the past decades, thanks to the inflow of FDI and the expansion of the private sector, in which small and medium firms have played an important role. However, in Vietnam, small and medium firms (SMEs) might be susceptible to bribery in perceived widespread corruption. According to Transparency International (2019), 56 percent of respondents in Vietnam thought that corruption had increased, and 60 percent of respondents believed that the government had not yet been successful in fighting corruption. The perceived bribery rate is particularly high in Vietnam, as 65 percent of respondents had to pay a bribe when accessing public services. ACCA (2013) shows that 70 percent of SMEs in transition economies perceive corruption as an impediment to their business. It is argued that SMEs are susceptible to corruption and often use higher percentages of their revenue to pay bribes than large companies (UNIDO and UNODC, 2000; Bai *et al.*, 2019).

This paper seeks to explore the determinants of bribery behaviors in Vietnam using cross-section data of 2,637 small and medium firms surveyed in 2015. Bai *et al.* (2019) found, from examining data of 10,000 firms in Vietnam in 2006-2010, that firm size and firm growth reduce bribery as a share of firm revenue. They argue that firm mobility goes with firm size, and larger firms are less likely to pay a high rate of bribery since they can move to another location in the context of the regional competition in attracting firms. Wu (2009) found that firm size, growth rate, corporate governance, fierce market competition, among others, are determinants of bribery in Asian firms. Clarke & Xu (2004) showed that firms are more likely to pay bribes when they are more profitable, or they are new firms. Martin *et al.* (2007) showed that firms facing perceived pressures in the local environment, such as competition, are more likely to increase bribery activity.

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In this paper, we reexamine the determinants of bribery among small and medium firms which are less likely to move outside their locality to avoid corrupt officials. Particularly, we explore the relationship between bribery and firm characteristics as well as the characteristics of the business environment and the characteristics of firm owners. First, we verify the hypothesis that the decision to bribe is influenced by firm size, firm growth rate; and other firm and owner characteristics by estimating a logit regression. Second, we test the hypothesis that smaller firms pay higher bribes as a percentage of revenue and firm growth reduces bribery using simple regression.

One issue with several studies on this topic is that they treat firm size, growth, and performance-related variables as exogenous variables affecting firm bribery behaviors. However, there might be a reverse relationship that taking bribery might influence firm size and performance. One strand of studies shows that bribery has an adverse influence on firm size and performance, known as the “sand the wheels” view (Mauro, 1995; Wu, 2009). The other strand shows the reverse that bribery has positive effects on firm size and performance in a certain business environment, known as the “grease the wheels” view (Treisman, 2000; Gaviria, 2002; Gundlach & Paldam, 2009). Whichever view is adopted, it is clear that these variables are endogenous; and treating them as exogenous might lead to estimation bias. Bai et al. (2019) instrumented industry-level growth with employment growth rate in provinces or in a neighboring country to avoid the endogeneity problem at the industry level. However, the instrument does not apply to the firm-level analysis. In this paper, we go around the potential endogeneity issue by using a one-year lagged firm size and a one-year lagged growth rate. We use firms’ total assets and total revenue growth to measure firm size and growth rate, respectively. Besides, we also consider other firm and owner characteristics that might influence bribery behaviors.

The remainder of the paper is organized as follows. In section 2, we briefly describe methods and data. Section 3 report estimation results and discuss findings. The final section is, as usual, concluding remarks.

2. LITERATURE REVIEW

In recent years, several studies have investigated firm-level determinants of bribery thanks to the availability of survey data. Several variables of firm characteristics, business environment characteristics; and owner characteristics are examined.

Firm characteristics

The first variable to be considered is firm size. There are reasons to believe that smaller firms are more susceptible to bribery since they might be unable to resist corrupt officials; and they lack internal disciplines to deal with corruption (Svensson, 2003; Arvis, 2003). However, suppose a firm is below a certain size or threshold. In that case, it might be exempted from selected public obligations or might be less attractive to public officials and, therefore, less likely to pay a bribe (Patibandla, 2006; Gauthier & Goyette, 2014).

Another factor is firm growth. Rapid-growing firms might be more able to pay a bribe (Wu, 2009). Clarke and Xu (2004) analyzed firm-level data from 21 transition economies in Eastern Europe and Central Asia to show that firm profit influences bribery. Svensson (2003) showed, based on the analysis of firms in Uganda, that the higher a firm’s profit, the more the firm would pay. However, Bai et al. (2019) argued that firm growth can reduce bribery since it increases the firm size and thus refusal power. If corrupt officials request high bribes (as the percentage of revenue), larger firms can move to another location in the context that various regions are

competing to attract businesses. His theoretical argument is backed by empirical analysis of firm data in 2006-2010 in Vietnam.

Other firm characteristics may also affect firms' involvement in bribery behaviors, such as firm age and firm ownership. Clarke & Xu (2004) showed that firms are more likely to pay bribes when they are new firms

Business Environment

The business environment is argued to affect firms' bribery behavior. Clarke and Xu (2004), Wu (2009) showed that market competition might reduce firms' bribery incentives since they do not have to rely on government procurements or officials' support to sell products. However, there might be the case that firms facing fierce competition attempt to lure public officials into gaining competitive advantages over their rivalries. Martin et al., (2007) demonstrated that firms facing perceived pressures in the local environment, such as competition, are more likely to increase bribery activity.

Owner/manager characteristics

For small businesses, owner/manager can significantly impact firm activities in general and performance. Owner characteristics, such as age, gender, education, experience,... may influence their decisions concerning bribery. For example, Essel et al. (2019) several policy interventions have been implemented to enhance job creation functions of small-scale firms. This study examined one of these interventions, that is, promotion of small-scale firms in Sunyani municipality of Ghana by analyzing the effect of entrepreneurs, firm, and institutional characteristics on the growth of small-scale firms. A cross-sectional survey was conducted involving 200 small-scale firm operators selected through multi-stage sampling. Both descriptive and inferential analytical tools were used to analyze the data. Descriptive techniques employed included means, frequencies, and cross-tabulations. The inferential analysis included the use of multivariate multiple regression techniques that estimate a single regression model with more than one dependent variable simultaneously. The findings show three types of small-scale enterprises viz. processing (dominated by females examined small firms in Ghana and found that small firm performance is determined by owner demographics such as gender and education. Tu (2012) finds that well-educated entrepreneurs are more inclined to bribe. Guerrero & Rodríguez-Oreggia (2008) show that men are more prone to bribery, and higher education people are more likely to bribe.

3. MODEL AND DATA

To explore the determinants of firm bribery behaviors, we first employ a simple logit regression to model the dichotomous choice of a firm to pay or not to pay a bribe. The regressors are comprised of firm size, firm growth rate, and other firm characteristics. We also include the competition level and provincial competitiveness index (PCI) to examine the impact of the business environment on firm behaviors. Owner characteristics are considered as well. The logit model is as follow:

$$\text{Prob}[y=1|\mathbf{X}] = \frac{e^{X'\beta}}{1 + e^{X'\beta}} = \Lambda(X'\beta)$$

In which y is the binary variable which is one if a firm bribes and zero otherwise; X is a vector of firm characteristics, business environment characteristics, and owners' characteristics; and β is a vector of coefficients. The list of variables, their abbreviations, and description is shown in Table 1.

For firms that engage in bribery, we then test the hypothesis between the share of bribing value over firm revenue and other variables using a simple regression framework. It is assumed that smaller firms have to pay a higher share of their revenue to bribe. The regression model is defined as follow:

$$\begin{aligned} \text{Bribery} = & \beta_0 + \beta_1 FS + \beta_2 FG + \beta_3 FA + \beta_4 HHB + \beta_5 SO + \beta_6 EX \\ & + \beta_7 COMP + \beta_8 PCI + \beta_9 OA + \beta_{10} GO + \beta_{11} EXP + \beta_{12} BA + u \end{aligned}$$

A caveat must be taken, however. The relationship between firm size and several performance indicators with bribery can be reversed. That is, bribery can affect the firm size and firm performance. One strand of literature stresses that bribery impedes firm performance. Firms may choose to remain small to avoid bureaucratic procedures and corruption by public officials and thus reduce their growth (Gauthier and Goyette, 2014). The existence of bribery can also give firms the incentives not to innovate but to switch to rent-seeking behaviors (Dal Bó & Rossi, 2007). Some empirical studies confirmed this “sand the wheel” hypothesis, showing that bribery negatively influences firm performance (Gaviria, 2002; Fisman & Svensson, 2007; De Rosa et al., 2015). Dutta & Sobel (2016) proved that corruption empirically hurts entrepreneurship even in a bad business climate, using a large dataset from World Bank. Zhou & Peng (2012) explored an extensive, cross-country sample of 2,686 firms and found that bribery hurts the growth of small and medium firms but not large firms.

The other strand of the literature suggests that bribery boosts performance as it helps firms to “grease the wheel” to get things done faster. A good relationship with public officials might help increase firm performance (Fisman, 2001; Park & Luo, 2001; Peng & Luo, 2000). The literature argues that bribery fosters firm performance in a bad business climate. Some studies with data from countries with high corruption rates showed that bribery improves firm performance (Hellman & Schankerman, 2000; Radaev, 2004). Dreher & Gassebner (2013) used data from 43 countries to prove that corruption helps in countries with a high number of procedures.

While it is still ambiguous whether bribery boosts or impedes firm performance, it is clear that treating firm performance exogenous would induce estimation bias. We, therefore, instrument firm size and growth rate with their one-year lagged values.

Table 1: List of variables and description

Variable	Description
Bribery	Binary variable which is unity if the firm engages in bribing activity
Firm characteristics	
Firm size (FS)	Log of 1-year lagged total assets of firm
Firm growth (FG)	The growth rate of firm revenue over previous year
Firmage (FA)	Log of firm age
Household business (HHB)	Binary variable which is unity if the firm is household business
Singleowner (SO)	Binary variable which is one if a single person owns the firm
Exporter (EX)	Binary variable which is unity if the firm is an exporter.
Business environment	
Increasing competition (COMP)	Binary variable which is unity if the firm faces with increasing competition.
PCI	PCI index of the province where the firm locates.

Owner's characteristics	
Ownerage (OA)	Log of age of firm owner/manager
Gender (GO)	Binary variable which is unity if the firm owner is male.
Experience (EXP)	Binary variable which is unity if the firm owner has prior experience in the field.
Bachelor (BA)	Binary variable which is unity if the firm owner has a bachelor or higher degree.

To estimate the models, we use a dataset of 2,636 small and medium firms surveyed in 2015. The survey was conducted jointly by the Institute of Labour Science and Social Affairs of Vietnam, the Central Institute of Economic Management of Vietnam; and the University of Copenhagen with sponsorship from the Danish International Development Agency. The provincial competitiveness index (PCI) is built by Vietnam Competitiveness Initiative and is collected from pcivietnam.vn website.

4. DESCRIPTIVE STATISTICS AND ESTIMATION RESULTS

Descriptive statistics

Table 2a and Table 1b present simple descriptive statistics of the variables in our model, which are tested for the difference between bribing firms and non-bribing firms. There are about 43% of firms in our data had involved in bribery activity. The tables show significant differences between bribing and non-bribing firms. Table 1a shows that bribing firms tend to be larger and younger than non-bribing firms. Owners of bribing firms also tend to be younger. A bit of surprise here is that we can see a higher PCI index associated with the locations of bribing firms. There is an insignificant difference in growth rate between bribing and non-bribing firms.

In Table 2b, we can see that bribing firms are less likely to be household firms and tend to be owned by more than a person. Also, owners of bribing firms tend to have more prior experience in their fields. On the contrary, exporters are more likely to bribe than non-exporters. Firms facing increasing competition are more likely to be in the bribing group. Firms with female owners seem to involve in bribery more than those with male owners. Firms with owners who have bachelor's or higher degrees are more likely to bribe.

Table 2a: Descriptive statistics of continuous variables

Variable	Bribing firms		Non-bribing firms	
	Mean	Standard Dev	Mean	Standard Dev
Firm size	14.99***	1.47	13.27***	1.63
Firm growth	0.047	0.26	0.035	0.21
Firm age	2.38***	0.69	2.63***	0.71
PCI	60.65***	0.06	59.33***	0.04
Owner age	3.74***	0.26	3.82***	0.24

Note: *** significant at 1% level.

Table 2b: Descriptive statistics of binary variables

Variable	Proportion (%)	
	Bribing firms (43.12%)	Non-bribing firms (56.88%)
Household firm	38.25***	81.47***

Single owner	75.29***	94.60***
Exporter	12.96***	2.4***
Increasing competition	60.42***	48.33***
Gender of owner/manager (male =1)	54.18***	62.67***
Experience	10.86***	16.36***
Bachelor	42.39***	15.33***

Note: *** significant at 1% level.

Estimation results

We further analyze the estimation results of the logit model to shed light on the choice of firms to whether to bribe or not. Table 3 demonstrates the marginal effects of the variables from the logit regression estimation. It is clear from the table that firm size is related to firms' bribing behaviors. Larger firms are more likely to bribe compared with smaller firms. Firm age is negatively correlated with firm bribery. That means younger firms may be more involved in bribery. It is understandable that younger firms may need more support from public officers and thus be more likely to give a bribe. Household firms are also less engaged in bribing behaviors. This is also true with single-owner firms. Firms with single owners are less likely to bribe than firms with more owners.

According to the "grease the wheel hypothesis", firms may bribe to "grease" public administrative procedures when dealing with, for instance, tax and customs officers. That may explain why we find exporters are more likely to involve in bribery, though the finding is significant only at 10%. Firms also tend to bribe when they face strong competition, probably to gain advantages over their competitors. Paradoxically, firms in provinces with higher provincial competitiveness indices appear more likely to bribe. The provincial competitiveness index is designed to measure the provincial business environment from the firm perspective. That is, it is assumed that higher indices mean a more comfortable business environment. Contrary to some previous studies, we do not find experience, gender, age; and education of firms' owners affect their bribing propensity.

Table 3: Marginal effects of variables in the Logit model (Dependent variable: Bribery)

Variable	Marginal Effect	
	Coefficient	Std. Error
Firm size	0.065***	0.006
Firm growth	-0.03	0.03
Firm age	-0.04***	0.01
Household business	-0.15***	0.02
Single owner	-0.08***	0.03
Exporter	0.07*	0.03
Increasing competition	0.06***	0.02
PCI	0.05***	0.004
Owner age	-0.03	0.04
Gender of owner	0.006	0.02
Experience	-0.04	0.03
Bachelor	-0.01	0.02

Note: *** significant at 1% level; * significant at 10% level.

Table 4 presents the estimates of the simple regression model used to test the hypothesis between the share of bribing amount and other variables of firms. The result shows evidence to support the hypothesis that smaller firms pay a higher share of revenue to bribe as bribing share seems to be negatively related to firm size. However, firm growth is also negatively correlated with bribing share, which means firms that grow faster may pay a lesser share of revenue to bribe. As surprising as the finding from the logit regression, we find that firms in higher PCI provinces tend to pay a higher share of revenue to bribe.

**Table 4: Estimation results of the simple regression model
(Dependent variable: Ratio of bribery value over revenue)**

Variable	Coefficient	Std. Error
Firm size	-0.06***	0.01
Firm growth	-0.25***	0.05
Firm age	-0.02	0.02
Household business	-0.05	0.04
Single owner	0.04	0.04
Exporter	-0.01	0.05
Increasing competition	-0.02	0.03
PCI	0.03***	0.007
Owner age	0.002	0.06
Gender of owner	0.02	0.03
Experience	0.06	0.05
Bachelor	-0.03	0.04
Hệ số chặn	-0.79	0.51

Note: *** significant at 1% level; * significant at 10% level.

4. CONCLUSION

This paper attempts to identify the relationship between firm bribing behaviors and variables of firm characteristics, business environment; and owner characteristics. Using simple logit regression and simple regression models, we find that the decision of firms to bribe or not seems to depend on firms size, firm age; and whether firms are exporters, hold by families, or single owners. Business environment also affect firms' decision as firms are more likely to bribe if competition is fierce. Strangely, we find that firms in provinces with higher PCI are more likely to bribe. As per the share of bribing amount over revenue, we find that the share is negatively correlated with firm size and firm growth rate and positively correlated with PCI. The findings give additional evidence to the literature of bribery determinants of firms.

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PRESENTATION OF DEFERRED INCOME TAX INFORMATION ON FINANCIAL STATEMENTS IN ACCORDANCE WITH INTERNATIONAL PRACTICE

Dr. Do Minh Thoa¹

Abstract: *The reason for deferred tax is because the enterprise recovers the value of assets or pays the payable. This results in the amount of corporate income tax payable in the future exceeding or not reaching the amount of income tax payable in the current year. Despite the fact that this withdrawal or payment has no effect on the total income tax, the business must still recognize this deferred tax. In simple terms, the reason for deferred corporate income tax is because the basis of recognition and the principle of recognition of items in the financial statements between accounting and tax are different. However, the financial statements need to fully show both accounting tax liability and tax liability. Therefore, the deferred income tax target presented is to balance between accounting tax liability and tax liability. Within the scope of this article, the author gives reasons, nature, methods of recognition and presentation of deferred corporate income tax information in financial statements in accordance with international accounting practices.*

Keywords: *Temporary differences, deferred tax assets, deferred tax liabilities, tax base, deferred tax*

1. INTRODUCTION

Corporate income tax appeared very early in the history of tax development. Currently, in developed countries, corporate income tax plays a particularly important role in ensuring stable state budget revenue and distributing income. High or low tax rates apply to entities subject to corporate income tax is different, it depends on the income regulation perspective and targets set in the income distribution of each country in each period

International Accounting Standards Committee (IASC) Re-enactment of International Accounting Standards IAS 12 – Income taxes in October 1996 and apply to the financial year starting from January 1, 1998. The purpose of IAS 12 is to prescribe and guide the principles and methods of income tax accounting.

In Vietnam, Accounting law 2003 number 03/2003/QH11 was issued and took effect on January 1, 2004, accompanied by the Ministry of Finance issued Decision 12/2005/QĐ-BTC February 15, 2005 announcement of contents of Vietnamese Accounting Standard No. 17 “Income taxes” (VAS 17), Circular 20/2006/TT-BTC dated March 20th, 2006 guides in detail the accounting contents of VAS 17 and Decision 15/2006/QĐ-BTC dated March 20th, 2006 about business accounting regime has created a legal corridor for the accounting work on corporate income tax to become more complete. Accounting law 2015 number 88/2015/QH13 passed by the National Assembly

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ngày on November 20th, 2015 and come into force from January 1st, 2017 replace the Accounting law 2003 number 03/2003/QH11. Circular 200/2014/TT-BTC dated December 22th, 2014 of the Ministry of Finance guide to business accounting regime replace Decision 15/2006/QĐ-BTC date March 20th, 2006. Since its release until now, the regulations on income tax accounting have not had any changes or adjustments to match reality. Consequently, the assessment and discussion of income tax accounting is one of the issues that need to be done in the current period.

2. LITERATURE REVIEW AND PREVIOUS RESEARCH STUDIES

Presenting deferred corporate income tax information on financial statements in accordance with international practices in Vietnam in recent years has attracted the attention of researchers, however, the number of publications is limited and only focuses on certain aspects of deferred corporate income tax accounting. Vu Thi Hoa - Thai Nguyen University of Economics and Business Administration (2016) research on “The reality of applying corporate income tax accounting standards”; Phan Thị Anh **Đào**, Faculty of Accounting - Auditing, Banking Academy (2017) researched on “International accounting standards on income tax and current updates”; Nguyen Thi Hong Hanh, Ho Chi Minh City Open University (2020) research on “Identifying temporary differences leading to deferred income tax accounting”; Tran Thi Lan Huong, Ngo Thi Huong, University of Transport Technology (2017) research on “Method of distinguishing revenue and cost differences.”; Le Thi Bao Nhu, Nguyen Thi Thu Hau, Nguyen Thi Khanh Van (2020), Research on “Effect of accounting-tax difference on corporate income tax finalization and audit”

Towards perfecting Vietnam’s legal and accounting system towards harmonizing with international accounting, in this article, the author clarifies from the study of International Accounting Standard IAS 17 on deferred tax accounting, aimed at completing the legal and accounting system of Vietnam on the presentation of deferred corporate income tax information in the financial statements in the context of international economic integration.

3. METHODOLOGY AND PROPOSED MODEL

From the collected documents, the author conducts qualitative research, through methods of theoretical analysis and synthesis, analysis and summary of experience, historical research... From the point of view of dialectical materialism, use deduction to speculate on inevitable consequences, use comparison to make intermediate judgments, and then use induction to draw conclusions and synthesis.

4. RESULTS AND DISCUSSION

The income tax expense presented in the financial statements is composed of current tax expense and deferred tax expense when determining the profit or loss for an accounting period of an enterprise.

4.1. Current tax

Current corporate income tax is a corporate obligation to the State Budget determined under the Income Tax Law. This is a direct tax, levied on taxable income of enterprises, including income from production and business activities of products and service; other income as prescribed by the Law on Income Tax.

Current Tax is the payable corporate income tax amount calculated on the taxable income and the corporate income tax rate of the current year.

Current Tax	=	The taxable income	x	Income tax rate
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Taxable income is determined on the basis of provisions of current income tax law, then revenue and expenses are determined based on the provisions of income tax law.

The taxable income	=	Revenue <i>(according to the provisions of the Income Tax Law)</i>	-	Expenses <i>(according to the provisions of the Income Tax Law)</i>
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Present information on current income tax payable on the financial statements:

Based on the payable current income tax amount calculated according to the Law on Income Tax, the accountant records the payable current income tax incurred:

Dr. Acc Current income tax expenses

Cr. Acc Current tax liabilities

Present information on current income tax payable on the financial statements according to the current Vietnamese accounting system:

Current Vietnamese accounting system Circular 200/2014/TT-BTC dated December 22th, 2014 of the Ministry of Finance, to reflect the current corporate income tax payable, using accounting Account 3334 – Current tax liabilities và Account 8211 - Current income tax expenses

According to the Circular 200/2014/TT-BTC dated December 22th, 2014, current income tax payable is as follows:

Dr. Acc 8211 - Current income tax expenses

Cr. Acc 3334 – Current tax liabilities

4.2. How is deferred tax incurred and recorded?

Standing from the perspective of the business, accounting profit is determined according to accounting principles and standards, then the accounting revenue and expenses are determined based on the provisions of the accounting regime and current accounting standards.

Accounting profit	=	Revenue <i>(determined on accounting principles and standards)</i>	-	Expenses <i>(determined on accounting principles and standards)</i>
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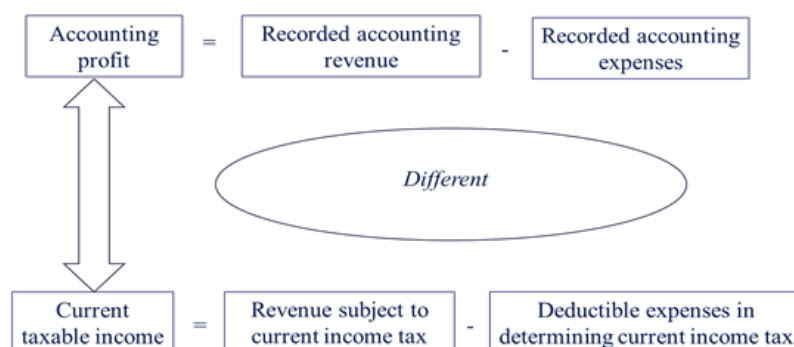


Figure 1: Accounting profit and taxable income are determined on two different bases, Therefore, there is a difference between accounting profit and taxable income.

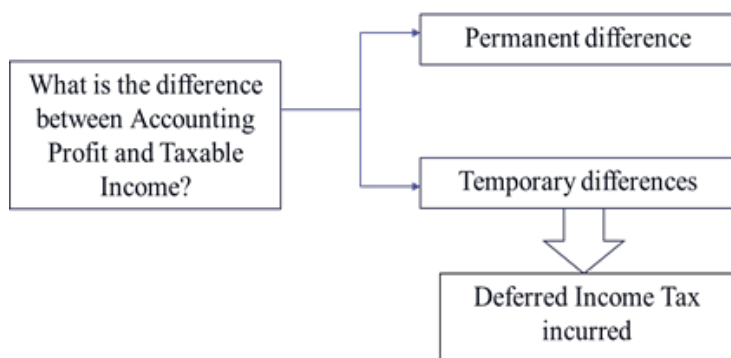


Figure 2: *The difference or difference between Accounting Profit and Taxable Income is divided into two categories as follows: permanent difference and temporary difference.*

4.2.1. Permanent difference: Permanent difference is the difference between accounting profit and Taxable income because revenues or expenses are recognized but eliminated when determining taxable revenue or expenses.

+ The permanent difference makes the taxable income for the period higher than the accounting profit: such as non-deductible expenses, unreasonable expenses such as fines, indemnify, excessive advertising costs, expenses without legal invoices are not allowed by tax law to be deducted when determining taxable income.

+ The permanent difference makes the taxable income for the period lower than the accounting profit: examples of income that are not subject to corporate income tax: dividend income is non-taxable income and is completely excluded from taxable income when determining payable corporate income tax.

Permanent differences do not create amounts that can be taxed or deductible in the future. Permanent differences arising in any year will be adjusted to calculate taxable income for that year.

4.2.2. Temporary differences:

The metric difference between accounting profit and taxable income can be approached based on: (i) Report business results ie based on revenue, expenses; or (ii) The balance sheet is based on the carrying amount with the tax base of the assets and liabilities.

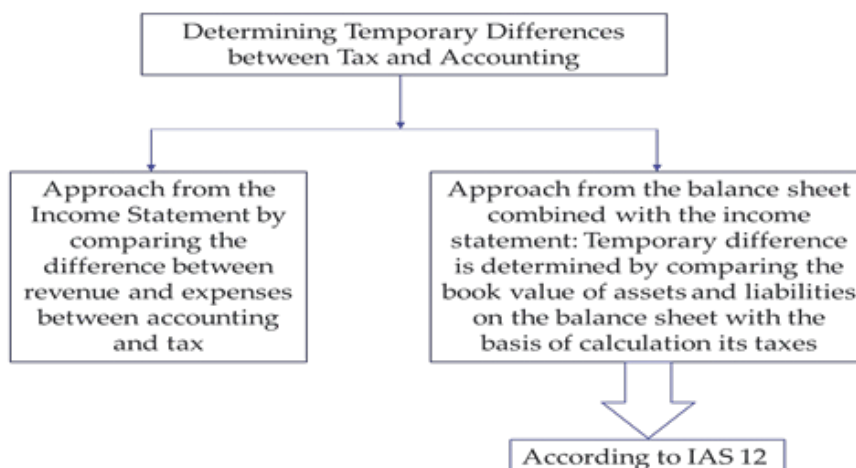


Figure 3: *The metric difference between accounting profit and taxable income can be approached based on: (i) Report business results ie based on revenue, expenses; or (ii) The balance sheet is based on the carrying amount with the tax base of the assets and liabilities.*

A temporary difference is a difference arising from a difference in recognition time between the book value of the accounting and the tax base of the asset and liabilities, or revenues and expenses; and this difference will disappear over time.

a) The temporary difference between accounting profit and taxable income can be approached based on: (i) Report business results ie based on revenue, expenses

Standing from the perspective of the Income Statement, temporary difference determined through revenue and expense when revenue is recognized according to accounting principles but not recorded in accordance with tax regulations; expenses must be gradually allocated to expenses each period according to accounting regulations but must record all expenses at the time of arising in accordance with the provisions of tax

(1) Temporary differences arising from costs

+ During the accounting period, if accounting costs $>$ deductible expenses when determining taxable income then there will be a temporary difference between accounting profit and taxable income, This is the deductible temporary difference incurred.

For example: (*Unit is million dong*): For an equipment in the enterprise, depreciation expense is determined by accounting in the period as 200, while according to tax regulations, this cost is included in the deductible expense in the period as 120. When calculating the deductible expenses, only 120, eliminating 80 reduces the deductible cost to 80, resulting in taxable income will increase to 80, then the business has to pay more tax than it is now, leading to the future is the following years the business will be deducted (the future recovers). On the contrary, in the following years also with this property, if the accountant's depreciation expense is less than (or equal to 0), while the depreciation cost of tax (expenses are deducted) larger, this is the deductible temporary difference (return).

+ During the accounting period, if accounting costs $<$ deductible expenses when determining taxable income then there will be a temporary difference between accounting profit and taxable income, this is a taxable temporary difference arising.

For example: (*Unit is million dong*): For a unit's service rental, payment is required for 4 years in advance, then the prepaid expense is determined by accounting in the period to be 120 evenly distributed over 4 years according to the principle of matching then, each year the business takes into account the cost of 30; while according to tax regulations, this expense is allocated up to 3 years. Thus, each year the deductible expense according to the tax law is 40. When calculating the deductible expense is 40, then the taxable income must be added by 10 (accounting is 30) causes the deductible expenses to increase by 10, leading to a decrease in taxable income by 10, then the business pays less tax than it is now, in the future, the business will have to pay taxes in the following years (the future has to pay more).

(2) Temporary differences arising from revenue.

+ During the accounting period, if accounting revenue $<$ taxable revenue then there will be a temporary difference between accounting profit and taxable income, this is the deductible temporary difference incurred, then the business has to pay more tax than it is now, leading to the future is the following years the business will be deducted (take back).

For example: (*Unit is million dong*): Financial year N, businesses receive the sales amount from the program for traditional customers is 200, but by the end of the year this program is not

over yet. Therefore, a part of the revenue that the accountant hangs to pay for this program is 50 (on Unrealized Revenue account). However, tax will determine the revenue for calculating corporate income tax in year N, the whole amount is 200, leading to an increase in taxable income, then the business has to pay more tax than at present (year N). This program ends in year N+1, accountants will convert all unrealized revenue 50 into accounting revenue of year N+1, but taxable revenue in year N+1 will not count this, this is the deductible temporary difference (return).

+ During the accounting period, if accounting revenue > taxable revenue then there will be a temporary difference between accounting profit and taxable income. This is a taxable temporary difference (incurred), then the business pays less tax than it is now, leading to the future that the following years businesses will have to pay more (must return).

For example: Financial year N, Enterprise has a contract to build Jupiter Palace high-rise building for investor A, payment according to work progress. End of the year, although the progress of Jupiter Palace is still being done according to the schedule in the contract, However, the enterprise must determine the completion level of Jupiter Palace project so that the accountant can record the revenue made under the contract. Accountants recognize revenue according to the level of completion of the work, tax recognizes revenue when there is a record of acceptance.

b) The temporary difference between accounting profit and taxable income can be approached based on: (ii) The balance sheet is based on the carrying amount with the tax base of the assets and liabilities.

The value of assets and liabilities calculated according to accounting principles is called accounting base

The value of the items of assets and liabilities calculated according to the provisions of tax is called the tax base

International Accounting Standards IAS 12 – Income Taxes issued by the International Accounting Standards Committee (IASC) approached and presented income tax from the perspective of the balance sheet. According to IAS 12 – Income Taxes:

“The objective of this Standard is to prescribe the accounting for income tax. A key issue in corporate income tax accounting is how to account for the present and future tax effects of:

(a) future recovery (payment) of the carrying amount of assets (liabilities) recognized in the entity’s statement of financial position; and

(b) transactions and other events in the current period recognized in the entity’s financial statements.” (According to IFRS.VN)

How to determine the income tax base of an asset or liability:

According to IAS 12– Income Taxes: “The income tax base of an asset or liability: The amount charged to an asset or a liability for income tax purposes” (According to IFRS.VN)

+ *Tax base of an asset*: Is the value to be deducted for income tax purposes, deducted from the economic benefits that the enterprise will receive and is subject to income tax when the carrying amount of the asset is recovered. If these economic benefits, when received, are not taxable, the tax base of the asset is equal to its carrying amount.

Example of a situation where the income tax base of an asset is determined: (*Unit: million VND*)

(1) A receivable from customers has a carrying amount of 200; The corresponding turnover of 200 has been included in taxable income for the current year.

Thus, this receivable from customers in the current year has a Tax Basis = Accounting basis (Book value) = 200. (No temporary difference)

(2) The Company recognizes an interest receivable of 150. This interest will be received by the enterprise in the following accounting period, but this is the interest calculated on the loan amount in the current year, so it is recorded as the current year's revenue. The carrying amount of this interest receivable is 150.

Interest on on-lending is subject to income tax when the business actually receives the money, so in the present period, the business does not have to pay tax on the revenue from this interest. The tax base of this interest receivable for the period is 0

So, this interest receivable in the current year has a Tax Basis = 0; Accounting basis (Book value) = 150; Temporary differences = 150

(3) (*Unit: thousand VND*): A company, January 1, N; Buy an equipment with the original price of 400.000, useful life for accounting purposes is 5 years, amortization using the straight-line method and there is no estimated salvage value (that is, the annual depreciation rate is 80.000). For tax purposes, this equipment is depreciated at the rate of 25%/year (Depreciation expense in year N tax calculated as 100.000)

Basis of accounting (Book value) of equipment December 31, N: 320.000

Equipment tax base December 31, N: 300.000

Temporary differences year N: 20.000

.....

+ *The tax basis of a liability*: Is its carrying amount less deductible amount for tax purposes of the liability in future periods.

In case of revenue received in advance, the tax base of the resulting liability is its carrying amount, less the amount of that revenue that will be recognized but not subject to future income tax.

Example of a situation where the income tax base of a liability is determined: (*Unit: thousand VND*)

(1) B Company records a salary payable of 50,000 in 2020, tax authorities allow deductions when the company actually pays the employee's salary.

Book value of payables to employees as of December 31, 2020: 50.000

Tax base for the payables to employees on December 31, 2020: 0

Temporary difference in the amount payable to employees on December 31, 2020: 50.000

(2) C Company in year N has interest expense payable with a carrying amount of 40.000. The payment of this loan is not deductible from taxable income.

Book value of interest expense payable year N: 40.000

Tax basis for payable interest expenses year N: 40.000

Temporary difference in interest expense payable year N: 0

(3) Short-term liabilities with item "Accruals" for the current year's annual leave salary deduction with a book value of 100. Accruals are deductible for income tax purposes on a net expenditure basis.

The carrying amount of item “Accruals” current year = 100

Tax basis of item “Accruals” current year = 100 – 100 = 0

Temporary differences: 100

From the perspective of the balance sheet, a temporary difference is the difference between the carrying amount and the income tax base of the assets or liabilities.

Temporary differences = Book value - Tax basis

The temporary difference can be divided into two types: (i) deductible temporary difference, or (ii) taxable temporary difference. A deductible temporary difference results in a deferred tax asset, the taxable temporary difference results in a deferred tax liability

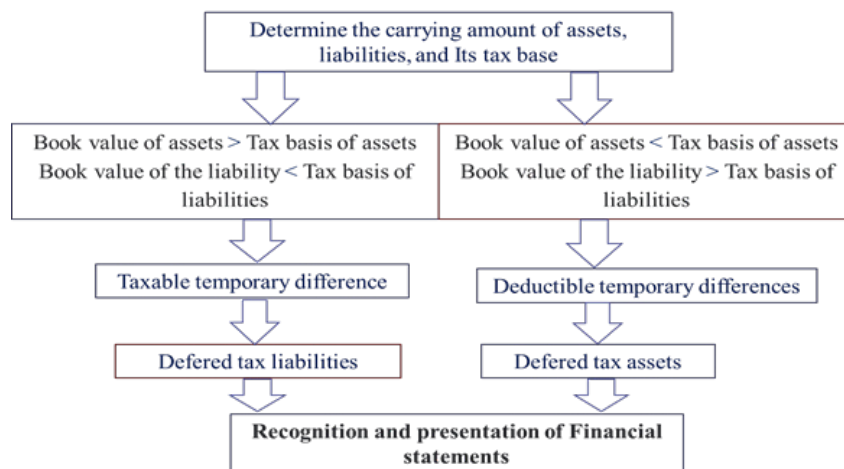


Figure 4: A deductible temporary difference that results in a deferred tax asset, a taxable temporary difference that results in a deferred tax liability is reported in the financial statements.

Case 1: Determination of deductible temporary differences and deferred tax assets

Deductible temporary differences: Are temporary differences that give rise to deductibles when determining future taxable income when the carrying amount of the related assets or liabilities is recovered or settled. (According to IAS 12 – Income Taxes)

A deductible temporary difference arises when:

- + The carrying amount of an asset is less than its tax base;
- + The carrying amount of the liability is greater than its tax base.

- *Determination of deductible temporary differences:*

+ For assets: A deductible temporary difference is the difference between the carrying amount of an asset that is less than its tax base..

+ For liabilities: A deductible temporary difference is the difference between the carrying amount of a liability and its tax base.

When born “Deductible temporary differences” accountants will record “Deferred Tax Asset”.

To understand why “Deductible temporary differences” create assets recognized on the balance sheet, we need to use the Financial Statements Framework (IASB) Template to explain.

The Financial Statements Framework (IASB) Framework defines “Assets”: A resource that is controlled by the enterprise and where future economic benefits can be obtained. The deductible temporary difference arising will cause the enterprise to pay an additional income tax in the current year compared to the amount recognized in accordance with accounting standards and regimes. For example: The enterprise’s rapid depreciation policy makes the depreciation expense higher than the depreciation rate specified by the tax policy, lead to tax authorities, the enterprise’s payable income tax in the current year will be higher than the accounting figures. However, deductible temporary differences will cause the business to pay less income tax in future periods than would otherwise be the case (tax obligations of enterprises in the current year are more burdensome than in future years). It means that the business will derive a future benefit from paying more tax in the current year due to the temporary differences. Thus, this more tax paid, under the Framework, will satisfy the condition to be recognized as an asset item on the Balance Sheet.

$$\text{Deferred tax assets} = \text{Deductible temporary differences} \times \text{Income tax rate}$$

Presentation of Deferred Tax Assets on Financial Statements:

In the current year, a deductible temporary difference is incurred, accounting recognizes a deferred tax assets:

Dr. Acc Deferred tax assets

Cr. Acc Deferred income tax expense

When reversing a deferred tax asset, the accountant records:

Dr. Acc Deferred income tax expense

Cr. Acc Deferred tax assets

Presentation of Deferred Tax Assets on Financial Statements according to the current Vietnamese accounting system:

Circular No.20/2006/TT-BTC March 20, 2006 – Guide accountants to implement (06) accounting standards promulgated under Decision No.12/2005/QĐ-BTC February 15, 2005 of the Minister of Finance, to reflect deferred income tax assets for accounting use Account 243 – Deferred tax assets and Account 8212 - Deferred income tax expense.

According to Circular No. 20/2006/TT-BTC March 20, 2006, the accounting records of deferred tax assets are as follows:

Dr. Acc 243 - Deferred tax assets

Cr. Acc 8212 - Deferred income tax expense

When reversing a deferred tax asset, the accountant records:

Dr. Acc 8212 - Deferred income tax expense

Cr. Acc 243 - Deferred tax assets

Situation: (Unit: million VND): Tay Ho Company, January 1, N bring a machine with the original cost of 180 to be used in business management. Accounting for depreciation in 4 years, depreciation tax as prescribed is 6 years, straight-line method of depreciation; estimated liquidation value of 0. Income tax rate 20%

+ Depreciation value of accounting from the first year to the end of the fourth year is 45. At the end of the first year, the residual value of the property is 135, that is the book value of 135.

+ Tax amortization from the first year to the end of the sixth year each year is 30. At the end of the first year, the residual value of the property is 150, that is the tax base is 150.

Thus, at the end of the first year, the carrying amount of 135 is 150 less than the tax base, 15 is the deductible temporary difference (incurred).

In the 5th and 6th years, the accounting depreciation for this asset is 0, but the depreciated value of the tax on this property every year is 30, this is the period for the reversal of the deductible temporary difference

Accountants determine the temporary difference and deferred corporate income tax incurred each year related to the above equipment as follows:

Year	December 31, N	December 31, N+1	December 31, N+2	December 31, N+3	December 31, N+4	December 31, N+5
Book value (1)	135	90	45	0		
Tax base (2)	150	120	90	60	30	0
Cumulative temporary difference (3) = (2) – (1)	15	30	45	60	30	0
Temporary difference (4) = (3) current year – (3) next year	15	15	15	15	(30)	(30)
Deferred tax assets = (4) x 20%	3	3	3	3		
Return of deferred tax assets = (4) x 20%					6	6

The accountants record information in the financial statements of deferred corporate income tax arising each year related to the above equipment as follows:

December 31, N; December 31, N+1; December 31, N+2; December 31, N+3 accounting record:

Dr. Acc Deferred tax assets: 3

Cr. Acc Deferred income tax expense: 3

December 31, N+4; December 31, N+5 return Deferred tax assets:

Dr. Acc Deferred income tax expense: 6

Cr. Acc Deferred tax assets: 6

Situation: (Unit: million VND): Duc Think Company deals in car. During the promotion, January 15, N, company sells customer A a car for 80,000 including car price and maintenance service within 2 years, customer has paid in full 80,000 by bank deposit. Independent selling price of cars is 90,000; the independent selling price of car maintenance services per year is 5,000.

Know that: January 20, N+1 và January 20, N+2, Duc Think company has completed the car maintenance service for customer A as agreed (Maintenance service is performed once a year within 3 days). According to the Law on Income Tax, the taxable revenue of contracts with customers is determined on the basis of money.

Determine the revenue each year and recognize the revenue each year

Allocate contract value to each obligation on the basis of independent selling price

Obligation	Contract value allocated
Car selling price	$72.000 = (80.000/100.000 \times 90.000)$
Maintenance service for the year N+1	$4.000 = (80.000/100.000 \times 5.000)$
Maintenance service for the year N+2	$4.000 = (80.000/100.000 \times 5.000)$
<i>Total</i>	<i>80.000</i>

The accountant records the information of the transaction on the Financial Scratch Report each year:

+ Year N:

Dr. Acc Bank: 80.000

Cr. Acc Revenue from sales: 72.000

Cr. Acc Unrealized revenue: 8.000

+ Year N+1, Year N+2

Dr. Acc Unrealized revenue: 4.000

Cr. Acc Revenue from service providers: 4.000

Accounting for the temporary difference and deferred tax of the liability “Unrealized revenue” each year as follows:

Year	The carrying amount of the liability (Unrealized revenue) (1)	Tax basis of liabilities (2)	Cumulative temporary difference (3) = (1) – (2)	Temporary difference (4) = (3) current year – (3) next year	Defered tax assets	Return of deferred tax assets
N	8.000	-	8.000	8.000	1.600	
N+1	4.000	-	4.000	(4.000)		800
N+2	-	-	-	(4.000)		800

Accountants recognize information in the financial statements of deferred corporate income tax incurred each year related to liabilities “Unrealized revenue” as follows:

+ December 31, N accounting record:

Dr. Acc Deferred tax assets: 1600

Cr. Acc Deferred income tax expense: 1600

+ December 31, N+1, December 31, N+2: accounting for deferred tax assets:

Dr. Acc Deferred income tax expense: 800

Cr. Acc Deferred tax assets: 800

Case 2: Determination of Taxable Temporary Difference and Deferred Income Tax Payable

Taxable temporary difference: Are temporary differences that give rise to taxable income when determining future taxable income, when the carrying amount of the related assets or liabilities is recovered or settled. (According to IAS 12– Income Taxes)

A taxable temporary difference arises when:

+ The carrying amount of an asset is greater than its tax base.

+ The carrying amount of the liability is less than its tax base.

- *Determination of taxable temporary differences:*

+ For assets: A taxable temporary difference is the difference between the carrying amount of an asset and its tax base.

+ For liabilities: Taxable temporary difference is the difference between the carrying amount of a liability and less of its tax base.

Incurred “Taxable temporary difference” accountants will record “Deferred Tax Liability”

To understand why “Taxable temporary difference” recognized as a liability on the balance sheet, use the Framework for Financial Statements Preparation and Presentation (IASB) to explain.

Framework for Financial Statements Preparation and Presentation (IASB) defines “A liability is a present obligation of the enterprise arising from past transactions and events for which the enterprise must settle from its resources”. The resulting temporary difference will cause the business to pay less income tax than the accounting figures for the current year. (The tax liability of enterprises in the current year is slightly lower than in future years). This unpaid income tax will be payable in future periods. Thus, it meets the conditions of recognition as a liability on the balance sheet according to the definition of a liability in the Framework.

$$\text{Deferred tax liabilities} = \text{Taxable temporary difference} \times \text{Income tax rate}$$

Presenting Deferred Income Tax Information on Financial Statements:

In the current year, when a taxable temporary difference arises, the accountant recognizes the deferred corporate income tax payable:

Dr. Acc Deferred income tax expense

Cr. Acc Deferred tax liabilities

When reversing Deferred income tax payable, accountants record:

Dr. Acc Deferred tax liabilities

Cr. Acc Deferred income tax expense

Presentation of Deferred tax liabilities on Financial Statements according to the current Vietnamese accounting system:

Circular No.20/2006/TT-BTC March 20, 2006 – Guide accountants to implement (06) accounting standards promulgated under Decision No.12/2005/QĐ-BTC February 15, 2005 of the Minister of Finance, to reflect deferred income tax assets for accounting use Account 347 – Deferred tax liabilities and Account 8212 - Deferred income tax expense.

According to Circular No. 20/2006/TT-BTC March 20, 2006, the accounting records of Deferred tax liabilities are as follows:

Dr. Acc 8212 - Deferred income tax expense

Cr. Acc 347 - Deferred tax liabilities

When reversing Deferred income tax payable, accountants record:

Dr. Acc 347 - Deferred tax liabilities

Cr. Acc 8212 - Deferred income tax expense

Situation: At Mars company: (unit is million VND):

- Year N, enterprises pay for labor protection is 2/person for 200 employees, So the total cost of buying labor protection is 400. Enterprise allocates this cost over 2 years (Enterprises only buy labor protection once every 2 years)

- When making tax finalization, enterprises are entitled to finalize tax according to the actual number of expenses

- At the end of year N, the remaining prepayment is 200, the carrying amount of the prepaid expense is 200. The cost of tax in year N is 400 because a year the business spends on clothes in kind is not limited if there are sufficient invoices and documents, also understood as the tax base is 0. Thus, the carrying amount of 200 is greater than the tax base of 0, 200 is the taxable temporary difference.

In year N+1, the accountant's prepayment is 200, but the cost of tax on this is 0, this is a taxable temporary difference reversal period.

Accountants determine the temporary difference and deferred tax of "Prepaid expenses for labor insurance" each year as follows:

Year	Book value of assets (Prepaid expenses) (1)	Tax basis of property (2)	Cumulative temporary difference (3) = (1) – (2)	Temporary difference (4) = (3) current year – (3) next year	Deferred tax liabilities	Refund Deferred income tax payable
N	200	-	200	200	40	
N+1	0	-	0	(200)		40

The accountant recognizes the following information in the financial statements:

December 31, N, The accountant recognizes the deferred income tax payable:

Dr. Acc Deferred income tax expense: 40

Cr. Acc Deferred tax liabilities: 40

December 31, N+1, accounting for the reversal of deferred income tax payable, the accountant records:

Dr. Acc Deferred tax liabilities: 40

Cr. Acc Deferred income tax expense: 40

Case 3: Presentation of deferred income tax expense on the financial statements

Tax Expense: Tax Expense (or corporate income tax income): Is the sum of current tax expenses and deferred tax expenses (or current tax income and deferred tax income) when determining the profit or loss for a period.

(a) Presented on the Balance Sheet, including:

The deferred tax asset is presented in the entry "Deferred tax assets": The data for this entry is based on the debit balance of Account 243 - "Deferred tax assets"

Deferred tax liabilities is presented in the entry "Deferred tax liabilities": The data for this entry is based on the balance of Account 347 - "Deferred tax liabilities"

(b) Presenting the Statement of Business Performance

Current corporate income tax expenses: This entry reflects current corporate income tax expenses incurred in the reporting year. The data for this entry is based on the total amount incurred by the Creditor of Account 8211 “Current corporate income tax expenses” against the debit side of Account 911 “Determination of business results” in the detailed accounting book of Account 8211, or based on the number arising from the debit side of Account 8211 to the creditor of Account 911 in the reporting period in the detailed accounting book of Account 8211, (In this case, the data is recorded in this indicator with negative numbers in the form of parentheses (...))

Deferred income tax expense: This entry reflects deferred corporate income tax expense or deferred corporate income tax income incurred in the reporting year. The data for this entry is based on the total amount incurred by the creditor of Account 8212 “Deferred corporate income tax expenses” to the debit side of Account 911 “Determination of business results” in the accounting books detailed calculation of account 8211, or based on the arising number of the Debit side of Account 8212 corresponding to the Credit side of Account 911 in the reporting period, on the detailed accounting book of Account 8212 (in this case, the data is recorded in this entry by negative numbers in the form of parentheses (...))

4.3. Some special cases of deferred income tax accounting

a) Recognition and reversal of a deferred tax asset arising from an unused tax loss:

According to IAS 12: “Deferred tax assets should be recognized for the carrying forward of tax losses and unused tax credits to the extent it is probable that future taxable profit will be available against which the unused tax losses and unused tax credits can be utilised.”

Deferred tax assets are recognized from the carry-forward of tax losses and unused tax credits are also recognized as deferred tax assets arising from deductible temporary differences.

Taxable loss is the loss arising from the business activities of the enterprise due to the reasonable and valid expenses greater than the total revenue and is allowed to carry forward losses according to the provisions of the current financial mechanism to deduct the income tax amount of future years when the business has taxable income. Expenses that are not deductible from income taxable income in the reporting year that create a permanent difference between accounting profit and taxable income are not considered tax losses.

Situation: At the company Neptune: *(Unit is million VND)*

Suppose in the year N, the total revenue of the business is 1.000; Total eligible reasonable expenses deductible for income tax purposes is 1.200. The business result of the enterprise in year N is a loss of 200. At the end of year N, when preparing financial statements, based on market signals, the company estimates that in year N+1 will have a pre-tax profit of 1.500.

When preparing the financial statements of year N, the enterprise determines the deferred tax assets arising from unused taxable losses in year N as follows:

$$\text{Deferred tax assets} = \text{Tax loss} \times \text{Tax rate recognized in the year N} = 200 \times 25\% = 50$$

The accountant records:

Dr. Acc 243 – Deferred tax assets: 50

Cr. Acc 8212 – Deferred income tax expense: 50

Report on business results for the year N will include the following items: (*Unit: million VND*)

Targets	Year N
Revenue	1.000
Expense	(1.200)
Profit before tax	(200)
Deferred income tax expense	50
Profit after tax	(150)

In year N+1, the enterprise has the following data:

Revenue: 4.000;

Total eligible reasonable expenses deducted from taxable income: 2.500

Profit before tax: 1.500.

Taxable loss in year N is carried forward to year N+1 and deducted from taxable income.

Amount of income tax payable = (Profit before tax - Tax loss) x 25%

Current income tax payable in year N+1: 325 = (1.500 - 200) x 25%

In year N+1, when preparing the financial statements, the enterprise must revert the income tax assets recognized from the previous period: The following accounts shall be recorded:

Dr. Acc 8212 – Deferred income tax expense: 50

Cr. Acc 243 – Deferred tax assets: 50

Report on business results for the year N+1 will include the following items: (*Unit: million VND*)

Targets	Year N
Revenue	4.000
Expense	(2.500)
Profit before tax	1.500
Current income tax expenses	(325)
Deferred income tax expense	(50)
Profit after tax	1.125

Situation: At Uranus company: (*Unit is million VND*): Year N, an accounting loss is 1.000, The tax office accepts a loss of 800 and the business is expected to transfer losses evenly over the next 4 years, 200 per year, with a tax rate of 20% in year N.

Thus, in year N, the accountant determines that a deferred tax asset has arisen for a tax loss of 160 (800 x 20%), at the same time, accountants record:

Dr. Acc 243 – Deferred tax assets: 160

Cr. Acc 8212 – Deferred income tax expense: 160

To the years N+1, N+2, N+3, N+4 The business has enough profit to cover the loss, According to the business plan, the loss will be 200, accounting for the reversal of deferred tax assets is 40 (200 x 20%), each year the accounting records:

Dr. Acc 8212 – Deferred income tax expense: 40

Cr. Acc TK 243 – Deferred tax assets: 40

b) Recognition and reversal of deferred tax assets arising from unused tax credits:

Situation: At Mercury Company: (*Unit: million VND*)

Enterprises starting to operate are eligible for income tax incentives in the form of income tax exemption for 2 years, since having taxable income and reducing 50% of tax payable for the next 2 years.

For example, the business is exempted from tax from 2008 to 2009. In 2010, enterprises are entitled to a 50% reduction in payable tax amounts.

In 2010, the enterprise had the following data: Total revenue: 2.000; Total reasonable and valid expenses: 1.200; Profit before tax: 800; Amount of income tax payable (50% reduction): $(800 \times 25\%) / 2 = 100$. In 2010, the enterprise decided to temporarily not use this tax incentive and will use it for deduction of income tax payable in 2011. Therefore, in 2010, the enterprise still paid 100% of the income tax calculated on the pre-tax profit: $800 \times 25\% = 200$

Since the preferential income tax amount in 2010 has not been used, the enterprise is recognized as an income tax asset based on the unused tax incentive (100) if there are grounds to determine in 2011 the enterprise will have taxable income.

The accountant records:

Dr. Acc 243 – Deferred tax assets: 100

Cr. Acc 8212 – Deferred income tax expense: 100

The report on business results in 2010 includes the following items: (*Unit: million VND*)

Targets	Year N
Revenue	2.000
Expense	(1.200)
Profit before tax	800
Current income tax expenses	(200)
Deferred income tax expense	100
Profit after tax	700

In 2011, the enterprise decided to use the entire preferential income tax amount, including the income tax incentives in 2010 but not yet used to deduct the payable income tax amount of 2011.

In 2011, the enterprise had the following data: Total revenue: 5.000; Reasonable and valid total expenses: 3.000; Profit before tax: 2.000;

Income tax payable on taxable profit of 2011 (50% discount): 250; Income tax paid in 2010 is deducted from income tax payable in 2008: 100; Total income tax payable in 2011 is 150.

Because in 2011, the enterprise used the tax incentive of 2010 to reduce the tax payable in 2011, so the accountant must revert the deferred tax assets recognized since 2010:

Dr. Acc 8212 – Deferred income tax expense: 100

Dr. Acc 243 – Deferred tax assets: 100

The report on business results in 2011 includes the following items: (*Unit: million VND*)

Targets	Year N
Revenue	5.000
Expense	(3.000)
Profit before tax	2.000
Current income tax expenses	(150)
Deferred income tax expense	(100)
Profit after tax	1.750

c) Recognition and reversal of a deferred tax asset arising from a change in tax rates

Deferred tax assets and deferred tax liabilities should be measured at the tax rates expected to apply to the year the asset is recovered or the liability is settled, based on tax rates (and tax laws) in effect at the balance sheet date.

The determination of the deferred tax liabilities and deferred tax assets should reflect the tax effects in a manner consistent with the recovery or settlement of the carrying amount of the assets and liabilities, payments expected by the enterprise at the balance sheet date

Situation: At Earth company (*Unit: million VND*): Year N, an accounting loss of 500, Tax also accept the above loss is 500 and the business expects to carry forward losses evenly over the next 5 years at 100, with the income tax rate in year N of 20%

Thus, in year N, a deferred tax asset is incurred for a tax loss of 10 ($500 \times 20\%$), at the same time, accountants recognize Dr. Acc 243/Cr. Acc 8212 with the same amount of 100.

In year N+3, the Ministry of Finance changes the income tax rate from 20% to 17%, start calculating the new tax rate from year N+4. In years N+1, N+2, the enterprise is profitable and carries forward losses as planned, each year the return of deferred tax assets is 20 ($100 \times 20\%$), Accounting for the reversal of a deferred tax asset: Dr. Acc 8212/Cr. Acc 243 with the same amount of 20 for each year.

In year N+3, the enterprise made a profit and also carried forward the loss as planned. However, the accountant will settle the closing balance of Account 243 at 34 ($200 \times 17\%$), Therefore, the deferred tax asset to be reversed at year-end is 26 ($100 - 20 - 20 - 34$). That is, year N+1, year N+2 per year reverting 20 and year N+4, year N+5 per year reverting 17 (due to tax rate change to 17%), so the accountant will fully import the deferred tax asset for year N+3 which is 26. In year N+3, accountants record the reversal of deferred tax assets: Dr. Acc 8212/Cr. Acc 243 with the same amount of 26

5. CONCLUSION

Financial statements presenting comprehensive, transparent and correct information are always of interest to investors. Financial statements that provide comprehensive, transparent and correct information are always of interest to users of accounting information. The basic function of Financial Statements is to provide information to external parties to assist them in making optimal decisions. Those external objects are investors, banks, customers, suppliers. In an economy where capital is mainly mobilized through the capital market, the role of investors is of particular interest. Information about corporate income tax is always of interest to investors, because corporate income tax is an important tool contributing to encouraging and promoting investment according

to the Government's plan, strategy and comprehensive development. The principle of presenting information about deferred corporate income tax on the financial statements is a very complicated matter; in fact, businesses have encountered many difficulties. For the above reason, the article has provided a basis for presenting information about deferred income tax on the financial statements in a scientific, systematic manner, derived from international accounting practices and from reality in Vietnam, make the presentation of deferred income tax information on the financial statements more convincing and meaningful./.

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SOLUTION TO BALANCE THE TRADE BALANCE OF VIETNAM WITH KOREA

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Abstract: Korea is an important market of Vietnam not only for import and export activities but also for the entire economic and social development of the country. The value of two-way trade between Vietnam and South Korea has increased rapidly, in 2020 has reached more than \$ 66 billion (of which, Vietnam exports \$ 19.1 billion and imports \$ 46.9 billion). However, one thing that Vietnam needs to pay close attention to is the trade balance of Vietnam - Korea in recent years (especially since the implementation of the VKFTA Agreement - 2015). in a deficit situation, even the extent of the deficit tends to get worse. This fact not only causes difficulties and limits the development of international trade activities of Vietnam, but also may pose potential risks of destabilizing the economy. The following article will analyze specifically the current situation of trade trade deficit between Vietnam and South Korea in the past time and propose some solutions to balance trade settlement with Korea in the near future.

Keywords: Trade balance, Vietnam, Korea.

1. RESEARCH OVERVIEW OF WORKS RELATED TO NATURAL RESOURCES

Korea is an important school of Vietnam not only for import and export activities but also for the whole country's socio-economic development, so there have been many articles and study programs to evaluate the activities. Vietnam's import and export with Korea in general and the trade fair situation of Vietnam - Korea in particular in recent years. Instrumental studies and articles after assessing Vietnam's trade activities with Korea have also assessed the impact of issues on Vietnam's economic development. Typical of instrumental research are:

- Article by author Hong Son, newspaper dientu@hanoimoi.com.vn with the title "Each time Steps to balance the trade balance" on March 23, 2019, the basic content of the article assessed Vietnam's trade balance deficit with major markets such as ASEAN, China and Korea. China and the need to balance the trade balance, but the article has not gone into depth to evaluate and analyze the trade deficit of Vietnam with Korea and point out the causes and solutions. effective remedy.

- Article by author An Khanh with the title "Balance of Vietnam - Korea trade deficit" Business Newspaper No. 61, dated October 11, 2010, the basic content of the article has gone into depth assessment. Vietnam's trade balance deficit with Korea and the need to balance the trade balance. However, the article has not fully researched in terms of both theory and comprehensive assessment and analysis of Vietnam's trade balance deficit with South Korea and pointed out the causes as well as solutions to the problem. effective remediation.

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- Research work by Nguyen Minh Trang, published in the Proceedings of the Vietnam International Economic Integration Forum (2018) with the title: “Impact of the Vietnam - Korea Free Trade Agreement on Vietnam’s economy. Nam” The article has gone into depth assessment of the impact of the VKFTA Agreement on the entire economic development of Vietnam and includes an assessment of the impact on Vietnam’s trade with Korea, but the author has not assess the impact on the trade balance of Vietnam - Korea.

- Ho Chi Minh City Center for International Integration Support (CIIS) held a seminar on “Vietnam - Korea Free Trade Agreement (VKFTA) - Opportunities and Challenges” on August 16, 2020. In 2016, there were many discussions and assessments on the impact of the VKFTA on Vietnam’s economy on both opportunities and challenges. In general, the seminars still only focus on assessing the impact of the VKFTA on Vietnam’s trade, not mentioning the trade balance between Vietnam and Korea.

- Article by authors Pham Thi Khanh & Nguyen Ha Phuong published in the journal Northeast Asian Studies No. 8, 2017, “The status of Vietnam’s trade in goods and investment with South Korea after signing the Free Trade Agreement. freedom” No. 8, 2017. The basic content of the article has assessed the trade status of Vietnam with Korea and mentioned the trade balance between the two countries, but has not gone into depth to assess the trade balance deficit of Vietnam. How will South Korea and South Korea affect the trade and economic development of Vietnam in the coming time?

- Author Aries with the article: “Vietnam is increasingly having a large trade deficit with South Korea” (2018) has analyzed quite clearly the situation of Vietnam’s trade balance deficit with Korea over the past time, but The authors have not yet analyzed the negative impacts of the trade deficit with Korea on our country’s economy.

In addition to the above studies, there are a number of other related studies, but most of these studies and new articles only go into the assessment and analysis of Vietnam’s trade relations - Korea or have research on trade balance, trade balance deficit of Vietnam with Korea on certain aspects. There has not been a work that comprehensively studies both in theory and specifically assesses the impact of the Vietnam-Korea trade deficit on the negative impacts on the development of trade. international trade, to the economic development of Vietnam, so the author has chosen that issue for research.

2. RESEARCH METHODS

Research documents combined with survey of actual data through the collection of secondary information. The methods used in the research process are: comparison, analysis, synthesis... to process information and make reasonable and logical comments.

3. RESEARCH RESULTS

3.1. Basic perceptions of the balance of trade

The balance of trade is the difference between the value of exports and imports of a country in a given period (usually 1 year).

If approached from the perspective of economic research, the balance of trade (NX - net export) is expressed in the form of the formula:

$$NX = EX - IM$$

In which: EX (export) is the value of export turnover, in other words, it is the expenditure that assesses the ability of foreign countries to buy domestic goods and services; IM (import) is the value of imports, in other words, spending that reflects a country's ability to purchase imported goods.

In this sense, balance of trade is another way of calling net exports of goods and services. NX is an important part of gross domestic product (Y - GDP) accounting and has a relationship with investment and savings.

We have the formula: $Y = C + I + G + NX$ (C is domestic consumption of goods and services, I is investment and G is government spending). balance of trade has 3 states:

First, $NX > 0$: balance of trade surplus.

Balance of trade has surplus when the total value of goods and services of an exporting country is greater than the total value of goods and services that that country imports in a certain period, so balance of trade in this case is still valid. called transcendence. When the trade surplus shows that the export activities of that country grow faster than the import activities and contribute to increase foreign currency revenue for the country, promote GDP growth, create jobs for workers... However, It should be noted that the large surplus of balance of trade may also pose difficulties for future economic development such as the management of flexible exchange rates, the effective balance of international payments. ...

Second, $NX < 0$: trade balance deficit, also known as trade deficit.

Balance of trade deficit when the total value of goods and services of an exporting country is smaller than the total value of goods and services that that country imports in a certain period. When the trade deficit shows that the export activity of that country grows slower than the import activity, it can cause a serious shortage of foreign currency, slow economic growth, increase unemployment, etc. However, it should be noted that not every trade deficit has negative effects on economic development, but in order to accurately and scientifically assess the impact of trade deficit, it is necessary to specifically consider the economy. What specific phase are you in: a period of crisis or growth?

Third, $NX = 0$: Balance of trade balance.

Equilibrium balance of trade is the total value of a country's exported goods and services equal to the total value of imported goods and services in a given period. In general, when the trade balance of a country is balanced, it shows that the export - import activities of that country are stable, the economy is stable and there is nothing to worry about. However, it should also be noted that the equilibrium trade balance sometimes still reflects the economy with uncertainties in the future, so when analyzing the trade balance in the equilibrium state, it is necessary to analyze it from different angles such as: products and trade fairs by region, territory (by country or region)... can make accurate and scientific conclusions.

There are many factors affecting the trade equity of a country such as: advantages of production resources, level and efficiency of exploitation - use of production resources, macroeconomic policies of the Government such as: exchange rate management, import and export tax...

3.2. Status of trade balance between Vietnam and Korea in recent years

In order to be able to analyze the current situation of trade agreements between Vietnam and Korea in the past years objectively, science needs to understand the current status of trade relations (export and import relations) between Vietnam and Korea.

In trade relations: the value of two-way trade between the two countries continues to increase rapidly, if in 2015 it was only 36.55 billion USD, in 2016 it reached 43.57 billion USD, in 2017 it reached 56.25 billion USD, in 2018 it reached 65.82 billion USD, in 2019 it was 66.65 billion USD, in 2020 it is 66 billion USD. If comparing 2017 with 2016, the value of two-way trade exchange increased by 12.68 billion USD in absolute number and 29.1% in relative number, in 2018 compared to 2017, the value of trade exchange 2 dimension increased by US\$ 9.57 billion in absolute numbers and 17% in relative numbers, in 2019 compared to 2018 the value of two-way trade increased by US\$ 0.83 billion in absolute numbers and by 1.26% in relative numbers, especially in 2010 compared to 2019 has a slight downward trend. Thus, if calculated on average in the period 2015 - 2020, the value of two-way trade exchange between the two countries increased by 29.45 billion USD in absolute number and 78.37% in relative number, which is an impressive increase. However, for a more specific assessment, it will be necessary to analyze more specifically international trade activities (exports and imports) of the two countries.

Table 1: Export value and main export items of Vietnam to Korea for the period 2015 - 2020

Unit: Million USD

Items	2015 Year	2016 Year	2017 Year	2018 Year	2019 Year	2020 Year
Seafood	571.65	607.68	706.19	864.,23	781.89	770.90
Crude oil	145.96	93.71	101.52	111.19	76.25	69.65
Wood and wood products	498.48	574.05	596.37	937.21	792.56	818.26
Textile yarn	195.56	265.00	290.13	406.28	350.18	397.76
Textiles and garments	2,128.05	2,282.87	2,445.13	3,298.13	3,353.38	2,895.31
Computers and electronic products	776.27	1,253.27	1,644.01	2,509.61	2,877.33	2,874.61
Phones and accessories	1,461.81	2,729.88	3,670.30	4,533.95	5,145.16	4,577.51
Footwear	302.21	344.94	355.59	493.99	604.87	548.58
Machinery, equipment and spare parts	476.98	756.86	869.18	1,233.78	1,626.07	2,046.91
Vehicles and spare parts	263.52	253.15	232.71	267.93	384.70	372.58
Total export value to Korea	8,921.15	11,406.06	13,532.46	18,240.59	19,720.08	19,107.26

Sources of data: Statistics of the General Department of Customs, VCCI over the years and calculations by the author

The data in Table 1 shows:

Firstly, in the overall period since the Vietnam-Korea Free Trade Agreement (VKFTA) was implemented, Vietnam's exports to South Korea have increased relatively rapidly. Our country's export turnover to South Korea reached 8.92 billion After the VKFTA Agreement was approved by the competent legal authorities of the two countries, in 2016 it was 11.41 billion After the VKFTA Agreement was approved by the competent authority. The legal competence of the two countries will reach 13.53 billion in 2017 After the VKFTA Agreement

is approved by the legal authorities of the two countries, in 2018 it will reach 18.24 billion. After the VKFTA Agreement is signed, competent legal authorities of the two countries, in 2019 and 2020 both reached more than 19 billion. After the VKFTA Agreement was approved by the legal authority of the two countries. Thus, in 2020 compared to 2015 the export value of our country to South Korea increased by 10.19 billion USD in absolute and relative numbers by 2.13 times (ie an increase of more than 2 times). Compared to the period 2010 - 2014, the period 2015 - 2020 Vietnam's export value to South Korea increased rapidly because many items have surpassed the 1 billion USD mark quite a lot, even some products have surpassed the USD 1 billion mark. \$4.5 billion mark.

Second, in the 10 main export products of our country to Korea from 2015 to 2018, there are 9 items with an increase in export value and only 1 item with a decrease in export value, which is oil. rough. However, due to the impact of the Covid-19 pandemic, in 2019 and 2020, although the value of export turnover to South Korea still increased compared to 2018, many export value products decreased (especially in 2020). For 9 export items with export value increasing by 2018, there are 4 items with the fastest increase in export value: textiles and garments, phones and components, computers and electronic products, machinery and equipment and spare parts, in which mobile phones and components have the fastest growth, followed by textiles, computers and electronic products, machinery and equipment and spare parts by the year. In 2018, all three items mentioned above exceeded the export value of over 1 billion USD (phones and components alone achieved an export value of over 4.5 billion USD). In general, fast-growing export products are all groups of goods that Vietnam has advantages in production because of its abundant labor force with labor costs not higher than that of other countries in the region and the world. In the coming time, in order to quickly increase the value of export turnover to Korea, in addition to the above products, Vietnam needs to promote the production of other products that also have advantages such as seafood, wood and wood products, shoes. slippers for export.

Third, facing the export value of exports to Korea is decreasing is crude oil, the research group thinks that it is correct because reducing the export of crude oil is reducing the export of raw materials. The economic efficiency of export activities in our country is higher and the exploitation of oil and gas resources is avoided at a fast rate to ensure sustainable export activities. Particularly, the group of textile fibers with an increasing trend is not very suitable to reduce the export of raw materials and gradually develop the domestic textile industry to meet raw materials for the garment industry for export in the near future.

In summary, Vietnam's export activities to Korea in the period of 2015 -2020 (especially after the implementation of the VKFTA agreement) have also achieved quite good results because most of Vietnam's products have advantages. has exported to Korea more and more and the items that need to be restricted from export have also been implemented effectively, in accordance with objective rules. However, in order to accurately evaluate international trade activities between Vietnam and Korea in the period 2015-2020, it is necessary to put them in correlation with Vietnam's import activities from Korea.

Table 2: Import value and main imported items of Vietnam from Korea for the period 2015 - 2020*Unit: Million USD*

Items	2015 Year	2016 Year	2017 Year	2018 Year	2019 Year	2020 Year
Petrol of all kinds	178.92	988.45	1,721.84	1,793.44	1,846.32	1,025.80
Plastic raw materials	1,147.55	1,198.88	1,136.10	1,672.78	1,609.56	1,547.25
Products processed from plastics	1,066.98	1,304.21	1,487.19	1,803.71	1,791.44	1,770.35
Fabrics of all kinds	1,856.30	1,957.42	1,849.44	2,162.56	2,023.34	1,624.17
Textile and footwear materials	795.27	790.44	692.66	771.38	719.75	731.55
Iron and steel of all kinds	1,044.54	1,009.89	1,117.86	1,407.48	1,409.22	1,280.37
Products processed from steel	1,209.20	697.03	617.99	679.54	708.50	722.19
Other common metals	1,035.74	1,071.91	1,320.14	1,523.59	1,478.94	1,511.35
Computers and accessories	6,732.32	8,674.09	13,881.87	17,577.81	16,843.11	17,138.44
Phones and accessories	3,023.10	3,578.62	5,586.25	6,255.28	5,922.05	7,763.60
Equipment and spare parts	5,115.89	5,885.44	8,077.96	5,902.08	6,163.06	6,003.28
Automobiles and auto parts	1,189.01	1,169.02	918.22	881.65	1,145.72	1,163.01
Value of Vietnam imported from Korea	27,631.01	32,162.95	42,723.68	47,582.22	46,134.58	46,895.44

Sources of data: Statistics of the General Department of Customs, VCCI over the years and calculations by the author

The data in Table 2 shows:

Firstly, the growth rate of Vietnam's import turnover from Korea in the period 2015 to 2020 is very fast and much faster than the period before 2015 but also unstable. If in 2015 the value of Vietnam's imports from South Korea was 27.63 billion USD, in 2016 the value of Vietnam's imports from South Korea was 32,163 billion USD, by 2017 it had increased to 42.723 billion USD. to 10.57 billion USD in absolute number and increased by 32.86% after 1 year, in 2018 the import value was 47.58 billion USD and compared to 2017 the absolute number increased by nearly 5 billion USD while the relative number increased. 11.38%, in 2019 the import value was 46.13 billion USD and compared to 2018 the absolute number decreased by 1.45 billion USD and the relative number decreased by about 3%, in 2020 the import value is 46.89 billion USD and compared to 2019 the absolute number increased by 0.76 billion USD and the relative number increased 1.65%. In fact, the rapid increase in the value of Vietnamese goods imported from Korea during this period is also easy to explain because Vietnamese goods imported from Korea are all raw materials and fuels for domestic manufacturing industries. country and produce goods for export, but it must also be affirmed that the entry into force of the VKFTA Trade Agreement is also a reason for the rapid increase in the value of Vietnam's import turnover from Korea. The reason that the value of import turnover from Korea in 2019 and 2020 decreased compared to 2018 is due to the impact of the Covid-19 pandemic on the world economy in general and the economies of other countries. Due to the crisis in the country in particular (including Vietnam), Vietnam's import demand from Korea has decreased but to a negligible extent.

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also be affirmed that the entry into force of the VKFTA Trade Agreement is also a reason for the rapid increase in the value of Vietnam's import turnover from Korea. The reason that the value of import turnover from Korea in 2019 and 2020 decreased compared to 2018 is due to the impact of the Covid-19 pandemic on the world economy in general and the economies of other countries. Due to the crisis in the country in particular (including Vietnam), Vietnam's import demand from Korea has decreased but to a negligible extent ... Especially, the three groups of goods with the fastest increase in import value by 2020 are computers and components with 17.14 billion USD, machinery and equipment and spare parts at 6.0 trillion USD, phones and components at 7.76 billion USD. The reason for the above-mentioned groups of goods to increase rapidly in import value is due to the import of components to assemble products under export processing contracts, while the increase in import value of equipment and spare parts is the main reason. completely suitable with the conditions of Vietnam when it is carrying out the process of industrialization and modernization (industrialization and modernization) in the opinion of the project group, the government should encourage the import of firearms from the Korean market to gradually replace the import of devices from the Chinese market. f we can replace the import of new equipment from China with the import of new equipment from Korea, the same thing will solve two goals: reducing the trade trade deficit with China and gradually renewing it. production technology techniques for economic sectors to avoid lagging behind in technology compared to other countries in the world and in the region. Another group of goods that our country's import value from Korea also tends to increase relatively quickly (although not stable because there is a slight decrease in years) is fabrics of all kinds, in the opinion of the subject group this is It is completely reasonable by increasing the import of all kinds of fabrics to serve the garment industry, producing all kinds of clothes for export to both increase the value of export turnover and exploit the abundant living labor force of our country.

From the data in Tables 1 and 2, it can be seen that in the period from 2015 to 2020, Vietnam's trade deficit with Korea always has a trade deficit and tends to increase faster than the period before the VKFTA Agreement was implemented (refer to data on table 3)

Table 3: Vietnam's trade balance with South Korea in the period 2015 - 2020

Unit: Billion USD

Year	Value of export turnover	Value of import turnover	Trade balance
2015	8.92	27.63	-18.71
2016	11.41	32.16	-20.75
2017	13.53	42.72	-29.19
2018	18.24	47.58	-29.34
2019	19.72	46.13	-26.41
2020	19.11	46.89	-27.78

Source of data: Statistics of the General Department of Customs, VCCI over the years

Specifically: in 2015 Vietnam had a trade deficit of 18.71 billion USD from Korea (ie, Vietnam's trade trade deficit with Korea was 18.71 billion USD), in 2016 the trade deficit was 20.75 billion USD, in 2017 it was 20.75 billion USD. trade deficit of USD 29.19 billion, in 2018 USD had a trade deficit of USD 29.34 billion, in 2019 USD had a trade deficit of USD 26.41 billion, in 2020 USD had a trade deficit of USD 27.78 billion

Thus, it can be seen that Vietnam's trade deficit from Korea appeared before 2015 but not until 2015, which means that Vietnam's trade trade deficit with Korea was before 2015. However, after 2015, the last year before the implementation of the VKFTA Agreement, the trade deficit was also nearly 20 billion USD (exactly 18.71 billion USD). The data shows that the value of Vietnam's trade deficit from Korea increased rapidly after the implementation of the VKFTA Agreement, if in 2016 only had a trade deficit of more than 20.75 billion USD, in 2017 there was a trade deficit of 29.19 billion USD, which is nearly 41% increase and the absolute number increased by 8.45 billion USD only after only 1 year, the year of trade deficit with the heaviest trade deficit is 2018 with 29.34 billion USD after 2018, then it tends to decrease slightly in 2019 and 2020. Cause Vietnam trade deficit from Korea is daily value. The rapid increase after the implementation of the VKFTA Agreement is not too worrisome when we have determined that the goal when the governments of the two countries sign the agreement is to promote economic relations and investment globally. (including promoting international trade) and moreover, our country is in the stage of economic construction and development, so many groups of goods we increase imports are to ensure raw materials for the production of goods and services. services for export such as fabrics of all kinds, computer components, phone components... but there are a few groups of Vietnamese goods that need to be studied to reduce the amount of imports from Korea such as iron and steel of all kinds, common metals by These two groups of products have annual import value ranging from 1.2 to more than 1.5 billion USD, which many domestic enterprises can produce. Therefore, restricting the import of these two groups of goods both promotes the development of domestic enterprises and saves foreign currency in order to improve trade relations with Korea in a more favorable direction.

Iso from the data in Table 3, the trade deficit with Korea in 2 years 2019 and 2020 tends to decrease compared to 2018 but not much and unstable. In 2019, balance of trade reduced trade deficit by USD 1.45 billion compared to 2018, in 2020 compared to 2018 balance of trade reduced trade deficit by USD 0.69 billion, but in 2020 compared to 2019, balance of trade increased trade deficit by 0.24 billion USD. The cause of the above situation is mainly due to the objective impact of the Covid-19 pandemic, which has made the world economy and countries' economies in crisis, so the need to export and import goods to serve the development of the country. economic decline and Vietnam's import and export activities are also in that spiral.

The basic reason leading to Vietnam's trade deficit with South Korea increasing (the trade deficit is increasing day by day) is: due to the impact of the implementation of the VKFTA Agreement, which has facilitated the import of goods into Vietnam to increase. rapidly, due to the rapid increase in the demand for importing machinery, equipment and raw materials from Korea, because the structure of Vietnam's import and export goods with Korea is still not reasonable, due to the competitiveness of export goods of the country. Vietnam is not high...

3.3. Solutions to balance Vietnam's trade fair with Korea

To be able to gradually balance Vietnam's trade fair with Korea in the coming years, Vietnam needs to focus on implementing the following solutions:

First, there should be a reasonable coordination between state management agencies and businesses in the process of implementing the VKFTA Agreement in order to increase exports and limit imports to improve trade relations with Korea.

In order for the implementation of the Vietnam - Korea Free Trade Agreement (VKFTA) to be effective with the goal of reducing the trade deficit from the Korean market in order to gradually balance of trade balance with Korea, it is necessary to do the following things well:

On the government side: continue to stabilize macroeconomic development in the direction of a market economy to increase exports and limit the negative impacts of the Covid-19 pandemic; supplementing and adjusting Vietnam's legal system in line with international practices and meeting the requirements of VKFTA; It is necessary to research and come up with effective policies to support Vietnamese enterprises (especially small and medium enterprises) to access and meet the implementation of the commitments of the VKFTA Agreement in order to boost exports. to Korea.

On the business side: businesses need to be aware that businesses themselves are the real subjects who must implement international economic integration commitments in general and the VKFTA Agreement in particular to proactively take measures to boost exports; enterprises need to come up with measures to effectively take advantage of the opportunities brought by the VKFTA Agreement to boost exports to Korea; Vietnamese enterprises need to improve the competitiveness of goods to rapidly increase the volume of goods exported to Korea.

Second, Formulate and effectively implement a long-term export strategy.

To effectively develop and implement a long-term export strategy, it is necessary to develop a long-term export strategy of our country and implement an effective long-term export strategy. In order to perform well the above tasks, the Government must direct the implementation of the strategy in a unified and synchronous manner and take measures to harmonize the interests of entities participating in export activities. to ensure sustainable exports.

Third, to build a reasonable structure of export and import goods with Korea.

In order to build a reasonable structure of export and import goods with Korea, it is necessary to determine the key export products that are reasonable and suitable with Vietnam's advantageous production resources on the basis of demand. demand of the world market and the Korean market. However, it is also necessary to choose reasonable and effective imported products from Korea.

Fourth, Improve the competitiveness of Vietnamese goods exported to Korea.

To improve the competitiveness of Vietnamese exports to Korea, it is necessary to: increase the localization rate of exported products. It is necessary to increase the added value in exported products (ie, the content of crystalline gray matter in the product is increasing day by day). Gradually improve the level of production and business management in order to save production costs, reduce costs to improve competitiveness,

Fifth, to develop domestic supporting industries (support industry) effectively.

In order to develop the supporting industry effectively, it is necessary to have a correct awareness of the need to develop the supporting industry in our country in the context of the increasingly deep and wide integration of the economy. On the other hand, it is necessary to improve mechanisms and policies to promote the development of supporting industries and encourage the attraction of Korean FDI in the production of import substitutes in order to attract Korean FDI capital. both promoting trade relations between the two countries and helping Vietnam improve its trade deficit.

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IMPACT OF HUMAN CAPITAL TO VIETNAM'S ECONOMIC DEVELOPMENT

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Abstract: *The article studies the impact of human capital on Vietnam's economic development. The original model of choice is the model of Isola and Alani (2005). After processing the data with the criteria set forth by the group (valid data), there are 19 years of standardization and used in the research model (from 2001 to 2019). The variable representing economic development is GDP; The independent variables representing human capital include: Total labor in the economy; average labor productivity; average life expectancy. On the basis of research and analysis, drawing conclusions in the period from 2001 to 2019, the above factors have greatly influenced economic development according to the forecast regression model. From there, recommendations related to the use of human capital to contribute to Vietnam's economic development are proposed.*

Keywords: *Impact; human capital; develop; Vietnam economy.*

1. INTRODUCTION

Proposing a research model for factors affecting the economic development of Vietnam.

The model inherited from Isola and Alani (2005) to build a research model on the impact of human resources on Vietnam's economic growth has the following form:

$$\text{LOG}(GDP) = \beta_1 + \beta_2 L + \beta_3 \text{LOG}(PRD) + \beta_4 \text{LOG}(AGE)$$

Inside:

GDP: GDP per capita - a representative indicator to measure the output of the economy.

L: Total employment in the economy. Total labor in an economy measures the size of the labor force in the economy. The larger the number of workers leads to the overall development of the economy.

PRD: Average labor productivity. Labor productivity reflects the ability to create wealth, the efficiency of labor in the production process, measured by the number of products or the amount of value created in a unit of time, or the amount of labor time wasted to produce one unit of product. Labor productivity reflects the nature and progress of the economy.

AGE: Average life expectancy. Average life expectancy is a measure of people's health, people with increased life expectancy show that investment in health makes health better. With self-training and a good health system, jellyfish will be healthy and the average life expectancy will increase, thereby helping to increase labor productivity and develop the economy.

The research hypotheses reflect three factors affecting human capital that affect the average GDP - a representative indicator of Vietnam's economic development.

- Hypothesis H1.1: Assuming all other factors are constant, if the total labor in the economy changes, the average GDP will change accordingly.

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- Hypothesis H1.2: Assuming all other factors are constant, if the average labor productivity changes, the average GDP will change accordingly.

- Hypothesis H1.3: Assuming all other factors are constant, if the average life expectancy in Vietnam changes, the average GDP will change accordingly.

2. BUILDING RESEARCH MODEL

With a sample size of 33 years (from 1986 to 2018), after filtering the data with the criteria set by the group (validated data), there are 19 years of qualifying and used. in the research model (from 2001 to 2019).

At the 5% level of significance, the research team built a regression model.

Regression function with GDP.

Dependent variable		
Y: LOG(GDP) - indicator representing Vietnam's economic development (million VND/person)		
Independent variables		
Variables	Interpretation	Expectations sign
L	X_2 Total labor in the economy (million people)	+
LOG(PRD)	X_3 Average labor productivity (million VND/worker)	+
LOG(AGE)	X_4 Life expectancy (age)	+/-

Table 1: Variable set with average GDP model

Year	Variable Value			
	Average GDP (million VND/person)	L (million people)	PRD (million VND/worker)	AGE
2001	9.34	39.62	16.18	73.23
2002	9.92	40.72	16.9	73.44
2003	11.12	41.85	17.67	73.65
2004	12.62	43.01	18.59	73.88
2005	15.86	44.9	19.62	74.09
2006	18.11	46.24	22.75	74.3
2007	20.91	45.20	25.30	74.47
2008	26.52	46.50	32.00	74.62
2009	28.09	47.70	37.90	74.74
2010	30.41	49.00	44.00	74.84
2011	35.19	50.40	55.20	74.90
2012	40.04	51.40	63.10	74.96
2013	43.53	52.20	68.70	75.01
2014	46.85	54.48	74.70	75.06
2015	48.11	54.61	78.90	75.11
2016	50.59	53.29	84.40	75.17
2017	54.59	53.72	93.20	75.24
2018	59.22	55.39	102.10	75.32
2019	62.66	56.12	110.50	73.60

Table 2: Vietnam data on variables.

3. RESEARCH RESULTS

Dependent Variable: LOG(GDP)
 Method: Least Squares
 Date: 03/21/21 Time: 00:14
 Sample: 2001 2019
 Included observations: 19

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-36.75971	14.39732	-2.553233	0.0221
L	0.053536	0.020569	2.602795	0.0200
LOG(PRD)	0.430070	0.152893	2.812889	0.0131
LOG(AGE)	8.319264	3.390870	2.453431	0.0269
R-squared	0.984703	Mean dependent var		3.320452
Adjusted R-squared	0.981643	S.D. dependent var		0.637433
S.E. of regression	0.086364	Akaike info criterion		-1.875825
Sum squared resid	0.111881	Schwarz criterion		-1.676996
Log likelihood	21.82034	Hannan-Quinn criter.		-1.842175
F-statistic	321.8535	Durbin-Watson stat		0.836260
Prob(F-statistic)	0.000000			

Table 3: Eviews estimation results of average GDP model by L, PRD, AGE

F-statistic	Prob(F-statistic)
321.8535	0.000000

Table 4: Results of F. test

F test: testing the overall fit of the model, getting the value $F = 321.8535$ with Prob (F-statistic) = $0.000000 < 5\%$, and $R^2 = 0.984703$ proving that the linear regression model is built, be consistent with the overall.

General evaluation of the model				
R^2	\bar{R}^2	F-statistic	P-value	N
0.984703	0.981643	321.8535	0.000000	19
Evaluate each variable				
variable		β	Std.Error	Prob.
Parameters	β_1	-36.75971	14.39732	0.0221
L	X_2	0.053536	0.020569	0.0200
LOG(PRD)	X_3	0.430070	0.152893	0.0131
LOG(AGE)	X_4	8.319264	3.390870	0.0269

Table 5: OLS regression results with LOG (GDP) (million VND/person)

The results of OLS regression with LOG (GDP) in the table show that the independent variables included in the model explain 98,4703% of the variation of the dependent variable Y. The three included variables are all quantitative variables that have an influence on the dependent variable Y. Average GDP is the variable X_2, X_3, X_4 which are the factors of the number of workers in the economy, the average life expectancy and the average labor productivity of Vietnamese workers, respectively. 3 variables have Prob. respectively 0.0200, 0.0131, 0.0269 $< 5\%$. Among the variables that affect the dependent variable, the average life expectancy of Vietnam has the greatest impact on the average GDP, the development of the Vietnamese economy, with the coefficient β received is 8.930017. The variable Vietnam's total labor force has the lowest impact on the average GDP,

i.e. the development of the Vietnamese economy, with the coefficient β receiving the smallest value of 0.053536.

In general, the independent variables all reflect the expected sign exactly with the research group's prediction. In which, the labor force in the economy has a (+) sign, showing that when the labor force in the Vietnamese economy increases to 1 million people, the average GDP increases by 5,3536% over the previous year. Vietnam's average labor productivity has a (+) sign, showing that when Vietnam's average labor productivity increases by 1%, the average GDP increases by 0.43007%. The average life expectancy of the people is expected to bear the sign (-)/(+) and after analyzing the data, the average life expectancy variable has the sign (+), showing that when the average life expectancy increases by 1%, the GDP average increase of 8.319264 %.

4. CHECK THE FIT AND DEFECTS OF THE MODEL

a. Check for multicollinearity

Checking for multicollinearity defects using subregression model

Estimating the sub-regression model:

$$L_i = \alpha_1 + \alpha_2 \text{LOG}(PRD)_i + \alpha_3 \text{LOG}(AGE)_i + V_i$$

Dependent Variable: L
Method: Least Squares
Date: 03/22/21 Time: 17:15
Sample: 2001 2019
Included observations: 19

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-156.3720	170.5692	-0.916766	0.3729
LOG(PRD)	7.134458	0.521641	13.67695	0.0000
LOG(AGE)	41.40026	39.89345	1.037771	0.3148
R-squared	0.964802	Mean dependent var		48.75526
Adjusted R-squared	0.960402	S.D. dependent var		5.275133
S.E. of regression	1.049710	Akaike info criterion		3.078843
Sum squared resid	17.63024	Schwarz criterion		3.227965
Log likelihood	-26.24901	Hannan-Quinn criter.		3.104081
F-statistic	219.2851	Durbin-Watson stat		0.893325
Prob(F-statistic)	0.000000			

Hypothesis pair test: Ho: Original model has no multicollinearity

H1: The original model has multicollinearity

$$\text{Inspection standards: } F = \frac{\frac{R^2}{(4-2)}}{\frac{1-R^2}{(n-4+1)}} \sim F^{(2,n-3)}$$

$$\text{Rejection domain: } W_\alpha = \{F: F > F_\alpha^{(2,n-3)}\}$$

There is $F_{qs} = 219.2856 > F_\alpha^{(2,16)} = 3.63$. So $F_{qs} \in W_\alpha$. So reject H_0 , accept H_1 . The original model has multicollinearity.

Checking for multicollinearity defects using variance exaggeration factor VIF

Variance Inflation Factors
Date: 03/22/21 Time: 17:10
Sample: 2001 2019
Included observations: 19

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	207.2828	528019.8	NA
L	0.000423	2590.170	28.41064
LOG(PRD)	0.023376	857.9702	26.67129
LOG(AGE)	11.49800	544298.7	2.243016

Table 6. Checking for multicollinearity

According to the results obtained from the VIF test in Table 6, the original model has multicollinearity.

b. Check Variance Random Error Variation

Check Variance of Variable Random Errors with White 's test

We have a regression model:

$$Y = -297.0173 + 8.930017X_2 + 0.759326X_3 - 2.768073X_4$$

Estimation of the original original model obtained: $e_i \rightarrow e_i^2$

Heteroskedasticity Test: White

F-statistic	2.633094	Prob. F(7,11)	0.0734
Obs*R-squared	11.89880	Prob. Chi-Square(7)	0.1039
Scaled explained SS	6.798556	Prob. Chi-Square(7)	0.4502

Test Equation:

Dependent Variable: RESID^2

Method: Least Squares

Date: 03/22/21 Time: 17:26

Sample: 2001 2019

Included observations: 19

Collinear test regressors dropped from specification

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.689288	0.757045	0.910498	0.3821
L^2	-0.001197	0.001437	-0.833556	0.4223
L*LOG(PRD)	0.022205	0.021963	1.011037	0.3337
L*LOG(AGE)	0.708786	0.223174	3.175935	0.0088
L	-3.024760	0.982745	-3.077870	0.0105
LOG(PRD)^2	-0.049807	0.088780	-0.561017	0.5860
LOG(PRD)*LOG(AGE)	-8.463651	2.645920	-3.198755	0.0085
LOG(PRD)	35.76484	11.41986	3.131811	0.0095
R-squared	0.626253	Mean dependent var		0.005888
Adjusted R-squared	0.388414	S.D. dependent var		0.008192
S.E. of regression	0.006406	Akaike info criterion		-6.967506
Sum squared resid	0.000451	Schwarz criterion		-6.569847
Log likelihood	74.19131	Hannan-Quinn criter.		-6.900206
F-statistic	2.633094	Durbin-Watson stat		2.562680
Prob(F-statistic)	0.073352			

Table 7: Report of White test results

Hypothesis pair test: Ho: Original model Variance of error does not change

H1: Original model variance variance changes.

Inspection standards: $\chi^2 = n \times R_w^2 \sim \chi^{2(k_w-1)}$

Rejection domain: $W_\alpha = \{\chi^2: \chi^2 > \chi_\alpha^{2(k_w-1)}\}$

From the results of the report we have: $\chi_{qs}^2 = nR_w^2 = 11.89880$

At 5% significance level, $n = 19$ we find $\chi_{0.05}^{2(7)} = 14.0671 > \chi_{qs}^2 = 11.89880$. So we do not have a basis to reject H_0 , temporarily accepting H_0 means that the model the research team is considering does not exist the phenomenon of variance of random error changing at 5% significance level.

c. Autocorrelation defect test

Check for second-order autocorrelation defects using B-G

Estimating the original model obtained: $e_i \rightarrow e_{i-1}, e_{i-2}$

Breusch-Godfrey Serial Correlation LM Test:				
F-statistic	4.553342	Prob. F(2,13)	0.0317	
Obs*R-squared	7.826909	Prob. Chi-Square(2)	0.0200	
Test Equation:				
Dependent Variable: RESID				
Method: Least Squares				
Date: 03/22/21 Time: 17:37				
Sample: 2001 2019				
Included observations: 19				
Presample missing value lagged residuals set to zero.				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	17.23193	13.16393	1.309026	0.2132
L	0.008869	0.017371	0.510587	0.6182
LOG(PRD)	-0.020677	0.127792	-0.161804	0.8739
LOG(AGE)	-4.078656	3.103435	-1.314239	0.2115
RESID(-1)	0.916999	0.332672	2.756467	0.0163
RESID(-2)	-0.282964	0.316906	-0.892895	0.3881
R-squared	0.411943	Mean dependent var	-5.61E-15	
Adjusted R-squared	0.185767	S.D. dependent var	0.078839	
S.E. of regression	0.071141	Akaike info criterion	-2.196229	
Sum squared resid	0.065793	Schwarz criterion	-1.897986	
Log likelihood	26.86418	Hannan-Quinn criter.	-2.145755	
F-statistic	1.821337	Durbin-Watson stat	1.840085	
Prob(F-statistic)	0.177758			

Table 8: Report of test results B-G

Hypothesis pair test: H_0 : Original model has no order 2 autocorrelation

H_1 : Original model has 2 order autocorrelation

There is $\chi_{qs}^2 = 7.826909 > \chi_{0.05}^{2(2)} = 5.9915$. Vậy $\chi_{qs}^2 \in W_\alpha$. So we reject H_0 , accept H_1 . So the original model has order 2 autocorrelation.

5. DISCUSSION AND CONCLUSION

The test of average GDP model according to influencing factors of human capital such as labor size, labor quality expressed by average labor productivity, labor health expressed by life expectancy average is correct. The test also shows that the model inherits the research of Isola and Alani (2005), combined with the empirical researches at home and abroad, and is based on the actual operational situation of the Vietnamese economy. Nam correctly reflects the human capital factors affecting the development of Vietnam's economy.

In terms of labor size, our country's labor force increases by about 1.3 million people per year with an average growth rate of about 2.65% per year; the number of laborers of working age accounted for nearly 95% of the total labor force and the group of young workers (age 15-34) accounted for 45%. By the end of 2017, the population of our country reached 96.02 million people., of which female accounts for about 48.94%. Population growth in recent years has led to an increase in the labor force. In general, each year, Vietnam has about 1 million people entering the working age, this is an important competitive advantage of Vietnam in attracting foreign investment, contributing to socio-economic development. In general, through economic theory, regression model analysis by Eviews report and actual situation, the labor force has a positive influence on Vietnam's economic development in the period 2001 - 2019.

Labor quality is mainly expressed through average labor productivity, from data on gross domestic product (GDP) at real prices and labor employed in the Statistical Yearbook of the General Statistics Office., we can calculate the labor productivity in 2005 reaching 19.62 million dong. According to the fluctuating trend, the labor productivity of the whole economy has continuously increased and has a good increase. This increase in average labor productivity is due to a pure increase in labor productivity of sectors and regions, which contribute less than 40% on average, and also due to economic restructuring towards an increase in the proportion of workers. labor of economic sectors, industries with higher labor productivity, that is, reducing the proportion of labor according to the corresponding proportions of economic sectors, industries with low labor productivity contribute on average per capita. 60%. In order to continuously improve the overall labor productivity of the whole national economy, in the coming time, we must pay close attention to investing in production development, technological innovation, and improving the effectiveness and efficiency of management. production management, promote training to improve the qualifications of workers... to strive to increase labor productivity more evenly in all three economic sectors, as well as in all branches of the national economy. Special attention must be paid to improving labor productivity in the non-state economic sector as well as improving labor productivity in the agro-forestry sector, because in these regions and economic sectors the technical level is still low. is very low, but has a wide scope of activities and accounts for a very large proportion of employees. Comparing labor quantity and labor productivity during the whole period from 2006 to 2017, both labor productivity factors and labor quantity over all years increase and increase GDP, ie, GDP growth rate due to the influence of these two factors is positive. However, the degree of increase of each factor in each year as well as in each period is more or less different. In addition, the quality of human resources is reflected in the professional and technical qualifications, namely the knowledge and skills necessary to undertake positions in management, business and professional activities. In parallel, the factor affecting labor productivity in particular and labor quality in general is the reality related to labor skills such as foreign language skills, computer skills, soft skills, etc. Vietnam has abundant and young human resources, but the ratio of skilled and qualified people to the population of the whole country is very low compared to other countries in the region; The number of managerial and technical workers is very small compared to the population as well as to the size of the economy. Skills shortages are one of the main obstacles to Vietnam's competitiveness in the global economy. Human resources are a key factor for the development of enterprises, so businesses pay great attention to recruitment with the desire to select qualified candidates.

Regarding the health factor of Vietnam's labor force, which is expressed through the average life expectancy, this factor has an impact on average GDP but not too much. Currently, our country is

in the final stage of the golden population structure, entering the aging phase. According to the General Statistics Office's forecast, by 2038 the population aged 60 and over will account for about 20% of the total population. At this time, the population of working age will decrease and this population fluctuation will adversely affect the socio-economic development situation without appropriate policies. When we enter the period of population aging, the use of elderly workers is very necessary. There is a lot of work older people can do that doesn't affect the job supply of young people. Therefore, many businesses said that in the future, the demand for elderly workers may be more. And so, to meet the needs of human resources for the economy, like many developed countries, we have to use older workers (which means increasing the retirement age). From an economic perspective, population aging and aging population have dual effects on the national and global economies.

From the above studies and analysis, the research team concluded that in the period from 2001 to 2019, human capital factors such as the size of the labor force, the quality and skills of workers, the health of Labor affects economic development according to the regression model. However, it can be seen that the quality of human resources plays an important role and has the strongest impact on economic development. Some solutions to improve the quality of human resources such as: Focus on recruitment; diversify training methods and forms of human resource training: face-to-face learning, distance learning, domestic and foreign learning, combination of practice with training, linkage between training places and enterprises; develop good remuneration and welfare policies in order to attract talents; building a dynamic, friendly and open working environment; focus on regularly inviting experts to train directly with businesses; training and fostering high-quality human resources in the field of information technology and digitization; training and fostering in various forms and methods; fostering foreign languages and informatics for staff; train cadres to adapt and respond to the changes of the industrial revolution; improving skills, skills in using technology, skills in applying scientific and technical advances; strengthen and actively cooperate internationally in training and fostering in various ways; raising the awareness of the staff about the role of the industrial revolution 4.0 and the cause of national innovation, this is an important premise to promote talents and enthusiasm; it is necessary to improve mechanisms and policies to attract talents, especially holding leadership and management positions that require in-depth expertise in information technology; creating a favorable working environment, with a special treatment mechanism for talented people; transparent business environment, complete legal documents, create a level playing field, perfect.../.

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CREDIT POLICY CONTRIBUTES TO ECONOMIC DEVELOPMENT AND SUSTAINABLE BUSINESS IN VIETNAM

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Abstract: *This article aims at analyzing credit policy and implementing credit policy in Vietnam in recent years, analyzing components, limits and personnel, and offering some solutions. In order to implement the target control regime and stabilize the foreign currency market, at the same time, drastically and promptly solve problems to remove difficulties and face negative activities of the Covid-19 pandemic, making an important contribution to maintaining economic growth and recovery.*

Keywords: *credit policy, operating credit monetary policy*

1. OVERVIEW OF CREDIT POLICY:

Credit policy is the totality of the bank's regulations on credit activities in order to provide orientation and guide the activities of bank staff in granting credit to customers.

The role of credit policy: (i) Reflect the bank's funding platform; (ii) Documentation for credit officers and bankers; (iii) Strengthening specialization in credit management; (iv) Establish consistency in credit activities; (v) Resolving credit related issues

The objectives of the credit policy include: (i) Improving the legal framework to create a favorable environment for the achievement of financial inclusion goals; (ii) Develop a variety of supply organizations and distribution channels to support all people and businesses to access and use basic financial products and services conveniently and at a reasonable cost.; (iii) Develop a variety of basic financial products and services, targeting the target audience of financial inclusion; (iv) Improve and increase the efficiency of the use of financial infrastructure, facilitate the reduction of transaction fees, and meet the requirements of promoting financial inclusion; (v) Financial education, capacity building and financial literacy; financial consumer protection.

2. PRACTICE IN VIETNAM:

With the characteristics of Vietnam's economy, credit is still the main capital supply channel in the economy. Accordingly, the State Bank of Vietnam has synchronously operated monetary policy tools with the aim of controlling inflation, stabilizing the macro-economy, contributing to economic growth; focusing on implementing solutions to facilitate credit expansion to support economic development, but coupled with credit quality, ensuring the operational safety of the commercial banking system.

As a result, the average inflation rate for 2016 - 2020 is at 3.2%, lower than the target level of the National Assembly (4%) and previous periods, creating room for fiscal policy and other macro policies. effective. The money market is firmly consolidated, liquidity is smooth, and the position

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of the Vietnamese dong is enhanced.

Interest rates decreased, credit grew in line with the absorption rate of the economy, along with improving quality and efficiency. The exchange rate and foreign currency market were stable, the State's foreign exchange reserve scale increased, meeting the requirements of market intervention when necessary and ensuring the foreign position of the economy.

The anti-dollarization policy in the economy was effectively implemented, capital in foreign currency and gold converted into money for socio-economic development. The process of restructuring and dealing with bad debts of the commercial banking system has been implemented, consolidated, and improved the quality of management and administration of commercial banks to meet international practices, ratio On-balance sheet bad debt remained below 2%. In the context of the whole society being heavily affected by the Covid-19 pandemic, along with the synchronous implementation of timely and correct policies of the entire political system, the State Bank of Vietnam has quickly stepped in. quickly and drastically implement solutions on monetary and credit, reduce interest rates, stabilize exchange rates, ensure liquidity, refinance, promulgate regulations on commercial banks to restructure debt repayment terms, Exemption and reduction of interest and fees, maintaining the same debt group to support customers affected by the Covid-19 epidemic.

In fact, high credit growth (average growth of about 33% from 2006 to 2010) causes consequences such as increased inflation, macroeconomic instability and monetary and financial market. In the last 10 years, the State Bank of Vietnam has well controlled credit growth by assigning annual oriented credit growth targets, with adjustments in line with developments and actual situations to implement. At the same time, the goal of controlling inflation and supporting growth is set by the National Assembly. On that basis, the State Bank of Vietnam announced the credit growth targets for each commercial bank, flexibly reviewing and assigning targets in accordance with the operation situation, financial capacity and ability. healthy growth, directing credit to production and business fields. In 2021, the State Bank of Vietnam sets an oriented credit growth target of about 12%, with adjustments in line with actual developments.

This is one of the operating measures to control the credit growth of each commercial bank, thereby controlling the credit growth of the whole system, controlling and regulating the money supply to the economy. In the condition that the capital market has not really developed, the capital for the economy still depends mainly on bank credit, especially medium and long-term capital, creating greater pressure on the banking system in meeting the needs of the banking system. The credit demand of the economy is always high. Against this backdrop, to reduce lending interest rates, maintain credit quality, ensure liquidity and safety of commercial banking operations, and control inflation are major challenges for the banking system. In order to solve many of the above-mentioned simultaneous goals, the application of a credit line management solution is very necessary and suitable to the characteristics and management capacity of the banking system as well as the conditions of the banking system. of the economy. Thereby, ensuring commercial banks control credit growth healthy, quality, suitable to the scale and ability to expand credit of each commercial bank, in line with the level of corporate governance approved by the Bank. gradually improve according to international standards, ensuring the operational safety of each commercial bank and of the whole system, especially now that the credit scale is already at a large level (by June 2021, it will be about 9 months), 4 million billion dong, equal to 146.1 percent of GDP by the

old method and 115.8% of GDP by the new method).

In order to continue to adjust the credit structure, the State Bank of Vietnam has directed commercial banks to focus credit on production and business sectors, especially priority areas according to the policy of the Government; strictly control credit for potentially risky fields such as real estate and securities business; strengthen risk management for BOT, BT transport and consumption sectors; implement solutions to remove difficulties for production and business, increase access to capital for customers, support the development of economic sectors and types of enterprises. Implement synchronously solutions to gradually transform foreign currency mobilization - lending relationship into foreign currency buying - selling relationship; promulgate regulations on foreign currency lending by commercial banks to residents, with a specific roadmap, step by step stopping foreign currency lending for a number of foreign currency borrowing needs that are not in line with the term orientation. dollarization of the economy. The State bank of Vietnam continues to focus on perfecting the legal framework, mechanisms and policies in order to create a full and favorable legal corridor for commercial banks in terms of credit granting activities; in which, renovating the lending process of commercial banks in the direction of simplifying loan procedures, improving appraisal capacity, risk management, autonomy in lending activities of commercial banks, ensuring ensure safety for commercial banks' lending activities, facilitate customers to access loans.

3. CREDIT MANAGEMENT HAS CONTRIBUTED TO SUSTAINABLE ECONOMIC AND BUSINESS DEVELOPMENT IN VIETNAM OVER THE PAST TIME, DEMONSTRATING:

Firstly: Control credit growth of the whole system in line with the capital absorption capacity of the economy, contributing to controlling inflation according to the target.

Credit growth in the years followed the orientation targets of the State Bank of Vietnam and tended to decrease gradually: 2016 increased by 18.25%/orientated 18 - 20%; 2017 increased 18.28%/18%; 2018 increased by 13.89%/17%; 2019 increased by 13.65%/14%; 2020 increase by 12.17%/14%; positively contributed to controlling the average inflation in the period 2016 - 2020 about 3.2%, a sharp decrease compared to the period 2011 - 2015 (7.65%). Regarding the assessment of the correlation between bank credit and inflation, in the period 2006 - 2016, the efficiency of monetary policy transmission through the bank credit channel to inflation was very high, especially in the period from 3 to 5 years. - the first 12 months after the shock occurs. The results show that, after about 1 year, the change in credit to the economy explains about 50.85% of the change in CPI. Credit demand in 2020 was low due to the impact of the Covid-19 epidemic, but credit has gradually improved and by the end of 2020 increased by 12.17%. By April 15, 2021, credit of the whole system increased by 3.28% compared to the end of 2020.

Second: Credit has been well controlled in terms of quality, effectively contributing to GDP.

Credit growth/average GDP growth gradually decreased: 2006 - 2010 was 5.29 times; 2011 - 2015 is 2.25 times; 2016 - 2019 is 2.38 times, contributing to supporting the renewal of the growth model, improving the efficiency of capital use and investment efficiency, in 2020 credit will increase by 12.17%, contributing to supporting economic growth. economy remained positive. Credit structure is positively adjusted, capital is used effectively and allocated reasonably; focus on areas that are growth drivers such as production and business sectors, priority areas; Risky credit is strictly controlled. The state of dollarization in the economy has decreased sharply, so far foreign currency credit accounts for 5.44% of the total outstanding loans of the whole system.

Regarding the assessment of the correlation between bank credit and economic growth, the study shows that the transmission efficiency of monetary policy through the bank credit channel to output (representative variable for economic growth) is reflect some of the changes in the economy; in which: (1) Credit quality is increasingly improved, increasing the efficiency of capital use with the shift of credit structure to areas that are the driving force for economic growth such as production and business, the banking sector. priority areas; credit with controlled risk areas. (2) Foreign direct investment (FDI) plays an increasingly important role in driving the growth engine of the economy, while this economic sector is less dependent on domestic credit capital. (3) The capital market has taken steps to diversify capital mobilization channels in the economy. (4) In the long term, the continuous increase in credit leads to asset bubbles and macro instability, which has the opposite effect on long-term economic growth.

Third: The operation of the commercial banking system is safe, efficient, credit is controlled in accordance with the business scale, management capacity and ability to expand safe credit of each bank. trade, creating an increasingly sustainable business environment.

The allocation and adjustment of credit growth targets has been and is the main support policy to encourage commercial banks to participate in handling weak people's credit funds; encourage commercial banks to actively reduce deposit and lending interest rates, commercial banks focus on areas that are growth drivers, priority areas, strictly control potential credit Thereby adjusting the commercial bank's operations on both assets and liabilities, linking the commercial bank's credit growth with the bank's ability to mobilize capital and manage liquidity. commercial banks, contributing to improving the liquidity of each commercial bank and the whole system, reducing inflationary pressure, gradually reducing the market interest rate level, improving operational safety indicators, contributing to supporting the restructuring of the commercial banking system and dealing with bad debts effectively.

Fourth: The credit structure of the banking system has changed in accordance with the orientations and policies of the Party and the State on private economic development.

Accordingly, from 2016 up to now, credit to the private sector has increased rapidly in both speed and proportion; continuously increased from 81.2% to about 90%, while the proportion of credit to the state economy decreased from 13.3% to about 5%. The growth rate of private economic credit over the years has been higher than the general credit growth, thereby, positively supporting the private economy to achieve a good growth rate. Credit programs and policies for sectors, fields, the poor and other policy beneficiaries under the direction of the Government and the Prime Minister have been effectively and synchronously implemented the National Comprehensive Financial Strategy, promoting sustainable growth such as credit policies for agriculture and rural areas in order to contribute to modernization of agriculture and rural areas associated with new rural construction, lending to poor households, policy beneficiaries support fast and sustainable poverty reduction. ...

4. ISSUES EMERGE:

However, the problems posed for bank credit now emerging are:

1. Credit/GDP ratio remains high and tends to increase (End 2020: 146%, average 2016 - 2019: 129.6% (2019: 135.7%; 2018: 130.1%), 2017: 130.1%; 2016: 122.3%). Calculated by GDP revaluation, it is still high: 2016: 197.62%; 2017: 103.47%; 2018: 103.04%; 2019: 107.07%;

2020: 115.82%), the credit scale so far is about 9.4 million billion VND. According to the World Bank's assessment, Vietnam is one of the countries with the highest credit-to-GDP ratio in the world. This is because the size of the stock market is not commensurate with the money market and is still small compared to the region, creating a burden of capital supply on the bank credit channel, especially medium and long-term capital for the economy. the ratio of medium and long-term credit to total outstanding loans is over 50% while the mobilized capital of commercial banks is mainly short-term. These are major shortcomings in the structure of the banking system in particular and the economy in general, which may have some potential risks: (1) The commercial banking system faces liquidity risks and risks. the opportunity to arise bad debt when the loan term is not suitable with the capital structure of the commercial bank; (2) Increasing pressure on market interest rates and safety of the banking system, stabilizing the macroeconomy, controlling inflation in the context of potential inflation risks.

2. Evaluating the impact of transmission from credit management to the economy through money market channels shows that: The ability to explain and forecast monetary variables to the fluctuations of inflation is generally good. better than explaining and predicting fluctuations in output growth (a proxy for economic growth). This is a practical evidence for the process of operating monetary policy, reflecting that monetary policy does not really have an effective role and effect on output growth and therefore executives should not expect and should not use monetary policy as a tool to stimulate economic growth.

3. In the context that the credit/GDP ratio is already at a high level, inflation risks are still hidden, monetary policy needs to continue to operate to not only ensure inflation control in the short term but also ensure long-term macro stability, while ensuring the safety of the banking system. Therefore, the State Bank of Vietnam needs to firmly control credit growth closely, continue to control credit growth gradually to ensure the safety of the system and ensure quality. At the same time, it is necessary to accelerate the healthy development of the capital market to improve the role of medium and long-term capital supply for the economy, ensuring sustainable financial resources for economic development.

The world economy is expected to continue to have complicated and unpredictable developments, growth is likely to be slower than in the previous period, and risks in the international financial and monetary markets will increase. In particular, the Covid-19 pandemic has complicated developments, causing a severe recession and global economic crisis, which is likely to have a long-term impact on the world economy; profoundly change the economic order and structure. The price of basic commodities is forecast to increase and warnings about inflation risks will begin to appear in the world, the major central banks are expected to continue to maintain the loosening monetary policy, however, there are some market expectations for a contraction in monetary easing earlier than expected. In the context of increasing political and trade tensions, FDI inflows tend to shift to diversify value chains, avoiding dependence on one or a few countries. Vietnam has the advantage of a stable socio-economic situation, which is an attractive investment attraction in the region. Domestic economic growth is forecasted to continue to recover, and the early control of the epidemic situation has created Vietnam's reputation in the international arena along with the prospect of attracting FDI, benefits from FTAs, promoting economic development and economic development. budget for public investment and financial and monetary support measures to support the economy. Inflation continues to be controlled but cannot be subjective when

world prices increase and economic conditions recover. At the same time, the openness of the large economy also makes the negative impacts of the world economy on the domestic economy faster and stronger. The IMF recommends maintaining monetary policy to support the economy, but it is necessary to note the risk of deterioration in asset quality of commercial banks due to the impact of the pandemic; The WB recommends that the expansion of fiscal and monetary solutions if the pandemic lasts, should be noted about the risk of financial instability.

5. SOLUTION

In the coming time, the State Bank of Vietnam will focus on implementing solutions on monetary and credit policies such as:

1. Operating proactive and flexible monetary policy tools with a view to the priority goal of controlling inflation, contributing to maintaining macroeconomic stability and promoting sustainable economic growth. Manage interest rates and exchange rates in line with macro balance, market movements and monetary policy management objectives, and flexibly buy/sell foreign currencies and intervene in the market to stabilize the foreign market. currency, consolidating the State's foreign exchange reserves when market conditions are favorable. In order to promptly respond to new risks of inflation and financial stability, the State Bank of Vietnam will closely monitor macroeconomic developments, inflation, and conduct monetary policy of central banks. central government and the impact of the epidemic to make appropriate policy adjustments.

2. Administering credit solutions to control the size and growth of credit in line with credit quality, in line with the economy's ability to absorb capital, and continue to create favorable conditions for businesses credit access, contributing to controlling inflation, supporting production and business and reasonable economic growth. Continue to review, amend, supplement and perfect credit mechanisms and policies in order to create an appropriate and synchronous legal framework to ensure safe and effective banking operations, and to create favorable conditions for the people. businesses access credit. Directing commercial banks to increase credit in association with improving credit quality, concentrating capital for priority areas, strictly controlling credit for potentially risky areas such as real estate., securities, BOT projects, BT traffic. Credit expansion must ensure that customers do not lower their lending standards to meet loan conditions and comply with legal regulations, do not relax credit granting conditions, and minimize debt increase. bad. Directing the State bank of Vietnam's branches in provinces and cities to coordinate with local departments, agencies and sectors in diversifying forms of connecting commercial banks with enterprises to promptly handle difficulties and obstacles in the process of communication. credit access.

3. Continue to synchronously administer credit solutions in order to effectively expand credit in association with credit quality, create a legal corridor for consumer lending to develop safely, efficiently and healthily. strong. Strengthening risk management for consumer lending, especially the activities of consumer finance companies in order to promptly meet the needs of people's legitimate lives, and contribute to boosting production., business and credit restrictions black. Closely monitor consumer credit fluctuations of commercial banks to have appropriate solutions to limit the improper use of loans in high-risk areas such as securities investment, real estate business. Continue to study the regulations on consumer lending of financial companies, ensuring strict management of operational efficiency.

4. Continue to research, review, amend and supplement regulations to ensure adequacy ratio,

credit extension ratio, reduce medium and long-term credit risks, gradually shift from direct credit control to control indirectly controlled by safety ratios according to the roadmap. Strengthen supervision of credit quality, grant credit to high-risk areas, improve the legal framework, management policies, inspection and supervision activities, and regulations on safety of banking operations. regulations on governance and risk management of commercial banks in the direction of stricter, safer and in line with international practices.

5. Continue to implement solutions to limit foreign currency lending, gradually shift the relationship of capital mobilization and foreign currency lending between commercial banks and customers to foreign currency trading relationship under the anti-dollar policy economy of the Government; to stop lending foreign currencies, focus on foreign currencies in the banking system, and stabilize the foreign currency market.

6. Continue to implement solutions to create conditions for the private economic sector to access credit capital, thereby contributing to supporting the development of the private economy according to the guidelines of the Party and Government. Continue to drastically implement tasks and solutions to improve the business environment, enhance national competitiveness, support and develop enterprises; create favorable conditions for enterprises to access credit capital; Encourage commercial banks to develop a variety of credit products and new products such as banking products and services, and products to hedge against interest rate and exchange rate risks to help businesses be proactive about capital, enhancing the ability to hedge risks.

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FACTORS AFFECTING FOREIGN DIRECT INVESTMENT ATTRACTION IN NGHE AN PROVINCE

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Abstract: *The study identifies factors affecting foreign direct investment (FDI) attraction in Nghe An – a slow-growing province of Vietnam. The study uses a linear regression model on SPSS 22 to find out the factors affecting FDI attraction in Nghe An province. Primary data is collected from a survey of 399 FDI enterprises which invested or did investing survey in Nghe An province. The research results show that, in a slow-growing province like Nghe An, the factors such as infrastructure system, human resources and quality of public services still have the strongest attraction from FDI enterprises. Meanwhile, the input cost factor has no correlation. This shows that FDI enterprises in this province still mainly focus on finding resources.*

Keywords: *FDI, FDI attraction, Nghe An province*

1. INTRODUCTION

Nghe An province is located in the North Central of Vietnam. In the province's socio-economic development strategy for the period of 2021-2030, the main goal is to become the economic, cultural, and social center of the North Central region. However, when compared with the two nearby provinces in the North Central region, Thanh Hoa and Ha Tinh, Nghe An's ability to attract FDI is still poor, and is creating a low-lying area in attracting FDI of the North Central region. In order to accomplish that task and remove the low-lying area attracting FDI in the region, Nghe An province needs to attract more FDI capital to develop in the current globalization context. Nearly 30 years ago, Nghe An has determined that FDI will be an important capital to promote socio-economic development.

The province has also obtained important results. From 1992 up to now, Nghe An has attracted 109 FDI projects. In which, there are 91 valid projects with a total registered capital of 2,369.59 million USD. Those projects brought many benefits for Nghe An such as expanding and increasing investment and development capital, increasing productivity, contributing to restructure the economic, creating many new jobs, accelerating the process of economic transformation, new technological equipment, management experience, expanding export markets and increasing budget revenue. However, the province's FDI attraction results have not achieved as expectation, the number of FDI projects is limited, mainly small projects, low implemented capital, not using modern technology. Majority of FDI projects focus on labor-intensive industries. Since then, the contribution of FDI to the province's socio-economic is not remarkable.

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Vietnam is taking part in and implementing many new-generation FTAs along with the shift in the global value chain, adding value, building domestic linkage chains, improving skills and innovation. Attracting FDI competition in the region and in the world is increasingly fierce. Nghe An province has identified a strategy to attract FDI from reliable partners in developed countries; focusing on transport infrastructure, science and technology, clean industry, supporting industry, high-tech agriculture; focusing on industrial zones and Southeast economic zones. In order to catch this opportunity, to attract desired FDI, and take advantage of quality FDI sources, Nghe An province needs decisive changes in both approaches and solutions in the short coming time. This study analyses factors affecting FDI attraction of Nghe An to give some policy implication for the authorities to follow the goals.

2. LITERATURE REVIEW AND PREVIOUS RESEARCH STUDIES

There are many studies about factors affecting FDI attraction at countrial, regional, or local level. Most studies do not have a consensus on the determinants of FDI. In general, these factors can be classified according to: (i) comparative advantages; (ii) macroeconomic policy; (iii) institutions, and (iv) benefit inheritance. Specifically: labor costs, labor quality, infrastructure, natural resources, macroeconomic stability, authority institutions.

Labor: some studies suggest that low labor costs have a positive effect on FDI. However, the effect becomes attenuated or nullified when different labor qualities are included in the model. Feestra and Hanson (1997), Dees (1998) found that low labor cost is a significant factor to attract FDI while Mody et al. (1998) and Fung et al. (2000) found that average labor cost is a non-significant factor of FDI. Noorbakhsh et al. (2001), Mody et al. (1998) and Fung et al. (2000) found that skilled labor is a significant factor affecting FDI attraction. In contrast, Kinoshita and Campos (2003) found that the development of education is not significant to FDI attraction.

Infrastructure in the host country also has a positive impact on FDI inflows (Dupuch and Mazier, 2002; Katherine, 2007; Kumar, 2000). The cumulative effects are often very significant (Lim, 2001). Industry studies show that the location choices of MNEs are strongly influenced by the presence of foreign investors.

Similarly, evidence on the role of resources in attracting FDI has mixed results. Both in Africa, but Asiedu (2006) and Basu & Srinivasan (2002) give different results on influencing factors. While Asiedu (2006) through panel data of 22 African countries found that natural resources promote FDI, but Basu and Srinivasan (2002) found that in African countries attracting FDI is not because of nature resources but through improving the business environment.

The influence of macroeconomic stability factors on economic activity as well as the ability to attract FDI has been mentioned in many studies (Demekas, Horvath, Ribakova, & Wu, 2007). Lecraw (1991), OECD (2002) and Asiedu (2002) found a positive effect of trade openness on FDI while Wheeler and Mody (1992), Brainard (1997) found that FDI inflows are positively correlated with trade restrictions.

Many studies about Vietnam have the same results. Most studies showed the positive impact of investment infrastructure, investment policies, quality of public services, human resources, living and working environment, competitive input costs, investment industry advantages, and local brands on FDI attraction into Vietnam, region in Vietnam, or in a province (Dinh Phi Ho (2011), Nguyen Ngoc Anh and Nguyen Thang (2007), Nguyen Duc Nhuan (2017), Cao Tan Huy (2019).

About Nghe An province, Dang Thanh Cuong (2012) analysed the current situation and the results of FDI attraction from 2002 to 2012. Besides, this study evaluated the impact of FDI on economic growth (Value added).

3. METHODOLOGY AND PROPOSED MODEL

3.1. Research hypothesis

Summarizing previous studies, the following main factors affect FDI attraction (investment intention) in a province:

3.1.1. Investment infrastructure (CSHT)

Infrastructure is a basic and important factor for the socio-economic development of the country and localities. Infrastructure (including basic infrastructure elements such as electricity, water, traffic, and technical infrastructure elements such as communication, banking system,...) is one of the factors that have a great influence on FDI enterprise. Previous studies have shown that infrastructure is a factor that has an impact on investment intention. Hypothesis H1 is as follows:

H1: Infrastructure has a positive effect on investment intention (expectation +)

3.1.2. Investment policies and incentives (CSDT)

Investment policy is reflected in the policy of the local government on investment incentives; the government's dynamism in supporting investment administrative, legal, and tax procedures, transparent and quickly deployed to enterprises so that public officials cannot profit or harass enterprises. The authors' studies have shown that investment policies and incentives are factors that have an impact on investment intentions. Hypothesis H2 is as follow:

H2: Investment policies and incentives have a positive impact on investment intention (expectation +)

3.1.3. Living and working environment (MTS)

The living and working environment are reflected in the factors of culture, education, health, quality of living environment, entertainment, activities, harmony and reasonable cost, showing a quality living environment and suitable for investors and employees to be able to operate effectively and stick with the locality. Previous research results have shown that living and working environment is one of the factors affecting investment intention. Hypothesis H3 is as follow:

H3: Living and working environment has a positive impact on investment intention (expectation +)

3.1.4. Supporting industries and clusters (CNHTCN)

Some FDI enterprises invest in a province to take advantage of the industry. Those advantages are near the raw material market for production or near the main consumption market, near business partners to reduce transportation costs, increase linkages or compete with main competitors to maintain and capture market share. The previous studies have shown that investment industry advantage is one of the factors affecting investment intention. Hypothesis H4 is as follow:

H4: Supporting industries and Clusters has a positive impact on investment intention (expectation +)

3.1.5. Quality of public services (CLDVC)

Investors can easily comply with state policies, save time and money in dealing with necessary administrative procedures of investment and production in province with quality public services. Besides, they can also get benefit from the State's support in areas where the State has advantages and enterprises are difficult to access by themselves. Through the above studies, it has been shown that the quality public services in a province is one of the factors affecting investment intention. Hypothesis H5 is as follow:

H5: Quality of public service has a positive impact on investment intention (expectation +)

3.1.6. Local brand (THDP)

Foreign investors decide to invest in a province when they operate effectively in that locality. An enterprise can be considered effective when the goals it sets out are achieved as desired. In which, the two most important goals are to grow revenue and maximize profit. Investors often look to local brands to invest because they can save money on learning about the investment environment and avoid risks. These studies have shown that local brand is one of the factors affecting investment intention. Hypothesis H6 is as follow:

H6: Local brand has a positive impact on investment intention (expectation +)

3.1.7. Human Resources (NL)

Human resources are an important factor that a FDI enterprise must consider when deciding whether to invest in the locality or not. Abundant and cheap human resources are an attractive factor to attract enterprises with low technology level and labor intensive; skilled and disciplined workers suitable for industrial production lines; and especially managerial and technical workers with foreign language qualifications working for foreign-invested enterprises. A province with abundant and diverse human resources always attract foreign investors. The above studies have identified human resources as one of the factors affecting investment intention. Hypothesis H7 is as follow:

H7: Human resources have a positive impact on investment intention (expectation +).

3.1.8. Competitive input costs (CPDV)

Competitive input costs are a fundamental factor directly related to the investment efficiency of an enterprise. An enterprise can increase their competitiveness or seek higher profits when input costs are low. A competitive cost means both a reasonable price and quality of products and services. Based on the above studies, it shows that competitive input cost is one of the important factors affecting investment intention. And author has hypothesized H8 as follows:

H8: Competitive input costs have a positive impact on investment intention (expectation +).

3.1.9. Investment intention (YDDT)

Investors will decide to invest in a province that they feel are favorable and progress as desired. Efficiency in investment activities also shows the level of investment decisions of investors. Investors who decide to invest in a province tend to continue to invest for a long time in the province as well as introduce the province to other investors.

3.2. Proposed Model

Based on the theories that the author has synthesized as well as selected factors suitable to the actual research of the topic, the author proposes a research model as follows:

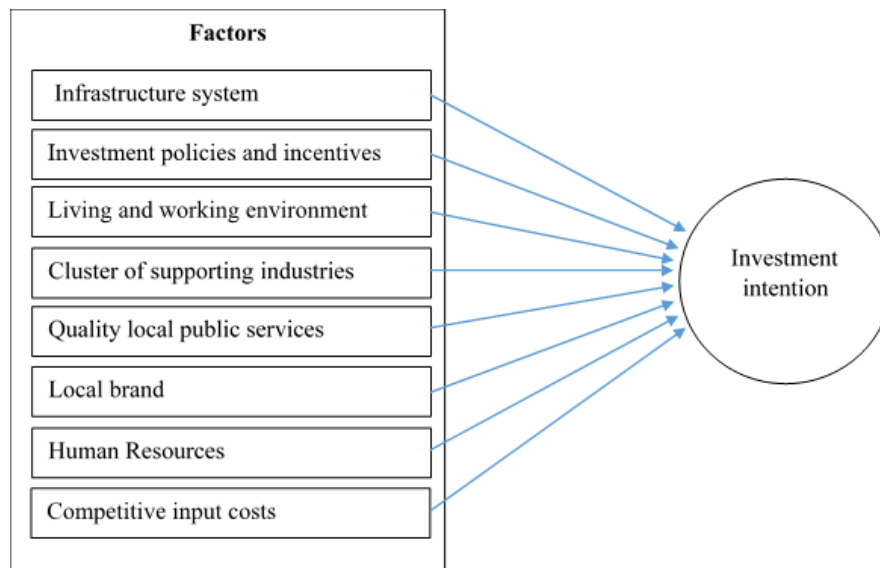


Fig 1: Model research

3.2. Research Data

Data is collected both online and offline through questionnaires. Author sent out 420 questionnaires for FDI investors who invented or did survey for making investment decision in Nghe An province. However, only 399 questionnaires were obtained. Based on the study of Hair, Anderson, Tatham and Black (1998) for sample size reference whereby the minimum sample size is 5 times the total number of observed variables, this is the appropriate sample size for the study using factor analysis. The sample size met the analysis requirements. After coding the variables, author has an accurate and objective data set to conduct testing and run the regression model on SPSS 22.

To determine, measure and evaluate the influence of factors on FDI attraction, the author used multiple linear regression between 8 influencing factors obtained from exploratory factor analysis (EFA) include: Infrastructure System, Competitive input costs, Human resources, Living and working environment, Local brands, Investment policies, Supporting industries and clusters, Quality of public services.

Determining which factors affect the investment intentions of foreign investors is very important and is the basis for policy implication to attract FDI in Nghe An province.

Conduct regression analysis to determine specifically the impact level of each factor on investment intention of investors. To do this, the author builds multiple linear regression models. The regression model has the form:

$$YDDT = \beta_0 + \beta_1 CSHT + \beta_2 NL + \beta_3 THDP + \beta_4 MTS + \beta_5 CSDT + \beta_6 CNHTCN + \beta_7 CLDVC + \beta_8 CPDV + U_i$$

4. RESEARCH RESULTS

4.1. Cronbach's Alpha test

The variables CSHT, CNHTCN, CPDV, CSDT, CLDVC, THDP all have Corrected Item-Total Correlation greater than 0.3. Cronbach's Alpha coefficient of the scale is greater than 0.6, so the scale ensures reliability.

Particularly, variables NL and CPDV have observed variables NL5 and CPDV4 Corrected Item-Total Correlation less than 0.3, so they are removed and re-run for the second time.

Table 1: Cronbach's Alpha coefficient

Ord	Variables	Sym	Cronbach's Alpha coefficient
1	Investment infrastructure	CSHT	0,838
2	Human Resources	NL	0,806
3	Cluster of supporting industries	CNHTCN	0,821
4	Investment policies and incentives	CSDT	0,814
5	Input costs	CPDV	0,809
6	Local brand	THDP	0,820
7	Quality public services	CLDVC	0,848
8	Living and working environment	MTS	0,863
9	Investment intention	YDDT	0,859

(Source: Extract result from SPSS 22)

The results of Cronbach's Alpha test show that the Cronbach's Alpha coefficient of all variables is as required (>0.6) and the total correlation coefficient <0.3 . This ensures the coherence between the factors, demonstrating the appropriateness of the scale used in the research.

4.2. EFA analysis

The KMO value is 0.832 greater than 0.5, so factor analysis is suitable for the research data. Furthermore, the Barlett test gives Sig. 0.000, less than 0.05, so the observed variables are correlated with each other, ensuring convergence.

Table 2: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.832
Bartlett's Test of Sphericity	Approx. Chi-Square	5642.059
	df	595
	Sig.	.000

(Source: Extract result from SPSS 22)

Author conducted two rotation tests to ensure the convergence and discriminability of the variables. In the first analysis, due to not ensuring the requirements "Convergence value" (observed variables converge on the same factor) and "Discriminatory value" (observed variables belonging to this factor are analyzed different from other factors), author removed some indicators (Factor loading <0.50). In the first pivot table, remove variable CSHT4 because this variable has a load factor of less than 0.5, remove variable CLDVC6 because this variable is loaded in both factors. At the second rotation, the observed variables have ensured the convergence and discriminability.

Thus, after running Cronbach's Alpha and EFA tests, the study gives 8 variables that are likely to affect the dependent variable, ensuring the reliability of the scale, convergence, and discriminant value. Eigenvalues = 1,436 > 1 at factor 8, so the 8 factors extracted from EFA have the meaning to summarize the information of observed variables the best. Total variance extracted: Rotation Sums of Squared Loadings (Cumulative %) = 64.294% $> 50\%$. This proves that 64.294% of the variation of the data is explained by 8 factors.

4.3. Pearson correlation

Table 3: Pearson Correlations

		f_YDDT	f_CSHT	f_MTS	f_THDP	f_NL	f_CNHTCN	f_CLDVC	f_CPDV	f_CSDT
f_YDDT	Pearson Correlation	1	.486**	.306**	.303**	.456**	.290**	.528**	.187**	.443**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000	.000	.000
	N	399	399	399	399	399	399	399	399	399
f_CSHT	Pearson Correlation	.486**	1	.268**	.029	.323**	.007	.067	.079	-.013
	Sig. (2-tailed)	.000		.000	.567	.000	.895	.184	.113	.793
	N	399	399	399	399	399	399	399	399	399
f_MTS	Pearson Correlation	.306**	.268**	1	.125*	.243**	-.008	.040	.034	.052
	Sig. (2-tailed)	.000	.000		.013	.000	.876	.425	.493	.299
	N	399	399	399	399	399	399	399	399	399
f_THDP	Pearson Correlation	.303**	.029	.125*	1	-.001	.201**	.234**	.148**	.284**
	Sig. (2-tailed)	.000	.567	.013		.984	.000	.000	.003	.000
	N	399	399	399	399	399	399	399	399	399
f_NL	Pearson Correlation	.456**	.323**	.243**	-.001	1	.111*	.034	.082	-.062
	Sig. (2-tailed)	.000	.000	.000	.984		.027	.494	.103	.215
	N	399	399	399	399	399	399	399	399	399
f_CNHTCN	Pearson Correlation	.290**	.007	-.008	.201**	.111*	1	.273**	.165**	.235**
	Sig. (2-tailed)	.000	.895	.876	.000	.027		.000	.001	.000
	N	399	399	399	399	399	399	399	399	399
f_CLDVC	Pearson Correlation	.528**	.067	.040	.234**	.034	.273**	1	.164**	.485**
	Sig. (2-tailed)	.000	.184	.425	.000	.494	.000		.001	.000
	N	399	399	399	399	399	399	399	399	399
f_CPDV	Pearson Correlation	.187**	.079	.034	.148**	.082	.165**	.164**	1	.170**
	Sig. (2-tailed)	.000	.113	.493	.003	.103	.001	.001		.001
	N	399	399	399	399	399	399	399	399	399
f_CSDT	Pearson Correlation	.443**	-.013	.052	.284**	-.062	.235**	.485**	.170**	1
	Sig. (2-tailed)	.000	.793	.299	.000	.215	.000	.000	.001	
	N	399	399	399	399	399	399	399	399	399

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

(Source: Extract result from SPSS 22)

The result shows that all Pearson correlation Sig-values between the independent variables and the dependent variable are less than 0.05. Thus, the independent variables are all linearly correlated with the dependent variable.

4.4. Regression models and hypothesis tests

Author conducts regression analysis to determine specifically the impact level of 8 factors on investment intention of foreign investors. The proposed regression model has the form:

$$YDDT = \beta_0 + \beta_1 CSHT + \beta_2 NL + \beta_3 THDP + \beta_4 MTS + \beta_5 CSDT + \beta_6 CNHTCN + \beta_7 CLDVC + \beta_8 CPDV + U_i$$

The result has shown as follow:

Anova analysis shows that $F = 102,898$ has a value of $Sig = 0.000$, showing that the built regression model is suitable for the collected data and can be used.

Tables 4: ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	40.858	8	5.107	102.898	.000 ^b
	Residual	19.357	390	.050		
	Total	60.215	398			

a. Dependent Variable: f_YDDT

b. Predictors: (Constant), f_CSDT, f_CSHT, f_CPDV, f_CNHTCN, f_MTS, f_THDP, f_NL, f_CLDVC

(Source: Extract result from SPSS 22)

The adjusted R^2 coefficient is 0.672 (corresponding to 67.2%) showing that 67.2% of the variation of the dependent variable is generally explained by the independent variables.

Table 5: Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.824 ^a	.679	.672	.22279	1.888

a. Predictors: (Constant), f_CSDT, f_CSHT, f_CPDV, f_CNHTCN, f_MTS, f_THDP, f_NL, f_CLDVC

b. Dependent Variable: f_YDDT

(Source: Extract result from SPSS 22)

Regression results show that CPDV is not significant in the model because the Sig of t-test is greater than 0.05. The other variables all have an impact on the dependent variable because the sig t-test of each independent variable is less than 0.05.

VIF coefficients of the independent variables are all less than 10, so there is no multicollinearity.

Durbin – Watson test results $d=1,888$. This value is within the allowable range ($1 < d < 3$). Therefore, the model does not have autocorrelation.

Regression model result:

$$YDDT = 0,334CSHT + 0,319NL + 0,317CLDVC + 0,254CSDT + 0,188THDP + 0,099MTS + 0,082CNHTCN + \varepsilon$$

According to this model, there are 7 factors that have a positive influence on the YDDT of foreign investors.

Table 6: Coefficients^a

Model	B	Unstandardized Coefficients	Standardized Coefficients	t	Sig.	Collinearity Statistics	
		Std. Error	Beta			Tolerance	VIF
1	(Constant)	.002		.014	.989		
	f_CSHT	.239	.334	10.728	.000	.850	1.176
	f_MTS	.050	.099	3.240	.001	.881	1.135

f_THDP	.069	.018	.118	3.839	.000	.873	1.145
f_NL	.230	.022	.319	10.215	.000	.844	1.185
f_CNHTCN	.050	.019	.082	2.666	.008	.871	1.148
f_CLDVC	.211	.022	.317	9.396	.000	.724	1.381
f_CPDV	.003	.019	.005	.176	.860	.935	1.070
f_CSDT	.141	.019	.254	7.480	.000	.713	1.403
a. Dependent Variable: f_YDDT							

(Source: Extract result from SPSS 22)

Hypothesis tests

Based on the regression model, when affecting the respective independent variables, the value of investment intention of foreign direct investors also increases. The independent variables and dependent variables have a positive relationship.

5. DISCUSSION AND CONCLUSION

According to research result, YDDT is most affected by infrastructure factor CSHT ($\beta = 0.334$), followed by Human resources NL ($\beta = 0.319$) and Quality of Public services CLDVC ($\beta = 0.317$). Input costs CPDV factor does not affect on Investment intention (YDDT). There are 7 factors impact on FDI attraction in Nghe An province.

Infrastructure system includes electricity, water, transportation, premises, and technical infrastructure elements such as communication, banking system. A locality with a convenient transportation system that easily connects with other localities in a country will help foreign investors reduce unnecessary transportation costs. Besides the traffic system, an accurate and fast information system will help foreign investors see business opportunities. The system of utility services such as finance and banking, post and telecommunications, energy, clean water helps foreign investors to ensure large-scale and continuous production process. This impact is evidenced in Nghe An province. After attracting foreign investors into infrastructure such as VSIP, WHA project, the province's industrial park infrastructure has improved and attracted more FDI than the total of the three previous periods (from 1992 to 2016).

Beside the infrastructure system, foreign investors tend to look for localities with abundant labor resources and easily find quality labors. This is evidenced by China and many Asian countries, where labor supply is abundant and labor is cheaper than host countries, so FDI flows into Asia especially China, India, Southeast Asia countries.

Local public services provide to investors are usually administrative services for project documentation, appraisal, and investment licensing; support in market research, finding partners, investment opportunities; support services during project operation, procedures for termination of operation, support services to answer questions, advise foreign investors when problems arise. These services are deployed locally to create favorable conditions for investors, save time and administrative costs and state management in the receiving localities.

Although, the result of the study shows that input cost doesn't attract FDI investors, It can obviously seen that input cost can be reduced long-term potentially through the good infrastructure system, abundant labor resources, and good local public service... Therefore, the research results are completely consistent with reality and meaningful for Nghe An province to develop solutions to enhance FDI attraction, especially high quality FDI attraction.

In the trend of shifting foreign investment flows into Vietnam, Nghe An is considered as a potential and attractive province with available advantages such as large natural area, abundant human resources; diversifies transport infrastructure including road, railway, air, sea and inland waterways. But when looked deeper, attracting FDI in over 30 years in Nghe An has not met the requirements. The province still lacks a clean land fund; land rent in industrial parks does not really have a comparative advantage compared to other industrial parks of other provinces in the region. Some administrative procedures are cumbersome and lengthy, increasing timing-costs. Many key projects of the province are being entangled with procedures, so the implementation progress is slow or not yet implemented. On the other hand, the infrastructure in the area has not been completed synchronously, especially transport infrastructure (deep-water seaports, highways), technical infrastructure in industrial zones, clusters, and logistics systems, etc... In addition, due to the impact of the Covid-19 pandemic, the implementation progress of many projects in the area were affected.

From research result and current situation of FDI in Nghe An, to attract more FDI especially more high quality FDI, the province should concentrate solutions on 3 key-factors: (1) synchronously completing infrastructure, improving quality of human resources by educating more skilled labors, and improving quality of local public services by cutting down administrative procedures and supporting foreign investors

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VIETNAM HUMAN RESOURCE IN INDUSTRIAL REVOLUTION 4.0

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Abstracts: *The industrial revolution 4.0 (IR 4.0) has really spread rapidly and strongly to all fields as well as to all aspects of socio-economic life. In this revolution, human resources play an important role, an internal force determining the success and breakthrough in the growth of each country. The article summarizes the current status of Vietnam's human resources, the challenges that Vietnamese human resources have to face in the industrial revolution 4.0. Basing on this, the author makes a SWOT matrix, analyzes the strategies set out, as a basis for proposing solutions to transform Vietnamese human resources into a valuable internal resource, ready to accept and adapt well with the requirements of the industrial revolution 4.0.*

Keywords: *human resources, Industrial revolution 4.0; IR 4.0*

1. THE CONTENT

1. Literature Review and Previous Research Studies

In recent years, the topic of human resources for economic development, especially the humane resources in the industrial revolution 4.0 has been studied in Vietnam. Studies have shown the salient features of the industrial revolution 4.0, showing the impact of this revolution on Vietnamese human resources. For example, the thematic research No.10 with topic: “*Tac dong Cach mang cong nghiep 4.0 den phat trien nguon nhan luc Viet nam*”, conducted in 2018 by the Central Research Institute of Economic Management - CIEM, has shown that there will be a big change about labor demand in economic sectors. Because there will be many stages in producing that used to need humans before, will be replaced by machines. As a result, competition in the labor market will become increasingly fierce. Besides, basing on valuable data, the theme pointed out the challenges in training and developing human resources in the IR 4.0 era in Vietnam.

Another study about the labor market in Vietnam in the industrial revolution 4.0 was conducted by the International Labor Organization - ILO, May 2018, “*Industrial Revolution (IR 4.0) in Vietnam: What does it mean for the labor market?*”, has given an overview of the industrial revolution 4.0, the impact of IR 4.0 on the employment sector as well as suggestions to make the most of the positive impact of IR 4.0 on work in the fields of agriculture, industry and services in Vietnam. Besides, this topic also can be found in many articles on the websites and is approached from many different aspects.

Inheriting previous studies, as well as update the Vietnam human resources data, the author would like to approach this topic and wish to clarify the strategies posed for Vietnamese human resources through the SWOT model.

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2. RESEARCH RESULTS:

Basic characteristics of the industrial revolution 4.0 – IR 4.0

The industrial revolution mentions the great changes which it brings to the economic, cultural, and social fields. Looking back at history, mankind has undergone many great scientific and technological revolutions. Each revolution has its own characteristics, yet all of them bring about amazing changes, some of which are beyond human imagination.

The industrial revolution 4.0, with its outstanding characteristic, is a fusion, without boundaries between the fields of technology, physics, digital, and biology. This is the trend of combining virtual and entity systems, the Internet of Things (IoT), that is changing the way of production and manufacturing. In “smart factories”, machines are connected to the Internet and linked together. These systems can visualize the entire production process by themselves and make decisions. Thanks to the connectivity around the world through mobile devices and access to large databases, information processing capabilities will be multiplied by technological breakthroughs in areas such as artificial intelligence, robotics, Internet of Things, self-driving cars, 3D printing, nanotechnology, biotechnology, materials science, energy storage, and quantum computing. As a result, it makes changes in producing methods, organization, and managing methods as well as the way in using resources.

Human resources in Vietnam.

Vietnam is a country with a large population of 97,757 thousand people by the end of 2020. Vietnam is in the period of “golden population structure” with the most abundant human resources ever. This gives Vietnam a huge advantage in development. Chart 1 shows that Vietnam’s labor force always accounts for over 50% of the total population:

1000 people

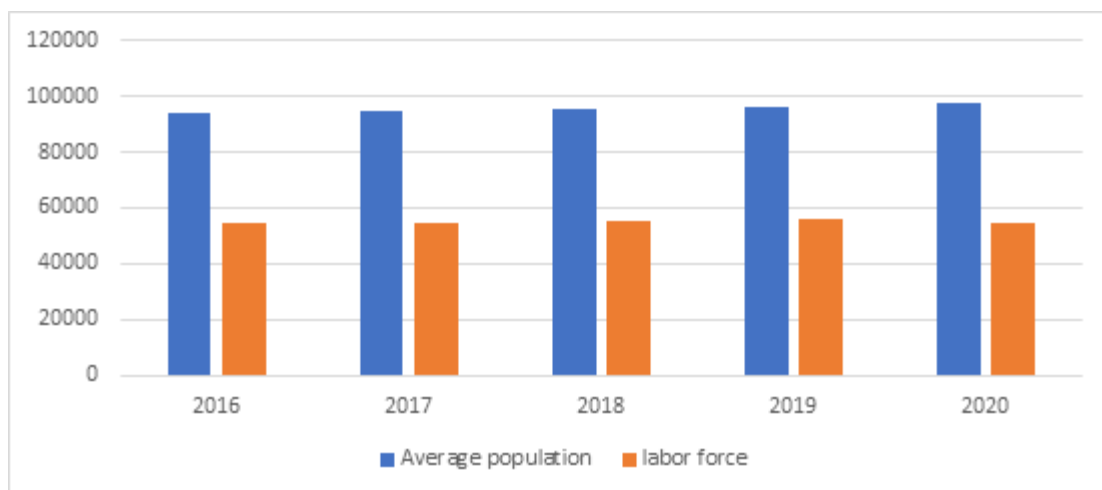


Chart 1: Population and Labor force in Vietnam

Source: Vietnam General Statistics Office

However, the outstanding limitation of Vietnamese human resources is the lack of trained human resources. According to the results of the 2019 population and housing census, the proportion of the population aged 15 and over with professional and technical qualifications is 19.2%. In the group of employed workers, the rate of professional and technical training is 23.1% - thus, there

are up to 76.9% of employed workers who are untrained. For that reason, Vietnam's labor force in 2019 is still the largest concentration in the "simple occupations" sector with the rate of 35%, highly specialized and technical workers account for only 8%, and the middle level accounts for 3% in total employment.

Table 1 below shows that Vietnam's human resources are standing at a very low rank compared to ASEAN countries region.

Countries in ASEAN	Human resource index	Highly qualified labor index
Singapore	2	1
Malayxia	21	45
Thailand	53	78
Phillipine	66	50
Indonexia	55	83
Vietnam	70	81
Combodia	86	87

Table 1: Rank in human resource index and highly qualified labor index

Source: World Economic Forum – WEF

Although the quality of vocational training improved better than before, however, according to WEF, it is still ranked 115/140 countries in the world and is near the bottom in the ASEAN region. The quality of higher education has been improved slowly, even lagging behind many countries in the region. This is proved by the number of universities in the top 1000 that are carried out by prestigious organizations in the world. This is the result in 2020 published by the World Bank (Table 2)

Country	Webometrics	QS	THE
China	103	40	63
Indonexia	9	3	2
Thailand	8	5	6
Vietnam	0	2	2

Table 2: The number Universities in top 1000 (2020)

According to the rank of 3 prestigious organizations

(Webometrics, Quacquarelli Symonds - QS and Times Higher Education – THE)

Source: World Bank [10]

Those limitations surely affect labor productivity, competitiveness as well as the value of Vietnam's human resource. If there are no improvements in quality, Vietnam's human resources will certainly have to face many challenges that are brought by the 4.0 industrial revolution.

These situations lead to big challenges that human resources in Vietnam have to face in the IR 4.0.

The first challenge is employment problems.

The outstanding feature of IR 4.0 is the application of high technology, the use of artificial intelligence, machine systems, and automatic lines in many production stages. Whereby the demand

in using unskilled labor will be reduced. Automated systems and intelligent robots will gradually replace manual labor in the entire economy, leading to a labor surplus and increasing unemployment. It is really a huge difficulty for Vietnam labor. New occupations, new jobs in the IR 4.0 period require high skills and professionals, however most Vietnamese workers in recent years cannot meet.

In fact, many corporations (Nestle Vietnam, Vinamilk, automobile manufacturing, and assembly facilities, some banks, etc.) have used robots and technology in their business activities. It really brings efficiencies in business for these corporations, like increasing productivity, increasing production safety and management efficiency. Ms. Truong Bich Dao - Nestle Vietnam human resources director - said that the use of robots in the warehouse saves 50% of workers, goods are coded, thus, it is easy to manage. Similarly, Vinamilk's Mega factory automates the production stages from filling, sterilizing to packaging, boxing, and loading. The result is that the number of workers doing this job is reduced by thousands of people [6]

The second challenge is competition on the labor market more fiercely

Besides the problem of employment, Vietnamese workers (both trained and untrained) also face increasingly fierce competition, because they are lacking both hard skills and soft skills, like foreign languages, information technology, communicating skill, team work, industrial style, etc. That competition is not only between laborers but also between workers and robots and wiring systems automatic line. It means that large and low-cost labor is no longer a strength in Vietnam.

What are the solutions?

In this part, the SWOT matrix will be given basing on the labor force data as well as challenges above. Analyzing the SWOT matrix is necessary in order to get the strategies in developing Vietnam's human resource next time.

SWOT	O – OPPORTUNITIES 1, Approaching new technology associated IR 4.0 2, Accessing to new knowledge easily	T – THREATS 1, Skill gaps 2, Competition in the labor market 3, Adaptation	
	S – STRENGTHS 1, Abundant quantity 2, Golden population structure 3, Good characters: Hardworking, creative	S-O STRATEGY S1, S2, S 3 – O1, O2	S-T STRATEGY S2, S3 – T1, T2, T3 S1 – T2
	W – WEAKNESSES 1, Improving quality slowly 2, Lacking soft skills	W-O STRATEGY W1,W2 – O1,2	W-T STRATEGY W1, W2 – T1, T2, T3

Basing on Strengths – Weaknesses, and Opportunities – Threats, there are strategies that Vietnam should concern in developing human resources:

- **S-O:** This strategy aims is to make the most of the opportunities that IR 4.0 brings to promote Vietnam's human resource strengths. An abundant, skilled and qualified human resource will be an endogenous strength that will help Vietnam to make a breakthrough in growth towards sustainable development.

- **W-O:** Vietnam needs to take advantage of the opportunities that IR 4.0 brings to improve its weaknesses. Can Vietnam implement this strategy? Absolutely can. In the condition of globalization and international economic integration, Vietnam can quickly access new technological advances in the world, learn organizational, management and operation skills (*O1, O2*). As a result, the quality of human resources will certainly improve rapidly (*W1*). An open world and filled with information will also help workers improve and adapt to new conditions, in which soft skills are strengthened (*W2*).

- **S-T:** Can Vietnam's human resources face threats? With the available strength in human resources, especially Vietnam is in the period of the golden population structure with good characters (*S2, S3*), Vietnamese workers can quickly adapt to new requirements (*T3*), shorten the skill gaps (*T1*), thereby increasing competitiveness on the labor market (*T2*). In addition, the strength of a large number of employees (*S1*) still creates unique competitiveness of Vietnam in the short term (*T2*); and it will really become a competitive advantage in the long term if there is a strong improvement in labor quality.

- **W-T:** Analyze this content to visualize the threats that Vietnam will face. If Vietnam's human resources keep maintaining the Weaknesses (*W1, W2*), it will increase more Threats (*T1, T2, T3*). At that time, it will create a huge barrier for Vietnam in all activities such as economy, society, politics, diplomatic activities...

The SWOT matrix shows that the most worrying problem for Vietnamese workers in the IR 4.0 period is the threats created by Weaknesses (Ws) and Threats (Ts). And to minimize these threats, it is necessary to focus on realizing the S-O strategy.

The solutions to actualize this strategy are:

- Renovate the education and training system, in which encouraging and giving priority to training in science and technology and engineering disciplines, especially digital technology. It is necessary to forecast the labor demand, the level of expertise that each industry requires... The training plan will be established based on this forecast. In which:

Vocational training needs to be strongly developed in both scale and quality to meet growth and sustainable development. Training programs need to approach international standards and strengthen international cooperation in vocational training. Focusing on fields that the IR 4.0 period has great demand, such as information technology, tourism and hotel management, hi-tech agriculture, medical and healthcare...

Higher education needs to improve the quality of training in order to supply quality human resources to the labor market. The higher education system should increase the application of modern technology and teaching methods with a high professional lecturers team. Moreover, it is really necessary to connect education systems and enterprises and socio-economic organizations

in developing training objectives, building content and programs. This connection would gradually lead to a trend of appearance of the “Enterprise - University” model.

- Developing soft skills for learners at all ages. Soft skills, such as adaptability, collaboration, leadership, critical thinking, and problem solving..., can take years to develop, that is the accumulation and training frequently of each person from school, life... IR 4.0 are continuing to have changes itself and continuing requiring higher and higher new skills. Thus, equipping soft skills means helping an individual to adapt to changing circumstances in IR 4.0 period. This content relates to education programs from kindergarten to higher education, the way that society evaluates someone’s capability. Therefore, it requires the participation of many organizations as well as members in society. It mentions not only improving the teaching program in education systems but also evaluating and opinion, that society is using.

- Besides, the government should develop the labor market, building effective labor market institutions, which include legal protection of workers’ rights. In the IR.4.0 period, workers are required to adapt with changes quickly. However, it is not easy for Vietnam’s human resources at this time. That is why support from Government through policies, such as salary, insurances, unions... are important. These give a good and safe environment for workers to develop new skills, approach new jobs smoothly.

3. CONCLUSION

The industrial revolution 4.0 brings breakthroughs and strong progress, helping humanity to enter a new era with new achievements and developments. Vietnam’s labor advantage can still be maintained and strongly promoted if the quality of labor is improved, to meet new development requirements. It means, the Vietnamese labor force is not only large in quantity but also high in quality with wisdom, profession, and skills. This is an internal resource precious in helping Vietnam reach further and further in sustainable development.

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EXTRACTION RATE OF MINERAL RESOURCES FOR SUSTAINABLE DEVELOPMENT

PhD. Nguyen Thi Thuy Huong¹, MA. Nguyen Thanh Huyen²

Abstract: *The key characteristics of mineral resources are exhaustible and non-renewable. In order to sustainably extract and use these mineral resources, one main question must be answered: what is the extraction rate that can enhance a sustainable usage of mineral. If extraction rate is low, the economy will not grow fast enough. However, extracting more resources in the present will exhaust the limited supplies and will put a burden on the future's generations. Solving this dilemma requires a mathematical model to calculate the rate of extraction that can achieve sustainable outcomes. In this paper, a model was built and applied to coal extraction in Vietnam to explore potential sustainable paths of mineral energy usage to sustainable development.*

Keywords: *extraction, rate, mineral resource, sustainable development*

I. RATIONALE OF THE STUDY

Vietnam has a unique geological and geographical location. It is the intersection of two large mineral belts which are Pacific and Mediterranean. It is also a tropical monsoon country, so it strongly develops favorable weathering processes for mineral formation. Vietnam has thousands of mines and deposits of more than 60 different types of minerals, from energy minerals and metals to industrial minerals and construction materials. Minerals play a very important role and have a strong impact on the socio-economic development of the country. However, minerals are non-renewable resources and have a limited quantity in the ground, so it is necessary to have a management, protection and exploitation strategy to use rationally and effectively for the cause of socio-economic construction and development, national security and defense. So, in order to sustainably develop mineral resources, what is a reasonable rate to exploit mineral resources?

II. INTRODUCTION

1. Price of mineral resources

Mineral resources or exhaustible resources (ER) like fossil fuels are limited, exhaustible, and nonrenewable. Due to these characteristics, prices of ER possess some unique features compared to the ones of other resources. Prices of ER can be formulated as an optimization problem and calculated by an optimal model as follows:

$$\sum_{t=0}^T [P_t y_t - C(y_t, x_t)](1+r)^t \rightarrow Max \quad (1)$$

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Within (1):

P_t : price of ER when extracted at time t

t : extraction period (year, $t=0, T$)

y_t : quantity of ER being extracted at year t

C : cost of extraction ER

x_t : stock of ER supply at year t

x_0 : initial stock of ER supply

x_T : stock of ER at the end of extraction period T

Constraints of equation (1) are:

$$+ x_0 = \bar{x}_0$$

$$+ x_T = \bar{x}_T$$

$$+ \sum_{t=0}^T y_t = \sum_{t=0}^{T-1} (x_t - x_{t-1})$$

These constraints determine the price features of ER.

Solving (1) to obtain the function for price of ER:

$$P_t = MC + \mu_t(1+r)^t \quad (2)$$

Within (2):

P_t : price of ER at year t

MC : margin cost of extracting ER

μ_t : Lagrange multiplier (the model was solved using the Lagrange method)

r : discount rate

In equation (2) the term $\mu_t(1+r)^t$ may have different interpretations: it could be understood as the user cost, resource tax, rent for land use, or net price. Ultimately, $\mu_t(1+r)^t$ is the marginal price of a unit of ER if it stays on the ground.

Prices of ER can be depicted in Figure 1.1:

P : price of ER

T : time (year)

MC : marginal cost of extracting ER

M_{Cb} : marginal cost of extracting the substitute resource for ER

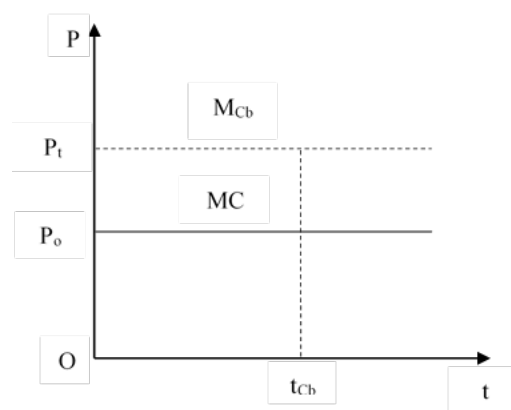


Figure 2.1. Patterns of ER prices over time

Source: Le Thi Huong (1999). *Environment Economics*. Statistical Publishing House.

In theory, according to Figure 2.1, prices of ER increase by the power of t ; P_t only stops at t_{cb} when there is a substitute natural resource for ER, or “the last substitute resource for ER”, which has the marginal cost of M_{cb} . However, in reality, when assessing prices of ER the price cycle in Figure 1.1 has rarely been observed since prices of ER have been impacted by other factors, such as the exploration and findings of new reserves, technological improvements that reduce the cost of extraction, etc. Ultimately, prices of ER will naturally follow the patterns in Figure 2.1.

2. Analytical Problem

Based on the characteristics of ER prices, one of the major research questions must be answered is: shall ER be extracted fast or slow? If extraction occurs slowly then the economy will not grow as much. Meanwhile, if extraction happens too fast, the opportunity cost of using resources today will be large. In other words, the opportunities for future’s generations to tap into these resources will be sacrificed. This paper proposes a mathematical model to resolve this problem.

III. THEORETICAL MODEL

1. Definition of “the length of resource exhaustion”

The depletion indicator is the maximum length of a resource usage after being completely exhausted. Because nonrenewable resource is non-renewable, the depletion indicator is finite and have a time limit. While in reality, for any type of non-renewable resources, humans can find additional reserves to extend the depletion timeline of a resource, the timeline of all non-renewable resources is not indefinite by any means. Up until now, in order to enhance the expansion of nonrenewable extraction and production, the depletion indicator can be calculated using the following formula:

$$T = \frac{Q}{S_{bq}}(\text{year})(\text{year}) \quad (3)$$

Such that:

T: depletion indicator (year)

Q: the total quantity of a resource reserve (tons)

S_{bq} : annual quantity of ER being extracted (ton/year)

This formula is simplistic, though it doesn’t account for the actual extraction rate since the annual amount of ER being extracted changes over time.

2. Constructing a formula relating the depletion indicator with the extraction rate

a, Formulate the problem:

The problem is established by the starting formula:

$$T = \sum_{t=0}^T S_0 (1 + \alpha)^t = Q \quad (4)$$

Within:

T: the depletion indicator (year)

t: the number of years being calculated (year)

S_0 : initial quantity of extraction (when $t = 0$, ton/year)

Q: the total quantity of a resource reserve (tons)

α : the rate of extraction

b, Solve the problem:

Write the formula in the form of an integral:

$$\int_0^T (1 + \alpha)^t dt = \frac{Q}{S_0}$$

Equation (5) is similar to this integral form: $\int a^x dx = \frac{a^x}{\ln a}$

Solving equation (5) obtains:

$$\begin{aligned} \left[\frac{(1+\alpha)^T}{\ln(1+\alpha)} - \frac{(1+\alpha)^0}{\ln(1+\alpha)} \right] &= \frac{Q}{S_0} \\ (1+\alpha)^T - 1 &= \frac{Q}{S_0} \ln(1+\alpha) \\ (1+\alpha)^T &= \frac{Q}{S_0} \ln(1+\alpha) + 1 \end{aligned}$$

Taking the logarithm of both sides of the equation gives this final outcome:

$$T = \frac{L_n \left[\frac{Q}{S_0} \cdot \ln(1+\alpha) + 1 \right]}{\ln(1+\alpha)} \text{ (year)} \quad (6)$$

The problem is solved.

3. Determination of the total quantity of ER reserves

This step is to find Q in Equation (6).

Every nation has their different approaches to categorize ER resources. The quantity of ER chosen to calculate Q is the quantity when extraction can generate profits. For example, according to the extraction data in the US (box MC Kelvey), the quantity used to calculate Q is the “economic quantity”.

4. Calculation the length of different periods towards sustainable development

Sustainable development has two major periods: low sustainable development and high sustainable development. These two periods can be modeled as in Figure 3.1.

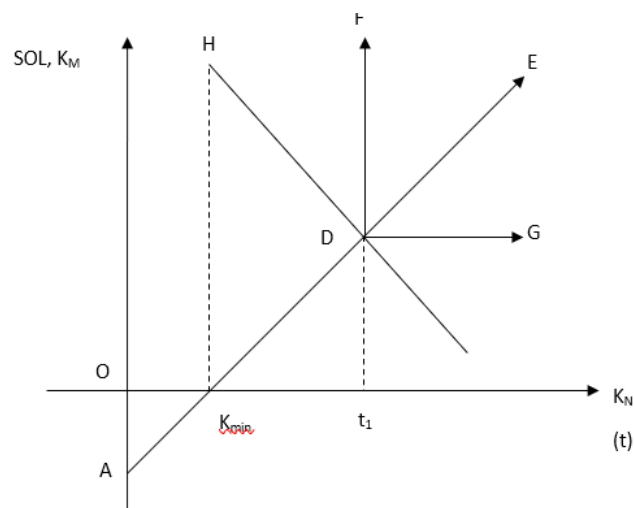


Figure 3.1. Two periods of sustainable development

Source: Nguyen Thi Thuy Huong (2018). What is a reasonable extraction rate for coal under low sustainable development in Viet Nam? The 4th International Conferences, Hanoi University of Mining and Geology

Such that:

SOL: standard of living

KM: human-induced capital

KN: natural capital

O: minimum living standards

A: poverty or difficult living situations

Kmin: minimum capital storage to secure the minimum living standards

t: time

According to this figure, sustainable development periods are calculated until t_1 . During these periods, K_N is often tapped into for the production of K_M and for the upgradation in standards of living (an exchange of K_N for K_M). The process of sustainable development begins in year t_1 with D is the starting point for economic growth. After t_1 the extraction of both K_N và K_M then begins. The rate of economic growth is the factor used to calculate the length of sustainable development periods. For example, this paper will discuss the length of two sustainable development periods in Vietnam in the following section.

5. Solving the application of this model for each ER

After the value for the depletion indicator T, the quantity of ER reserves Q, the initial quantity of ER S_0 , the length of sustainable development periods (T_{PTBV}) are being obtained, a hypothesis can be posited that during the sustainable development periods, extracting all the resources for economic growth or $T = T_{PTBV}$ will help determine the rate of extraction. This rate is the extraction rate at which sustainable development can be achieved. In other words, this rate of extraction can meet economic growth goals without sacrificing future generations' benefits. The following section will apply this model and calculation in the case of coal extraction in Vietnam.

IV. WHAT IS THE COAL EXTRACTION RATE IN VIETNAM THAT CAN MEET SUSTAINABLE DEVELOPMENT GOALS?

1. Coal reserves in Vietnam

Table 4.1. Quantity of coal reserves in Vietnam in 2016.

Unit: million tons

Number	Region	Reported quantity of coal reserves with high certainty (A+B+C)	Estiamted and predicted quantity	Total
1	North East	2284,1	4359,2	6643,3
2	Domestic	152,5	26,7	179,2
3	Red River Delta	524,9	38826,7	38879,6
Total		2961,5	43212,6	45702,1

Source: Vietnam National Coal and Mineral Industries Group - Vinacomin

Table 4.1 shows the quantity of coal reserves in Vietnam estimated using the categorization in four different levels A, B, C_1 and C_2 until 2016. From 2017, these categories have been changed. According to Table 4.1, the total quantity of coal reserves in Vietnam that were reported with high degree of certainty is 2961,5 million tons. However, with the Red River Delta region, the amount

of 524,9 million tons were not extracted for economic purposes, which will be omitted when calculating Q.

Then, $Q = 2284,1 + 152,5 = 2436,6$ million tons.

2. Low sustainable development period in Vietnam

The length of this period can be determined by the predictions conducted by PWC (Price Water house Coopers), one of the four biggest global consulting firms. PWC calculated that Vietnam's GDP in 2015 was 204 USD billion. In order to estimate the SOL, GSP is often converted to GDP_{PPP} (GDP Purchasing Power Parity), and the Vietnam's GDP_{PPP} in 2015 was then be 597 USD billion, which ranked 32nd in the global economy. With the average annual growth rate of 5% (in reality among recent years the annual growth rate was 6% before taking account the impacts of the COVID 19 pandemic), Vietnam's GDP_{PPP} in 2050 would be 3.181 USD billion, which would make Vietnamese economy to stand among the top 20 economies. During this period, with the assumption that the resource reserve Q will be used up, the depletion indicator T for coal reserves in Vietnam would be equal to T_{PTBV} : $T = T_{PTBV} = 35$ years.

3. Determination of initial quantity of S_0

The quantity of extracted coal in 2016 was 35 million tons. So $S_0 = 35$ million tons.

4. Determination of the coal extraction rate in Vietnam from 2016 to 2050

Using the existing data, the following variables are determined:

- The initial year of extraction 2016 (t_0), $T=35$ years
- The actual extraction quantity of coal in 2016: 35 million tons/year (S_0)
- Reserve quantity: 2436,6 million tons (Q)

Table 4.2 is set up to estimate from 2016 to 2050:

Table 4.2. Extraction rate and depletion indicator of coal reserves in Vietnam

STT	Growth rate (α)	Depletion indicator (T_i) (year)	Year of depletion
1	0,01	52	2068
2	0,02	43	2059
3	0,03	37	2953
4	0,04	33	2049
5	0,05	30	2046
6	0,06	27	2043
7	0,07	25	2041
8	0,08	24	2040
9	0,09	22	2038
10	0,10	21	2037

Source: Own study

According to this table, given the α_i (column second), equation 6 is used to calculate T_i respectively (column 3). From column 3, T_i can be chosen from 3337 years (T_3-T_4), which corresponds to T_3 và T_4 which is $\alpha_3 \div \alpha_4$. α is then 0,035 ($\alpha = 0,035$). In order to meet sustainable development goals, the coal extraction rate in Việt Nam from 2016-2050 should be $\alpha = 3,5\%$.

6. Survey of coal extraction in Vietnam from 2010-2019

The quantity and rate of coal extraction in the recent 10 years were recorded in Table 4.3.

Table 4.3. The quantity and rate of coal extraction in Vietnam from 2010-2019

Goals	Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Quantity of coal extraction (million ton/year)		47,0	48,3	44,3	42,7	37,5	37,6	34,8	35,0	36,9	40,5
Extraction rate (%)		-	2,76	-8,28	-3,61	-12,17	0,26	-6,91	-0,57	6,03	9,75

Source: Own study depend on Decision No. 403/QĐ-TTg, dated March 14, 2016.

Based on Table 4.3, the average coal extraction rate in Vietnam from 2010 to 2016 was $-1,41\%$, which was much lower than compared to the rate between 2016 and 2019, which was $=5,07\%$ (2016 was the proposed initial year in section IV.4). The average extract rate of the recent four years (calculated based on table 3) was $=5,07\%$, which was higher than the theoretical rate ($=3,5\%$). Given these comparisons, it is clear that this extraction rate can be achieved.

Note that: the result of calculating the rate of $3,5\%$ is only the rate of exploitation of coal reserves in 2016. Vietnam still has a great potential for coal. Table 4.1 shows that the Red River Delta has estimated reserves at the resource level of 38 billion tons (equivalent to $4,2\%$ of global coal reserves in 2015). This amount of coal resources will be exploited after the period of low sustainable development in Vietnam.

V. CONCLUSION

Using a mathematical toolkit, the paper proposes a model to resolve the problem of finding the optimal extraction rate of nonrenewable resources to meet sustainable development goals. The proposed model can be easily applied and used to develop new approaches to the management of nonrenewable usage and extraction. The proposed model is quite applicable to all the developing countries, where low sustainable development period is still occurring.

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FINANCING CLIMATE CHANGE ADAPTATION: INTERNATIONAL LESSONS

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Abstract: Nowadays climate change has significantly impacted on human life, leading to the increase of the demand for financing climate change adaptation. However, the developing countries contributing less to climate change process but being the most vulnerable nations to climate change are lacking financial resources to adapt climate change. Despite the fact that the expense for climate change adaptation will be lower than the anticipated damage of not doing so, the financial resources for it is estimated to reach to hundreds of billions. The concern is how to finance global climate change adaptation effectively. This research paper will summarize the existing international experiences of several international organizations on financing to adapt to climate change, and also explore how private sector finance can be further attracted to invest in climate change adaptation.

Keywords: climate change, financial resources for climate change adaptation, financing to adapt to climate change, impact of climate change.

1. INTRODUCTION

In parallel with the process of human formation and development, the living environment has a close relationship with human activities and vice versa, human activities also greatly affect the living environment. One of those relationships must include the relationship between human activities and the climate. It is undeniable that the topic of climate change is now concerned by many countries and international organizations and people around the world. Since the industrial revolution of the late 18th century, the climate has changed rapidly. The main reason is that the amount of greenhouse gases (GHG) in the atmosphere has been constantly increasing. Climate change is happening, as reflected by several weather- and climate-related events, such as the increased frequency and intensity of hurricanes and forest fires, and the high frequency of droughts causing loss of agriculture productivity in various parts of the world. In order to minimize the losses from these impacts, measures should be undertaken that help the ecosystem to adjust to these impacts, such as drought-resistance crop varieties.

Globally, among countries most effected by climate change, Viet Nam was ranked as the sixth in the Global climate risk index 2018 (German Watch, 2018) and as the fifth by research conducted by the cooperation of World Bank and Asian Development Bank in 2020. Each year, increasingly intense and unpredictable weather events cause fatalities and extensive damage to infrastructure, such as schools and health centers, and impact on the livelihoods of already disadvantaged communities in Vietnamese urban and rural areas. Vietnamese government has been demonstrating dedication to combating climate change through a range of national policies and concrete adaptation measures. In 2011, the National Climate Change Strategy was issued,

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outlining the objectives for 2016–2050. In 2012, the National Green Growth Strategy with mitigation targets and measures to climate change adaptation was approved. In 2013, the Law on Natural Disaster Prevention and Control was enacted, aiming to address diverse natural hazards affecting the country. Additionally, Law on Environment 2014 has a full chapter on climate change. Vietnam ratified the Paris Agreement on November 3, 2016 and submitted its updated Nationally Determined Contribution (2020).

However, to deal with the impacts of climate change, Vietnam will need more than only policies. To help the people living in the areas affected by climate change as well as build the infrastructure systems to prevent floods, droughts and other natural disasters, Vietnamese government should have enough financial resources. In fact, Vietnam is a developing country with the limitation of financial resources allocated to climate change adaptation. The question is how Vietnam can mobilize finance for adapting to climate change. To answer this question, we chose to research and assume the experiences on financing climate change adaptation from other countries as well as international organizations to give lessons for Vietnam.

The rest of the paper is organized as follows. Section 2 describes the fundamental of climate change. Section 3 will show the experiences on financing climate change adaptations from countries and organizations. Section 4 presents the lessons for Vietnam on mobilizing financial resources for climate change adaptation.

2. THE FUNDAMENTAL OF CLIMATE CHANGE

2.1. The definition of climate change

Following United Nations Framework Convention on Climate Change (United Nations, 1992) climate change is defined as a change of climate that is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and that is in addition to natural climate variability observed over comparable time periods. In this definition, climate change is known as global warming due to a significant increase in the concentration of GHGs in the atmosphere.

Climate change refers to a change in the state of the climate that can be identified (e.g. using statistical tests) by changes in the mean and/or the variability of its properties, and that persists for an extended period, typically decades or longer. It refers to any change in climate over time, whether due to natural variability or as a result of human activity (The Intergovernmental Panel on Climate Change, 2007).

Uejio et al (2015) considers climate change as a systematic change in the long-term state of the atmosphere over multiple decades or longer, causing five critical global environmental changes, as following:

- *Warming temperature of the earth's surface and the oceans*: The earth has warmed at a rate of 0.13° C per decade since 1957, almost twice as fast as its rate of warming during the previous century.
- *Changes in the global water cycle ('hydrologic' cycle)*: Over the past century there have been distinct geographical changes in total annual precipitation, with some areas experiencing severe and long-term drought and others experiencing increased annual precipitation. Frequency and intensity of storms increases as the atmosphere warms and is able to hold more water vapor. *Declining glaciers*

and snowpack: Across the globe, nearly all glaciers are decreasing in area, volume and mass. One billion people living in river watersheds fed by glaciers and snowmelt are thus impacted.

- *Sea level rise:* Warmer water expands, so as oceans warm the increased volume of water is causing sea level rise. Melting glaciers and snowpack also contribute to rising seas.
- *Ocean acidification:* Oceans absorb about 25% of emitted CO₂ from the atmosphere, leading to acidification of seawater.

2.2. The origin of climate change

At its most basic, climate change is caused by a change in the earth's energy balance — how much of the energy from the sun that enters the earth (and its atmosphere) is released back into space. The earth is gaining energy as we reduce the amount of solar energy that is reflected out to space — just like people gain weight if there is an imbalance between calories in and calories out. Since the Industrial Revolution started over 200 years ago, human activities have added very large quantities of GHG into Earth's atmosphere. These GHG act like a greenhouse (or a blanket or car windshield) to trap the sun's energy and heat, rather than letting it reflect back into space. When the concentration of GHG is too high, too much heat is trapped, and the earth's temperature rises outside the range of natural variability. There are many GHG, each with a different ability to trap heat (known as its "global warming potential") and a different half-life in the atmosphere. GHG are sometimes called "climate active pollutants" because most have additional effects, most notably on human health.

Carbon dioxide (CO₂) is the GHG responsible for greatest amount of warming to date. CO₂ accounted for 82% of all human-caused GHG emissions in the U.S. in 2013.³ The majority of CO₂ is released from the incomplete combustion of fossil fuels - coal, oil, and gas — used for electricity production, transportation and industrial processes. Together, these three activities account for more than 80% of the CO₂ released into the atmosphere. Other important GHG include methane, nitrous oxide, black carbon, and various fluorinated gases. Although these gases are emitted in smaller quantities than CO₂, they trap more heat in the atmosphere than CO₂ does. The ability to trap heat is measured as Global Warming Potential (GWP). As the most common and abundant greenhouse gas, CO₂ has a GWP of 1, so all other GHG warming potentials are compared to it. Fluorinated gases, for example, have GWPs thousands of times greater than CO₂, meaning that pound-for-pound, these gases have a much stronger impact on climate change than CO₂.

2.3. The negative impacts of climate change on economic growth and social life

Climate change obstructs economic growth.

Climate change, economic growth and human activities affect nature in the process of production and consumption and they have a cause-and-effect relationship. Climate change has negative effects on social security and global economic growth. Fast and unsustainable economic growth is based on the exploitation of natural resources; scrambling for resources to serve the growth needs, causing resource depletion, environmental pollution, climate change. The economic losses due to the impacts of climate change adding with the costs of remedial damage will reduce economic growth in many countries and on a global scale.

Climate change threatens the stability of societies nationally and globally.

Climate change not only reduces economic growth, but also make more difficulties on the process of reducing poverty, ensuring global food security, and narrowing social inequalities. In

addition, there is a tendency to reduce water quality, biological production and the number of plant and animal species in freshwater ecosystems, increasing diseases, especially summer diseases.

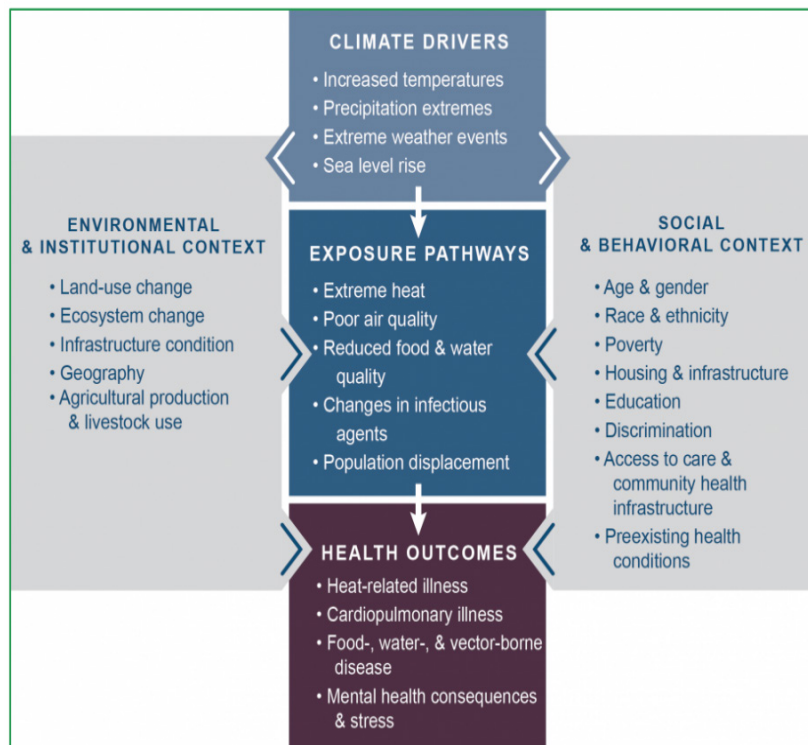


Figure 1: Climate change influencing on health outcomes

Source: Center for Climate Change and Health (2016)

The crucial impacts of climate change on society on a global scale can be seen as follows:

(i) Making a number of the poor poorer: The reason is that they are the subjects most directly and severely affected by extreme weather events related to climate change. Climate change, natural disasters directly affect low-tech economic sectors because production industries that are highly dependent on nature, environment, land, water resources, climate, hydrological and thermal regimes. temperature, humidity, such as agricultural production. Meanwhile, these are the areas where the poor make up the majority. Many of the poorest and least developed countries in Africa and Asia, the Pacific islands are home to the world's poorest population and are also the hardest hit by drought, floods, storms then aggravating malnutrition, poverty, disease and instability. In 2015, the World Bank published a report on the consequences of climate change, which warned that the world's progress in poverty reduction would be negatively impacted by climate change because about 100 million people around the world could fall into poverty in 2030 due to extreme weather events related to climate change. It is predicted that by 2080, an additional 1.8 billion people will face water scarcity, about 600 million people will face malnutrition due to the risk of reduced agricultural productivity (Food and Agriculture Organization, 2015).

(ii) Climate change increases the flow of environmental refugees: The reason is that people in places most affected by climate change will lose their place of residence with their traditional way of life associated with nature, and have to change careers. Environmental refugees, as defined by the United Nations, is a resident who has to leave their traditional habitat temporarily or permanently because the

environment is destroyed by natural and man-made factors, forcing them to loss of livelihood, existence in danger, deterioration of quality of life (United Nations, 1951). The Global Humanitarian Forum's 2009 summary report said that an increase in Earth's temperature would cause an average of 26 million people to migrate each year. Not only migrants but also the places that receive migrants would face many economic and social problems (Global Humanitarian Forum, 2009).

(iii) Climate change creates the exacerbation of social inequalities within each country and between countries: Although the impact of climate change affects all countries, the impact is not similar across regions and countries. It leads to the exacerbation of social inequalities within and between countries on a global scale. According to the Oxfam report, if the world temperature rises by three degrees, developing countries would have to spend an additional \$270 billion a year by 2050 to implement measures to cope with extreme weather conditions. Without the above money, the economies of these countries would be at risk of loss of about 600 billion USD by 2050 (Oxfam, 2015).

3. EXPERIENCES ON FINANCING CLIMATE CHANGE ADAPTIONS AROUND THE WORLD

3.1. Bilateral and Multilateral Financing by National Governments

To mobilize financial resources for climate change adaption, the developing countries should combine domestic and international factors. National governments, particularly developed countries, are the key sources of climate change adaptation finance in developing countries, through bilateral and multilateral channels. Some developing countries have also established national funds for climate adaptation, but those funds are contributed to by developed countries through bilateral or multilateral channels. For example, Rwanda established its national climate fund, FONERWA, through contributions from the UK's Department for International Development (DFID), KfW Germany, the Green Climate Fund, World Bank, and African Development Bank. Domestic sources such as dedicated government revenues collected through environmental fines and fees (e.g., forestry and water usage fees) also contributed to this fund. Similarly, Ethiopia created its Climate Resilient Green Economy Facility (CRGE Facility) through contributions from the UK DFID, Adaptation Fund, Green Climate Fund, and also from bilateral contributions from the governments of Norway, Austria, and Denmark.

It should be noted here that developed countries are the major contributors to the climate change adaptation funds established and administrated by international organizations, such as UN organizations and MDBs, among others. At the same time, there are a large number of bilateral or multilateral funds established by developed countries to finance climate change adaptation activities in developing countries. Table 1 presents some of these funds. Note that this table does not present an exhaustive list of such funds; it presents key funds for illustrative purposes.

Table 1: Key Bilateral and Multilateral Funds Established by Developed Countries to Finance Climate Change Adaptation in Developing Countries.

Name of Fund	Administered by	Focus
Canada Fund for African Climate Resilience (CFACR)	Canadian government	Sub-Saharan Africa
Caribbean Catastrophe Risk Insurance Facility (CCRIF)	CCRIF SPC	CARICOM members

Name of Fund	Administered by	Focus
Climate and Development Knowledge Network (CDKN)	Governments of Netherlands and United Kingdom	Developing countries
Climate Insurance Fund (CIF)	KfW, BlueOrchard	Qualified insurance and reinsurance companies
Danish Climate Investment Fund (KIF)	Investment Fund for Developing Countries (IFU)	Activities that contain a Danish economic interest
Energy and Environment Partnership (EEP)	Finland—Ministry of Foreign Affairs	NGOs, public and private companies, research and education institutions
Japan's Fast Start Finance (JFSF)	Japanese Ministry of Finance	Developing countries
KfW Development & Climate Finance	KfW	Public and private entities Depending on contract
Germany's International Climate Initiative (IKI)	Ministry for the Environment	Projects in IKI's areas of support
Global Climate Change Alliance+ (GCCA+)	European Union	73 LDCs or SIDS that are recipients of official development assistance
International Climate Fund (UK)(ICF)	DFID, DECC, Defra	Projects consistent with the DAC definition of ODA
International Climate Initiative (Germany) (ICI)	Ministry for the Environment	Developing and newly industrializing countries, countries in transition
Nordic Climate Facility (NCF)	NEFCO	Entities registered in Denmark, Finland, Iceland, Norway or Sweden
US Global Climate Change Initiative (GCCII)	USAID and the U.S. Treasury	Developing countries

Source: *Climate Fund Inventory Database (2019)*

When mentioning about the strategy of the developing country on financing to adapt to climate change, it is crucial to introduce the case of Mongolia. The Mongolian government issues Sustainable Finance Principles, which are a set of voluntary principles developed through a public-private dialogue between the Mongolian Bankers Association, the Mongolian Ministry of Environment, Green Development and Tourism and the Bank of Mongolia, with international support from the Dutch development bank FMO and the International Finance Corporation, through the Sustainable Banking Network. In Mongolia, there is a strong linkage between environmental, economic and social concerns because the gradual economic growth has depended on mining, livestock and real estate development – industries that contribute to pollution and water scarcity, leading to climate change. Therefore, the country has to deal with interlinked challenges of addressing the impact on biodiversity, air quality, soil, water and forests and at the same time ensuring that economic growth results in broad-based improvements for the majority of Mongolians. The voluntary principles were developed with CEO engagement by Mongolia's 13 commercial banks. However, they are part of a broader national Green Development Strategy with ambitious targets for sustainable consumption and energy efficiency, ecosystem and environmental protection, green jobs and poverty reduction, and urban and regional planning. The Sustainable Finance Principles include commitments not only on environment, but also on people and communities, cultural heritage, green growth, financial inclusion, corporate governance, transparency and accountability. They have been backed by sector guidelines in areas such as mining, construction, manufacturing and agriculture. All banks have adopted the principles and sector guidelines including reporting annually on their progress in implementing the principles to the Mongolian Bankers Association. Based on the initial success of the initiative, the Mongolian Bankers Association, in partnership with the Ministry of Environment and other key stakeholders, is planning to launch a national green

financing vehicle to encourage investment in clean, green and environmentally friendly projects (Based on presentation by Unenbat Jigjid, Executive Director, Mongolian Bankers Association).

3.2. Sustainable Stock Markets

While the private sector may not be interested in investing in climate-resilient projects that produce public services, governments can develop financial instruments for private funds and utilize those funds for climate change adaptation and resilience. For example, a government or an international financial institution can issue a bond dedicated to climate change adaptation and resilience to attract private finance, and then use these for climate resilient project activities. If private entities (households, firms, institutions) find the bond attractive to invest in, they will. Of the total investment (commitment) during the 2008–2018 period, 22% went to climate change adaptation and resilience projects in developing countries around the world (World Bank, 2018). A large number of countries, including the UK, USA, France, China, India, Indonesia, Russia, Germany, and South Korea, have issued green bonds for financing climate change activities, including adaptation and resilience activities. Climate Policy Initiative (2018) reports that by the year 2018, the total size of the climate-aligned bond was USD 1.45 trillion. While green bonds or any other bonds dedicated to climate finance attract private finance, they are issued by international financial institutions (e.g., the World Bank's green bonds) or by governments; they might, therefore, be interpreted as climate financing by the issuing institutions or governments rather than actual investors (private sectors).

Many developing country stock exchanges are developing sustainability strategies and requirements and have joined the Sustainable Stock Exchanges Initiative. Many, such as Nigeria and Mauritius, are introducing sustainability reporting guidelines on a voluntary basis initially, using an approach of market education and engagement. The key driver that they highlight relates to the demands and concerns of international institutional investors, and the desire to demonstrate international best practice in corporate governance. They report anecdotally that encouragement towards sustainability reporting has led to companies adopting environmental and ethical management standards and practices, and that it helps them to gain credibility in the marketplace. However, as with sustainability reporting in developed countries, there is not yet a system delivering market-relevant information about material risks that are routinely incorporated into financial decision-making.

Sustainability indices are also a popular type of sustainability initiative among stock exchanges, with many developing indices that integrate social and environmental issues. For example, the Mauritius Stock Exchange and the Egyptian Stock Exchange have both developed sustainability indexes that identify companies based on strong sustainability practices, using a set of internationally aligned and locally relevant economic, environmental, social and governance criteria. Egyptian Stock Exchange has been a pioneer stock exchange working on sustainability. Key challenges it sees are the low level of awareness among major stakeholders in the financial sector, how finance relates to the development priorities of the country and the potential for green and inclusive finance. Egyptian Stock Exchange's main goal in relation to sustainability is therefore raising the awareness of Corporate Social Responsibility between listed companies, investors and other stakeholders. In March 2010, Egyptian Stock Exchange became the first stock market in the MENA region and second worldwide to launch an Environment, Social and Governance

index (S&P/EGX). Together with the regulator, it hosts an annual event to promote the top-rated companies according to the Environment, Social and Governance index criteria. It is working to develop Environment, Social and Governance information reporting guidance for listed companies by the end of 2016. Egyptian Stock Exchange is seeking to develop a national conversation on sustainable investment. It has established a Sustainability Advisory Committee, which consists of listed companies, member companies, non-listed companies and NGOs, and promoted dialogue to raise awareness about the role and importance of sustainability in the financial sector under the banner of the Sustainability Year for the Egyptian Exchange in 2015. Internationally, it is a founding member of the Sustainable Stock Exchanges Initiative and an active member of the Sustainability Working Group of the World Federation of Exchanges and the Climate Change Investor Group (United Nations Environmental Program, 2016b).

3.3. Insurance

Although climate change is bad for society as a whole, it can provide business opportunities to some. This is similar to the fact that some natural disasters provide business opportunities to some entrepreneurs. For example, when a flood destroys a road or bridge, cement manufacturers might see that their demand goes up. Climate change risks could provide an incentive to insurance companies covering natural disaster damages or weather-related crop damages. There are many types of insurance products that cover climate change risks. The most commonly used in the agriculture sector is weather-index insurance. This insurance system first develops a weather index, say, based on rainfall. If there occurs a loss of crops due to heavy rainfall, farmers can claim compensation through their insurance policy. Under climate risk scenarios, insurance providers could increase the premium. Problems of moral hazard (false claims) can be avoided through a high deductible. This type of insurance policy can protect farmers from climate risks; at the same time, it attracts private investors to new types of insurance businesses (climate insurance businesses).

The private sector's participation in climate risk insurance has already started in developing countries. Guy Carpenter LLC, one of the leading global risk and reinsurance private firms with 60 offices around the world, provided weather index insurance to smallholding cotton and maize farmers in Mozambique (United Nations Environmental Program, 2016a). There are some private funds that finance climate change adaptation through insurance. One of such funds is the InsuResilience Investment Fund. It was formerly known as the Climate Insurance Fund and was established in 2015 by the German Development Bank, KfW, to contribute to climate change adaptation and resilience by providing an innovative solution in the field of climate risk insurance. It aims to reduce the vulnerability of micro, small and medium enterprises (MSME) and low-income households to extreme weather events. It has been formulated under a public-private-partnership setup. The private sector has two windows: debt and equity investment windows. It also provides technical assistance on insurance product design and development. Moreover, it also provides subsidies on premium payments for the end-clients, but the subsidy provision is temporary and the amount is limited. The fund is meant for existing or new insurance or reinsurance companies interested in insurance solutions to help clients mitigate climate related risks. The fund is managed by BlueOrchard, which is a leading global impact investment manager which has invested across 80 emerging and frontier markets around the world. Technical assistance under this fund is managed by CelsiusPro, which is a Swiss-based weather and climate change insurance specialist.

Inclusive Insurance in the Philippines is a good example for this case. The Philippines is one of the most vulnerable countries to environmental disasters. It has become an acknowledged international leader in its legal recognition and regulation of micro-insurance. Mutual Benefit Associations such as associations of farmers, teachers, drivers, market vendors and other occupations are key local institutions that have provided informal insurance such as death benefits to members. Mutual Benefit Associations use a model that combines elements of a commitment savings scheme and mutual risk pooling, and return dividends to their participating members. The main product is credit-life insurance to underpin microloans and provide death benefits to families. More recently, Mutual Benefit Associations such as CARD MBA have created non-life micro-insurance specifically to address climate risks and natural hazards, covering residential property, SMEs and crops against flood, typhoon, fire and earthquake. Following typhoon Haiyan (Yolanda) in 2013, micro-insurance was effective in providing relief to over 120,000 affected families. In some cases, Mutual Benefit Associations were able to begin to distribute cash within hours, providing more rapid and reliable resources to recover and rebuild rather than waiting for government or foreign aid. Since Typhoon Haiyan, the Philippines has sought to strengthen catastrophe insurance through sovereign-level protections working with donors, multilateral institutions and the international markets. The Insurance Commission is hopeful that a proposal to develop the first mandatory national catastrophe insurance pool for owners of private dwellings as well as small and medium enterprises will be implemented. The compulsory insurance scheme, an initiative of the Philippine Insurance and Reinsurers Association with the cooperation of the World Bank and the IFC, aims to develop a sustainable pilot catastrophe insurance pool covering mid-sized property owners ((United Nations Environmental Program, 2016b).

4. LESSONS FOR VIETNAM TO MOBILIZE FINANCIAL RESOURCES FOR CLIMATE CHANGE ADAPTATION

Adapting to climate change or marching towards a climate-resilient development path is the main strategy to address global climate change. The importance of this strategy is based on two factors. First, despite more than 30 years of negotiation on climate change, there is still no concrete agreement to reduce GHG emissions and stabilize their concentration. While the Paris Climate Agreement has set a goal to stabilize the concentration at the level that does not allow the earth's mean surface temperature to increase above 2 degrees Celsius or even 1.5 degrees Celsius from the pre-industrialized level, the agreement itself is voluntary. Moreover, major emitters such as the United States, Brazil, and Australia have either stayed out of this agreement or do not seem that serious about the agreement. After all, the Paris Agreement is a voluntary deal; there is no guarantee that climate change mitigation pledges made by various countries under this agreement will be met. Second, recent trends or patterns of extreme weather events in terms of their intensities or frequencies indicate that climate change might have already started to show its impacts (U.S. Global Change Research Program, 2018).

Vietnam, one of the most vulnerable countries to climate change, is now dealing with a big challenge to mobilize financial resources to adapt to climate change. Basing on the experiences from other developing countries mentioned above, the authors would like to suggest several key policy implications on this problem, detailing as following:

First, Vietnam can establish a national climate change adaptation institution (CCAI) being in charge of climate change adaption duties, then find the financial resources to support it from

cooperative organizations established by international NGOs or developed countries. Owing to the fact that, only institution managed by Vietnamese government will understand deeply about the needs of our country to adapt to climate change, i.e. the national investment portfolio for climate change. Besides, each fund, financier, or donor has differing rules and procedures that need to be followed when applying for financing and for project implementation. The levels of autonomy for the implementing party differ accordingly. Adaptation and resilience financing can take many forms and come from a variety of sources. Therefore, Vietnamese CCAI can research and consult to the Government to choose the most appropriate sponsors.

Second, Vietnamese government should issue the national adoption plan and nationally determined contribution development processes allow the country to assess project costs, evaluate current budgeting needs, and begin developing project proposals for priority issues of climate change. National adoption plan and nationally determined contribution development processes emerged from the UNFCCC process will guide Vietnam in its planning and implementation of climate action. Most countries have national adaptation strategies and plans in place or under development. While funding for the preparation of national adoption plan and nationally determined contribution development processes is readily available to most developing countries, funding for implementation of adaptation and mitigation projects happens on a project-by-project basis by application to one or more of the existing funds.

Third, Vietnamese government should build the legal framework to motivate the development of climate change bonds. Climate change bonds attractive to the private sector but dedicated to climate change adaptation could be a solution to channel private finance to climate change adaptation and resilience. Innovative insurance products against climate change impacts, such as weather index insurance, could be developed by private sector-owned insurance companies. Like in the clean energy project activities, the private sector might be interested in financing infrastructure project activities (e.g., power plants, transmission lines, roads, ports, bridges) as long as governments or donors provide guarantees on their expected rate of return on their investments.

Fourth, Climate change insurance is able to be an effective financial instrument to protect the Vietnamese poor who earn living mostly basing on the nature and be the most vulnerable group be affected by climate change. The government should develop a national climate change insurance with the participation of government and the public, like social insurance, to hedge the risks from climate change and reduce the burden to public state budget due to the damaged loss by flood, typhoon or drought. The insurance will also provide the short-term allowances for people who have to find new jobs or new residences because of the impacts of climate change.

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THE ROLE OF THE STATE IN THE HARMONIOUS SETTLEMENT OF ECONOMIC INTERESTS IN THE SOCIALIST-ORIENTED MARKET ECONOMY IN VIETNAM TODAY

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Abstract: *In order to develop a sustainable economy in the context of a socialist-oriented market economy, the problem of harmonizing economic interests is a mandatory requirement. In which the State actor plays an important and decisive role, the State performs well the role of regulating economic interests, which will create a great motivation for the actors when participating in the economic development process. Thereby improving people's living standards, ensuring social security policies, and realizing the goal of building a just, democratic and civilized society. In this article, the authors clarify the theoretical basis for the role of the State in harmonizing economic interests, thereby assessing the current situation and recommending solutions to harmonize economic interests in the current conditions of developing a socialist-oriented market economy in Vietnam.*

Keywords: *Market economy; benefit; benefit of economic; Government.*

1. INTRODUCTION

In order to survive and develop, people need to be satisfied not only with material needs but also with spiritual needs and the benefits obtained when people are satisfied their needs. Economic benefits are material benefits, which reflect the objective and objective motives of the subjects when participating in socio-economic activities. In the current market economy in countries around the world in general and the socialist-oriented market economy in Vietnam in particular, economic benefits are an issue that everyone is concerned about and directed arrive.

During the period of continuing to promote innovation, especially the comprehensive renovation of our country's economy today, for sustainable economic development, the Communist Party of Vietnam has determined: "Ensure the interests, a harmonious combination of interests and a fair and reasonable method of realizing benefits for everyone and all subjects, especially economic interests. Therefore, the settlement of interests in a harmonious manner is the driving force for socio-economic development in the current socialist-oriented market economy development in our country now on. Here we see the importance of the State in ensuring the harmony of economic interests in order to increase income for economic actors; limit conflicts, enhance unity; promptly handle conflicts.

So how does the State deal with those conflicts to ensure economic benefits for society? And do those effects really work? Will the harmonization of interests be completely resolved? In this article, the authors clarify the theoretical basis for the role of the State in harmonizing economic interests,

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thereby assessing the current situation and recommending solutions to harmonize economic interests in the current conditions of developing a socialist-oriented market economy in Vietnam.

2. RESEARCH METHODOLOGY

The article is based on the most general methodology of materialist dialectics and historical materialism. The article uses some specific research methods such as analysis, statistics, systematization, interpretation, inductive, etc.

3. RESEARCH RESULTS

3.1. Some concepts

* ***Socialist-oriented market economy:*** is an economy that operates according to the economic laws of the market and at the same time contributes towards the step-by-step establishment of a society in which the people are rich, the country is strong, the people owner, fair, civilized; regulated by the State led by the Communist Party of Vietnam.

* ***Economic benefits:*** are material benefits, benefits obtained when performing economic activities of people. Economic interests reflect the purpose and motive of the relationship between economic actors. Regarding the expression of economic benefits: profit (associated with business owners), income (associated with employees). Economic interests play the most important and decisive role, the basis and foundation for the existence and development of each person in particular, as well as society in general. Economic benefits are the driving force for economic activities and social development.

* ***Harmonization of economic interests:*** is the dialectical unity between the economic interests of the subjects, in which the contradictory side is limited, collisions and conflicts are avoided; The unified aspect is encouraged, creating conditions for development in both breadth and depth, thereby creating a driving force to promote economic activities, contributing to better realization of economic benefits, especially social benefits festival.

* ***Economic interest relationship:*** is the establishment of interactions between economic actors in order to establish economic interests in relation to the development level of productive forces and superstructure corresponding to a certain stage of social development. It is the relationship between employers and employees, between employers, between workers. The relationship of interests is expressed more deeply, the relationship of interests between individuals-group interests, interest-groups-social interests, etc.

3.2. The role of the state in the harmonious settlement of economic interests

The state is the instrument of the ruling class used to maintain social order to suit its interests. In capitalism classical bourgeois economists advocated free competition. According to the point of view of Adam Smith - the famous British economist who came up with the Invisible Hand Theory and the principle that the State does not interfere in the operation of the economy. He said that each person works only for super profit, but because of the influence of invisible hands, people have to obey the average profit rate. In order for the economy to develop healthily, the state should not interfere in the economy, in the operation of enterprises, but the state should only perform some economic tasks beyond the capacity of an enterprise such as Roads, harbor construction, etc. In the early 30s of the twentieth century, economic crises broke out frequently, especially the world

economic crisis that broke out in 1929-1933, which proved the Invisible Hand. The model cannot ensure stable conditions for the development of the market economy. According to the theory of the J. Keynes school, the state of crisis and unemployment is due to outdated, conservative economic policies and lack of state intervention in the economy. The state intervenes in the economy at both the macro and micro level and if the state intervenes in the economy with appropriate economic policies, the economy will be balanced, ensuring benefits for the owners body.

Historical facts have proven that the most successful market economies cannot develop spontaneously without the intervention and support of the State. However, in a market economy, economic activities are extremely diverse. However, the common point of these activities is towards benefits. In order to promote economic development and improve living standards, each individual and organization when participating in the market always wants to get maximum economic benefits to create a driving force to promote production, expand scale and work enthusiastically. Therefore, the role of the State in the regulation and settlement of economic interests is extremely important:

Firstly, to protect legitimate interests and create a favorable environment for economic entities' benefit-seeking activities: Economic activities always take place in a certain environment. The more favorable the environment, the more efficient and expanding economic activities are. Favorable macro-environment is not self-formed but must be created by the State. To create a favorable environment for economic activities, the State needs to: maintain political stability, build an open legal environment, and protect the legitimate interests of economic actors in and abroad, especially in the interests of the country; invest in the construction of the economy's infrastructure; create a cultural environment suitable to the requirements of market economic development.

Second, harmonize interests between individuals - businesses - society: The State needs to have policies, first of all, income distribution policies to ensure harmony of economic interests. In the conditions of a market economy, on the one hand, it is necessary to recognize the difference in income levels between collectives and individuals, and on the other hand, to prevent unwarranted income disparities. Excessive social division can lead to stress, even social conflict. Those are the issues that income distribution policy must take into account. The distribution of income depends not only on ownership but also on production. The higher the development level of the productive forces, the higher the incomes of the subjects, so the strong development of the productive forces and science and technology is extremely necessary. The State must actively and proactively implement equity in income distribution. At present, equity in income distribution is understood under two main concepts: fairness according to degree (based on the level of income that each subject receives) and functional justice (based on the contribution in income distribution). income generation). It is necessary to use a combination of these two views in income distribution policy. At each stage of development, people must achieve a minimum standard of living. To achieve this, the state needs to effectively implement policies on hunger eradication and poverty reduction, create conditions and opportunities for equal access to development resources, enjoy basic social services, and rise above the poverty line. poverty in poor areas and poor sections of the population, overcoming the ideology of subsidies, dependence, etc. The State should have policies to encourage people to get rich legally, create favorable conditions and help them by all means. In addition, the state needs to propagate and educate to raise awareness and understanding of income distribution for economic actors so that the subjects are aware of their personal interests, and at the same time eliminate the unreasonable demand.

Third, control and prevent beneficial relationships that have a negative impact on social development: In the market mechanism, income from illegal activities such as smuggling, counterfeiting, and fraud islands, corruption, etc, exist quite commonly. In order to combat forms of illegal income and ensure the harmony of economic interests, first of all, there must be an effective and integrity state apparatus. The state apparatus must recruit and employ talented, conscientious people and screen them to remove unqualified people from the state apparatus. State cadres and civil servants must be properly treated and responsible to the end for all decisions within the scope of their powers and responsibilities. Before the law, all citizens and cadres and civil servants must be truly equal, all violations must be tried according to the provisions of the law, with no forbidden zones. Implement publicly and transparently all mechanisms, policies and regulations of the state, etc. Improving the effectiveness and efficiency of inspection, examination and handling of violations is especially necessary. Good implementation of these activities is not only to overcome inadequacies, to implement social justice but also to be important. more important than preventing illegal forms of income.

Fourthly, resolving conflicts in economic interest relationships: Conflicts between economic interests are objective, if not resolved, they will directly affect the dynamics of economic activities. Therefore, when conflicts arise, they need to be resolved promptly. To do so, state authorities need to regularly pay attention, detect conflicts and prepare thoughtful solutions to deal with them. The principle to resolve conflicts between economic interests is to involve stakeholders, make concessions and put the interests of the country first. Prevention is key, but when conflicts of economic interests break out, it can lead to conflicts (strike, strike, etc.). When there is a conflict between economic actors, it is necessary to involve the mediation of relevant social organizations, especially the state.

In addition, in order for the state to perform well its role in harmonizing economic interests, it is necessary to combine it with the role of the market: Both theory and practice confirm: The state and the market both very necessary in the operation of harmonizing economic interests. However, how to use the state and the market for sustainable socio-economic development, there are still many different views. The market economy has many advantages but also many disadvantages such as: unstable development, failure to meet the requirements of public goods, the appearance of monopolies, shortages and distortions information; appeared many social and environmental problems, etc. In particular, the market economy deepens the rich-poor divide, adversely affecting the harmony between economic interests. Therefore, the state must intervene to limit and overcome the above-mentioned disadvantages. However, the State's management activities also reveal weaknesses such as: State officials and civil servants are easily exposed to abuse of power, embezzlement, corruption, lack of responsibility at work, and formation of group interests, etc. In order to limit the disadvantages mentioned above, and at the same time promote the superiority of the market economy and the role of the state, it is necessary to combine the two. The principle of combination is: The state only does and must do well what the market cannot do, publicize and transparently state activities.

Through the above analysis, it can be clearly seen that the important role of the State in the harmonization of economic interests cannot be replaced by any other entity.

3.3. Practical contact in Vietnam today

3.3.1. Achievements acquired

In the current period, the issue of harmoniously settling economic interests in order to develop a sustainable economy has been paid great attention and concern by our Party and State. Especially in the field of ownership and distribution, creating a driving force for the development of society in general and of each subject in particular. That process has achieved certain results, which are:

Firstly, our state protects legitimate interests and creates a favorable environment for the benefit-seeking activities of economic actors.

Vietnam has done very well in maintaining political stability. Thanks to that, it has attracted not only domestic investors but also foreign investors, they are very assured when investing in Vietnam. Therefore, continuing to maintain political stability is to contribute to the harmonious settlement of economic interests in Vietnam. In addition to maintaining political stability, the Vietnamese state has been constantly building and perfecting the legal system in the following direction: serving the goal of creating development, creating a safe legal corridor for development and deeply integrated with the region and the world in terms of economy, politics and culture. Vietnam's legal system has been actively changing to protect the legitimate interests of domestic and foreign economic actors. The infrastructure of our country's economy is increasingly improving: building highways, railways connecting provinces, bridges, and communications to meet the needs of economic activities. According to the General Statistics Office, in 2019, our country had 138.1 thousand newly established enterprises with a total registered capital of 1730.2 billion VND, an increase of 5.2% in the number of enterprises and an increase of 17.1% of registered capital compared to 2018 [5]. In addition, the good control of the Covid-19 epidemic, combining epidemic prevention with economic development to realize the dual goals of our country today also creates a favorable environment for investment than many countries in the region and the region. In the world. The State quickly introduced monetary, fiscal, and social security policies to support businesses and people to overcome the most difficult period of the Covid-19 shock. The state accelerates debt repayment for companies and suspends payments for electricity and water for businesses. Self-employed workers, business households, immigrants, ethnic minorities are more severely affected, so they are specially supported by the State. In addition to maintaining political security, our country has been changing the legal system in a positive direction to create an open legal environment and protect the interests of domestic and foreign actors, especially the interests of the country.

Second, in the harmonization of personal - business - social interests.

In order to harmonize interests between individuals, enterprises and society, the state has implemented an equitable distribution of factors of production in order to limit the gap between rich and poor among people; implement income distribution, distribution according to labor: work less, enjoy less, work more enjoy more. In addition, our state also develops a legal system that clearly states the rights and obligations of employees (working conditions, wages, working hours, etc.) and employers (recruitment, compensation, etc.) knowledge, performance of labor contracts, etc.), strictly handle violations.

Economic benefits are a direct result of income distribution, fair and reasonable distribution makes an important contribution to ensuring the harmony of economic benefits. In fact, income

inequality occurs in most countries in the world, including Vietnam. In the period 2007-2018, Vietnam's economy grew quite high, an average of 6.1%, in which, incomes of all population groups increased, but the income growth rate of the poor group was always lower than that of the rich group, so the gap between rich and poor is widening [4]. The wage policy is the basis for the State to gradually implement the income distribution policy towards the goal of improving the living standards of the working people and eradicating hunger and reducing poverty. The salary policy of the State has brought certain effects. The adjustment of the State's minimum wage according to the level of price slippage has increased incomes for salaried workers, especially those with low incomes, to meet a basic part of their lives. The unification of a common minimum wage for state-owned enterprises and foreign-invested enterprises contributes to eliminating the previous level of income inequality between the two sectors. Personal income tax is not levied on low-income individuals, just enough to support themselves and their families at the necessary level. Therefore, paying personal income tax also contributes to reducing the gap between the population classes. Annual income tax for high-income earners gradually increases, from 38,463 billion VND in 2015 to 76,833 billion VND in 2020 (accounting for 5.46% of state budget revenue) [5].

Both personal interests and social interests were initially concerned with the direction of promoting development. Justifiable personal interests are facilitated to develop in accordance with social interests, and social interests are initially well implemented, creating a premise for legitimate personal interests to be realized. In the context of globalization, in the socialist-oriented market economy in Vietnam today, businesses have really grasped the opportunity to bring economic benefits in accessing modern technology, apply digital science and technology and take advantage of foreign investment capital to improve production, increase labor productivity, increase profits for enterprises, and expand reproduction. Positive results in socio-economic development and good implementation of social security measures in recent years have created new values for society, creating equality of opportunities in enjoying social security. access to new development values. Each individual's life is constantly being improved, legitimate rights and interests are protected by law, especially in ownership and distribution. The interests of specific classes, policy beneficiaries, people in remote and isolated areas, bordering islands and islands are given due attention, the poverty rate is reduced, social security and social welfare are realized good show, etc. In the period (2016 - 2020), the 5-year average growth rate is estimated at about 5.8%/year, in 2020 alone due to the impact of the Covid-19 pandemic GDP will increase by 2.91% but still belong to the growth group highest economy in the world); gross domestic product (GDP) reached 268.4 billion USD, increased 1.3 times compared to 2010, to reach 116 billion USD; per capita income reached 4.23 million VND/month; As of January 14, 2021, there were 88 million people participating in health insurance (accounting for about 90.85% of the country's population) [5]. GDP in the first 6 months of 2021 is expected to reach 5.8% due to the 4th outbreak of the Covid-19 pandemic; the rate of poor households in 2020 will be more than halved compared to 2016, from 9.9% in 2016 to 4.8% in 2020; by the end of 2020, 90.1% of the population participates in Health Insurance, etc [6]. Despite being affected by the epidemic, the people's material life is still guaranteed at a basic level thanks to the timely attention of the Party and State, towards building a good socialism. In more than 30 years of innovation, we have gradually overcome the thinking of social absolutization in the settlement between individual interests and social interests. This is reflected in the fact that private ownership is recognized and facilitates private economic development, considering it "an important driving force of the economy".

Third, in controlling and preventing beneficial relationships that have negative effects on social development.

In recent years, illegal sources of income from smuggling, counterfeiting, imitation goods, poor quality goods, fraud, corruption, etc, are negatively affecting the development of society. To ensure the harmonization of economic interests among the actors and to eliminate the negative effects mentioned above, the State has determined to build a system of integrity, transparency, efficiency, discipline and discipline at all levels. Implementing the resolutions of the National Assembly, the direction of the Government and the National Steering Committee 389 on combating smuggling, commercial fraud and counterfeit and counterfeit goods, the functional forces have strengthened the inspection work, there are many measures to prevent and limit the production and trade of smuggled goods. During the complicated development of the Covid-19 pandemic, there was a situation of buying masks in large quantities and increasing the price of masks for the purpose of profiteering. A box of masks costs from 300,000 to 500,000 VND, before that situation, the General Department of Market Management quickly implemented the inspection and strictly handled the acts of taking advantage of the epidemic for profit. Vietnam has implemented training and retraining plans for cadres, civil servants and public employees; review and complete regulations and legal documents on management and administration to ensure publicity and transparency, contributing to eliminating the mechanism of “ask - give”, “approval - grant” to prevent, repel corruption, negativity, “group interests”, “backyard”, etc.

Fourth, in addition, in order to harmonize economic interests in the socialist-oriented market economy in Vietnam, it is necessary to optimize state-market relations. The State has really paid attention to the role of “midwife” for the market to form and develop, institutionalize, and facilitate the formation and development of all kinds of markets. The current market has a strong growth in size and quality, new markets are formed. The State has gradually minimized administrative orders so that market activities take place under the guidance of market rules, ensuring the principle of the market “self-regulating”, and at the same time strengthening management of the socialist state. Taking the market as the main basis for allocating economic resources in combination with the State’s economic regulation by policies, planning and resources. The pricing, especially the prices of goods and services that have been liberalized, are decided according to market rules. Competition in the market for goods and services is increasing, market monopoly and unfair competition is increasingly controlled and tends to decrease. The market has really step by step become the basis for the State to orient the country’s economic development in a sustainable way.

3.3.2. Limit

In addition to the above-mentioned achievements, the role of the State in the harmonious settlement of economic interests currently has certain limitations. Specifically:

Firstly, the market mechanism in Vietnam is in the process of formation and development, so there are still phenomena in many industries and occupations that simply have a higher income, many times higher than that of an ordinary worker. complicated; many areas of intellectual labor are enjoyed less than manual labor; many people in remote, border and island areas have not yet enjoyed social welfare as in centers, big cities, etc.

Second, the State’s wage policy has brought about certain effects. However, the salary policy in the past time has some limitations: It has not operated according to the market mechanism but

regulated by the State, is bound to many other social policies and is dependent on the state budget. The adjustment of the minimum wage is still considered a burden of the state budget and wages are merely a distribution of personal consumption, not yet considered an investment for workers.

Third, besides the successes, the collection of personal income tax still misses many objects, causing losses to the state budget, not ensuring fairness for those who have to pay taxes. Subsidies for the poor and low-income are one of the government's income redistribution policies. The government's social subsidy policy in recent years shows the great efforts of the government in the current difficult economic context. However, due to the large number of poor, disabled and disabled people, while the budget for this field is still limited, the amount of subsidy cannot be guaranteed for the lives of people. Policies are mainly focused on the form of support, granting cash or in-kind, few indirect support policies, so they have not created motivation for the poor to escape poverty and reduce poverty sustainably.

Fourthly, in the context of the market economy with very fierce competition, currently quite a lot of businesses and economic organizations in Vietnam carry out many illegal acts to make profit. Enterprises evade taxes for their own interests, enterprises and employees collude to make fake goods and poor quality goods, thus harming socio-economic interests. In order to combat forms of illegal income and ensure the harmony of economic interests, in recent years, many measures have been taken to prevent and limit the production and trade of smuggled goods. However, in the process of operation, the market management force encountered many difficulties because the methods and tricks of the subjects were increasingly sophisticated and complex.

Fifth, the situation in the name of social interests to violate the legitimate personal interests of the working people still exists and there are many potential problems that need to be solved. Typically embezzlement, corruption, activities of negative "interest groups"; illegal construction activities without regulations, especially in big cities and urban areas, etc, cause great loss of social benefits. Or some state monopolies in Vietnam abuse monopolies to manipulate market prices for personal gain, put pressure on people, create unfair competition among businesses, and put some small businesses at risk. bankruptcy, resulting in unemployment. The gap between the rich and the poor between the regions and the population groups is still large, the living conditions of some parts of the working population are still very difficult. Policies and measures to ensure social security are not well implemented in some places.

Sixth, the effectiveness and efficiency of State management of the economy is still low due to the lack of tools and mechanisms for monitoring and sanctioning to ensure that actors participating in market relations comply with the "rules of the game" mentioned above go out. State intervention tools still have some shortcomings such as unstable legal instruments, the State has not really become an "arbitrator" for economic actors, fiscal, monetary, and exchange rate policies price coordination is not flexible. The monopoly status in some fields still exists, the business and investment environment is not really open, ensuring equal competition among enterprises. Prices of some essential goods and services have not really followed market principles. The market and the state both play an important role in harmonizing economic interests in the socialist-oriented market economy in Vietnam.

Thus, in order to promote the role of the State in managing and harmonizing economic interests, it is required that in the coming time, the State needs to promote its advantages, soon overcome the above limitations, actively proactively propose appropriate policies to ensure the harmonization of economic interests, thereby creating a driving force for the sustainable development of the national economy.

3.3.4. Some solutions to harmonize economic interests in the context of developing a socialist-oriented market economy in Vietnam today

In the context of the socialist-oriented market economy in Vietnam, in the face of complicated developments of the Covid-19 epidemic, in order to better perform the harmonization of economic interests and create a favorable environment. For sustainable economic development, besides promoting the achievements and overcoming limitations, the State needs to implement a number of solutions as follows:

The first is to continue building and perfecting institutions to ensure that economic growth is linked with social progress and justice, creating opportunities for all members of society to participate in and enjoy the fruits of the development process. To do so, the State needs to continue to build and perfect the legal system and focus on the process of applying the law to life. Building a legal system to create favorable conditions for enterprises to invest in the market, promoting enterprises and entrepreneurs to become the leading force in the process of industrialization and modernization of the country.

Secondly, the state needs to do better to ensure publicity and transparency in the management process, and strictly handle acts of embezzlement, corruption, and negative “group interests” that cause damage to society. To step up and improve propaganda, education, and high unity of will and action among cadres, party members and people on anti-corruption. Strengthen inspection, supervision, build a team of civil servants who are clean, strong and capable to meet the requirements of socio-economic development in the new situation. In particular, the state needs to strengthen socialist legislation, strictly implement sanctions for violations that cause damage to social interests; effectively handle and prevent “corruption”, improve the efficiency of recovering corrupt assets.

Third, create consensus on income distribution, continue to perfect and improve the effectiveness of social security, social welfare and salary policies. Implement well the salary policy according to the promulgated salary reform scheme, ensuring the real salary to ensure the lives of officials, workers, public employees and employees. Pay attention to and help disadvantaged people, farmers, poor workers, people with meritorious services to the revolution, and people in remote and isolated areas, disadvantaged people in society, well implement policies poverty reduction. Having a good treatment policy for talented people, ensuring a satisfactory salary for employees. Especially in the epidemic situation, many workers lost their jobs, many businesses had to close, and it was necessary to have policies to support and help them to continue production.

Fourth, there should be policies to encourage people to get rich legally, educate people to put their interests in relationship with the interests of other subjects to create unity in the relationship of interests, avoid conflicts and contradictions. Through educational and propaganda activities to raise people’s awareness of their rights and obligations in the relationship of benefits, the distribution of income for a reasonable division between wages and profits. In the relationship between personal interests and social interests, the individual subject needs to realize that he must perform his legitimate interests well by actively studying and practicing non-stop, in harmony. between dedication and enjoyment, at the same time, social interest actors need to realize that social benefits will automatically be achieved when personal interests are satisfied, etc. Encourage all economic sectors, all citizens and investors to expand their industries and create more jobs for workers. All citizens are free to practice their profession, hire workers according to the law,

and develop employment services. Redistribution of population and labor in the whole country. Creating conditions for all employees to create and find jobs for themselves.

Fifth, especially now in the face of complicated developments of the Covid-19 epidemic, in order to harmonize the economic interests of the subjects, the Party, the State and the whole people need to make joint efforts to fight the epidemic for all economic activities to return to normal, to try to create the most favorable and safe environment for businesses and employees. Vietnam has created a favorable environment for domestic and foreign investors to feel secure when making investments, if it was previously a politically stable factor, now there is an additional safety factor disease. The Government needs to continue to implement many important solutions and policies on measures to support people facing difficulties due to the COVID-19 pandemic, demonstrating the state's sharing of responsibility with businesses in ensuring life for workers.

4. CONCLUSION

Economic benefit is an objective economic category and is the driving force of economic activities. The harmonious settlement of economic interests will contribute to promoting sustainable economic development, contributing to the process of restructuring, renewing the growth model and improving the competitiveness of the economy. In an integrated and open economy, with the rapid development of science and technology, the role of the state in the harmonious settlement of economic interests is extremely important. Implementation solutions need to be implemented synchronously and effectively, avoiding loopholes in handling violations that cause serious damage to society. To ensure harmonization of economic interests in the socialist-oriented market economy in Vietnam, it is necessary to have the influence of the State by means of educational, legal, administrative and economic tools, etc, to increase income for economic entities; limit conflicts, enhance unity; promptly handle conflicts. However, market participants need to agree with each other in terms of economic benefits by improving production level, skill level, product quality, healthy competition, and law enforcement., limiting income conflicts, etc. Thereby creating a driving force to promote Vietnam's economy to develop sustainably in the socialist direction, towards the goal of building a just and democratic civilized society./.

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AUDIT AND ASSURANCE SERVICE FOR CORPORATE SOCIAL RESPONSIBILITY REPORT OF COMPANY IN VIETNAM: FROM THEORY TO PRACTICE

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Abstract: *In recent years, information users are increasingly interested in the reliability of information in CSR reports provided by enterprises and can rest assured to make economic decisions when these reports are audited or assured by an independent party. This article explores the general theoretical framework of auditing and assurance services for corporate social responsibility reporting (Corporate social responsibility assurance or CSRA) in Vietnam; Then discuss the trend of applying this type of service in Vietnam.*

Key words: *corporate social responsibility reporting, audit and assurance service, corporate social responsibility assurance*

1. INTRODUCTION

Corporate Social Responsibility (CSR) reporting is not new issue to the developed countries. According to a survey by KPMG (2017), about 40% of G250 companies (the largest 250 companies of the world) voluntarily use assurance services for their social responsibility reporting in 2016. But, this number has risen to over 67% in 2017.

Currently, in developing countries, information users such as investors, banks, suppliers, customers pay more and more attention to this report because it helps understand the contribution of enterprises to society. Therefore, it is also an important basis for them to decide whether to have a business relationship with the company or not. The question is how do they assess the reliability of the information in the corporate social responsibility report? Auditing and assurance services for social responsibility reports helped them solve this problem.

In Vietnam, audit and assurance for CSR report still relatively new concepts for many reasons. This is reason why there are almost no Vietnamese companies that perform audit and assurance services for social responsibility reports. However, recently, due to the pressure of the media to publish social responsibility information, this issue has also been paid more attention by owners.

This paper concentrated on the Vietnam context because there is not much study in Vietnam focusing on this issue. The purpose of this paper is to review theoretical framework on audit and assurance of CSR report (Definition, Objective, Research Subject, Methodology, Assurance report) and discuss future opportunity to apply it in this country.

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2. LITERATURE REVIEW

2.1. Definition and Purpose

There are a number of different definitions of CSRA. According to a report published by Price (2012), a CSR audit is a formal strategic process that helps measure a company's actual social performance against the social objectives it has set for itself. The audit hence equates how the firm's decision making, business conduct, mission guiding principles, employee interest, and stakeholder objectives are aligned with its social responsibilities (Kottamunickal & Jabeen, 2015). CSRA is generally understood that a company recruits an independent third party to perform assurance services for their corporate social responsibility report (Farooq & De Villier, 2017). In addition, Price (2012) suggest that auditing process may be conducted internally by the company or externally by an outside consultant, which is more beneficial considering the minimal biases imposed by an outside. Moreover, an outside auditor brings credibility to the evaluation. Once the CSR audit is complete, it may be distributed internally, or published depending on the company's mission statements and goals.

The aim of assurance provider is to draw conclusion in assurance statement on information contained in CSR report. Before entering into an engagement letter, assurance provider and firms must carefully discuss the terms and conditions, including the level of assurance that the business desires. Firms also choose different levels of assurance such as high level (reasonable) or limited level (moderate). For high level, audit service is conducted and the auditor should give opinion about the truth and fair of CSR report. For limited level, assurance service is taken place.

The main purpose of providing CSR assurance services is to evaluate the reliability of CSR report. In addition, it not only encourages company to improve efficiency and support the establishment of CSR regulations in corporate culture but also evaluate the organization's management system and its relationships with stakeholders.

2.2. Corporate Social Responsibility Report

For this type of audit and assurance, the information to be examined is the CSR reports. At first, CSR was seen as "obligations of businessmen to pursue those policies, to make those decisions, or to follow those lines of action which are desirable in terms of the objectives and values of our society" (Bowen 1953, 6). Later, in 1971, Johnson give a new view on CSR concept that should take account to shareholders' and society's expectations. Four years later, Backman (1975) identify the impact of environmental issues. In the same year, Davis (1975) give a definition as follow "Social responsibility is the obligation of decision makers to take actions which protect and improve the welfare of society along with their own interests".

In 1979, Carroll introduced four-layer triangle definition of CSR. According Carroll, while implementing corporate social responsibility, business should integrate all aspect of society expectations given to organizations, including economic, legal, ethical and discretionary responsibility.

Among the social responsibilities that businesses need to achieve, the most important is still economic responsibility. This is seen as making profit and maximizing the shareholder wealth. For external party, it requires to provide goods, services to consumers and creating jobs for employees. In addition, companies also make certain contributions to society when they regularly seek and develop new products and change production technology... (Boatright 2012, 278).

Although economic goals are the most important, businesses have to comply with state and local laws and regulation during their operation. The next layer in Carroll's triangle shows that companies need to fulfill their legal responsibilities (Carroll 1991, 14). However, law is essential but not sufficient. Society's expectations hold that businesses run their businesses according to the purpose towards ethical values rather than following what the law requires. In case the law does not show what businesses have to do, they should also act in the fair and objective way. At the very end of the CSR triangle lays the philanthropic responsibility. Philanthropic responsibilities surround the business' actions that make business firm a good corporate citizen from society's point of view. To fulfill its perceived philanthropic responsibilities, companies could give a lot of things that are such as gifts of monetary resources, product and service donations, volunteerism by employees and management, community development and any other discretionary contribution to the community or stakeholder groups that make up the community (Archie B. Carroll, 2016).



Figure 1: Four-layer triangle of Carroll (1991,42)

Currently, social responsibility reporting in general still includes four main types of responsibility as in Carroll's model. However, the content and detailed presentation of these four types of responsibilities in each report will be different according to different groups of standard. As a result, assurers need to clearly identify the content of reports according to each standard. The contents of each set of standards are presented below:

2.3. Some legal frameworks for CSR reporting

To give opinion on the reliability of information on a corporate social responsibility report, the assurer should consider how this information is in line with established standards. Currently, there are many different sets of standards for preparing and presenting social responsibility reports such as:

2.3.1. ISO 26000

ISO 26000 is an International Standard of the International Standards Organization (referred to as ISO) which is released in 2010. The International Standard ISO 26000 (International Standard ISO 26000) provides guidance on social responsibility for business.

The content of ISO 26000 addresses 7 main principles, including: accountability, transparency, ethical behavior, recognition of the interests of stakeholders, respect for the principle of legality, related to international standards behavior and respect for human rights.

2.3.2. International Framework on CSR (International Framework)

Published in December 2013, the CSR International Framework supports the integration of thinking, decision making and action with a focus on value creation in the short, medium and long term. An integrated report that provides insight into the “resources” and “capitals” resources used and affected by the organization. The international framework encourages businesses to present briefly information on how to run the organization such as its strategy, governance, performance in the short, medium and long term.

The integrated report has 8 main contents, including: overview of the organization and the external environment; administration; business model; risks and opportunities; strategy and resource allocation; efficiency; challenges and risks; basis for preparation and presentation.

2.3.3. The OECD Guidelines for MNCs review

With the OECD Guidelines for Multinational Enterprises, they provide a comprehensive code of conduct designed to multinational businesses, which has been in force since 1976. The objective is to help MNCs act according to Government policy and societal expectations. The recommendations relate to the following areas: information publishing; human rights; employment and industrial relations; environment, regulations against corruption, bribery and other forms of extortion; the right of consumer; science and technology; competitors; tax.

The OECD Amendment for Multinational Enterprises was adopted on May 25, 2011 and has been endorsed by the governments of 42 countries.

2.3.4. GRI (Global Reporting Initiative) Standards

The Global Reporting Initiative (GRI) is an international and independent organization that helps businesses, governments and organizations understand and disclose information on how business impact to sustainability issues such as climate change, anti-corruption and other issues.

The GRI Standards released in 2016 as a development step of the previous G4 guidelines. It officially is in effect for reports prepared from 1 July 2018 onwards and is encouraged to apply early.

GRI's set of standards enhances the comparability and quality of sustainability information to ensure greater transparency with respect to economic, environmental and social impacts. It is an accepted common standard that creates a common language for organizations and stakeholders in

disclosure information on their impacts to social. GRI's set of standards includes: Three Standards applicable to all organizations; The 33 standards relate to specific content and are divided into 3 groups: Economic, environmental and social. Organizations select and use only relevant standards.

2.4. Methodologies

There are several measurement methods for CSR being implemented by different organizations. According to Sethi (1975), a structural framework to facilitate analysis of corporate social activities should have at least two aspects. First, categories for classifying corporate activities should be made comparisons between current data and previous one. Second, it is necessary to define various categories that could be applicable across firms, industries, or even social systems. It leads to make comparative analysis possible.

Kok et al. (2001) developed a corporate social responsibility audit following the underlying methodology of the quality award and excellence models. The audit instrument uses a combination of the fourteen aspects of social responsibility, and four levels of scoring the extent to which social responsibility policy has been developed in an organization, to analyze both its current and future CSR status.

The literature review of Risako Morimoto (2004) indicates that developing an applied CSR auditing procedure will be a challenging task. In their research, Risako Morimoto and colleagues have shown that many people consider CSR reporting to be a social strand of Sustainability Development including World Business Council and European Parliament, but there is far less agreement on regarding its measurement.

This study also provides key contents in the CSR audit model such as:

- + Assesses the organization's management system and its relations with all of the stakeholders.
- + Build appropriate indices that applies to all types of businesses
- + Keep evidence, gathered by doing audit procedures, against a series of indices that make the organization's performance in relation to each stakeholder group.
- + Performance against index are categorized as essential, required and desirable

To take these steps, the assurance provider needs to have an understanding of the essential factor in CSR report as perceived by different stakeholders. Therefore, the author develops a matrix (Figure 2) to illustrate these factors, including the six key elements such as good stakeholder management, good corporate leadership, greater priority for CSR at board level, the integration CSR into corporate policy, regulation at national and international level, and the active involvement of, and good coordination between government, business, NGOs and civil society.

Environment	Actor	Process	Six key elements for successful CSR	Outcome
Competitive market	Private sector	Practice CSR	i) Good stakeholder management	More efficient business, greater share price, long-term business success
CEOs see the commitment increasingly important to creating well-managed company			ii) Greater priority for CSR at board level iii) Integration of CSR into corporate policy iv) Good corporate leadership	
CSR perceived as a business contribution to sustainable development	NGOs	Putting CSR in practice by stakeholder dialogue and consultation		Meaningful change in corporate behaviour
CSR voluntary initiative	Government	Light-touch regulation	More Regulation	Help organizations to tackle sustainability
Direct impact on their daily life	Local inhabitants	Positive stakeholder relationship created by CSR		Less negative impact on local inhabitant and more positive involvement of the community
Society where CSR is understood better than the past	General public	Transparency created by CSR		Better quality society
Reputational value insignificant, and no cost & time for CSR	Supplier	Through supply -chains: pressure from larger corporations		
Competitive environment	Employee & contract staff	Positive stakeholder relationship created by CSR		Motivated, engaged, involved, trained and committed workforce
Corporations are more transparent and people empowered by choice	Clients & customers	Pressure on corporations		Better quality of goods & services
Share prices reflect many factors	Shareholders	Active social responsible investment		Create market for CSR. Greater share prices

}

Active

involvement of and good coordination between government, business, NGOs, and civil society

Figure 2. CSR-Stakeholder Matrix

According to the report of CorporateRegister (2008), to collect the above information, the assessor mainly conducts internal interviews and scrutinize internal data systems. Fewer providers review external documents and fewer still interview external stakeholders.

Based on the finding of previous research of Morimoto, two researchers Kottomorickal, Jabeen suggested an adoption of corporate office system such as the Board of Corporate Auditors, to implement CSR Audit. The committee consists of 4 people including CEO, COO and two independent external auditors. However, the author also points out that this model is not suitable for all types of businesses and must be adjusted to the needs, structure and operations of the business. Moreover, there could be various existing models of CSR auditing, but not a single model, which can be applied universally (Kottomorickal, Jabeen, 2015).

2.5. Assurance Statement

Assurance statements is a product from a process which examines the veracity and completeness of a CSR report. Assurance statement on CSR is important to businesses and stakeholders. For company, assurance statements would benefit from following the principles underlying good CSR reporting: Transparency and accountability. This is one of the reasons why companies producing a CSR report turn to external assurance as a mark of credible business disclosure. On the other hand, during the assurance engagement, assurers can provide valuable insights on CSR management systems, data collection, target setting procedures and a range of associated processes. This is especially useful where assurers have a range of expertise across different regions & sectors, and are able to advise on best practice and carry out benchmarking. Many assurers specialise in such work.

The Key Elements of a Meaningful Assurance Statement:

a. Reference to Standardised Approaches and Levels of Assurance

- Standardised Approaches

This section describes the criteria for evaluating information in CSR reports. Three major approaches have emerged. Currently, there is no universal rule or standard that is applicable to all assurance providers. However, according to Corporateregister's report (2008), they usually use the following standards:

+ AA1000AS:

+ ISAE 3000:

+ GRI Guidelines

- Levels of Assurance

The level of service assurance depends on the volume and scope of work performed by the service provider. Assurance providers refer to 'limited' or 'reasonable' levels of assurance. The Study of 90 reports by leading companies from across the world shows 'Accountants (Big 4)' assurance providers frequently to be referencing assurance levels in their statements.

Reasonable assurance: The assurers draw a conclusion on the truth and fair of CSR report by carrying out enough work to be able to make statements which is presented in a positive manner, eg "the reported environmental data accurately reflect XYZ's environmental performance during 2019-2020"

Limited assurance: The assurers have only carried out enough work to make statement about the report that is presented in a negative manner, eg ‘nothing has come to our attention which causes us to believe that the reported environmental data do not accurately reflect ABC’s environmental performance during 2019-2020’

b. Methodology

This content is to set out how the assurance provider approaches the task. The assessor describes the methods and work undertaken.

c. Provider Recommendations and Opinions

Assurance statements which offer insights (eg into) are of value for external stakeholders. Providers will usually have views on CSR performance, strengths and weaknesses, challenges and including them in published statements should be encouraged. By publishing this information, providers not only create a more useful statement, they demonstrate their level of expertise and competence.

d. Assurance Conclusion

This is the most important element of an assurance statement. From the viewpoint of the user information, a conclusion written in a ‘positive’ way would be more expected and more conducive to building trust than a ‘negative’ formulation. A conclusion given by providers depends on the scope of the engagement or the perceived level of risk.

3. METHODOLOGY OF THE STUDY

To meet the objectives of the study effectively and objectively, a suitable methodology was adopted. This paper synthesizes literature on CSR audit from the past years by searching ABI for academic papers containing the following keywords: CSR reporting, CSR audit. While extensive literature review was done to sift through related research, a sample survey was undertaken at audit firm. A questionnaire was quite simply designed. The questionnaires were used through face to face interviewing. Every single one of the participants was requested to answer with their opinions. Using the information obtained from the survey as a basis, a few key findings were made.

4. RESULTS AND DISCUSSION

The article has synthesized the research on CSR audit to create the most basic theoretical framework. Specifically, the article mentioned definition, objective, research Subject, methodology, assurance report for CSR audit. This has great significance in opening up further studies for the application of these issues to the Vietnamese audit market.

As mentioned above, social responsibility reporting is not a new concept in Vietnam in recent years. However, those charged with governance and BOD do not pay much attention to prepare a separate social responsibility report for many reasons. The first one is that there is no specific regulation on the preparation and publication of this report. The second one is due to cost of preparing report could be higher than its benefit.

In 2015, the Ministry of Finance issued regulations on environmental information disclosure for companies listed on the stock market through Circular No. 155/2015/TT-BTC. Although Circular 155/TT-BTC has no specific provisions on CSR reporting of enterprises, companies are also required to disclose data related to activities that have an impact on the environment and society.

Since then, most of the companies listed on the stock exchange publish information on social responsibility in the sustainability report or in the annual report, rather than making a separate social responsibility report.

Because the preparation and publication of social responsibility reports is still limited, audit and assurance services for social responsibility reports is still a very new issue for businesses. For example, since 2015, Baoviet Group was considered as one of the first enterprises to sign a contract with the PWC auditing firm to provide assurance services for the group's sustainability report.

On the other hand, in Vietnam, the number of auditing companies providing assurance services for this service is not much, mainly concentrated in large auditing firms such as Big4.

In the new era of globalization, the trend of providing assurance services for social responsibility newspapers is necessary. KPMG's (2013) survey shows that in U.S, at least for larger firm, where 86 percent of the largest 100 companies now engage in some form of CSR reporting. The report also outlined that the number of large companies voluntarily seeking assurance is increasing, with 59 percent of the G250 and 38 percent of the N100 currently assuring their corporate responsibility disclosure.

This is an opportunity for auditing firm in Vietnam to expand their own market. These companies can provide a wide range of services such as making CSR reports, selecting and developing a set of evaluation criteria suitable to the business characteristics of the business, providing audit services and guarantee for CSR reporting. However, when entering this market, auditing firms also face competition from other assurance service providers. Unlike financial statement audits, auditing firms do not have a monopoly on assurance so they have to compete with other service providers. As KPMG notes, of the world's largest 250 global companies which engage in CSR reporting, 59 per cent have this information externally assured, and two-thirds of these engage a major accounting firm to undertake this assurance (KPMG 2013 12). CSR report assurance is now dominated by just three providers with a combined market share of 89%. These are Accountants (Big4), Certification Bodies, Specialist Consultancies (Corporateregister 2008 34).

5. CONCLUSION

This study summarizes and reviews the issues related to the type of audit and assurance services for CSR reporting from theoretical to practical aspects in Vietnam. Theoretically, in Vietnam, there have not been many studies on auditing and assurance services for CSR reports. The article introduces fundamental theories such as CSR report, standards, assurance statement, methodologies. However, conducting a CSR audit and assurance is quite complex because of the complexity of the subject matter. In addition, the evaluation of some indices will depend on the judgment and experience of the auditor. Practically, for many developed countries in the world this market has existed for a long time, but for Vietnam it is still very new. Therefore, the synthesis of research on auditing and assurance services for CSR is important to create more in-depth research in this field in Vietnam.

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DETERMINANTS OF DIVIDEND PAYOUT DECISIONS – PUBLICLY LISTED TRANSPORTATION CONSTRUCTION ENTERPRISES OPERATING IN VIETNAM MARKET

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Abstract: *Transportation Construction Enterprises have joined the VN Stock market for less than 10 years. The issue of dividend payment of these enterprises is supposed to be unsuitable, which affects the efficiency of the businesses. The article mentions and analyzes the factors that influence the decision to pay dividend. Analysis is based on panel data with 80 observations of 20 listed Transport Construction Companies in Stock Market in Vietnam over 4 years, from 2016-2019. The research develops 6 research hypotheses and uses a modeling approach based on random and fixed effects regression models, then uses the Hausman test to choose a reasonable method. The factors included in the model are size, earning per share, market expectations, profit margins, return on invested capital, and the current rate. The important conclusion reached in our study is that Size, Profits and Profit Margin significantly influence transportation construction companies' dividend policy. The conclusion of the study is quite similar to other studies in emerging markets like Vietnam.*

Keywords: *Dividend policy, determinants of dividend decisions*

1. INTRODUCTION

Dividend is the amount of interest that a company pays for investors for the capital they have contributed to the company. Many people believe that when the company has a good profit, it will pay high dividends and vice versa. However, decisions related to dividend payments do not only depend on the company's financial results and cash flow distribution within the company. Manager's decisions about dividends can also be dictated by other factors such as the risk of recession, increased profit volatility, limited external funding or capital demand in the future. Therefore, the issue of dividends has always been the subject in many studies. The issue of paying dividends in a given company, known as the 'dividend puzzle', gives rise to a number of research problems that can be studied at various levels of detail. (Glen, Karmokolias, Miller, & Shah, 1995), Carleton, Chen, & Steiner, 1998). [2,6]

Our state has recognized the advantages of equalization and made a decision on the equalization of state-owned enterprises. Most of the transportation construction enterprises also come from state-owned enterprises. In the process of operating under the equalization model, businesses also participate in the stock market to raise capital, however, the issue of paying dividends of this group of businesses is considered to be ineffective. The study of how companies make dividend decisions will help provide solutions for the group of businesses studied.

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The purpose of this study is to identify the factors that influence the various payment decisions regarding the financial position of listed transport construction companies in Vietnam. Understanding dividend policy is crucial for getting deeper forecasts about dividend policy. Panel data analysis is used to identify factors that influence firms' dividend policy. The following variables were considered: size, return per share, market expectations, margins, return on invested capital, and the current rate of payment. These data only include internal analysis of dividend policy. The table sample includes 80 observations on the change in the number of companies from 20 listed transport construction companies in Vietnam from 2016-2019. Articles that contribute to papers related to research related to dividend policy in particular areas. Our paper adds new evidence to the dividend policy literature by showing that there are different dividend responses with different groups of firms. The results of the study can give investors a more comprehensive understanding of the impact of the dividend decision mechanism on the financial health of companies in the transport construction sector. The article is structured as follows. Part 1 discusses the theory of dividend distribution decisions. Part 2, based on a review of relevant documents, introduces the determinants of the decision to pay dividends. Part 3 illustrates the research sample, provides methodology and identifies the basic measures used in the selected tabular model. Section 4 summarizes the empirical results and results of the certainty tests, while section 5 presents general results and conclusions with the limitations of the study and the problem of further research.

2. THEORETICAL BACKGROUND

There are many factors affecting the dividend policy that have been studied, including the factors inside and outside the company, the article will only mention and analyze some factors that are considered likely to affect the dividend policy of listed transportation construction companies in Vietnam after consulting some financial experts.

*** Profit**

Profit is the factor that was mentioned in many studies such as Basnet (2007), Oskar (2007), Truong (2015), these studies study company profit under different perspectives. This could be the profit made this year, the profit accumulated to this year and allowed to be distributed, or earning per share. The relatively consistent result was found is that firms' profits and dividend policies are positively related, meaning that firms will pay more to shareholders when they earn more money. However, we still need specific research aiming at the groups of businesses whose profitability fluctuates significantly due to unstable business characteristics as transportation construction firms to confirm whether profitability affects the dividend decision.[2,8,12]

*** Size**

Smith and Watts (1992) studied the effect of firm size on the dividend policy of firms in the US in reports from 1965 to 1985 at the Conference Board that are reported every four years. The results show a positive relationship between these two factors. However, with the research of Ahmend (2008), there is a difference between the business groups when classified by size, more specifically, this relationship is not consistent for different groups of businesses. The study found a positive relationship in the small group of firms, but found the opposite relationship in the large group. Fama and French (2001) studied joint stock companies in the US from the 1980s to the 1990s also found a positive relationship and Thanatawee (2012) found inconsistent relationships in studies of groups of company in Thailand. That means size and dividend policy have different relationships for different groups of firms. [10,1,6,11]

*** PER**

PER is one of the factors appearing in many studies on factors influencing dividend policy, positive relationship between market expectations and dividend policy was found, meaning that when the market has confidence in the company, the higher of PER become, the more dividend the company maintains for investors. However, paper firms in India in Fama and French (2001) study showed a negative relationship, meaning that when market expectations fell, they increased their dividend payments. It shows that market expectation is also a factor with many differences. [6]

*** Revenue and Profit Margin**

Revenue and profit margin are the factors mentioned by many researchers such as Basnet (2008), but this study found a strong relationship between revenue and firms. As for Truong's (2019) research, it showed a reverse relationship, while Smith (1992) found a positive relationship. That is explained because revenue is not only one factor affecting dividend policy, specific situations in each group of businesses with different revenue and profit characteristics, in different periods will affect dividend policy. The difference between revenue and profit margin is that the profit margin reflects the profitability on the revenue of the business, this can be considered a combination of the profit and revenue of the business. [2,12,10]

*** Return on Asset, Return on Equity, Return on Investment**

These are factors that are of great interest to many studies such as Fama and French (2001), De Anglo (2006) or as Denis's (2008), those studies have found a positive relationship between policies. corporate dividends and profitability, namely ROE, ROA or ROIC. However, not all studies in research groups have found a positive relationship that Shulian (2005) only found a positive relationship of dividend policy with ROIC of firms with low ROIC and When studying data of enterprises with high ROIC, the relationship is positive. That means, businesses can have low profitability but still strive to pay high dividend policy with the aim of seeking more confidence from investors for future opportunities, there is another explanation for this contradiction is that businesses have gradually come to the point of bankruptcy and run out of investment opportunities and profit, so they will release capital contributions for investors. The assumptions made will be different for different groups of businesses in different markets. [6,4,5]

3. DATA AND HYPOTHESES

In Vietnam market, the number of listed Transportation Construction companies is much less than other fields. The enterprises that formerly came from the construction of transportaion, after the equitization process have gradually shifted their business to other fields, only 20 enterprises are still attached to the transportation field. These enterprises represent the industry in terms of listed companies. Based on the data obtained from 20 enterprises in the sample in the Stock Market during the period 2016-2019, the paper estimates the regression model with panel data through the REM (Random Effects Model) and The FEM (Fixed Effects Model) model. Then use the Hausman Test to choose a suitable model.

Table 1. Hypotheses

Hypotheses	
H1	There is a statistical significant relationship between dividend policy and the size
H2	There is a statistical significant relationship between dividend policy and EPS
H3	There is a statistical significant relationship between dividend policy and PER
H4	There is a statistical significant relationship between dividend policy and Profit margin (ProMar)
H5	There is a statistical significant relationship between dividend policy and ROIC
H6	There is a statistical significant relationship between dividend policy and Current rate (CurR)

$$\text{The model: } Y_{it} = \alpha + \beta_k X_{kit} + u_{it}$$

where:

Y_{it} : Dependent Variable at time t

X_{kit} : Independent variable k at time t

u_{it} : Random error term at time t .

Table 2. Variable

Dependent variable	
DPR	DPR is calculated by dividing dividends by realized profits this year
Independent variables	
LnSize:	Natural Logarithmic of Total Assets
ProMar:	Profit margin is calculated by Profit divided by total revenue
EPS:	Earning (allowed to be distributed) divided by the number of share
PER:	Price divided by Earnings rate
ROIC:	Return divided by investment capital
CurR:	Current rate is calculated by dividing current asset by current debt

4. RESULT

Using the software Stata for the panel data set gave the following results:

Table 3. Summarize of the variables

Cu	Obs	Mean	Std. Dev	Min	Max
LnSize	80	20.82453	1.088237	19.50571	22.7845
ProMar	80	.0233442	.0439057	-.0745792	.1113594
EPS	80	1334.414	520.0719	10.202	2119.057
PrePER	80	10.19739	8.371683	2.3	36.63
F-ROIC	80	.0896775	.0991887	.0088164	.4498348
CurR	80	1.18	.2151955	.54	1.71
DPR	80	76.86957	38.2828	0	155

The maximum and minimum values of some variables have a relatively significant difference from the mean value. For example, the earning per share of the firm, there are observations that the firm has very large or extremely low returns during the year of the study due to abnormal activities, leading to affects significantly on average weight. Dividend Payout Ratio in the sample has years that exceeded 100%, meaning that the enterprise must use the profit of the previous years to pay dividend

Pwcorr LnSize ProMar EPS2 PrePER FROIC CurR DPR, sig

Table 4. Pairwise Correlation results

	LnSize	ProMar	EPS	PrePER	F-ROIC	CurR	DPR
LnSize	1.000						
ProMar	0.4990	1.000					

		0.0800					
EPS	0.1770	0.4361	1.000				
	0.0489	0.1040					
PrePER	0.0539	0.1061	0.0115	1.000			
	0.6182	0.3250	0.9153				
F-ROIC	0.0193	0.0930	0.0336	-0.0813	1.000		
	0.8582	0.3890	0.7558	0.4515			
CurR	-0.1178	-0.1706	0.1064	-0.0381	0.2504	1.000	
	0.2742	0.1121	0.3238	0.7247	0.0686		
DPR	0.7009	0.7502	0.9645	-0.0344	0.0377	0.0619	1.000
	0.0115	0.0061	0.0330	0.0194	0.0166	0.0344	

The Sig value of all Independent Variables and Dependent Variables are smaller than 0.05, meaning that no Independent Variables should be eliminated from the model. The relationship between the Dependent Variables are consider to be suitable according to the Sig value

Table 5. Fixed effect Result

Fixed-effects (within) regression				Number of obs =		80
Group variable: MCK				Number of groups =		20
R-sq:	within	=	0.7852	Obs per group:	min	=
	between	=	0.6654		avg	=
	overall	=	0.7210		max	=
						4
						4.0
						4
				F(6,60)	=	121
Corr(u_i, Xb)	=	-0.225		Prob>F	=	0.324
DPR	Coef.	Std.Err.	t	P> t 	[95%conf.	Interval]
Lnsiz	9.582645	27.48376	0.69	0.039	-36.98752	74.98677
ProMar	130.473527	79.23298	1.64	0.016	-28.43435	288.8786
EPS	0.473635	.0032423	19.02	0.004	0.6735329	.0854256
PerPER	-2.84353	.2086453	-1.32	0.123	-.6854324	.1412486
F-ROIC	27.82625	64.3242	0.42	0.642	-102.6435	156.7857
CurR	-26.49736	18.03836	-1.49	0.193	-62.76421	9.965866
_cons	-383.4864	562.3392	-0.68	0.488	-1507.655	741.5453
sigma_u	35.927363					
sigma_e	36.048473					
rho	.49273623			fraction of variance due to u_i		

Table 6. Radom Effect Result

Random-effects (within) regression				Number of obs =		80
Group variable: MCK				Number of groups =		20
R-sq:	within	=	0.5852	Obs per group:	min	=
	between	=	0.6654		avg	=
	overall	=	0.6210		max	=
						4
						4.0
						4

Corr(u _i , X)		=	0 (assumed)	Wald chi2(6)		=	151.35
				Prob>chi2		=	0.000
DPR	Coef.		Std.Err.	Z	P> z	[95%conf.	Interval]
Lnsize	3.094645		3.88376	-0.92	0.023	-9.908752	4.989177
ProMar	69.902527		50.22398	1.40	0.026	-28.13435	167.8786
EPS	0.782935		.0033423	33.73	0.000	0.7395329	.0894256
PerPER	-.283053		.1686403	-1.66	0.098	-.6054324	.1512486
F-ROIC	24.82225		53.9842	0.46	0.646	-80.64357	130.7857
CurR	-26.16736		15.09636	-1.66	0.097	-57.77721	4.960566
_cons	68.54578		70.9992	0.97	0.332	-70.65565	207.5453
sigma_u	25.927363						
sigma_e	16.048473						
rho	.4000						fraction of variance due to u _i

The results of the Hausman Test show that, because p-value = 0.8191 > 0.05, that means we can not reject the Ho hypothesis with a significance level of 5%, concluding that there is no difference between FEM and REM are statistically significant, so it is more appropriate to use the REM model.

$$DPR = 68.54 + 3.094 LnSize + 69.902 ProMar + 0.78 EPS2$$

The variables in the model explain 66.54% of the variation in the dividend policy showed by the value of R-square.

The model support the statement that the Sizes have positive effects, the Profit (which is allowed to be distributed) and the Profit margin also has positive effects on the dividend policy. The study found no statistically significant relationships between the dividend policy and the remaining dependent variables.

5. CONCLUSION

Transportation construction businesses are mostly nascent and dividend decisions are still uncertain. The article analyzed the factors affecting the decision to pay dividends and found a number of factors affecting the decision to pay dividends. Based on the research results, the author makes some conclusions as follows:

Recommendation can be suppose to this group of businesses is that when small businesses have to use most of their profits to pay dividends in the situations of struggles, it will bring risks in the long term. Attracting investors comes with a great risk of running out of money for future projects. Therefore, businesses, especially small and new market entrants in transportation construction sector, should not follow a high dividend policy because the current context of the transportation construction industry in Vietnam is considered to lack of stability, due to the ongoing project delays, a lot of conflicts between the construction contractors and the State. So, businesses should save money to prevent risks rather than spend money on Dividend Payment. The cumulative profit per share of firms represents the accumulation in the past and present, when the cumulative profit per share decreases, firms should consider reducing the dividend ratio and even stop paying dividends. That makes a positive relationship between EPS and dividend ratio. Profit margin is also a criterion that affects the dividend ratio. When the profit on revenue of enterprises

are low, there is a sharp decline in dividend, leading to a decrease in the dividend ratio. However, the downside of continuously stopping dividend payments or lowering the dividend policy will make long-term investors lose confidence in the business. The use of a high or low dividend ratio also needs a certain balance of the level and intensity for businesses

The downside of the paper is that the sample is small, and further future studies are needed to clarify these issues.

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IMPACT OF EPS ON MARKET PRICES AND MARKET RATIOS IN TRANSPORTATION CONSTRUCTION COMPANIES IN VIETNAM

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Abstract: *The article attempts to examine the impact of EPS on stock price, PER and PBV in 22 companies that are categorized as Transportation Construction companies, listed on the Vietnamese stock exchange, during the period of 2015-2019. The article uses regression data panel to test hypotheses through Stata software. The positive relationship between EPS and stock price was found and EPS does not affect PBV and PER statistically significantly. Based on the research results, some suggestion was given for related parties.*

Keywords: *Earning per Share, Market Price, Price Earning Ratio and Price to Book Value*

1. INTRODUCTION

The Stocks of Transportation Construction companies were considered as Growth Stocks, but no longer. The decrease in the businesses' results of these companies is supposed to account for the change. It is necessary to diving into the related financial ratios as EPS, PER, PBV and Stock Price of these companies to examine and give out some suggestions.

Investing in equity stocks is one of the investments that have many potential risks but bring great opportunities for investors in return. A company would try to maximize the profit of its owner. If a company is established by many owners with a large number of shares, the return per one owner is lower than a company that produces few profits with only few owners. Therefore, to assess the profitability per one share of a company, EPS is used as a popular ratio because it indicates a company's ability to provide profits to its owners. EPS becomes an attractive tool for shareholders to measure a company's success in achieving returns on each stock invested.

EPS is supposed to be a suitable factor to assess stock's attractiveness. Rahardjo (2005) [4] found that expected EPS can affect an investor's confidence in an investment because EPS affects stock prices in the market, thereby indirectly affecting selling price of the stocks to earn capital gains. Besides, the greater the profit per shareholder, the more likely it is that the shareholders will be paid more dividends. Investors' behavior towards the stock is significantly influenced by accounting information and in particular it is influenced by EPS.

Warsono (2010) [9] mentioned the meaning of the market financial ratios in evaluating the company's situation. The quotient indicators mentioned are the commonly used PER and Price to Book Value (PER and PBV) as indicators.

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Price Earning Rate (PER), is calculated by dividing the stock price that the investor is willing to pay for stock and the companies' earn per each stock. A higher PER shows that investors have good expectations for the company's development in the future, investors are willing to pay high prices. Book value (PBV) reflects how much a stock is valued by the market. A high PBV shows that the more successful a company creates value for its shareholders. When a company achieves a high PBV, it makes the market more confident about the company's prospects, so investors will be interested in investing their capital in the company.

The subject of this study is transportation construction companies listed on the Vietnam Stock Exchange. This is a group of businesses of industrial features and there is very few research on these businesses even though they are the businesses who are important because of building foundation facilities for the economy.

Therefore, through this study, we will examine the effect of Earnings per Share on Stock Market Price and Marker Ratio. The period studied is from 2014 to 2019.

Based on the description of the background above, the hypotheses in the study are:

- 1) *H1: There is the effect of Earnings Per Share on Stock Market Prices*
- 2) *H2: There is an effect of Earnings Per Share on PER*
- 3) *H3: There is an effect of Earnings Per Share on PBV*

2. LITERATURE REVIEW

2.1 Effect of Earnings Per Share on Stock Market Prices

Sharma (2011) [5] analyzed the relationship between EPS and stock price, EPS is considered as a very important factor because when a company's income increases, it will increase its earnings. An increase in EPS encourages an increase in stock prices. Earnings per share are positively related to market price, that is, the higher earnings per share, the higher the market price.

Other studies that have also studied this relationship and also found a positive relationship are Talamati and Pangemanan (2015) [8], Shehzad and Ismail (2014) [6], Hunjra et al. (2014)[2]

2.2 Effect of Earnings Per Share on Price Earning Ratio

Radim Gottwald (2002) used PER to measure how investors evaluate a company's growth prospects in the future. Companies are expected to grow at a high rate of growth (meaning good prospects), often with a high PER. Conversely, companies that expect low growth will also have a low PER. The study was conducted by Chisti et al. (2016) [1], Sharma (2011) [5], Radim Gottwald (2002) [3] also showed a positive and significant effect of earnings per share on price earnings ratio.

2.3 Effect of Earnings Per Share on Price Earning Ratio on Price to Book Value

Book Value (PBV) indicates how much of a company's book value is the book value of a company's shares priced by the market. Shinta and Laksito (2014) [7] studied and found that firms with high income, the profit available to shareholders will also increase, would have higher PBV.

3. DATA AND METHODOLOGY

3.1 Variables with Symbols, Calculations and Expectations

* Earning per share is obtained as follows:

$$\text{EPS} = \frac{\text{Net Profit}}{\text{Number of Share}}$$

* Stock market prices (market prices) can be obtained by:

$$\text{MP} = \frac{(\text{Highest Market Price} + \text{Lowest Market Price})}{2}$$

* Price Earning Ratio

$$\text{PER} = \frac{\text{Share price}}{\text{Earnings per share}}$$

* PBV is calculated by the formula:

$$\text{PBV} = \frac{\text{Stock Price}}{\text{Stock Book Value}}$$

* Variables with Symbols and Expectations are presented as follow:

Variable	Symbol	Expectation
<i>Earning Per Share</i>	EPS	+
<i>Price Earning Ratio</i>	PER	+
<i>Price Book Value</i>	PBV	+

Table 1. Variables with Symbols and Expectations

3.2. Data Sources

This study uses data sources derived from the company's annual report issued by the Vietnam Stock Exchange

The types of data needed:

- a. Financial reports obtained from Vietnam Stock Exchange
- b. Annual stock prices from 2015-2019, the Financial Ratios is used to obtain financial ratio data which includes EPS, PER and PBV obtained on an annual basis

3.3. Analysis methods

The analysis technique used in this study is quantitative data analysis to estimate the influence of independent variable on the dependent variable. After selecting a sample, making a model, determining the variables used in the study and making a test hypotheses, panel data regression analysis methods were used to test the hypotheses. Data processing techniques are carried out using computer stata programs.

$$\text{The regression model is: } X_{it} = \beta_0 + \beta_1 \text{EPS}_{it} + \epsilon_{it}$$

Where:

X_{it} is for Stock Price, PER and PBV of each company in the year t

EPS_{it} is the EPS of each company in the year t

4. RESULTS AND DISCUSSION

4.1. Overview about the mentioned ratios

The author separates the enterprises under study into two groups, divided by EPS value. Group 1 is the group of businesses with lower EPS and group 2 is the group with higher EPS. The EPS values and financial ratios are shown in the following charts:

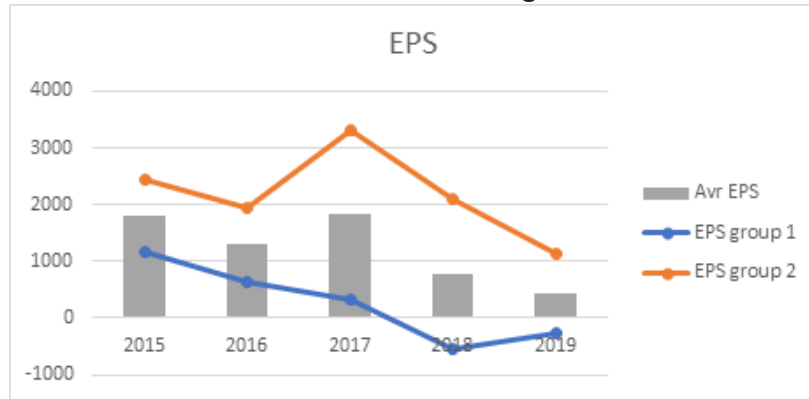


Chart 1: EPS

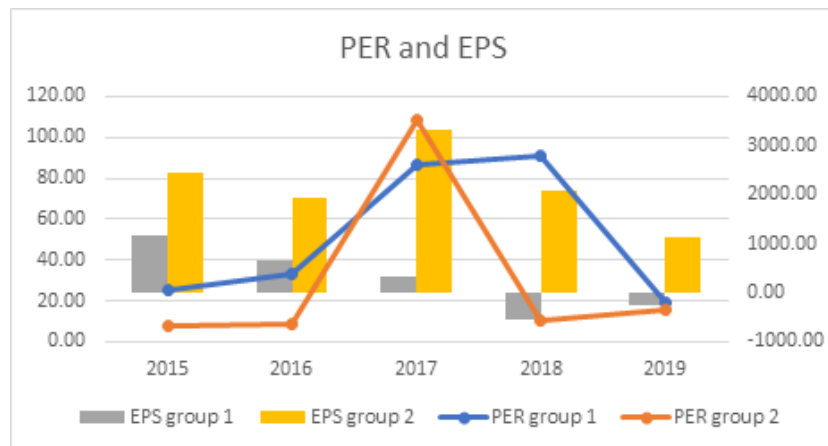


Chart 2: EPS and PER

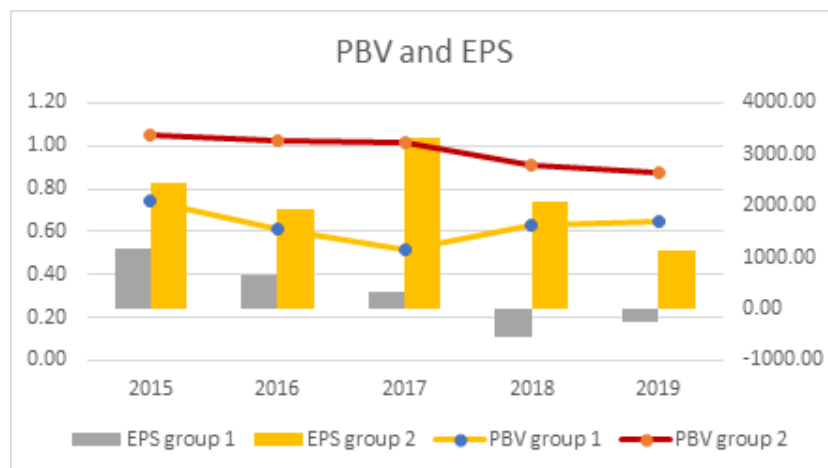


Chart 3: EPS and PBV

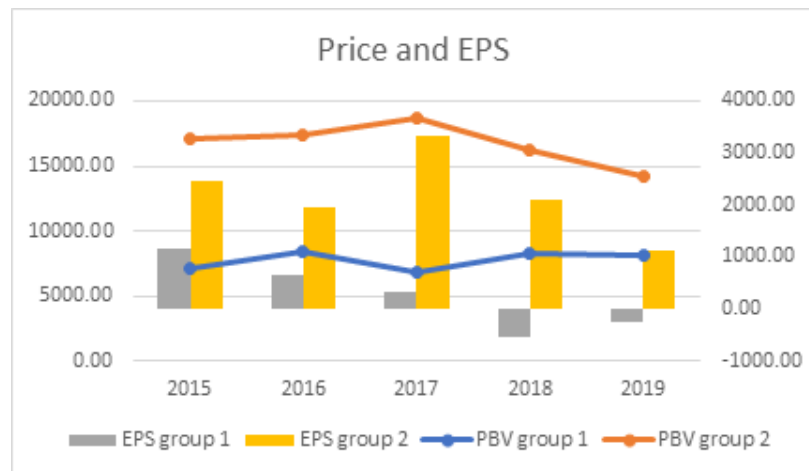


Chart 4. Price and EPS

EPS of companies with low EPS declined steadily over the years, showing a significant decrease in EPS of these companies. However, the fluctuation in EPS of the group with higher EPS is strongest in 2017 and lowest in 2019 and the volatility over the years can be considered erratic.

Trend of fluctuation of Market Expectation shows that the average PER of firms with low EPS is mostly higher than the average PER of the group of high firms. This is explained because if the enterprises do not have a sharp decrease in the selling price of shares in the situation where the company has a decrease in revenue, the PER will increase. Thus, it can be seen that this is the situation where firms do not suffer a decline in stock prices despite a sharp decline in EPS, this is not a situation where firms are assessed as better prospects, but the confidence of investors is not reduced too much due to EPS.

The variation of PBV compared to EPS over the years shows a significant difference between the 2 groups, with the group of higher EPS, the PBV is always higher. However, when comparing these ratios over the years, It shows that the uptrend is not too much even when the EPS of enterprises increases or decreases. From that, it can be said that the PBV of the firms in the sample does not change much, although the higher the EPS, the better the PBV.

The relationship between stock price and EPS shows a significant difference between high EPS firms and low EPS firms, especially the price movement trend of firms with high EPS is almost always associated with stock price volatility, companies with low EPS also have a partial resemblance to the variation in EPS and stock prices.

4.2. The results of the econometric model test

After using the random effects and fixed effects models, the Hausman Test was used to evaluate the suitability of the model, the Hausman test results of all three models gave $p\text{-value} > 0.05$, that means there is no evidence to reject the hypothesis H_0 at the 5% level of significance, concluding that there is no statistically significant difference between FEM and REM, so the REM model will be more appropriate. The model results are shown in the following tables:

Table 2. Result of relationship between EPS and PER

Random-effects (within) regression	Number of obs	=	108
Group variable: MCK	Number of groups	=	22
R-sq: within = 0.6514	Obs per group:	min =	4
Between = 0.8617		avg =	4.9
overall = 0.7215		max =	5
	Wald chi2(5)	=	0.46
corr(u_i, Xb) = 0 (assumed)	Prob > chi2	=	0.0000

PER	Coef.	Std. Err.	Z	P> z	[95% Conf. Interval]	
EPS	-.0061346	0.0056454	-0.88	0.403	-.0168765	0.0066549
_cons	46.42357	20.65865	2.56	0.000	7.768776	88.34426
sigma_u	60.053357	(fraction of variance due to u_i)				
sigma_e	142.46356					
rho	0.15634536					

Table 3. Result of relationship between EPS and Price

Random-effects (within) regression	Number of obs	=	108
Group variable: MCK	Number of groups	=	22
R-sq: within = 0.5514	Obs per group:	min =	4
Between = 0.6617		avg =	4.9
overall = 0.5721		max =	5
	Wald chi2(5)	=	0.234

corr(u_i, Xb)	= 0 (assumed)		Prob > chi2		=	0.0000
Price	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
EPS	1.253253	0.2367543	5.64	0.002	0.80293822	1.7063221
_cons	10822.19	1654.583	6.35	0.000	7609.622	14097.23
sigma_u	7206.9232	(fraction of variance due to u_i)				
sigma_e	4722.9123					
rho	0.689125285					

Table 4. Result of relationship between EPS and PBV

Random -effects (within) regression	Number of obs	=	109
Group variable: MCK	Number of groups	=	22
R-sq: within = 0.6574	Obs per group:	min =	4
Between = 0.6917		avg =	4.9
overall = 0.6856		max =	5
	Wald chi2(5)	=	0.128
corr(u_i, Xb) = 0 (assumed)	Prob > chi2	=	0.0000

PBV	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
EPS	.0000654	.0000643	0.66	0.518	-.000223	.0000321
_cons	.7764356	.0997543	7.76	0.000	.5838734	.9864544
sigma_u	.42657726	(fraction of variance due to u_i)				
sigma_e	.33162927					
rho	.61247625					

4.3. Research results

The study results show a statistically significant relationship between EPS and stock price. The other two financial ratios, PER and PBV, do not have a significant relationship with EPS.

$$X_{it} = \beta_0 + \beta_1 \text{EPS}_{it} + \epsilon_{it} \text{ Becomes: Price} = 10\,822.19 + 1.253 \text{ EPS}$$

Based on the common effect regression model above, the coefficient of determination (adjusted R^2) is 0.5721. This shows that the dependent variable (earning per share) that can be explained by variations in the independent variable (market price, price earnings ratio and price book ratio) is 57.21% and the rest is explained by variations in other variables which is not included in the regression model.

5. DISCUSSION AND CONCLUSION

The positive relationship between EPS and stock price shows that an increase in a firm's EPS results in a share's price rise and vice versa. This is a common relationship in the stock market and transportation construction firms are not in the exception group. In some markets, investors can rely on other financial information much rather than annual EPS because the transportation construction industry typically does not have a stable profit stream, which depends on how and when the project or each part of the project can be completed. However, that particularity is not unique enough to make the difference between stock prices and EPS, making them separate from each other. The relationship was found to be statistically significant

EPS does not affect PBV and PER statistically significantly and the value is kept fairly steady as the graph shows, meaning that the group of firms in question has gained some credit of the market. This can be said to be a positive point of transportation construction enterprises when they can partly make investors still maintain their belief of the business.

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CENTRAL BANK DIGITAL CURRENCY – THE ROADMAP FROM THEORY TO PRACTICE

PhD. Ngo Duc Tien¹

Abstract: Central bank digital currency is now receiving more attention than ever before while the Covid-19 pandemic all over the world has been pushing many countries to digitalize the economy. Moreover, the development of information technology and its adoption to financial industry have motivated central banks and scholars to focus on research to create accessible central bank digital currency to broad public. The main purposes of this paper are introducing the definition of central bank digital currency, characteristics and its benefits and risks. Basing on the knowledge provided, author would like to give various implications on policies to publish central bank digital currency in Vietnam.

Keywords: central bank digital currency, digital currency, crypto, digital currency policy, benefits of central bank digital currency, risks of central bank digital currency.

1. INTRODUCTION

The concept of a central bank digital currency (CBCD) was introduced over 30 years ago (Tobin, 1987). However, the attitudes of central banks to CBCDs have just changed dramatically over the past two years. Due to the spread of corona virus all over the world, social distancing or lockdown has happened in many countries, leading to public awareness of virus transmission via cash, then creating the need of a new innovative payment method between governments to people. Therefore, many countries are now speeding up the shift toward digital payment, and may give a further impetus to CBDCs. As of late 2019, central banks representing a fifth of the world's population reported that they were likely to issue CBDCs very soon (Boar et al, 2020). Similarly, the share of central banks (by number) that are likely to issue a retail CBDC over the medium term (in one to six years) doubled in 2019, to 20% (Auer, Cornelli, & Frost, 2020). Now, CBDC is currently discussed by numerous central bankers and it is no longer just an idea of academics or economic theory. It is now a concept that is being researched by research centers of several central banks.

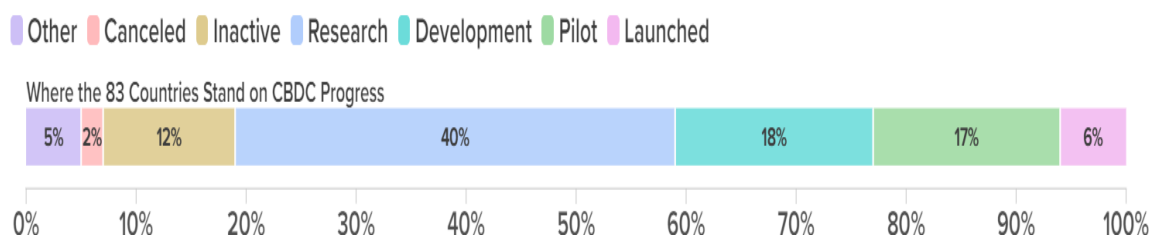


Figure 1: Race for the future money

Source: Atlantic Council (2021)

¹ Academy of Finance

Thanks to the development of cryptographic and distributed ledger techniques (Narayana et al, 2016), the widespread usage of digital currencies is reliably capable. The economic, legal, and technological factors relating to the CBDC issuances have been analyzed and summarized informatively (i.e. Barrdear & Kumhof, 2016; Cecchetti & Schoenholtz, 2018; Niepelt, 2020). Besides, several studies concentrated on how central banks should create money and whether CBDCs are desirable in that context (i.e. Keister & Sanches, 2019; Jackson & Pennacchi, 2019; Armelius et al, 2020). Another area is the systemic implications of CBDCs and how to cope with them (see Brunnermeier & Niepelt, 2019; Fernández-Villaverde et al, 2020; Kwon et al, 2020). There is also work on policy design frameworks (Davoodalhosseini & Rivadeneyra, 2020; Allen et al, 2020), their implications for cross-country payments (Milkau, 2019), implications for the international role of currencies (Ferrari et al, 2020). Being a special form of base money, CBDCs may have not only merits but also dangers to financial markets. Lacking of fully fundamental knowledge on these perspectives, no major jurisdiction has decided to issue a retail CBDC, and many open questions remain.

The problem this paper aims to deal with: what is CBDC? Which are its characteristics and impacts? How do central banks in several countries implementing their experiences and plans to create CBDCs? Then, the author would like to suggest policy framework for CBDC of Vietnam, especially specializing on which strategies being suitable for the Vietnamese technology infrastructure and nature of economy.

The rest of the paper is organized as follows. Section 2 describes the definition and characteristics of CBDC. Section 3 conducts empirical analysis on benefits and risks of CBDC. Section 4 discusses implications for Vietnam on the way to create CBC. Finally, the conclusion of the research is delivered in section 5.

2. FUNDAMENTAL KNOWLEDGE ON CENTRAL BANK DIGITAL CURRENCY

Over the centuries, the human being has witnessed wave after wave of new means of payment emerging to meet societal demands. Coins, banknotes, cheques and credit cards were recorded as each innovative stage in the historical development of payment methods (Giannini, 2011). And now, CBDC may be a new form of payment method with national effect as well as worldwide effect. To define CBDC, several scholars provide different opinions about this new phenomenon. Starting from the report of Committee on Payments and Market Infrastructures published in 2015 (CPMI, 2015), digital currencies was defined electronic money, and not the liability of anyone with feature peer-to-peer exchange. Following Boar & Wehrli (2021), CBDC is defined as central bank-issued digital money denominated in the national unit of account, and it represents a liability of the central bank. Or, CBDC, also called digital fiat currencies, or digital base money, are a type of digital money issued by a government central bank for household and business use (Hajjar, 2021). As a digital liability of the central bank, wholesale CBDCs could become a new instrument for settlement between financial institutions, while retail (or general purpose) CBDCs would be a central bank liability accessible to all (Auer et al, 2020).

CBDC is proposed not to replace cash or bank deposits, however, they will co-exist. Hence, CBDC is additionally a mean of payment with virtual form. When implementing a proposal to label CBDC for all, not only financial intermediaries but also all households and firms will be allowed to open accounts at central banks to make electronic payments without the participant of commercial banks. Following the figure 1, CBDC is published monopolistically and transactions are carried out in a centralized payment system (Berentsen and Schär, 2018).

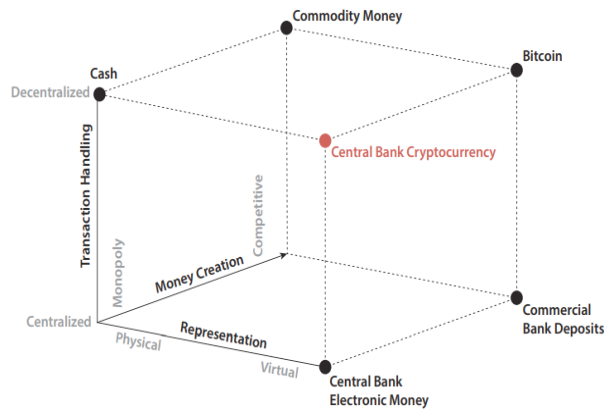


Figure 2: Control Structure of Currencies

Source: Berentsen and Schär (2018)

To show the uniqueness of CBDC, the author will outline the core characteristics concerning its form, accessibility, issuer and transfer mechanism, as mentioned below:

Form of CBDC: To get clearer taxonomy of CBDC forms, it is useful to put CBDCs in the context of other types of money. Following the venn-diagram of Bech and Garratt (2017), there are three forms of CBDCs (see Figure 3). CBDC forms are at the center of the money flower, dividing into 2 groups illustrated by the dark gray shaded area of diagram, namely token-based group and account-based group. The two forms in token-based group are distinguished by the access authority, one with widely available payment instrument used for retail transactions but not excluding broader use, other with access restricted for wholesale payment and settlement transactions. The third form is built with account-based version, envisaging the central bank providing general purpose accounts to all agents in the jurisdiction.

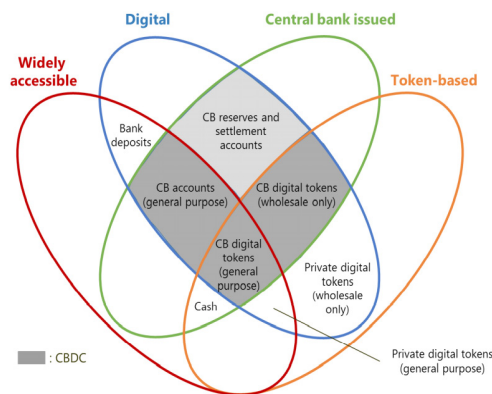


Figure 3: Four key properties of money¹

Source: Bech and Garratt (2017)

¹ Four key properties of money are issuer (central bank or not); form (digital or physical); accessibility (widely or restricted) and technology (account-based or token-based). CB = central bank, CBDC = central bank digital currency (excluding digital central bank money already available to monetary counterparties and some non-monetary counterparties). Private digital tokens (general purpose) include crypto-assets and currencies, such as bitcoin and ethereum. Bank deposits are not widely accessible in all jurisdictions. For examples of how other forms of money may fit in the diagram, please refer to the source (CPMI, 2018)

Accessibility of CBDC: Normally, each legal mean of payment issued by central bank, like cash, is absolutely accessible to everyone. Therefore, CBDC, as a type of national legal payment method, will need to bring accessibility feature to broad. According to this spirit, Bjerg (2017) attaches universally accessible, i.e. easy to obtain and use, to the key factor of new concept of CBDC. Besides, accessing to digital central bank money limited to central bank operating hours, traditionally less than 24 hours a day and usually five days a week. But the accessibility of CBDCs could occur 24 hours a day and seven days a week like people having their cash with them all the time.

Who issue CBDC? Central bank of country will be the institute in charge of issuing CBDC. CBDC issuance and design are sovereign decisions to be made by each jurisdiction. The electronic money like bitcoin, ethereum and etc issued by private institutes in order to maximize their own profits while CBDC will be a tool for providing social welfare. Hence, CBDC payments should be at very low or no cost to end users, who should also face minimal requirements for technological investment (Bank for International Settlements, 2020).

How to transfer CBDC? With cash, people can conduct the transferring on a peer-to-peer basis. As a method of payment in each transaction like cash, the CBDC of a nation need to be transferred internally and externally. For transferring domestically, CBDC would require an underlying system comprising the central bank, operators, participating payment service providers and banks. A potential alternative framework under which central banks could engage with the rise of digital currencies would be for private sector payment service providers to issue liabilities matched by funds held at the central bank. For multi-currency cross border transferring system, it is possible to interlink CBDCs by the cooperation between central banks. This deeper integration allows for potentially more operational functionality and efficiency but increases the governance and control hurdles (like wider access might allow more efficient settlement but increases other risks). To summarize, CBDC may be transferred either on a peer-to-peer basis or through an intermediary, which could be the central bank, a commercial bank or a third-party agent.

3. THE BENEFIT AND RISK OF CENTRAL BANK DIGITAL CURRENCY

Over the last four years, the share of central banks actively engaging in some form of CBDC work grew by about one third and now stands at 86% (Boar & Wehrli, 2021). A various number of positive impacts of CBDCs are motivating central banks' interest in CBDCs. However, as two sides of a coin, each country can take not only advantages but also disadvantages from CBDCs. In this paper, the author would like to analysis on benefits and risks of CBDCs which can give a balancing adjustment on the development of CBDCs.

3.1. Benefits of central bank digital currency

Efficient retail payments

CBDC creates a range of benefits on retail payments such as convenience, efficiency, stability and accessibility. While electronic payments provided by commercial banks such as mobile banking, internet banking, etc are dominant in payment markets with requirements to clients, CBDC will be a good solution to clients who cannot qualify the requirement of electronic payment of banks. Then it will lead to motivate financial inclusion dramatically, especially in emerging countries like Vietnam, Laos, Campuchia and so on. Moreover, people can use CBDCs conveniently and efficiently because they only need a token or a cell phone to make their transactions instead of wallets with full of cash

or fast exchange money when on broad trips, no need to find exchanging office or banks to support them. Several perspectives are strongly considered to strengthen the case of CBDC to support efficient retail payments: (i) vanishing demand for banknotes; (ii) unsatisfactory access of relevant shares of households to commercial banking system, which can occur both in least-developed countries (with a generally underdeveloped banking system) and countries with a relatively high-income disparity; (iii) an unstable or overly concentrated retail payment infrastructure.

Overcome use of banknotes for illicit payment and store of value

With the three forms of CBDCs (mentioned in part 2), when people own the CBDCs, central banks will have detail information on their asset and be easier to find out illegal money as well as prevent money laundry. However, this advantage of CBDC would not apply if CBDC circulates as anonymous token money even for high amounts.

Strengthen monetary policy

First, CBDC may contribute to the strength of monetary policy by allowing overcoming the zero-lower bound by imposing negative interest rate on it. Dyson and Hodgson (2016) predicted that the interest rate would be pushed below the zero-lower bound (ZLB) when the digital cash replaced the physical cash totally. They explained their prediction basing on the opinion of the power of CBDC on allowing for strong monetary stimulus to help the country deal with a sharp recession or financial crisis. This could not only avoid recession, unemployment, and/or deflation but also issuing non-standard monetary policy having more negative side effects than negative interest rate policies. Second, interest on CBDC provides an additional monetary policy instrument. Barrdear and Kumhof (2016) who find that “*a CBDC regime can contribute to the stabilization of the business cycle, by giving policymakers access to a second policy instrument that controls either the quantity or the price of CBDC in a countercyclical fashion. This second policy instrument becomes especially effective in response to shocks to private money demand and private money creation...*” Third, thanks to CBDC, the central banks can provide helicopter money. Dyson and Hodgson (2016) argued that central bank could achieve the target of price stability of currency by using helicopter drops to increase aggregate.

Sovereign money related

First, CBDC support central bank to improve financial stability and reduce moral hazard by downscaling banks. Huber (1999), one of the key German supporters of “sovereign money”, summarizes the sovereign money proposal as follows: “*The sovereign money proposal says: Give the central bank unimpaired full control of the total money supply on the legal basis of a general prerogative of money creation*”. Secondly, seigniorage income will be redirected to state (and citizens). Sovereign money supporters have argued that CBDC can recapture a portion of seigniorage, also if physical cash declines. Mayer and Huber (2014) give much prominence to the assumed fiscal advantages of sovereign money. Obviously, with the current low levels of interest rates, and the outlook on future interest rates as it is priced in yield curves, this argument has become rather irrelevant for the time being.

3.2. Risks of central bank digital currency

Threat to privacy of consumer

If CBDC replaced the cash completely, the central bank would control almost all transaction in a currency and have all the information of how deposits and savings kept by citizens (Lacalle,

2021). In fact, to the right of lawful, the use of money (a public good to which equal access is a human right) and how it is saved, sent, spent and secured, should be as free as possible and it should be secret of each citizen. A central bank that controls all transactions and how savings are kept is also able to violate the private rights of citizens, and put citizens in danger if the politic crisis happens with unsafe social life.

Technology risk

Launching a CBDC would transfer substantial technology risks to the public sector and ultimately taxpayers, who would bear the brunt of fast moving and often experimental technologies. For a CBDC to exist, someone is selling some newfangled technology to central banks. This introduces the often-overlooked operating vulnerability of supply chain and vendor risk, let alone the potentially insidious prospect of regrets of consumers or technological obsolescence. Protecting the public provenance of money and monetary oversight does not require central banks to become retail banks or, worse yet, technology service providers with massive stores of data recreating the very “honeypot” databases that attract illegal organizations.

Besides, there is no question the public sector must continue to innovate and evolve their digital transformation agenda. Keeping up with the central bank Jones’ and jumping onto the CBDC bandwagon transitions more risks to the public sector, which already labors under challenges with core infrastructure upgrades, than the potential rewards a CBDC warrants. As the risk management adage goes, complex systems fail in complex ways. Transitioning a rapidly evolving blockchain-based business model to the public sector for something as fundamentally critical as money and monetary oversight negates the fact that most value-added money in circulation today (M2) benefits from a robust banking, payments and technology landscape - all operating under the purview and global coordination of central banks, who are the guardians of the macroprudential framework.

Disruption of free markets

A vibrant and competitive economy produces growth through the creative destructive process. Over the maiden decade of cryptocurrencies, digital assets and public blockchains (now in their third generation), entrepreneurs have built a \$2 trillion dollar sector. This journey has been rife with risks, failures, lessons learned, and, critically, growing regulatory understanding and clarity on how to responsibly harness these foundational innovations. The free market is where these risks (and those outlined in this article) should remain. Indeed, the key is to espouse and practice activity-based, technology neutral regulations and, vitally, to regulate the economic behavior of digital assets and not take a catch all approach - in short not all crypto is created equal. If it behaves like a security, it probably is. If it behaves like a currency or payment system, it should be afforded the benefits of “digital legal tender” or conformity with well-laid money transmission, e-money, financial markets infrastructure and prudential rules.

Regulate the activity not the technology

Most competitive regulators and banks for that matter, acknowledge the need to regulate the financial activity and not the technology. Notwithstanding the void of an industrial policy in the U.S. and other countries on how to harness exponential technologies such as blockchain, artificial intelligence and quantum computing, among others, there is a tendency among regulators to want to bar crypto-assets and blockchain-based payment systems. Ironically, these very technologies may represent the most material upgrade to financial inclusion, innovation and integrity in 50

years - the sum of this translates into potential exponential gains in financial crime compliance and security as well, through the collective witness of public financial ledgers on the internet.

4. IMPLICATIONS ON POLICY TO PUBLISH CENTRAL BANK DIGITAL CURRENCY IN VIETNAM

In Decision No. 942/QĐ-TTg issued by the Prime Minister on 15th June 2021 for approving strategy for development of e-government towards digital government for 2021 – 2025 with orientations towards 2030, the Prime Minister assigned the State Bank of Vietnam to research on, develop and pilot the use of digital currency based on blockchain technology. This Decision is considered as a sound guidance on creating the fundamental base of CBDC in Vietnam. However, the definition of digital currency is still lacking in the legal documents of Vietnam. Furthermore, following Dispatch no. 5747/NHNN-PC on 21 July 2017, virtual currency is not recognized as a mean of legal payment. To develop CBDC in Vietnam, it will be a long roadmap from theory to practice. Following my opinion, the research on Vietnamese CBDC should be built on three main pillars, including legal framework, technology and ecosystem of adoption. More details of these pillars will be delivered as below:

4.1. Pillar 1: Legal framework

A robust and unambiguous legal framework is an essential prerequisite for any central bank issuing a CBDC. Therefore, the first step should be conducted by State Bank of Vietnam is establishing a legal authority to issue CBDC. This authority will be in charge of building the basic legal documents to identify the core features of CBDC, shape the legal architectures of CBDC and then promulgate national law on CBDC issuance and management.

Identify the core features of CBDC: The first question to CBDC authority is what Vietnamese government and citizens may expect to the national digital money which can be used daily. The answer to this question will be concrete of the special features of Vietnamese CBDC, differentiating it to other CBDCs issued by other countries.

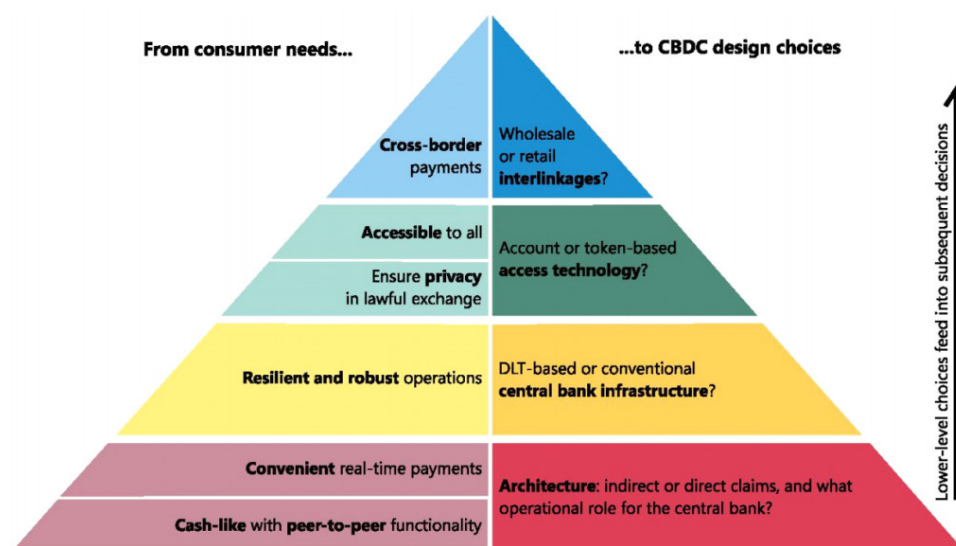


Figure 4: How to identifying the features of CBDC

Source: Auer and Böhme (2020)

The CBDC pyramid shows the needs of consumer on the left and the multiple choices to design suitable features of CBDC on the right. The consumer needs can be set out via a national

survey to help the government know how their CBDC can be useful to their citizens. Honestly, if CBDC was issued but it did not fit with the needs of consumer, it would be soon forgotten. The pyramid’s right-hand side lays out the associated trade-off –forming a hierarchy in which the lower layers represent design choices that feed into subsequent, higher-level decisions.

Shape the legal architectures of CBDC: Among three main duties of CBDC authority, shaping the legal architectures of CBDC is the most important because of its effecting on the way to issue and manage CBDC. The technical architecture of a CBDC is defined by the role of the components of the distributed record-keeping system, their communication relations, and the question who is in control of each component (Auer and Böhme, June 2021).

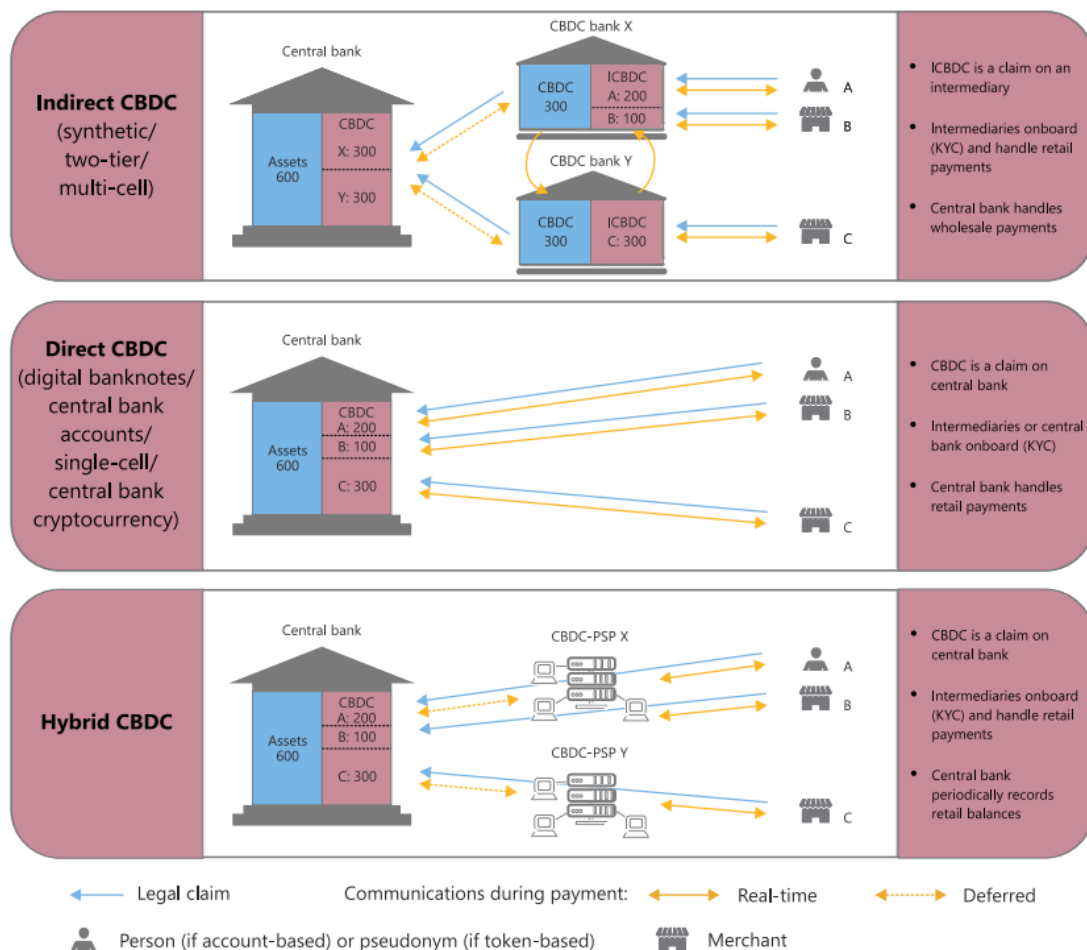


Figure 5: An overview of potential retail CBDC architectures

Source: Auer and Böhme (2020)

The architecture of Vietnamese CBDC can be designed as one of three models above. The similar factor of three architectures is the unique role of the central bank on issuing CBDC. In the indirect CBDC architecture (top panel), this is done indirectly, and an ICBDC in the hands of consumers represents a claim on an intermediary. In the other two architectures, consumers have a direct claim on the central bank. In the direct CBDC model (centre panel), the central bank handles all payments in real time and thus keeps a record of all retail holdings. The hybrid CBDC model (bottom panel) is an intermediate solution providing for direct claims on the central bank while real-time payments are handled by intermediaries. In this architecture, the central bank retains

a copy of all retail CBDC holdings, allowing it to transfer holdings from one payment service provider to another in the event of a technical failure. All three architectures allow for either account- or token-based access.

Promulgate national law on CBDC issuance and management: The Law guiding the issuance and consumption of CBDC should be launched after the government establishes an appropriate concept of Vietnamese CBDC basing on the results of two functions above. The Law should mention fully about the way of issuance, usage, transfer and violation cases relating to CBDC which should be banned.

4.2. Pilar 2: Technology

In Decision No. 942/QD-TTg, Vietnamese government chose to develop the BDC on Blockchain, one of various distributed ledger technologies (DLT). Blockchain is special kind of database which you can add information in as other database but you cannot delete information. The features of blockchain are cryptographically secure; permanent record and tamper proof; trustworthy; faster transactions, transparency, no central authority and no single point of failure. Figure 6 illustrates how elements of DLT could play a role in CBDC. The first DLT-related design choice hinges on whether the authority to update the database is centralized or delegated to a network of identified and vetted validators. DLT-based infrastructures often store data multiple times and in physically separate locations. In many DLT-based systems, the ledger is jointly managed by different entities in a decentralized manner and without such a top node. Consequently, each update of the ledger has to be harmonized between the nodes of all entities (often using algorithms known as “consensus mechanisms”). This typically involves broadcasting and awaiting replies on multiple messages before a transaction can be added to the ledger with finality. DLT could be used for the indirect CBDC architecture, as the number of transactions in many wholesale payment systems is comparable with that handled by existing blockchain platforms, as also demonstrated in several wholesale CBDC experiments conducted by central banks (Bech et al, 2020). Enterprise versions of DLT might also be feasible for the hybrid CBDC architecture.

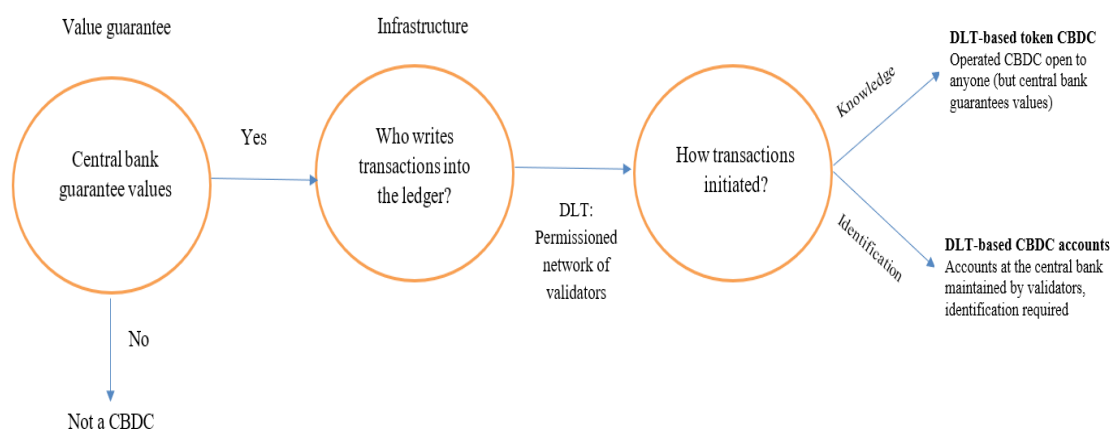


Figure 6: Central bank digital currency basing on blockchain technology

Source: Illustrated by author, following the originated study of Auer and Böhme (2020)

4.3. Pillar 3: Ecosystem of adoption

It is undeniable that the ecosystem of adoption is extremely crucial to assure the success of a currency. With a young population being eager to experience new technology wave, establishing ecosystem of CBDC adoption will not be too difficult in Vietnam. The successful ecosystem of digital wallets in Vietnam will be a good phenomenon referencing for the State Bank of Vietnam. From my perspective, the ecosystem of Vietnamese CBDC should consist of seven elements, namely digital currency platform, financial market, good and service market, citizens' expectation, domestic banking system, fintech companies and correspondent State Banks network. The first five elements are the basic ones which assure the existence of Vietnamese CBDC. The last two elements are the extensions which will contribute to maximize the value of Vietnamese CBDC as well as make it more familiar to users thanks to the on-going development of fintech companies.

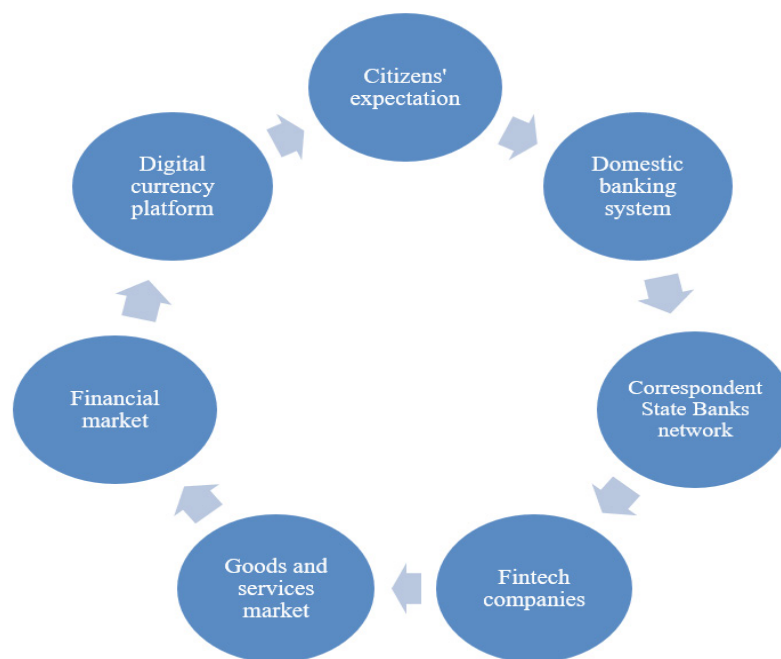


Figure 7: The ecosystem of CBDC adoption

Source: By author

5. CONCLUSION

The year 2020 and 2021 have seen the official launches of CBDCs around the world, and it is likely that more will be rolled out in the following years. Most central banks are now exploring the case for CBDCs in some way. Yet despite these developments, a widespread roll out of CBDCs still seems some way off. Interest and work on CBDCs are global, but motivations for their potential issuance are shaped by local circumstances. International policy coordination on CBDCs is set to intensify over the coming years as central banks thoroughly review the cross-border and economic implications of issuing digital currencies and technical design choices and operational complexities continue to present practical challenges. In Vietnam, the research on central bank digital currency has not started yet. We should prepare not only technological infrastructure but also human resources to conduct the plan to study and create the sample model for it. Vietnamese government needs to have a long-term strategy to CBDC because the existence of a new virtual

currency depends significantly on the acceptance of citizens. Even though the experiment of Vietnamese CBDC is successful, it cannot exist if most of Vietnamese people do not use it, like Vietnamese penny before.

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THE IMPACT OF COVID-19 ON VIETNAMESE FEMALE LABOUR: FROM SOCIAL ECONOMIC PERSPECTIVE AND POLICY RECOMMENDATIONS

PhD. Tran Phuong Thuy¹

Abstract: *The COVID-19 pandemic has halted exports, disrupted global supply chains, and severely affected Vietnamese female workers. Under the impact of COVID-19, a large number of Vietnamese female workers have to face unstable employment, loss or decrease in income, and risk falling into poverty. In addition, COVID-19 also increases the burden of housework, increases violence against women, and other psychological and mental health problems. On the basis of synthesizing data from reports of international organizations, the General Statistics Office of Vietnam and the author's synthesis, the article analyzes the impact of COVID-19 on Vietnamese female workers in 3 areas. Key aspects: economic (employment and income), health - health (access to health care; Issues related to psychological and mental health) and social - gender (concern) labor system; The burden of family work and child care; The risk of gender-based violence) thereby recommending social security policies to support female workers to overcome the COVID-19 pandemic and promote implementation of the sustainable development goals.*

Keywords: *COVID-19, female workers, impact*

1. RESEARCH OVERVIEW

Purpose of the study: 1. Analyze the impact of COVID-19 on Vietnamese female workers in 3 main aspects: economic, health-health, and social-gender. 2. The needs of female workers to respond to the COVID-19 epidemic. 3. Propose recommendations to businesses, brands, associations, unions, governments and development organizations to help workers recover and overcome the COVID-19 epidemic.

The information and data in this article are key findings from the Brief Report on COVID-19 and the Labor Market in Vietnam April 21, 2020, ILO; Enterprise and labor investigation report of National Economics University and HAGUE Institute for Social Research (Netherlands) 2019; Labor - Employment Survey Report, General Statistics Office (2019); National Survey on Violence Against Women in Vietnam (2019), Ministry of Labour, Invalids and Social Affairs, General Statistics Office and UNFPA; United Nations analysis of the social impact of the COVID-19 pandemic on Vietnam and strategic policy recommendations (August 2020); Impact of COVID-19 on Vietnamese textile and footwear workers Workers' perspective, CARE, TARGET, CNV and CDI, December 2020.

In which, the assessment study "Impact of COVID-19 on the lives of workers in the textile and footwear industry - Employee's perspective" was conducted in August 2020, surveying

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over 1,280 workers from 126 garment and footwear manufacturing enterprises in 5 provinces in Vietnam including Hai Phong, Hai Duong, Nghe An, Ho Chi Minh City and Dong Nai. Analytical framework of the study: Economic impact (employment and income) • Employment and income status during the COVID-19 period (6 months, from July 2, 2020) • Current employment and income in (August 2020) • New livelihood opportunities, demand for alternative skills Social and gender impacts • Labor relations, dialogue and bargaining in the workplace. • Burden of unpaid housework and childcare • Risks of gender-based violence • Access to social support programs with health and health impacts • Access to information, tools, and resources. COVID-19 prevention services • Health insurance and access to medical and health care services • Mental health-related issues, mental health rehabilitation, employment, income and life workers in the textile, leather and footwear industry (compared to the time before the epidemic).

2.CONTENT

2.1. Impact of COVID-19 on Vietnamese female workers

Economic impact

COVID-19 causes female workers to face unstable employment, loss or reduction of income, and extremely difficult life.

The survey results show that garment and footwear workers (most of them are female workers) are seriously affected in terms of employment and income in the first 8 months of 2020. Most workers have their working hours or working days reduced, only working 4-7 hours/day or 3-4 days/week. The time to cut working hours, the average working day is about 6 weeks, with some companies cutting continuously for about 10-30 weeks. Accordingly, workers are only paid basic salary by the hour or working day, not allowed to work overtime and also have their allowances cut. In addition, unpaid leave is also a common situation in garment and footwear enterprises in this period, the average time off is about 30-45 days, of which 4% is alternately unpaid leave. period of 1-3 months

**Table 1: Employment situation and income of garment and footwear workers
in the first 8 months of 2020**

Cut working hours/working days	86.9%
Cut allowances	71.3%
Basic salary by working day/hour	54.2%
Stop renewing labor contract	36.1%
Termination of labor contract	31.6%
Allowing employees to take unpaid rotational leave	29.0%

Source: Author compiled from CARE, TARGET, CNV and CDI's Report on Impacts of COVID-19 on Vietnamese textile and footwear workers, December 2020

As of August 2020, only about 11% of workers said their work has returned to normal compared to before the epidemic. The rest still work in moderation about 3-4 days/week or 6 days/week but do not work overtime, notably 17% of workers still take unpaid leave or switch to contract hourly work and seasonal workers, in which mainly female workers (75.2%). In addition

to the main job at the company, about 6.1% of workers who are working in the textile, garment and footwear company have to work another job to earn more income for the family (in which the percentage of women who do 1 extra job accounted for 72%).

The survey results show that the income in the first 6 months of 2020 of workers in the textile, leather and footwear industry has decreased sharply, an average decrease of 22-29% compared to 2019 in the group of workers working in leather textile factories. shoes due to no overtime. This reduction rate is much larger in the group who have quit their jobs, about 57-59% and their income will continue to decrease in the near future.

Table 2: Main difficulties of employees when their income is reduced

Difficulty buying food	80.9%
Difficulty buying essential goods	79.1%
Difficulty in paying electricity and water costs	63.8%
Difficulty in paying rent/accommodation costs	50.0%
Difficulty in paying for education costs	40.5%
Difficulty sending money home to family in the countryside	29.6%
Difficulty to repay	16.8%
Difficulty in paying medical expenses	14.4%

Source: Author compiled from CARE, TARGET, CNV and CDI's Report on Impacts of COVID-19 on Vietnamese textile and footwear workers, December 2020

According to the General Statistics Office, although by May 2021, COVID-19 in Vietnam is still complicated, but the average monthly income of salaried workers in the first quarter of 2021 reached VND 7.2 million, up 556 thousand dong from the previous quarter and an increase of 132,000 dong over the same period last year. However, male workers still have an average income 1.2 times higher than female workers (7.6 million VND compared to 6.6 million VND).

Social and gender impact

The COVID-19 pandemic has not only increased existing inequalities in the Vietnamese labor market, but also created new inequalities. Before the pandemic, there was almost no difference in the unemployment rate between men and women, but this situation has appeared since the third quarter of 2020. Job loss and reduced income made the life of female workers very difficult. difficulties, increasing cost burden and pressure on women. Up to 93% of workers are forced to cut costs due to reduced income (table 3)

In the context of cost-cutting, women often have to worry more about basic household expenses than men. According to the research results, 76% of female workers have to worry more about expenses to ensure basic needs for the family while only 63% of male workers share this. Especially for households of single female workers or migrants, this is really a burden as they are the sole earners and cannot rely on any other source of support. During the COVID-19 period, these unpaid jobs are on the rise when it comes to the very work that generates their income. Although the study results show that men also increase their share of these burdens with women, 46.7% of men did more housework than before the epidemic, but women still bear the main responsibility housework and childcare (73.3%) and are under more pressure for these jobs than before COVID-19 (table 4).

Table 3: Measures to cope with the decrease in income of garment and footwear workers

Pledge of property / valuables in the house	1,5%
Find a part-time job	4,8
Debt	7,5%
Returning home	10,3%
Seeking support	14,7%
Use money to save	49,3%
Cut costs	93,0%

During the COVID-19 period, schools are closed and teaching is online. This creates additional worries and responsibilities for women. According to the research results, only 21% of men said that they have to teach their children more than before the epidemic, and this task is assigned to women by default with 75.7% of female workers saying that they have to teach and teach. Learn more with your child. Even many female workers have to quit their jobs to stay at home to look after their children (16.2% female workers compared to 4.5% male workers). In addition, ensuring that their children have adequate education in the future is also one of the concerns of female workers, especially for single mothers, migrant workers with children, and those who do not have family support...

Table 4: Female workers are more dependent on income, doing housework and taking care of children during the outbreak of COVID-19

Ratio	Male	Female
Percentage of male and female workers who have quit their jobs in textiles and footwear and are dependent on their spouse for income	13,5%	34,7%
Percentage of male and female workers said they had to do more housework before the epidemic	46,7%	73,3%
The percentage of male and female workers said that they taught and looked after children more than before the epidemic	21,3%	75,7%

Source: Author compiled from CARE, TARGET, CNV and CDI's Report on Impacts of COVID-19 on Vietnamese textile and footwear workers, December 2020

Under the impact of COVID-19, female workers tend to accept informal work more than men. The survey results also show that, although the number of employed people decreased, the number of employed women increased compared to the same period last year. However, this increase in women is mainly due to an increase in the number of people in informal employment, which makes the proportion of women in informal employment increase more strongly than that of men (2.5 percentage points compared to 1.2 percentage points). Income dependence (dependence on husband or wife) and gender stereotypes about men's role as economic breadwinners also create burdens for women. In both cases, women are always under pressure to find a job to earn income, no matter what the job is, it is the burden of worry and pressure that makes them more vulnerable. at home and at work. This is the impact of the gender factor when participating in the labor market under the impact of the COVID-19 pandemic: women are easy to compromise and do not have many opportunities to choose jobs when entering the labor market compared to women. Men, they are forced to accept less stable jobs as long as they can ensure income for themselves and their families. That is why it is easier for female workers to find work after quitting their jobs, but they tend to accept informal work more than men.

In the context of COVID-19, gender-based violence tends to increase, in which women are at greater risk of violence than men.

According to the United Nations Population Fund: The pressures of disease, economy and life due to the impact of Covid-19 have led to cases of gender-based violence against women and girls tend to increase. Within the family, the rate of violence against women during the COVID-19 period is nearly twice as high (53.2%) as the rate of domestic violence against women in general over the past 12 months according to the national survey. in 2019 (31.6%). In the workplace, due to the economic impacts of COVID-19, employment and income pressures change the labor relationship between employees and employers, putting female workers in a vulnerable position.

Statistics from the Central Vietnam Women's Union also show that, during the time of social distancing due to the Covid-19 epidemic, the number of calls by women experiencing violence to the association's hotline has increased by 50%. The number of victims supported to rescue and receive into Binh Yen House increased by 80% over the same period last year. The National Child Protection Hotline 111 also receives more counseling calls or requests for intervention related to violence against children and women.

Medical and health impact

In the context of COVID-19, mental health problems among female workers tend to increase. Anxiety, confusion and insecurity are the main and lasting emotions among textile and footwear workers during the pandemic period (77.1%), notably, 3.6% of workers were diagnosed with these diseases. mental illness (depression, generalized anxiety, affective disorder) and need treatment. The main causes of workers' worries and insecurities are related to work and income, the risk of disease infection and health insurance. 24% of workers suffered from health problems and did not dare to go to the doctor during the COVID-19 period, of which 8% of female workers needed antenatal and reproductive health check-ups. Many workers worry about illness because they no longer have health insurance due to layoffs or termination of employment contracts. Female workers tend to worry about the above issues more than male workers (71.6% vs. 38%).

Notably, in the health sector, the majority of health workers are female. COVID-19 makes them overwhelmed by the rush of work in medical facilities. In addition, medical equipment is not always suitable for each gender, essential pandemic response kits for healthcare workers do not have hygiene products specifically for women... They also have to worry about household chores and children like most female workers... which makes stress and pressure on them increasingly greater.

Table 5: Psychological and mental problems of garment and footwear workers

Anxiety, confusion, insecurity	77,1%
Feeling pessimistic, uncertain about life and future	29,9%
Feeling depressed, helpless, melancholy	15,9%
Unusual mood swings (easily irritable, angry for no reason or sad or happy)	9,9%

Source: Author compiled from CARE, TARGET, CNV and CDI's Report on Impacts of COVID-19 on Vietnamese textile and footwear workers, December 2020

2. THE NEEDS OF FEMALE WORKERS TO COPE WITH THE COVID-19 EPIDEMIC

Forms and types of support as well as sources of support for employees during the COVID-19 period are mainly from: support from businesses the employees work in, from the industries in which the employees work; sources of support look to for support and government support.

According to a report from the Textile and Footwear industry, for the group of workers who are still working in the industry, direct support from the factory is considered the most useful (73.3 %) because they themselves perceive that outside the factory. After all, “I don’t have the opportunity to receive other sources” and for them, more or less support from the factory during the epidemic period, it also helps them feel secure to work and can increase their productivity. labor.

On the contrary, for the group of workers who have been laid off and cut their labor contracts during the COVID-19 period, government subsidies, especially unemployment benefits, are the most appreciated and useful (81.5%) because it helps them to cover expenses while looking for a new job. In addition, local workers have easier access to various types of support as well as support sources than migrant workers. The main barrier to this group is largely information and paperwork related. Textile workers have access to more resources and types of support than footwear workers. During the COVID-19 period, COVID-19 preventive equipment supports were the most popular with approximately 47.5% of workers receiving these items, followed by cash assistance (37.2% workers received), the average amount per person received was: 338,000 VND (\$17), followed by food and shelter (22.7% of workers received). Cash is the type of support that is considered to be the most useful and most desired by workers during the COVID-19 period, especially female workers.

As mentioned above, unemployment benefits are assessed by employees as a useful source of support for workers who are laid off and have their labor contracts terminated, but only 8% (out of a total of 542 workers who have been furloughed). work) has or is receiving unemployment benefits (average 3,500,000 - 4,200,000 VND/month). Government COVID benefits, unemployment benefits support from unions (factory/local) and support groups/societies from friends, colleagues, neighbors. Factory support (including brands) support from social organizations, benefactors, support from relatives/family.... Only 2.5% of the interviewed workers (out of 1280 workers) received support from the 62 trillion package. The main difficulty for workers to access this support package is “need a company to make a list”, “lack of household papers, temporary absence”, “need confirmation of not receiving support from locality in the countryside”. Thus, the lack of specific information about the support package and the requirement of many documents and administrative procedures are barriers that make it difficult for workers to access support from the government.

3. SOME RECOMMENDATIONS

COVID-19 has had a profound impact on female workers in social-economic aspects, putting them in the most vulnerable position. Therefore, above all, female workers are among the subjects that need the most attention in the context of implementing response and recovery measures to ensure that no one is left behind.

In the short term, the Government needs to continue implementing the COVID-19 response plan with five pillars: 1) Ensure essential health services are available and protect the health system; 2) Helping people cope with difficult situations through social protection and basic services; 3) Ensure jobs, support small and medium enterprises, workers in the informal sector through economic recovery and response programs; 4) Direct the acceleration of fiscal and fiscal stimulus to make macroeconomic policies effective for the most vulnerable populations, as well as strengthen multilateral and regional responses area; 5) Promote social cohesion, invest in community-owned resilience and response systems.

Which focuses on emergency support packages for female workers, with special attention to

single female workers, migrants, auxiliary workers, workers on unpaid leave, pregnant or nursing female workers. Connecting the participation and support of trade unions with the Department/ Department of Labour, Invalids and Social Affairs, Vietnam Social Insurance and relevant ministries and sectors to remove barriers in properly identifying affected people benefits, simplifying administrative procedures/documents in support work, in order to make timely support payments to employees. At the same time, innovate the form of communication to ensure that information reaches employees widely, effectively and accurately.

In the long term, the Government needs to: Adjust social security programs, review and expand the target audience, renew the data system to ensure timely emergency support if a similar epidemic occurs. out; Provide adequate information to employees about unemployment benefits and health insurance so that employees can feel secure about continuing to use health insurance while receiving unemployment benefits; Design a comprehensive social security program to ensure a basic standard of living for informal workers; Formalize or replicate those policies and models that have been adapted or proven effective and flexible in the context of COVID-19 to enhance community resilience to emergencies; Strengthening the legal framework for gender equality by promoting active leadership of women and their participation in decision-making on measures to respond to and recover from COVID- 19

CONCLUSION

During crises like the COVID-19 pandemic, women are the hardest hit health, economy and society. COVID-19 not only causes loss of human life and economic recession, but also the implementation of epidemic prevention and control measures such as: restricting travel activities, applying isolation measures and many others stalled activities...have led to an increased risk of gender-based violence, especially against women. Gender and social inequalities that existed in the Vietnamese labor market before the pandemic have deepened, making the lives of many female workers more and more difficult. That requires solutions to respond to the pandemic and to support female workers in both the short and long term, putting the needs of female workers at the center and sticking to the social-economic reality that they must face to face. This is the only way to ensure sustainable development.

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ANALYSIS OF MACRO FACTORS AFFECTING THE PROMOTION OF VIETNAM'S DIRECT INVESTMENT INTO ASEAN COUNTRIES

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Abstract: ASEAN is the traditional market of Vietnam in investment activities, the deep and wide participation of ASEAN countries in the current economy has created new opportunities for Vietnam and ASEAN countries. The article will assess Vietnam's macro factors affecting the foreign direct investment decisions of Vietnamese enterprises in ASEAN countries in recent times, helping the Vietnamese Government to properly assess the situation of promoting foreign investment activities of Vietnamese enterprises in ASEAN countries in order to offer effective solutions to promote investment activities of Vietnamese enterprises to ASEAN countries in the coming period.

Key words: ofdi, fdi, asean, fta, idp,....

1. INTRODUCTION

ASEAN has always been considered as one of the most dynamic economic development regions in the world, and has achieved many successes in attracting foreign investment capital in recent years. Today, the deeper and deeper integration of member countries leads to the participation in many new-generation free trade agreements, with many commitments at a higher level. In addition, the formation of the ASEAN Economic Community - AEC in 2015, has opened up great opportunities for economic development and mutual investment activities among ASEAN countries.

In particular, one of the important agreements for ASEAN economies was recently signed within the framework of the 37th ASEAN Summit (November 9th to 15th, 2020), in Hanoi, which is known as the "Regional Comprehensive Economic Partnership Agreement (RCEP)" expected to be the largest free trade agreement (FTA) in the world and to create a new impetus for the development of trade for member countries in particular and all countries in the region in general, especially in the context of the COVID-19 pandemic. This agreement was initiated by ASEAN in November 2012, RCEP is a free trade agreement among 10 ASEAN member countries and 5 partners including: China, Japan, Korea, Australia and New Zealand. The purpose of the Agreement is to establish a deeper economic cooperation platform, focusing on the areas of trade in goods, services and investment. When this agreement comes into effect, it is expected to create a market of 2.2 billion consumers, accounting for about 30% of global GDP, and become the world's largest free trade area. This number is much larger than the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) that came into effect at the end of December 2018 (about 500 million people and accounting for 13.5% of global GDP).

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With commitments to open markets for goods, services, investment, simplify customs procedures and establish regulations of origin to facilitate trade and reduce trade barriers, the RCEP Agreement is expected to create a new free trade area of the largest scale in the world, to promote the development of regional and global value chains, help further promote economic development of ASEAN countries, including Vietnam and its partners. Therefore, linking Vietnam's economic activities with ASEAN countries is of great importance to have opportunities to reach out to the world.

2. LITERATURE REVIEW AND PREVIOUS RESEARCH STUDIES

The study of OFDI capital flows has received much attention from scholars around the world. There have been different studies focusing on developing and transitioning countries, which are very relevant to the realities of Vietnam. By many qualitative and quantitative studies, the authors have clarified the factors that promote or inhibit the development of OFDI in these countries.

Researching to assess the factors affecting foreign direct investment of countries, Carmen Stoian [5] wrote "Extending Dunning's Investment Development Path: The role of home country institutional determinants in explaining outward foreign direct investment" the article used Dunning's theory of the development path of IDP investment as a basis to conduct research with new factors. In addition to the three typical factors of the IDP model, the growth of the economy of the investment country is measured by average GDP; Factors of science and technology development and domestic direct investment capital flow; then the author has added five other variables: (i) The degree of openness of the economy: including foreign trade and exchange rate; (ii) Large-scale expansion of privatization reform; (iii) Restructuring of domestic enterprises; (iv) Overall institutional reform; (v) Reform of competitiveness in the country of investment. By taking data for the 15 years to 2011 of 20 countries in Central and Eastern Europe, and adding new variables, the author has explained outward investment in developing and transition countries. The author has found a number of relationships between OFDI with new variables based on the IDP model. In this study, Carmen Stoian has shown that economic growth is measured by increasing GDP per capita, institutional reform, corporate restructuring and reform, improving the competitiveness of the country when investing has a positive impact on OFDI capital flows. However, increasing budget spending on science and technology has no positive effect on OFDI capital flows – an interesting finding by Stoian. It is also appropriate in the context of developing and transition countries because in these countries the proportion of budget spending on scientific research is limited, most of the foreign investments of the countries target to countries with equivalent or lower production levels, so obsolete technologies are more suitable for transferring. Moreover, OFDI from these countries serves the main industries and OFDI aims to find assets and resources rather than relying on science and technology like multinational companies in developed countries as a competitive advantage.

Studying the OFDI capital flows of Malaysia, Soo Khoon Goh, Koi Nyen Wong [10] confirmed the long-term relationship between the OFDI capital flows of Malaysia with the main influencing factors: The size of the host country market, the effective exchange rate, the openness of the economy, etc... In particular, the authors recommends that the Malaysian government should have more open policies to support the OFDI capital flow of businesses.

Also studying the factors driving the OFDI inflows of Malaysia, Rosfadzimi Mat Saad, Abd Halim Mohd Noor, Abu Hassan Shaari Md Norb [18] have conducted studies focusing on the

determinants of Malaysian OFDI by “Theory of Weaknesses” by Dunning. Regression analysis was performed on time series data starting from 1981 to 2011. The study shows GDP, FDI inflows into that country, productivity, exchange rate, export levels, and patents. institutions are the driving factors behind Malaysia’s OFDI inflows.

In a study on the influence of the host country’s macroeconomic conditions and government policies on OFDI flows from India in the period 1984-2015, Rishika Nayyar, Jaydeep Mukherjee [17] through Our empirical research model have shown the existence of a close relationship between OFDI capital flows and macroeconomic policy of the host country. Those policies related to foreign trade, investment, and financial sector development are considered as important determinants.

Meanwhile, Phung Thanh Quang [16] focused on evaluating and direct investment of Vietnamese enterprises in the Lao People’s Democratic Republic, which is associated with the new international integration context of Vietnam. The thesis evaluates the theories of OFDI and applies the Investment Development Path (IDP) model to assess macro factors (GDP per capita, budget spending on science and technology, amount of FDI invested in Vietnam) that affect the OFDI capital flow of Vietnamese enterprises into the market. Through the regression model, the author concludes that the influence of budget expenditure on science and technology and the amount of FDI invested in Vietnam affects OFDI capital flow (through spillover effect) but GDP Per capita impact on OFDI into Laos is not clear. Simultaneously, the study has achieved some significant results such as: the thesis has pointed out the characteristics of Vietnam’s OFDI projects in Laos, which are mainly vertical and export oriented. Meanwhile, Laos actively has moved to attract FDI horizontally. The thesis also points out the areas that Vietnamese businesses should focus on investing capital in the period 2015-2020, namely tourism, especially chain tourism products, industrial agriculture development, etc... high technology, especially sugarcane, maize, and high-tech cow raising. The thesis also clarify the “bottlenecks” in increasing OFDI capital flows of Vietnamese enterprises into Laos. The outstanding problem is the lack of human resources in Laos in terms of both unskilled and highly specialized workers, the lack of infrastructure, and the weakness in both physical and technical infrastructure.

3. METHODOLOGY AND PROPOSED MODEL

3.1. Proposed Model

To take a closer look at how Vietnam’s macro factors affect its outward foreign investment in member countries of ASEAN, the article uses the IDP (Investment development path - model of development path of investment) was first built by Dunning (1981, 1988)[6], and in collaboration with Rajneesh Narula (1994)[7]. This is a widely used model in research, especially suitable for developing and transition countries like Vietnam, used to assess how development in the exporting country affects the performance of the OFDI activity of that country. The IDP model has also been analyzed by many researchers and added institutional variables [13],[14]. The IDP model adds institutional variables and is applied in the study of the factors affecting OFDI in emerging countries and countries that have followed the socialist path, because OFDI activities of these countries often depends on government policy making [4]. The IDP model adds these variables mainly to consider the factors affecting OFDI in emerging countries, countries that have followed the socialist path, and developing countries, due to the fact that the OFDI activities of these countries depend on the policy making of the state.

Since each country's development path has its own characteristics [2], GDP per capita is not a complete measure of economic development. Therefore, some variables other than GDP per capita are used such as volume of FDI inflows [2], volume of trade [10], national institutions [13], [14], scientific level, the openness of the economy [4],... In this article, macro variables are used by the authors to assess the macro factors affecting the OFDI capital flow of Vietnam into ASEAN countries (symbol: OFDIA) are: GDPCAP (per capita domestic income), RDSB (percentage of state budget expenditure on science and technology), IFDI (FDI inflows into Vietnam), ER (exchange rate), IE (total import and export turnover/GDP) and EFS (economic freedom index). The model's hypotheses are made as follows:

Hypothesis H1: The development of the economy, measured by per capita national income, has a positive impact on the OFDI capital inflows of Vietnamese enterprises into ASEAN countries.

The IDP model also shows a positive relationship between science and technology level and OFDI capital. Science and technology will help private and public companies increase labor productivity, create competitive advantages and scale; thereby increasing the amount of OFDI capital. Therefore, one more hypothesis is put forward:

Hypothesis H2: The development of science and technology, measured by the proportion of state budget spending on science and technology (RDSB) (%) has a positive effect on OFDI capital flows of Vietnamese enterprises into ASEAN countries.

On the other hand, the IDP model also assumes that the amount of inflow capital (IFDI) will increase the amount of OFDI capital. This is explained by the spillover effect of FDI. When there is FDI inflow into a country, domestic companies will have to improve their management skills and operational efficiency, thereby creating relative advantages with other countries, accordingly promoting OFDI activities, exploiting new markets to increase profits. Therefore, the authors propose another hypothesis:

Hypothesis H3: FDI inflows into Vietnam have a positive impact on OFDI capital flows of Vietnamese enterprises into ASEAN countries.

Besides the basic IDP model with the above three factors, many scholars also propose to study the influence of some other macro factors such as exchange rate, the openness of the economy to OFDI capital flows. Countries with stronger currencies often have a financial advantage over countries with weaker currencies (Kohlhagen, 1997). Therefore, Kyrkillis and Pantelidis [15] argue that the appreciation of the domestic currency will increase the desire to invest abroad of domestic companies. Therefore, the authors propose the hypothesis:

Hypothesis H4: The appreciation of the local currency (measured by the USD/VND exchange rate) has a positive impact on Vietnam's OFDI capital flows to ASEAN countries.

Besides the exchange rate, the high openness of the economy will also contribute to the promotion of OFDI activities. The high openness of the economy will facilitate import and export companies to be exposed to and learn more from foreign markets as well as to understand the relevant regulations and standards, to overcome the linguistic, cultural and legal differences, to organize overseas activities and launch products marketing in international markets (Kogut, 1983; Kim, 1997; Bernard and Wagner, 2001). All of these play an important role in encouraging OFDI, especially as it becomes a more viable strategy than exporting. Therefore, the authors propose the hypothesis:

Hypothesis H5: Economic openness has a positive impact on OFDI capital flows of Vietnamese enterprises into ASEAN countries.

Today, successful economies are not necessarily geographically large or rich in natural resources. Many economies have sought to expand opportunities for their citizens by enhancing their economic dynamism. In general, the overarching goal of economic policies should be to create an environment that provides the best opportunity to turn opportunity into prosperity. And so the need to promote economic freedom is stronger than ever. Therefore, the authors propose one more hypothesis:

Hypothesis H6: Greater economic freedom has a positive impact on Vietnam's OFDI capital flow into ASEAN countries.

3.2. Research methods

** Overview of the research sample*

To study the relationship between the OFDI variable and the variables of economic development level, science and technology level, IFDI capital flow into Vietnam, the openness of the economy (Import-export turnover/GDP) and the appreciation of the VND against the USD, the economic freedom, the authors choose the data set provided by reputable domestic and foreign statistical organizations during the period from 1995 to 2019. The year 2020 was a very difficult year for the world economy in general, ASEAN countries and Vietnam in particular because of the Covid 19 pandemic, therefore Vietnam's outward investment activities in ASEAN countries were also greatly affected. Hence the research team only selected the period until 2019. The reason the authors chose 1995 as the starting year for the data series is that this was the year Vietnam officially joined ASEAN market, creating an important turning point in the international integration process of the country. In the same year, Vietnam officially normalized relation with the US to create a stepping stone for the Vietnam - US trade agreement, signed on July 13, 2000, opening a new chapter in economic activities between the two sides. The year 1995 was really a good start with a very important historical role in the international integration process of Vietnam later.

** Variables used in the model*

Specific data sources are shown in the following table:

Table 1. Summary of variables of the model

Variables		Description	Data Sources	Citation sources
Dependent variable	OFDIA	OFDI capital flows of Vietnam into ASEAN countries (millions of USD)	Foreign Investment Department - Ministry of Planning and Investment	
Independent variable				
Basic IDP model variables	GDPCAP	Domestic economic development measured by GDP per capita (USD/person)	General Statistic Office	Miguel & cs. (2106). Andreff & cs. (2014) Stoain (2012)
	RDSB	Ratio of science and technology spending to total state budget expenditure (%)	Ministry of Science and Technology Ministry of Finance (Annual state budget expenditure report)	
	IFDI	Foreign Direct Investment inflows into Vietnam (millions of USD)	Foreign Investment Department - Ministry of Planning and Investment	

Extended variables	Openness of the economy	Annual import-export turnover/GDP (variable symbol: IE)	General Statistic Office	Kueh & as (2008) Rosfadzimi & as (2013)
		Exchange rate (ER) (USD/VND)	State Bank of Vietnam	Andreff & as (2014)
	Economic freedom	Economic freedom index (variable symbol: EFS)	Heritage Foundation (The Heritage Foundation)	Kang and Jiang (2012)

Source: Authors' compilation

Data is in the form of time series, so the series will be tested to determine the stationary for the variables, then univariate regression models will be used to find variables that have an impact on the OFDI of Vietnam into ASEAN, univariate regression will consider the amplitudes with a maximum lag of 2 years, then include statistically significant variables in the single regression model into the multiple regression model. Then to measure the relationship between the variables, the author chooses the method of least squares (OLS). The authors propose the following research model:

* *Model with lagged variable*

The authors use EVIEWS software to estimate the parameters and perform necessary tests for the study.

First, perform initial analysis with data, conduct calculation of statistical parameters for variables to get basic information about the research data sample. Next, the authors use the correlation coefficient to consider the degree of correlation between the explanatory variables and the dependent variable and the correlation relationship between the explanatory variables with each other. Check the phenomenon of multicollinearity between variables through the coefficient of variance exaggeration. Before estimating and testing the model, the author checks whether the data series in the study are stationary series through Levin-Lin-Chu (2002) and Harris-Tzavalis (1999) tests.

4. RESEARCH RESULTS

The results are in the following tables:

Table 2: Model estimation results

Dependent Variable: D(OFDIA)
Method: Least Squares
Date: 12/22/20 Time: 11:33
Sample (adjusted): 1997 2019
Included observations: 23 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(IFDI)	-0.019592	0.008044	-2.435473	0.0300
D(LOG(GDPCAP))	-1197.262	1849.542	-0.647329	0.5287
D(EFS)	101.0729	63.19427	1.599399	0.1337
RDSB(-1)	3232.421	1030.844	3.135704	0.0079
D(IE)	-43.12513	149.8311	-0.287825	0.7780

D(ER)	0.081834	0.141719	0.577439	0.5735
D(IE(-1))	84.98783	133.2848	0.637641	0.5348
D(OFDIA(-1))	-0.726519	0.147033	-4.941200	0.0003
D(ER(-1))	-0.061256	0.124506	-0.491992	0.6309
C	-696.2152	234.3968	-2.970242	0.0108
R-squared	0.831801	Mean dependent var		4.625739
Adjusted R-squared	0.715356	S.D. dependent var		637.0938
S.E. of regression	339.9027	Akaike info criterion		14.79422
Sum squared resid	1501940.	Schwarz criterion		15.28791
Log likelihood	-160.1335	Hannan-Quinn criter.		14.91838
F-statistic	7.143273	Durbin-Watson stat		2.310251
Prob(F-statistic)	0.000894			

Source: The authors run on Eviews 8.1

Table 2 shows that the model does not have defects: no omitted variables, no autocorrelation, low multicollinearity. In which the variables D(GDPCAP), D(IE); D(IE(-1)); D(ER); D(ER(-1)) have no effect on D(OFDIA)). Excluding unaffected factors. Re-evaluating the regression model after checking the defects, the final results are obtained as follows:

Table 3: Re-estimated model results

Dependent Variable: D(OFDIA)

Method: Least Squares

Date: 12/22/20 Time: 15:26

Sample (adjusted): 1997 2019

Included observations: 23 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(IFDI)	-0.021935	0.005662	-3.874309	0.0011
D(EFS)	102.9140	55.70558	1.847463	0.0812
RDSB(-1)	3053.598	725.5777	4.208505	0.0005
D(OFDIA(-1))	-0.695530	0.111104	-6.260175	0.0000
C	-742.2963	179.1503	-4.143428	0.0006
R-squared	0.807983	Mean dependent var		4.625739
Adjusted R-squared	0.765313	S.D. dependent var		637.0938
S.E. of regression	308.6370	Akaike info criterion		14.49187
Sum squared resid	1714622.	Schwarz criterion		14.73872
Log likelihood	-161.6565	Hannan-Quinn criter.		14.55395
F-statistic	18.93546	Durbin-Watson stat		2.092256
Prob(F-statistic)	0.000003			

Source: The authors run on Eviews 8.1

The results of the selection model in table 3 show that with statistical significance of 1%, 5% and 10%: 4 influence factors to OFDIA are: D(IFDI); D(OFDIA(-1)) have the opposite effect; D(EFS) and RDSB(-1) have effect in the same direction.

5. DISCUSSION AND CONCLUSION

The regression analysis results in Table 5 shows that with statistical significance at 1%, 5% and 10% levels, related to the impact on Vietnam's OFDI capital flow into ASEAN countries, there are 4 factors when there is a fluctuation that will change this capital flow: foreign direct investment inflows into Vietnam (IFDI), the degree of freedom of the economy, the rate of spending on science and technology (RDSB) with a lag of 1 year, and it is Vietnam's OFDI capital flow into ASEAN countries 1 year earlier (the control variable of the model); while the change in per capita income (GDPCAP) and import-export/GDP ratio has no effect on this capital inflow.

First: With spending on scientific and technological research - the variable RDSB(-1) has a direct relationship with (positive impact on) Vietnam's OFDI capital flow into ASEAN countries.

Increasing investment in science and technology has helped Vietnam have many advanced technologies in fields of investment in ASEAN countries such as hydropower construction, processing and manufacturing industry, and hi-tech agriculture, information communication, fintech, etc., especially in recent times, Vietnam's technology startups are gradually targeting the ASEAN market as a starting point to reach out globally in which, there are some significant projects such as: "Project on investment and business in telecommunications and information technology networks in the Federal Republic of Myanmar" of Viettel International Investment Corporation with the total investment capital of the project is over 1.7 billion USD, in which Viettel contributed 860 million USD, accounting for over 50% of the total investment capital, now after 2.5 years of official business, Mytel has officially reached 8 million customers, accounted for 22% of the mobile telecommunications market share, ranked 3rd in the market and became one of the telecommunication brands with the largest growth rate in Myanmar; the project in the field of information technology of Vietnam Posts and Telecommunications Group (VNPT) and VNPT Company in combination with Meridian Media Asia Limited (Republic of Singapore) and Elite Telecom Public Limited Company (Federal Republic of Myanmar) with an investment capital of over 15 million USD, licensed for new investment in 2016, of which VNPT holds 67% of the shares, this project launched StreamNet Joint Venture to build infrastructure and providing fixed broadband services, as soon as it comes into operation, StreamNet Co., Ltd. will provide a series of telecommunications services including: FTTx, Leased Line VPN, IP transit, Satellite, domain names, web hosting, email... The increase in spending on scientific and technological research has partly contributed to the growth of Vietnam's OFDI capital inflows into ASEAN countries, which has led to policy suggestions to encourage research and investment in science and technology in the key areas that Vietnam has been investing in ASEAN countries such as the service sector including: communication, information, banking, technology,...; the agricultural sector using high technology, hydropower construction technology, agro-forestry product processing, boldly researches more in the field of animal husbandry, new industrial plants bearing the imprint of science, etc. To achieve this, the Government needs to increase spending on science and technology innovation, approach and apply the achievements of the industrial revolution 4.0. Strengthening the power of science and technology not only helps the development of economic growth as well as the competitiveness

of the economy, but also helps domestic enterprises have greater competitive opportunities to invest abroad. Therefore, the State needs to put enterprises at the center of the national innovation system; continue to make efforts to build a government that is tectonic for development, serving the people and businesses; ensure the freedom of business and make efforts to create an equal and favorable business environment for enterprises. At the same time, there should be support policies to improve technological capacity for enterprises to develop new products, advanced technology, high technology, key products; support and protect the development of intellectual property.

Second, regarding the impact of FDI inflows into Vietnam, the variable D(IFDI) has an indirect relationship (a negative impact on) Vietnam's OFDI capital flows into ASEAN countries.

Although the receipt of FDI has made transference and spreading of science and technology in Vietnam, this capital inflow has the opposite effect on Vietnam's outward direct investment in ASEAN countries. However, the impact is not large, when FDI into Vietnam increases 1 million USD, Vietnam's OFDI in ASEAN countries reduces by 0.021 million USD. In fact, although FDI into Vietnam has increased rapidly in recent years, the degree of spillover is still very low, FDI projects mainly focus on assembly, processing, their localization rate is low, and the value created in Vietnam is not high. FDI has not created close linkages with domestic enterprises to join the value chain, has not promoted the development of Vietnam's supporting industries, technology transfer and management experience have not been as expected.

Third, in term of the economic freedom index, the variable D (EFS) has a positive impact on Vietnam's OFDI capital into ASEAN countries.

Economic freedom index measures free trade, tax burden, judicial efficiency, etc. between jurisdictions. The Heritage Foundation's Economic Freedom Index scores countries on 12 factors: property rights, judicial validity, government integrity, tax burden, government spending, financial health, business freedom, labor freedom, monetary freedom, trade freedom, investment freedom, financial freedom.

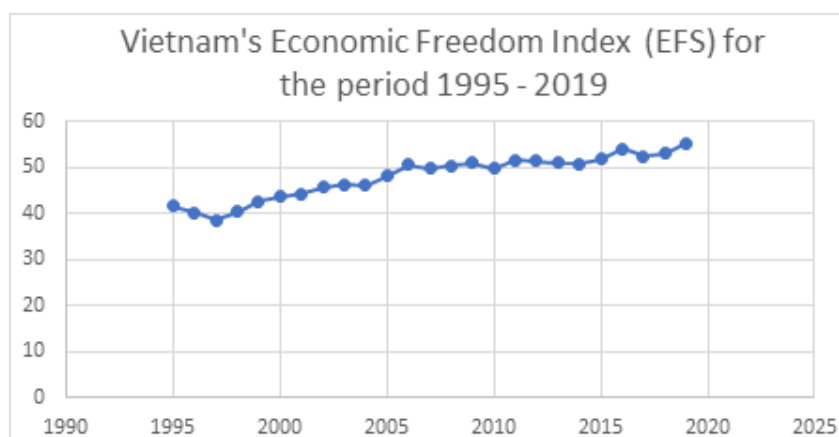


Figure 1. Economic freedom index of Vietnam in the period 1990 – 2019

Source: World Heritage Fund, 2019

Chart 1 shows that Vietnam's economic freedom index has continuously increased over the years, 12 above assessed factors are improved every year by the Government of Vietnam and have achieved some remarkable achievements. This regression result implies that in terms of policy,

the Government needs to continue to innovate and strengthen institutions to make the regulatory regime more effective, narrow the bureaucracy and make it more transparent, strengthen the judicial system, continue to expand international relations to promote economic freedom, which not only helps domestic economic growth, improves national competitiveness, but also helps Vietnamese enterprises reach out and dominate the markets of ASEAN countries. Moreover, increasing freedom in the economy also promotes the growth of the private economic sector, private ownership, which are the basis for promoting this sector to invest abroad. In fact, in 2019, the number of new projects investing abroad were all led by private sector enterprises and joint stock companies, in which the tendency of individuals to invest abroad increased, including some large enterprises such as Vingroup, Vietjet, Thaco, FPT, T&T, Vinamilk, TH True Milk.... There are no investment projects of state-owned enterprises.

Therefore, the Government needs to study and analyze specific criteria based on the world set of criteria regarding the effective and inefficient aspects in the process of building a market economy. At the same time, in the context of Vietnam in the development stage of a socialist-oriented market economy, it is necessary to study and propose a number of related criteria in the set of criteria in order to clearly define the scale in the coming time.

At the same time, the State needs to encourage outward foreign direct investment activities, especially in the group of target countries in ASEAN in particular and to the world in general, as an annual national development strategy. At the same time, to step up investment activities to traditional Southeast Asian countries in particular and to countries around the world in general, the Government should provide the necessary support and provide support services to encourage enterprises to invest abroad, regularly provide and update the latest information on foreign investment activities and develop policies and insurance funds for foreign investment with the aim of supporting enterprises to invest abroad.

However, in recent times, global trade tensions and the impact of the COVID-19 pandemic have had serious influences on ASEAN economies in general and Vietnam in particular. Currently, all ASEAN countries have confirmed cases of Covid 19 and there is no sign of stopping. Undoubtedly, the corona virus will have a negative impact on the economies of ASEAN and the rest of the world in 2021, greatly affects the growth in the near future. Southeast Asian economies were already suffered the negative effects of global trade tensions before the virus hit. The region will now face the prospect of a global shock and recession. Southeast Asian economies, already hit by supply and trade disruptions from China as well as a sharp drop in international tourism, are now also affected by border restrictions and social distancing measures of many countries that have slowed down activities in many sectors of the economy.

Therefore, with the negative effects in the context of the Covid 19 pandemic, but also the opportunity for the Vietnamese economy to take advantage of opportunities from the new generation FTAs that have been signed in recent years to promote investment into ASEAN countries, Vietnam needs to effectively prevent and control the Covid-19 epidemic; properly assess the changes and fluctuations of Covid-19 pandemic affecting the world economy in general and the ASEAN region in particular; promote the diplomatic campaign of “Covid-19 vaccine”, implement a vaccine strategy including 3 major contents (access and purchase vaccines as much as possible, as quickly as possible; accelerate vaccine’s access, technology transfer, research and production in Vietnam; implementation of a rapid, timely, safe and effective vaccination campaign) in order to carry out a vaccination campaign for the entire population, creating safe conditions for production and business activities in the country, and support for overseas investment activities of Vietnamese enterprises.

For Vietnamese businesses, it is necessary to actively develop business strategies to meet the requirements of integration and be competitive, especially in the new context when the Covid-19 pandemic has completely changed the business and investment environment in many countries. Businesses need to seriously and carefully study the investment environment of the target country, choose appropriate partners and investment locations, and take advantage of relationships with overseas Vietnamese in ASEAN countries. At the same time, it is necessary to diversify forms of outward investment in accordance with the regulations of Vietnam and the host country, closely link with other enterprises in the same investment market, improve management skills of investment projects abroad. Especially, enterprises need to increase investment in science and technology, application of advanced technology in investment projects abroad. In fact, there are many investment projects in ASEAN countries that are fragmented, using outdated technology, labor-intensive and resource-intensive, etc., and have had to stop operating. Meanwhile, projects aimed at using current technology such as HAGL's high-tech agriculture projects, combined with output product processing and off-take projects, etc., have gained many achievements. Therefore, businesses need to actively deploy R&D activities, implement OFDI projects horizontally, create added value for products, associated with technology transfer, and local workers training./

APPENDIX

MODEL RUNING DATA FOR THE PERIOD 1995-2019

Year/ Target	Science&Tech spending/GDP ratio	Import- export/ GDP	GDP per capita (USD)	Economic freedom score	OFDIA (OFDI of Vietnam to AEC) (million USD) Dependent variable	Registered FDI to VN (million USD)	Exchange rate
1995	0,0738%	5,944%	276,812667	41,7	0,000	6937,2	8607
1996	0,0901%	6,764%	324,147207	40,2	0,000	10164	8364
1997	0,1269%	6,625%	348,017398	38,6	0,000	5590,7	9727
1998	0,1512%	5,778%	348,324326	40,4	0,275	5099,9	10264
1999	0,1743%	5,822%	362,919503	42,7	1,411	2565,4	9710
2000	0,1959%	6,820%	390,093326	43,7	1,161	2838,9	11258
2001	0,2356%	6,492%	404,807866	44,3	0,677	3142,8	12247
2002	0,2253%	6,804%	430,052867	45,6	18,763	2998,8	13429
2003	0,2184%	7,402%	480,579799	46,2	7,861	3191,2	14453
2004	0,2746%	8,172%	546,909606	46,1	2,161	4547,6	14493
2005	0,3079%	8,247%	687,479736	48,1	66,714	6839,8	15444
2006	0,4978%	8,695%	784,372422	50,5	70,432	12005	15999
2007	0,6649%	9,734%	906,284198	49,8	676,039	21349	16106
2008	0,2149%	9,656%	1149,42464	50,4	687,141	71727	16580
2009	0,2298%	7,661%	1217,26856	51	1812,636	23108	18117
2010	0,1920%	7,279%	1317,89071	49,8	548,997	19887	19500
2011	0,2071%	7,326%	1525,11599	51,6	1801,367	15598	20626
2012	0,1823%	7,035%	1735,14128	51,3	358,264	16348	21756
2013	0,1839%	7,367%	1886,6719	51	817,508	22352	20879

2014	0,1784%	7,569%	2030,26195	50,8	422,745	21922	21232
2015	0,2240%	7,818%	2085,10148	51,7	238,391	24115	21938
2016	0,2097%	7,808%	2192,21454	54	1042,748	26891	22222
2017	0,1849%	8,556%	2365,62167	52,4	53,622	37101	22640
2018	0,2221%	8,678%	2566,59695	53,1	171,415	36369	22733
2019	0,2372%	8,572%	2715,27604	55,3	106,392	38952	23034

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GOVERNMENT SUPPORTS AND CSR PRACTICE: A LITERATURE REVIEW AND PROPOSED RESEARCH IDEA FOR VIETNAMESE SMES

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Abstract: *There has been a great deal of research into the effect of government supports and business environment on corporate performance in many countries around the world. However, so far there is a lack of empirical evidence to assess the impact of government supports and business environment on corporate social responsibility (CSR) practice in enterprises in Vietnam as well as countries around the world. This paper suggests an exciting research idea of relationship between government supports, business environment and CSR practice in Vietnam.*

Key words: *Government supports, corporate social responsibility*

1. INTRODUCTION

So far, there has been a great deal of research into the *effect of government supports* (through policies) on *corporate performance* in many countries around the world (Hansen, Rand, & Tarp, 2009; Pergelova & Angulo Ruiz, 2014; Bergström, 2000; Lee, 1996). In addition, there have been many studies examining the *impact of the business environment* on *corporate performance* (Gaganis, Pasiouras, & Voulgari, 2019; Contractor, Dangol, Nuruzzaman, & Raghunath, 2019). The results of the studies are varied. While government supports can have both positive or negative effects on business performance, a better business environment always helps businesses be more efficient. However, corporate social responsibility is another aspect that reflects the success of the business, there has not been much research to find out. Some studies see governments' *mandatory policies* as drivers of CSR implementation (Barthorpe, 2010; Bevan & Yung, 2015; Duman, Giritli, & McDermott, 2016), *incentive policies* as driving forces for CSR implementation (Lichtenstein, Badu, Owusu-Manu, Edwards, & Holt, 2013; Wuttke & Vilks, 2014). However, so far there is a *lack of empirical evidence* to assess the impact of government support on CSR implementation in enterprises in Vietnam as well as countries around the world.

In Vietnam, the term “corporate social responsibility” has only appeared since the “Doi Moi” period with the participation of FDI enterprises in the economy (Phuong, 2009). The beginning of the trend of applying CSR in Vietnam was from the time when shoe factories and the textile industry began to comply with CSR codes of conduct due to pressure from multinational corporations in other development countries (importing countries). Subsequently, the Vietnamese Government began promoting companies to improve working conditions and protect the environment, as a part of Vietnam’s Agenda 21 (Fukada, 2007). *The private sector’s CSR practices are supported by the Vietnamese government* (Fukada, 2007), and initially contributed to the goal of sustainable development in Vietnam. This suggests an interesting research issue in Vietnam: *the public governance*

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mechanism is often 'vertical' when policies are promulgated by center government, and implemented by local governments (provinces); as a result, the distribution of center government supports for CSR practice can be driven by differences in the quality of public administration in each province.

2. LITERATURE REVIEW

2.1. Government supports and corporate performance

There is not much empirical evidence on the impact of government supports on firm performance in developing countries (Hansen et al, 2009). However, with the premise of widely accepted sociological theories, a few scholars have suggested this research trend. *First, institutional theory* of North (1990) suggests that government supports can provide additional resources for capital, and other resources for businesses in the context of constraint. In addition, based on *signal theory*, Pergelova & Angulo-Ruiz (2014) argued that receiving government support was an indication that a business was reliable and leads to increase the ability to attract resources from stakeholders for these businesses, for example from banks or other financial institutions. When combined with other enterprise resources, government supports can increase firm capacity, and thereby increase firm efficiency.

In addition to these positive theoretical perspectives, there are also some warnings in the distribution of government supports. Bergström (2000) stated that government supports might be allocated effectively, because the distribution of these benefits was not based on the potential of businesses or contributions to the society, it depended on political ties and goals. This suggests further research on the problem of corruption in the distribution of government supports, whereby businesses may or may not have to pay informal expenses to obtain the subsidies. This result leads to a distortion in resource allocation between enterprises and it can reduce the profit growth rate of businesses (Zhang et al, 2014). In Vietnam, the issue of national budget allocations for development remains difficult and is still affected (Vu Van Ha, 2019; Dang Xuan Hoan, 2020).

As suggested by the theoretical perspectives above, a lot of empirical studies have been done in many different countries, and the results are varied. For example, there are studies that provide evidence that government supports reduce profits (measured by ROS indicators) (Bergström, 2000). However, there are also studies showing that government supports are helpful for improving the performance of businesses (Hansen et al, 2009). Some typical studies may be indicated below.

Lee's study (1996) in Korea firstly mentioned the concept of *government intervention to productivity growth*. In this study, government intervention is described by *government industrial policy* and *trade protection*. Empirical research results with panel data sets in 4 periods from 1963 to 1983 show that trade protection reduces the labor productivity and total factor productivity. Meanwhile, government industrial policies such as *tax incentives* and *subsidized credits* do not correlate with factor productivity.

In Sweden, Bergström (2000) used *public capital subsidies* to measure the concept of government support. In the study, the author emphasized in Sweden there have been many subsidies for businesses and the author used *regional policy subsidies* - policies whose primary goal is to maintain and enhance employment and growth in the Northern region of Sweden. Basically, there are 02 types of assistance, including: (i) *general assistance* (for example: *reducing labor costs* and *employment support*), which are for all enterprises in the region; and (ii) *selective support* (e.g. *loans*, *various development grants*, *assistance to sparsely populated areas*, *loans to investment companies*, etc.) for businesses who wish to register. The research used panel data distinguishing

between capital subsidized and non-capital subsidized manufacturing enterprises; and the results showed the influence on firm growth, but there seems to be little evidence of the effect of capital subsidies on the productivity of Swedish firms.

Fajnzylber et al (2009), when studying the impact of government supports on small businesses in Mexico, used *credit*, *training* and *tax payments* to measure government supports. The results indicated that these subsidies do not seem to have any effect on corporate profits, but if the business is given credit support, it will improve the viability.

In Vietnam, Hansen et al (2009) were one of the first researchers on government supports related to business aspects. In this study, the authors explore the effect of *government supports* on the *growth* and *survival of firms*. The research data which was used, was conducted from surveys in 1992, 1997 and 2002 for the years 1990/1991, 1995/1996 and 2000/2001. It can be seen that the data was collected in the 90s of the last century - the beginning of the “Doi moi” period and Vietnam gradually escaped from a stagnant state (Thao & Lan, 2013). Hansen et al (2009) referred to two aspects related to the concept of “government supports” as *financial support* and *technical support*. And they measured the concept of “government supports” by four specific aspects: (i) *Temporary tax exemption or reduction*; (ii) *Direct credit assistance*. (iii) *Business orientation* (Recommendation on line of business); (iv) *Support for licenses and applications* (Help with license application and registration). Research results showed that smaller businesses often grow faster than larger businesses. In addition, innovative companies are often significantly more likely to exist than others. In addition, the study also found that location and ownership form are important determinants of enterprise motivation.

After the study of Hansen et al, there is not much follow-up research to clarify the relationship of government supports to other aspects of business in Vietnam. Research gaps were left open from the study of Hansen et al (data to 2001) to Thanh et al (2018) (research data taken from 2009). Thanh et al (2018) was identified in the context of the gradually affirming and special attention of the private sector in Vietnam’s economy. Having the same perspective as Hansen et al (2009), Thanh et al (2018) measured government supports through two groups: *financial support* and *technical support*. However, specific aspects focus on measuring government support for innovation and sustainable development, including: (i) *Financial support*; (ii) *Human resource training support*; (iii) *Trade promotion support*; (iv) *Quality improvement support*. The study uses the *OLS method* and does not find a link between *financial support* and *firm performance*. However, when using the *quantile regression method*, the research results are quite interesting to reveal that government financial support is negatively related to the efficiency of enterprises who are in the lower percentile, but positive with businesses in the higher percentile. This suggests that the role of government financial support for Vietnamese enterprises can be obscured if using the mean regression method.

2.2. Business environment (public governance quality) and corporate performance

In addition to the research trends on the impact of government supports on business aspects (mostly enterprise performance) as reviewed above, there have been many studies inside and outside Vietnam exploring the effects of the business environment (in particular, the quality of public governance in creating a business environment) on the efficiency of the business.

In theoretical perspectives, the business environment is understood as a relationship of *policies*, *institutions*, *physical infrastructure*, *human resources* and *geographical features* that affect the

efficiency of the businesses (Eifert, Gelb, & Ramachandran, 2005). Collier (Collier, 2000) and Bigsten & Söderbom (2006) suggested the theory for the impact of the business environment on macro issues such as: firm entry, growth, investment, enterprise organization and the development of new industries.

Basil Hans (2018) has presented a conceptual framework for a business environment consisting of 2 groups of factors including: (i) External factors and (ii) Internal factors. External factors are factors beyond the control of enterprises. Internal factors is constituted by internal factors of the enterprise. Basil Hans (2018) argues that the inner element group implies resources and business leadership. Meanwhile, the group of external factors is the common factors and *reflects competitiveness*.

There are many other theoretical perspectives of scientists around the world on the business environment topic. However, according to the above summary, it can be seen that the main *business environment recognized by scholars in the world is that internal and external factors affect the efficiency of enterprises*. It emphasizes the external factors reflected by the concept of measuring competitiveness in the economy.

Originating from the theoretical perspectives on the business environment, many empirical studies have investigated the impact of this concept on firm efficiency.

Chrysovalantis Gaganis et al (2019) in a study explaining the relationship between culture, business environment and profitability of SMEs performed on large sample data with about 40,000 enterprises collected in 25 European countries between 2006 and 2014. The results showed the statistically significant effects of creating national business conditions and cultural aspects on the profitability of businesses. In this study, they measured the concept of “business environment” through two groups of factors, namely “degree of business freedom” and “ability to receive loans”. The first group of factors - the “business freedom” (BUSFR), is an overall indicator that reflects the effectiveness of government regulations on businesses. Data are taken from the Ease of Doing Business (EDB) study of the World Bank. With the second group of factors - “the ability to receive loans”, Chrysovalantis Gaganis et al measured this concept by “legal right index” and “scope, ability to access to available credit informations”.

Or as Contractor et al (2019) conducted a study to find out whether the *quality of regulations* and the *business environment* could account for the difference in FDI attraction of different countries or not. The study focused on the fluctuations in FDI inflows, as well as institutional and regulatory changes in 189 countries around the world, over 15 years. To measure the business environment, Contractor et al also used the “life cycle approach”. Accordingly, the authors considered the change of legal regulations affecting to the three stages of an enterprise’s life cycle, specifically: (i) The first phase of entering foreign markets was influenced by business start-up regulations; (ii) The later stage of operation of FDI companies was influenced by the rules of host countries; (iii) The stage of capital withdrawal was affected by the bankruptcy regulations of each country. The research data were also taken from the World Bank’s Ease of Doing Business (EDB) database. The specific independent variables used by the authors to measure the business environment are: (i) *Trade across border regulations*; (ii) *Starting business regulations*; (iii) *Contract enforcement*; (iv) *Resolving insolvency regulations*.

Other researches in other economic regions, such as research of Staats & Biglaiser (2012), Mengistu & Adhikary (2011) Campos & Kinoshita (2003), generally examined the different

impacts on investment decisions and FDI inflows in each country. But those studies focused on one economic region only at a time (not yet using time series data for analysis) or only dealing with one or a few specified variables at a time. There was little effort to test the effect of regulations on the life cycle of a business.

In Vietnam, the state governance has not yet met the development requirements of the market economy and international integration; effectiveness and efficiency are not high; discipline are not serious. Specifically, the state governance in the context of a socialist-oriented market economy still needs to be improved. Many new problems arise that have not been anticipated, and well managed by law (Dang Xuan Hoan, 2020). Continuing to improve the institutions at all levels and improving the business environment are urgent requests which the Communist Party and the government of Vietnam need to focus on resolving.

To develop a set of indicators for Vietnam to evaluate the quality of economic governance and to create a favorable business environment for the development of private enterprises, the Vietnam Chamber of Commerce and Industry has cooperated with USAID conducts data collection to build a set of indicators called the Provincial Competitiveness Index (PCI). This index was first piloted in 2005 for 42 provinces. From the second time, from 2006 onwards, all provinces and cities of Vietnam were included in the ranking, and the component indicators were also strengthened. So far, this set of indicators includes 10 component indicators (with a scale of 100) to evaluate and rank the provinces on the quality of provincial administration in Vietnam.

Recently, many empirical studies in Vietnam have used a set of PCI indicators to measure the quality of provincial public governance, including the quality of the business environment in its studies. One study of Tran Quang Tuyen et al (2018) explored the relationship between the quality of *provincial public governance* (measured by the PCI provincial competitiveness index) and *household welfare* (income per capita of the household). However, they have not found any linear relationship between these two concepts. Instead, it was discovered that the quality of provincial public governance tends to bring greater benefits to richer households than other groups.

Or as the study of Bach et al (2017) on the relationship between provincial public governance and corporate performance in Vietnam also used the PCI to measure for the concept of provincial public governance quality (including business environment).

Thus, the review of the above literature shows that, **firstly**, most previous studies focused on the impact of government support or the business environment/public governance to enterprise efficiency. Interestingly, in Vietnam, the “vertical” governance mechanism is preferred and combined between center and local government. Center government and ministries often issue policies and subordinate units of local provinces (local ministries in each province) are responsible for implementing policies. As suggested by Bergström’s (2000) theoretical perspectives, the problem of corruption in the provinces of Vietnam may distort the fairness of the allocation of subsidies to businesses in Vietnam, thereby it may also distort the efficiency of enterprises in the provinces of Vietnam. In other words, previous studies have not considered the quality of public governance in Vietnam’s provinces as an important control variable to the relationship between government support and firm performance.

Secondly, recently the term “corporate social responsibility” (CSR) has emerged as a new research trend in countries that are moving towards sustainable development. In addition to being

effective, businesses need to conduct activities that are responsible to the whole society towards the institutional sustainability at which the enterprise is an entity in that institution. Doing social responsibility can be seen as another aspect to assess the success of a business. The institutional theory and stakeholders theory point out that the implementation of social responsibility is the voluntary business. However, in fact many countries have issued mandatory policies as well as encouraged and supported businesses to implement social responsibilities, including Vietnam. However, there has not been any research/report in Vietnam clarifying the role of issuing policies to implement CSR practice.

Therefore, our study is the first to use a micro-econometric approach to quantifying the impact of government supports, provincial public governance quality on various aspects of CSR practice at the moment. In addition, qualitative research methods have been used to gain a deeper understanding of the impact of government supports, the quality of provincial public governance and the implementation of CSR in Vietnam.

3. RESEARCH APPROACH

3.1. Data sources

This study uses a survey of small and medium enterprise in Vietnam. The surveys were conducted in collaboration with two Vietnamese central partners: the Central Institute for Economic Management (CIEM) and the Institute of Labor Science and Social Affairs (ILSSA). The surveys focus on production SMEs in Vietnam and are conducted every two years from 2005 to 2015. The surveys cover 10 provinces (Ho Chi Minh City, Hanoi, Hai Phong, Long An, Ha Tay, Quang Nam, Phu Tho, Nghe An), Khanh Hoa and Lam Dong) and three regions (South, Central and North).

To ensure inclusion of all types of small and medium-sized enterprises, surveys follow a random sampling stratified structure of ownership structure. Surveys provide a range of indicators of company characteristics including ownership, industry, business history, government support, financial activity and other information. This dataset helps analyze the impact of government support on Vietnam's SMEs. A common problem with variable data over time is that it is usually expressed in current prices. As a result, our data on current variables is downward compared to 1994 prices using GDP deflators to avoid possible deviations from inflation.

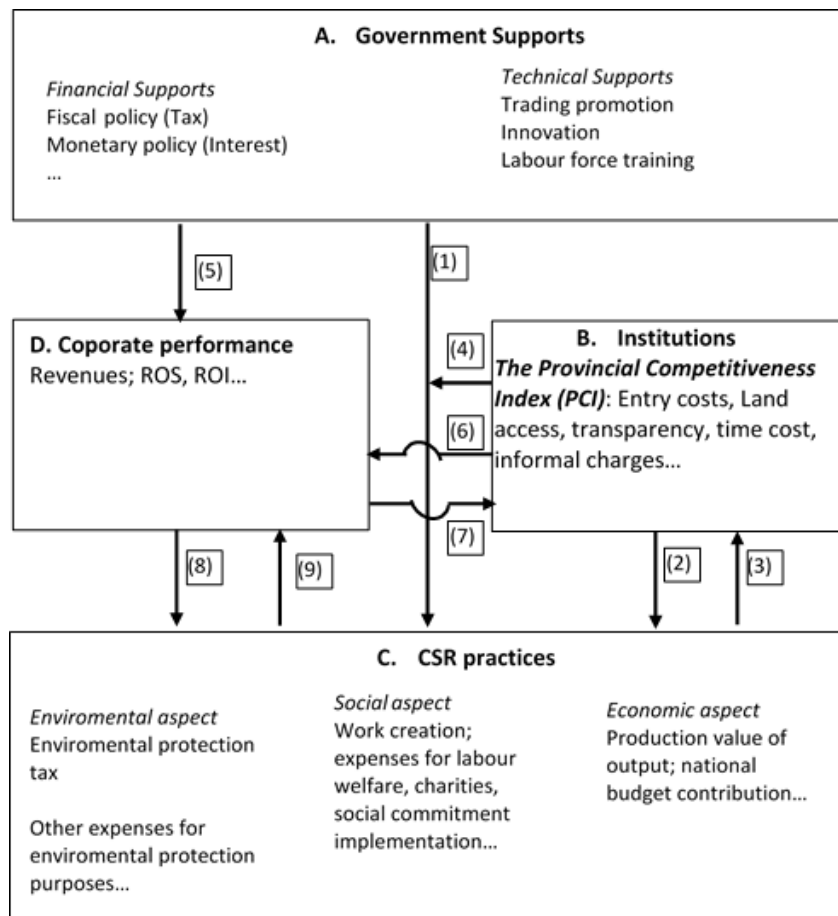
The second source of data is from the Provincial Competitiveness Index (PCI) surveys collected by the Vietnam Chamber of Commerce and Industry (VCCI) in the respective period of 2005 to 2015 for the purpose of assessing the institutional quality of provincial government and government support for the business environment. The survey provided nine component institutional indicators over the same time period, including entry costs; access to acquired land and business security; transparency and access to information; the time to address regulatory compliance measures; informal charges assess the company's perception of corruption from provincial officials; distortion provides privileges for state-owned enterprises; private development design services, business growth incentive programs of provinces, development of industrial parks and parks; employment and training provincial government officials promote vocational training and skills development for domestic enterprises. The final index measures businesses' trust in provincial courts and contract performance.

Small and medium-sized enterprise surveys and PCI surveys are combined to create a unique panel of enterprise and provincial dataset. This panel dataset allows us to examine the impact of

government supports and the types of government supports at both firm level and the support of the business environment at the provincial level on CSR.

The third data source is the annual enterprise census and information survey on the use of technology in production conducted in recent years from 2010-2017 by the General Statistics Office of Vietnam. This survey provides a wealth of information on CSR, business characteristics, ownership type, business activities and employment, profits, revenue, and assets. Subjects of investigation are independent economic accounting enterprises established and governed by the Law on State Enterprises, the Law on Cooperatives, the Law on Enterprises, the Law on Foreign Investment in Vietnam; they are businesses that started before 01/01/2005 and still exist. The survey was conducted for all businesses under the above-mentioned survey, operating in the fields of agriculture, forestry and fisheries; mining industry, processing industry, production and distribution of electricity, gas and water; build; trade and repair of motor vehicles, motorcycles, motorcycles, personal and family belongings; hotel and restaurant; transport, warehousing and communications; credit financing; scientific and technological activities; activities related to property trading and consulting services; education and training; health and social relief activities; cultural activities and sports; personal and community service activities.

3.2. Analytical structure/framework



In details:

* Description of basic concepts:

A. Government supports are policies issued by the Vietnamese Government to support the operation of businesses in the economy, especially the private sector (this concept is measured based on refer to the study of Hansen et al (2009) and Thanh N.M. et al (2018)).

B. Institution is the provincial public governance quality in Vietnam in creating a healthy business environment for enterprises' operations (the concept is measured based on the research reference of the Tuyen T. Q. et al (2018) and Bach N. et al (2017)).

C. CSR practice is activities, expenses of enterprises related to environmental protection, contributions to social activities and economic contributions (conceptual is measured based on the theoretical suggestion about sustainable development, implementation of CSR from previous studies).

D. Corporate performance is a traditional measurement of firm's profitability, used by many previous studies.

* Describe some key research hypotheses:

(1) Government supports have a positive impact on CSR practice.

(2) The quality of provincial public governance or PCI has a positive impact on the CSR practice.

(3) The more provincial enterprises conduct CSR activities, the higher quality of public governance (PCI) of that province is.

(4) The quality of provincial public governance (PCI) has an impact on the relationship between government supports and CSR practice. Which province has a better quality of public governance (PCI), the closer relationship between government supports and CSR practice is?

(5) Government supports positively impact on firm performance. The assumption is that, in addition to government grants, the firm performance is an important mechanism of impact on enterprise CSR practice. Firms with high effective often have more socially responsibility activities than other. So do government supports have a positive impact on business performance at the same time?

(6) Similar to hypothesis (5), is enterprise efficiency an intermediary mechanism through which the quality of provincial public governance affects to CSR practice?

(7) Does the efficient operation of enterprise have a positive effect on the quality of public governance in each province?

(8) Describe from hypothesis number (5). Do effective enterprises have more social activities to the community than the others?

(9) Some theoretical perspectives suggest that the CSR practice will help the image of enterprises become better in the eyes of the community, thereby implementing CSR is a factor that promotes the effectiveness of enterprises.

3.3. Analytical approach

Research questions will be addressed by using quantitative and qualitative methods. This approach will help to indicate not only the effectiveness but also the marginal effects of any

explanatory variables of interest in a given estimation equation. The objective of this study is to examine the impact of government supports on corporate social responsibility practices.

3.3.1. Econometric model

OLS or the estimation of fixed-influence panel data is a common method to consider the role of government supports on CSR practice (Hansen et al., 2009; Zhang et al., 2014). However, the role of government support to CSR practice may still be skewed by the use of these methods. This stems from the endogenous issue of government supports as well as the nature of the dynamic relationship between CSR and government support. In order to control the “endogenous dynamism”, the empirical models used with the dependent variable CSR must be tested in a dynamic framework where late dependent variables are used as explanatory variables (Wintoki, Linck, & Netter, 2012). According to previous studies (for example, Wintoki, Linck and Netter (2012)), research uses two-phase GMM to overcome these estimation problems. Specifically, the model is as follows:

$$Y_{it} = \alpha_0 + \sum_{s=1}^k a_s Y_{it-s} + \delta_m \text{Government support}_{,it} + \beta_k Z_{k,it} + \text{year dummies} + \text{industry dummies} + \mu_i + \vartheta_{it} \quad (1)$$

In details: Y_{it} is CSR of corporate number i in year t which is measured in some aspects as general CSR, CSR for labor, CSR for environment, CSR for community; a_s is estimated coefficient on a dependent variable delayed for one year; government supports is widely measured as a dummy variable to reduce measurement errors, this is the main variable of interest in the model. In this study, we evaluate government support as a set of variables. Firstly, it counts as a fake based on the question if the company has received assistance. In addition, the types of government assistance are measured on the basis of the question of what kind of support businesses receive from the government.

Z is a vector of explanatory variables that reflect the characteristics of the business used in the model as indicated by previous studies (e.g. firm size, age, innovation and leverage). main). We also control the potential effects arising from sectorial differences through the use of dummy variables to classify the industry. μ_i represents the characteristics of a company that is not noticed over time; ω_t denotes specific timing effects that are time-varying and common to all companies. These specific time effects are captured by five dummy variables; ε_{it} is the random error.

In the expanded designation, the study also included provincial institutional quality (X_{it}) factors in the model to consider the simultaneous impact of government support and provincial institutional quality on CSR practices. of the business. Therefore, model (1) is rewritten as follows:

$$Y_i = \alpha_0 + \alpha_1 * Y_{i-1} + \alpha_2 * \mathcal{G}_i + \alpha_3 * Z_i + \alpha_4 * X_i + \text{Yeardummies} + \text{Industrydummies} + \mu_i + \varepsilon_i$$

3.3.2. Qualitative approach

In addition to using quantitative methods, the study also incorporates qualitative methods to gain a deeper understanding of the relationship between government supports and CSR practice under the control of provincial public governance. Specifically, the topic will use key informants interview (KIIs) with at least three target groups. Firstly, the target group is officials and public employees working at central agencies such as the Ministry of Finance, the State Bank, the Ministry of Planning and Investment, the Ministry of Labor – War Invalids and Social Affairs, the Ministry of Industry and Trade... Secondly, the target group is officials and public employees working in

localities such as Hanoi and Ho Chi Minh, Hai Phong, Phu Tho... Thirdly, the leadership group of businesses. The results of KIIs and group discussions are expected to provide further insights that the datasets used in quantitative research cannot yet reflect. This will help us to reinforce the empirical findings from quantitative research.

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INTERNAL FACTORS IMPACT ON THE QUALITY OF FINANCIAL STATEMENTS OF LISTED COMPANIES IN VIETNAM

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Abstract: *The study examines the internal factors (I.F) affecting the quality of financial statements (F.S) of listed companies (L.C) in Vietnam, helping the L.C to improve the quality of F.S, serving the customers well. Users of information on F.S, and at the same time help Investors have a basis to evaluate the quality of F.S from which to make appropriate decisions. The factors included in the study are company size, age of the company, the proportion of foreign ownership, the structure of government capital, The separation of Chairman of the board (COB) and Chief Executive Officer (CEO), Proportion of Outside directors in the board of directors, age of CEO, Percentage of women on the senior management, profitability, financial leverage, current solvency. Data were collected through the F.S, financial annual report 2020 of 170 L.C in Vietnam, excluding those enterprises operating in sectors related to the financial. The research results show that the quality of F.S is affected by four factors: company size, foreign ownership rate, percentage of female members, and profit. These factors have the same dimensional relationship with the quality of F.S.*

Keywords: *Financial statements, internal factors, listed companies*

1. INTRODUCTION

In the context of the development of the market economy, F.S has an important role and meaning in providing information to investors, organizations managing and operating the market. According to Khale Aljfri (2014), Jouini Fathi (2013), the quality of F.S is influenced by factors: characteristics, size of the board, percentage of non-executive directors, the right to concurrently chair the board, and director, foreign ownership rate, director age, director gender, the capital ratio of board members, etc... These researchers all believe that providing a quality F.S will increase investment efficiency. Therefore, the quality of information on F.S is of interest to many domestic and foreign researchers.

Improved financial reporting of L.C helps investors make accurate investment decisions; help regulatory agencies to monitor the market easily and effectively, limit and prevent violations in the stock market which will help increase the aspect of the Vietnam Stock Exchange in the history of international economics... So how to improve the quality of F.S is a matter of concern not only of managers but also of investors. That is why the author chose to study this topic.

2. THEORETICAL BACKGROUND AND THE PREVIOUS RESEARCH FACILITY

2.1. Perspectives on the quality of financial statements

The financial statement is a reporting system that summarizes and reflects in a general and comprehensive way: The situation of assets and capital sources of an enterprise at a point in time;

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Situation of business results; Situation and results of cash flows of a business in a given accounting period (Accounting Regulatory Department, 2008). A quality financial statement contains quality accounting information.

According to Vietnamese Accounting Standards (VAS 21), the quality of F.S is the quality of information presented in F.S, including **(1) Honesty:** Accounting information and data must be recorded and reported based on sufficient, objective, and factual evidence. **(2) Objectivity:** Accounting information and data must be recorded and reported by reality, without misrepresentation or distortion. **(3) Sufficient:** All economic and financial transactions arising in connection with the accounting period must be fully recorded and reported, not omitted. **(4) Timely:** Accounting information and data must be recorded and reported promptly, on time, or before the prescribed time limit. **(5) Easy to understand:** The accounting information and data presented in the F.S must be clear and easy to understand for users. **(6) Comparable:** Accounting information and figures should be calculated and presented consistently.

The research will focus on finding out specifically the factors inside the business that affect the quality of financial statements according to complete criteria, that is, whether the information on the financial statements is fully reported by regulations. The information in the financial statements is fully disclosed means the financial statements are of good quality (According to Vietnamese Accounting Standard VAS 21, Financial reporting quality is the quality of information presented in the financial statements, including sufficient)

2.2 Overview of financial statement quality measurement methods

In the world, there have been many scholars studying the quality of F.S and the methods used to measure the quality of F.S. The studies measure the quality of financial statements through the the information publication index method (Behbahani et al., 2013; Ghasempour and Yusof, 2014), other studies measure through the timeliness of financial statements (Schipper and Vincent, 2003.) or studies measure the quality of financial statements indirectly through earnings management (Jones, 1991; Kothari et al., 2005; Yoon, 2006) or studies measure through the relationship between accounting data and stock market reaction (Mary E. Barth et al., 2001; Nichols and Wahlen, 2004). According to F.v. Beest, G. Bram, S. Boelens (2009) we have the following table:

Table 1: Commonly used financial statement quality measurement methods

	Accrual model	Subjective Theory of Value	The specific elements in the annual report, F.S	Information strategy
Technical	Checking the profit management which represents the quality of profit	Considering the relationship between stock earnings and profit gain to measure the relevance and reliability of F.S information	Considering the specific elements in the annual report, F.S in depth by conducting a test	Checking the usefulness level of information on F.S
Advantages	Relatively easy to collect data for measuring the profit management	Relatively easy to measure. Provides an insight into the economic value of profit figures	Focus on the quality of financial statements. Directly measure the quality of F.S.	Focus on the quality of financial statements Direct measurement of F.S quality.

Disadvantages	Focus on the quality of the profit. Difficult to estimate the accrual accounts	Focus on the quality of the profit. Not provide insight at the balance between suitability and reliability	Focus only on pre-selected factors	Difficult to measure
Some prominent research authors	Jones, 1999; Healy & Wahlen 1999; Dechow et al. 1995;...	Barth et al. 2001; Choi et al. 1997; Nichols & Wahlen 2004; Nelson 1996;...	Hirst et al. 2004; Beretta & Bozzolan, 2004; Cohen et al., 2004; Marston and Shives, 1991...	Schipper & Vincent, 2003; Van der Meulen, et al. 2007; Barth et al. 2006;...

Source: F.v. Beest, G. Bram, S. Boelens (2009)

The study selects a model to measure the quality of financial statements through the information publication index method of Ghasempour và Yusof (2014).

2.3. Theoretical basis

Agency theory: According to Jensen and Meckling (1976): “The agency theory focuses on a relationship similar to a contract under which an owner (investor) hires an agent (manager). The executor will represent the owner to perform some tasks and be allowed to make related decisions”. However, the law enforcement officer does not always act in the interests of the owner, even to the detriment of the interests of the owner. Therefore, the owner must pay the cost of supervising the agent. Representation costs will decrease as the business publishes more information and the increasing quality of accounting information will reduce the asymmetry of information between the owner and the manager.

Signaling theory: Signal theory describes the behavior between the two parties, a party holds information from which to give a signal to the market and a party uses that information.

Healy and Palepu (2001) mention very clearly the losses that the financial market suffers when the information held by managers and capital investors is different. Companies can broadcast signals using their financial information to send to the market. The quality of published information or the quality of F.S is a signal of confidence for investors, to convince investors that the information published is reliable and transparent. Thus, enterprises with large scale and high profitability that want to attract investment capital to implement projects will provide a signal that the quality of accounting information on F.S will be higher than other enterprises.

Asymmetric theory: According to the G.A. Akerlof studied and analyzed in 1970 information asymmetry occurs when one party to the transaction has more or better information than the other party.

In the stock market, information asymmetry occurs when enterprises publish unreliable or poor-quality F.S. Investors are passive in collecting information. So the quality of accounting information is the leading factor to help investors make informed decisions and effectively, reducing the asymmetry of information, improving the quality of accounting information will increase confidence for investment and help the stock market growth.

Proprietary Cost Theory: More information disclosure to the outside may hurt the competitiveness of the business (Verrecchin, 1983). The proprietary cost theory considers the benefits and costs of the publication or non-publication of information. Therefore, the quality of accounting information on F.S may decrease because businesses deliberately conceal information

or do not publish accurate, reliable information due to competitive pressure even though they may bear costs that outweigh the benefits of disclosure.

3. RESEARCH METHODOLOGY AND PROPOSED MODEL

3.1 Research Methodology

Research data was collected by loading the table prospectus, annual report, and the annexes on the website of the 170 companies listed in Vietnam (HOSE and HNX), the financial year 2020.

- Qualitative methods:

+ Research and review related theories such as Theoretical framework of financial reporting quality from the point of view of the quality of information characteristics of IASB, CoBiT, method of measuring financial report quality.

+ Based on previous studies, the author designed a questionnaire to interview experts, thereby making a list of factors expected to be included in the model affecting the quality of financial statements. The results after the expert interviews are processed, the author conducts descriptive statistics on the data according to the percentage of agree or disagree and the comments suggest new factors for the research model. After that, officially put the factors into the research model, and conduct quantitative research.

- Quantitative methods:

+ Synthesize, collect data, F.S, and other reports of enterprises in the research sample.

+ Measuring the quality of accounting information through the information quality index method (build a common list of accounting information indicators for all businesses: including 59 items).

The study used SPSS 20.0 software to analyze multivariable regression models, analyze the impact of independent variables on dependent variables to find out the relationship between independent variables and dependent variables.

3.2 Proposed Model

In the research model, dependent variables are defined as the quality of F.S. 11 independent variables were determined in the summary table below

$$QF = \beta_0 + \beta_1 \text{ SIZE} + \beta_2 \text{ NUMBER} + \beta_3 \text{ CFORE} + \beta_4 \text{ CGOV} + \beta_5 \text{ CONCU CEO} + \beta_6 \text{ INDE CEO} + \beta_7 \text{ AGE CEO} + \beta_8 \text{ PWOMEN} + \beta_9 \text{ ROE} + \beta_{10} \text{ LEV} + \beta_{11} \text{ CURRE} + \varepsilon$$

Table 2: Summary of measurement variables used in the research model

Variable name	Definition	Measurement method
The dependent variable		
QF	Quality of accounting information	Which QF_j : Quality index of accounting information ($0 \leq QF_j \leq 1$) d_{ij} : Information item i published by j company n : Maximum number of items of information to be published

	To measure the quality of accounting information, we use the information publication index method of Ghasempour và Yusof (2014), which is expressed through a list of selected information items for publication in the annual report and the financial statements. There have been many researchers who have come up with a set of criteria for information disclosure with different information items, they rely on the laws and regulations of their country to build the index accordingly. In Vietnam, there is not a list of official information items that must be disclosed to evaluate the quality of accounting information. In this article, based on the Law on Accounting, the system of accounting standards, Circular 200/2014/TT-BTC dated December 22, 2014, guiding the accounting regime of enterprises, circular 96/2020/TT-BTC dated November 16, 2020 guidance about information disclosure on the stock market, the author builds a list of information items that need to be published for calculating the index quality of accounting information. After completing the construction, the author consulted with experts in the fields of accounting, auditing, finance... and concluded the list of published accounting information indexes. If items of information published will be given a value of 1, otherwise it will get the value 0.	
Independent variables		
1. SIZE	Company size	Log (Total asset)
2. NUMBER	Company age	Number of fiscal years operating
3. CFORE	The proportion of foreign ownership	Number of ordinary shares held by foreign shareholders/ Total common shares
4. CGOV	Structure of government capital	1 - Proportion of the government capital $\geq 20\%$ 0 - If otherwise (Government ownership ratio = Number of ordinary stock held by the State /Total common stock)
5. CONCU CEO	The separation of COB and CEO	1 - the title of Chairman of the Board (COB) concurrently Chief Executive Officer (CEO) 0 - If otherwise
6. INDE CEO	The proportion of Outside directors in the board of directors	Number of Outside director members / Total members of the director's board
7. AGE CEO	Age of Chief Executive Officer (CEO)	1 – CEO age > 49 (average age of CEO) 0 - If otherwise
8. PWOMEN	Percentage of women on the senior management	Number of female members on the senior management / Total members of the senior management
9. ROE	The profits	Profit after tax / Equity
10. LEV	Financial Leverage	Liabilities / Equity
11. CURRE	The current solvency	Short-Term Assets / Short-term debt

Source: Author's summary

3.2.1. Company size

According to Khalid Alsaeed in 2006 the size of the company positively impacted the trend of information release; in 2000 Apostolou used cross-data tables to analyze F.S, annual reports of 36 companies and concluded that the size of the company is related to the level of voluntary disclosure release to 2014 Khale Aljfri also agreed, he said that enterprises with large market capital would disclose more information. In 2015, Ali and his associates again said that the size of the company reduces the quality of F.S.

H1: The greater the scale of the company, the higher the quality of accounting information in the F.S.

3.2.2. Company age

Company age is the operating time of the company. According to Stephen Owusu-Ansah in 1998, perennial companies often disclose more complete information because of the low cost of data collection and analysis. In 2005, M. Akhtaruddin after researching companies in Bangladesh, suggested that perennial companies with more experience would disclose more complete information to improve their reputation and image in the market, which means the age of the company is a factor that has a significant influence on the disclosure of required information.

H2: There is a positive relationship between the age of the company and the quality of accounting information presented in the F.S.

3.2.3 The proportion of foreign ownership

Most research suggests that the more foreign-owned companies, the more information they disclose. In 2002, Haniffa, R.M. and Cooke, T.E. has researched the L.C in Malaysia and point out that the proportion of foreign ownership has related the same way with the level of voluntary disclosure. Similarly, Khale Aljfri in 2014 also studied companies in the United Arab Emirates and found a positive relationship between the percentage of foreign ownership and disclosure. In 2014, Dr. Sartawi et al. are also researching the moderate level of voluntary publication of information in Amman-L.C that also concluded that the rate of foreign ownership has the same direction as the level of information disclosure.

H3: The proportion of foreign capital has a positive relationship with the quality of accounting information

3.2.4. Structure of State capital

There is a few research on the role of state ownership on the quality of financial reporting information such as Murcia & Santos in 2012, Teng in 2011, Wang and Yung in 2011 think that the higher the state ownership ratio, the higher the quality of financial reporting information. Conversely, Bzecz et al. (2002), Chen et al. (2006) argue that the State ownership rate has no impact on the quality of financial reporting information. In contrast, Guo & Ma (2015), Mak & Yuan Li (2001) argue that the higher the state ownership ratio, the lower the quality of financial reporting information.

H4: The larger the state-owned companies, the lower the quality of information

3.2.5. The separation of COB and CEO

The separation of the chairmanship of the board and general director the plurality will reduce the effectiveness of the board in overseeing management, which means that the information will be dropped, and the quality of information will diminish. The Jouini Fathi in 2013; Sartawi, Nekhili, Daghani, and their partner in 2016 are giving the same result as the president of the board and the CEO has a negative relationship with the majority of information. So the separation of these two titles will increase the quality of accounting information, and at the same time increase the benefits of shareholders and investors.

H5: In companies with the separation of the titles of Chairman of the Board and General Director, the quality of accounting information is higher than in companies with dual duties.

3.2.6. Proportion of Outside directors in the board of directors

Most of the previous research has shown a positive relationship between the proportion of Outside director as a member who doesn't run the board with the level of information. According to Chen & Jaggi (2000) shows that the proportion of independent members in the board of directors has an impact on the level of information disclosure. For Luciana Holtz in 2010, it was found that there is a positive relationship between the proportion of independent members and the level of accounting information disclosure.

H6: The proportion of independent members in the board of directors has a positive relationship with the quality of accounting information on F.S.

3.2.7. Age of Chief Executive Officer (CEO)

According to Herrmann & Datta (2005), the age of the operator represents the level of experience and bravery to cope with risks, the older the age, the more experienced, the higher the business performance. Similarly, Ahern & Dittmar (2012) also said that long-term leaders have a lot of accumulated experience, which has a positive impact on company performance. Contrary to the above view, Bonn (2004) shows that there is a negative relationship between the average age of the board of directors and firm performance. But with Rose (2005) concluded that the age factor is not a strong point to support business because he believes that young leaders will be more open to change, more creative, more dynamic, and have many new ideas in their business, this increases efficiency in supervisory administration.

H7: CEO's age harms the quality of accounting information on F.S

3.2.8. Percentage of women on the senior management

According to Cox (1991), Robinson and authors (1997) have studied diversity in the board of directors and emphasized gender diversity. In 2003, Carter and the authors think: "Women play the role of strengthening a monitoring and control mechanism, increasing the independence of the board, thereby reducing representation costs." Supporting this view, Smith et al. (2006), Sartawi et al. (2014) also argued that the proportion of women on the board in the same direction as the level of information release. On the contrary, Dittmar, A. (2012); Nirosha (2011), argues that "there is a negative relationship between the proportion of women in the board of directors and firm value, while increasing agency costs".

H8: There is a positive impact of the proportion of women on the senior management on the quality of accounting information

3.2.9. The profits

Several authors have shown a positive relationship between profitability and the level of disclosure such as Singhvi (1968), Owusu Ansah, S. (1998), Hossain & Hammami (2009) và Rouf and Harun (2011). Conversely, Meek (1995) hypothesized, companies that have less profit usually take measures to attract investment so that disclosure more transparent businesses profitable.

H9: Companies with the after-tax rate of return on equity will publish high-quality information more

3.2.10. Financial Leverage

The financial leverage factor positively affects the level of information disclosure, including the following authors: Meek (1995); Murcia & Santos (2012), Jouini Fathi, (2013). Companies

with a high level of financial leverage are often published more information than companies with low financial leverage. According to the study of Apostolou (2000) and Khalid Alsaed (2006), there is no relationship between financial leverage and the level of information disclosure.

H10: Financial leverage has a positive impact on the quality of accounting information.

3.2.11. The current solvency

Speaking of the current solvency of the company is said to be liquidity. Nandi & Ghosh (2012) had research 60 L.C in India and found that liquidity has a positive relationship with the level of information disclosure. And Khale Aljfri (2014) argues that companies with high liquidity have more disclosure.

H11: The L.C in Vietnam with high liquidity will publish more quality information

4. RESEARCH RESULTS

Performing regression analysis, we find that the regression analysis values are mostly satisfactory. Analytical results are as follows (Table 3): (1) value $R^2 = 0.393$ and R^2 correct = 0.350, which means that the independent variables explain 35% of the variance of the dependent variable, the rest is a random error or other factors outside the model. (2) Inspection F shows $\text{Sig.} = .000 < 0.05$, Thus, the regression model is suitable. (3) Correlation coefficient Durbin-Watson = 1.793, this shows that the model does not have autocorrelation. (4) Multicollinearity verification, VIF of 11 independent variables are less than 2, so it does not violate the variables multicollinearity phenomenon. (5) Inspection constant residual variance Spearman, Sig. of the variables are all larger than 0.05 which means we accept H_0 which concluding that the residual variance does not change. (6) Pearson coefficient shows that factors that are correlated with QF include SIZE, CFORE, PWOMEN, ROE with correlation coefficients r are all larger than 0.1, in turn as 0.531; 0.457; 0.251; 0.183, concurrent Sig. of These factors are all less than the significance level 0.05

Table 3: Results of regression analysis

Model Summary ^b						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson	
1	.627 ^a	.393	.350	.019991	1.793	
a. Predictors: (Constant), CURRE, PWOMEN, ROE, INDECEO, SIZE, NUMBER, CGOV, AGECEO, LEV, CONCUCEO, CFORE						
b. Dependent Variable: QF						
ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.039	11	.004	8.962	.000^b
	Residual	.061	158	.000		
	Total	.100	169			
a. Dependent Variable: QF						
b. Predictors: (Constant), CURRE, PWOMEN, ROE, INDECEO, SIZE, NUMBER, CGOV, AGECEO, LEV, CONCUCEO, CFORE						
Coefficients ^a						

Model	B	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		Std. Error	Beta				Tolerance	VIF
1	(Constant)	.595	.036		16.589	.000		
	SIZE	.018	.003	.441	5.790	.000	.687	1.456
	NUMBER	.000	.000	-.034	-.515	.608	.890	1.123
	CFORE	.028	.013	.176	2.173	.031	.611	1.637
	CGOV	.000	.003	.009	.126	.900	.828	1.208
	CONCUCEO	-.001	.004	-.014	-.191	.849	.769	1.300
	AGECEO	-.001	.003	-.011	-.165	.869	.916	1.091
	PWOMEN	.024	.008	.196	2.991	.003	.928	1.078
	INDECEO	-.004	.009	-.033	-.477	.634	.830	1.204
	ROE	.006	.003	.120	1.773	.078	.871	1.148
	LEV	-.001	.001	-.101	-1.411	.160	.772	1.296
CURRE	.001	.001	.067	1.002	.318	.905	1.105	

a. Dependent Variable: QF

Correlations			ABSRES
Spearman's rho	ABSRES	Correlation Coefficient	1.000
		Sig. (2-tailed)	.
		N	170
	SIZE	Correlation Coefficient	.001
		Sig. (2-tailed)	.992
		N	170
	NUMBER	Correlation Coefficient	.070
		Sig. (2-tailed)	.371
		N	170
	CFORE	Correlation Coefficient	.089
		Sig. (2-tailed)	.068
		N	170
	CGOV	Correlation Coefficient	.007
		Sig. (2-tailed)	.927
		N	170
	CONCUCEO	Correlation Coefficient	.090
		Sig. (2-tailed)	.249
		N	170
	AGECEO	Correlation Coefficient	-.028
		Sig. (2-tailed)	.724
		N	170
	PWOMEN	Correlation Coefficient	.035
		Sig. (2-tailed)	.658
		N	170
	INDECEO	Correlation Coefficient	.045
		Sig. (2-tailed)	.564
		N	170

	ROE	Correlation Coefficient	.022
		Sig. (2-tailed)	.783
		N	170
	LEV	Correlation Coefficient	-.129
		Sig. (2-tailed)	.099
		N	170
	CURRE	Correlation Coefficient	.094
		Sig. (2-tailed)	.232
		N	170
*. Correlation is significant at the 0.05 level (2-tailed).			
**. Correlation is significant at the 0.01 level (2-tailed).			

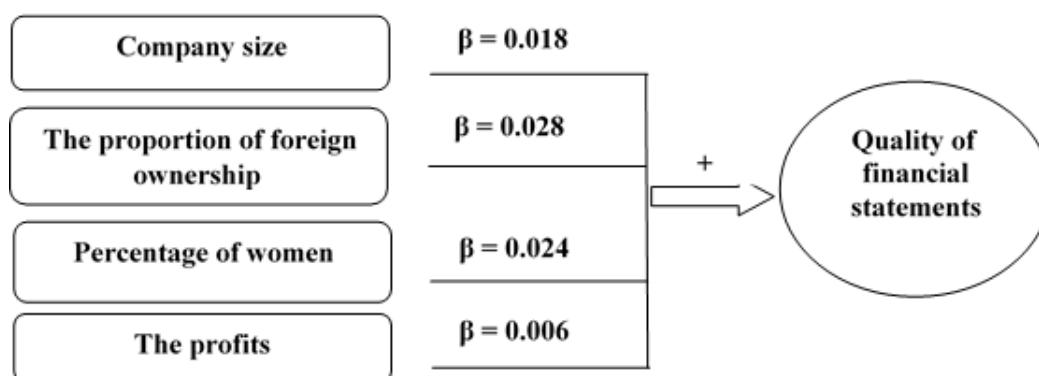
Correlations													
		SIZE	NUM BER	CFORE	CGOV	CONCU CEO	AGE CEO	PWO MEN	INDE CEO	ROE	LEV	CURRE	QF
QF	Pearson Correlation	.531**	.044	.457**	-.088	.022	.046	.251**	.008	.183*	-.074	.052	1
	Sig. (2-tailed)	.000	.574	.000	.263	.784	.556	.001	.923	.019	.349	.509	
	N	170	170	170	170	170	170	170	170	170	170	170	170
**. Correlation is significant at the 0.01 level (2-tailed).													
*. Correlation is significant at the 0.05 level (2-tailed).													

Source: Author's SPSS Analysis

Based on the above analysis results, 4 factors are affecting the quality of accounting information on F.S. The factors Company size, rate of foreign ownership, Percentage of women in the senior management have a positive relationship with the quality of accounting information, that is, as these factors increase, the quality of information will increase. Accounting information also increased. The profit factor alone has a loose relationship with the quality of accounting information. The remaining factors have no impact. We have a standardized regression equation:

$$QF = 0.595 + 0.018 \text{ SIZE} + 0.028 \text{ CFORE} + 0.024 \text{ PWOMEN} + 0.006 \text{ ROE} + \epsilon$$

Chart 1: Results of regression model inspection



Source: Author's research results

5. DISCUSSION AND CONCLUSION

The study evaluates internal factors affecting the quality of F.S of L.C in Vietnam. The results of the regression analysis show that the quality of F.S is affected by four factors: company size, foreign capital ownership rate, percentage of female members, and profit. These factors have the same dimensional relationship with the quality of F.S. Companies with large size, meaning a large total asset value, will have more financial resources to improve the quality of accounting information on F.S than small companies with weak financial resources. Similarly, companies with a high percentage of foreign ownership will publish more quality information to overcome the difficulty of geographical distance. The high percentage of women will increase the efficiency of the company's operations, which means the quality of information will increase. Research results also show that profit is significant at 10%, companies with high profits will disclose more information, which means that the quality of F.S increases.

The company has a large scale should utilize its advantages to build a system of effective control, to review the processes of collecting and processing transactions, and steps to get data to prepare F.S. Small companies do not have the advantage of scale, need to improve the accounting apparatus, build an effective internal control system, help administrators have a reliable database to make effective business decisions, thereby attracting investment capital. Moreover, L.C should have policies to attract foreign investors, however, there are still some inadequacies that are some foreign-invested companies that pollute the environment, or the import of outdated technology. Therefore, depending on business activities, each company needs to consider the appropriate level of foreign ownership ratio. If the percentage of female members in the Executive Board is high, the quality of accounting information will also be improved, so companies should include women in the management of the company, give women a chance to assert themselves, at the same time, organizations should create conditions for training and fostering to help women have better leadership skills. In addition, companies need to have solutions to increase profits, such as increasing sales, strengthening marketing activities, expanding markets, and improving market share, striving to reduce production costs, and lower product costs. L.C needs to improve its understanding of the quality of F.S, know what factors affect the quality of F.S so that it can overcome weaknesses in the entity or promote its strengths.

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FINTECH AND SUSTAINABLE DEVELOPMENT OF VIETNAM'S FINANCIAL MARKET IN THE CONTEXT OF COVID-19

MSc. Thanh Huyen Bui¹

Abstract: *The development of financial technology, commonly referred to as Fintech, is the subject of great concern to the general public and policymakers. In the context of the Industry 4.0, consumers have been increasingly accessing and using Fintech products and services. Fintech innovations have brought a disruptive digital transformation to the traditional banking - financial system, as well as have potentially improved the efficiency of the financial system and promoted inclusion and sustainable development. However, along with opportunities, financial technology in Vietnam still has many challenges and poses certain risks. On the basis of assessing the current situation of Fintech in Vietnam in recent years, the article proposes some recommendations to develop this fields, especially during and after the COVID-19 pandemic.*

Key words: *Fintech, innovations, sustainable development, COVID-19...*

1. INTRODUCTION

Rapid advances in technology are transforming the financial landscape, increasing access to financial services in profound ways. Globally 1.7 billion people have no access to a bank account and small- and medium-sized enterprises (SMEs), which provide employment to over 60 percent of workers worldwide, yet struggle to access finance (IMF, 2020). In this circumstance, financial technology (fintech) has been offering significant opportunities to enhance financial inclusion, supported by the growing use of mobile devices, smartphones in particular and access to internet.

During the Covid-19 pandemic, technology has created new opportunities for digital financial services to accelerate and enhance financial inclusion, promote economic growth, particularly in the context of social distancing. Digital financial inclusion may play an important role in mitigating the economic and social impact of the ongoing COVID-19 crisis. Also, increasing the financial access of low-income households and small- and medium-sized enterprises (SMEs) might support a more inclusive recovery.

Digital financial services are faster, more efficient and typically more cost-saving than traditional financial services; and therefore, digital finance may complement or substitute traditional finance, help to broaden financial inclusion. While digital financial services are still small relative to traditional services, they are growing rapidly and at different speed across regions and countries in the world. Digital financial inclusion is evolving from “spend” to “lend,” and tends to fill a gap: both payments and lending develop where the traditional delivery of financial services is no longer enough. In particular, during the Covid-19 crisis, digital finance has been enabling contactless and

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cashless transactions, and helping facilitate the efficient and rapid deployment of government support measures to people and businesses affected by the pandemic.

However, the development of digital financial services is giving rise to new risks to the financial sector, even emerging prior to COVID-19. Lack of access to mobile phones, computers, or the internet could lead to new forms of exclusion. The growth of digital financial services might also pose risks to financial stability and integrity if their regulation and supervision does not keep pace. Besides, cybersecurity risks or inappropriate lending practices by underregulated institutions could cause unexpected financial losses and undermine trust.

Vietnam also offers very high potential for the fintech industry to thrive. Factors, such as young demographic, growing Internet access and smartphone penetration, and prevalence of cash as main payment method, provide great opportunity for fintech and digital business models. In the Vietnamese financial market, the development trend of fintech has contributed to diversifying providers, financial products and methods in delivering financial products/services. Fintech companies in Vietnam tend to embark the potential retail banking market share of traditional banks, but the collaboration between fintech companies and banks is still the main trend in recent years. Digital transformation is expected to change the management of banks towards leaner, smarter and more modern business models, thereby potentially promoting the efficiency of financial system in line with sustainable development.

2. FINANCIAL TECHNOLOGY (FINTECH) AND THE DEVELOPMENT OF FINTECH IN VIETNAM

2.1. What is Fintech?

The term “Fintech”, short for Financial Technology, has been expanded with many different meanings but there is not yet a common definition of Fintech. Fintech is the term used to describe new technology that aims to automate and improve the use and delivery of financial services and products through software, such as online banking, mobile payment applications or even cryptocurrency. Fintech is utilized to improve the way businesses and consumers access their finances and better manage their financial operations, processes and lives based on specialised software.

Since the Internet revolution and the evolution of mobile internet, financial technology has grown explosively, and fintech, which originally referred to computer technology applied to the back office of banks or trading firms, now broadly encompasses a variety of technological interventions into personal and commercial finance. The adoption of technology in finance is not new, but a step change is currently expected with the application of a number of innovative technologies in combination, notably involving blockchain, the “Internet of things” (IoT) and artificial intelligence (AI). Fintech innovations promise a more efficient, accessible and less vulnerable financial system.

According to the International Monetary Fund (IMF), Fintech is the technology-enabled innovation in financial services that could result in new business models, applications, processes, or products with a material effect on the provision of financial services. Fintech refers to emerging technologies, from artificial intelligence to distributed ledgers, which are transforming the financial services landscape, creating opportunities as well as challenges for consumers, financial and non-financial firms, service providers and regulators alike. These technologies might strengthen financial development, inclusion and raise efficiency in the financial sector, including in the areas of payments, financing, investments, asset management and insurance. However, they could also pose risks to the stability and integrity of the financial system, as well as to consumer and investor protection.

In addition, Fintech has contributed to promoting inclusive and sustainable economic growth in most countries in recent years, since Fintech comprises some fundamental features that can help align the financial system with sustainable development:

1. Boosted financial inclusion and decentralization of the financial system: whereby advanced technologies are used to enable the inclusion of the unbanked and underbanked community of individuals and SMEs, by reducing the costs for payments and providing suitable access to capital domestically and internationally for the ‘unbanked’, the ‘underbanked’ and for SMEs.

2. Increased transparency, accountability and collaboration across sectoral boundaries: where advanced technologies can enable greater transparency, accountability and information sharing, to regulators, citizens and businesses to work together in the best interests of society.

3. Improved risk management and diversification: better capture and analysis of citizen, business and financial institution data allow both the private sector and financial regulators to identify and manage more detailed risks through the development of early-warning infrastructure and by better spreading risk across a range of actors in the financial system and in the real economy.

4. Lower costs through improved efficiency, speed and automation: artificial intelligence (AI) platforms allow for automation of processes, mitigating costs, increasing reach, tailoring services and increasing the speed of execution of financial system front- and back-end services.

5. Increased competition: disruption of the competitive landscape by the entry of fintech start-ups and the growth of alternative products and business models creates more accessible lower cost choices for individuals and firms.

3. THE DEVELOPMENT OF FINTECH IN VIETNAM IN RECENT YEARS

The explosive growth of technology is transforming the financial sector, increasing access to financial services in more inclusive ways. A recent study by the IMF shows that Fintech has contributed to boosting financial inclusion and has potentially made a significant contribution to economic recovery and growth during and post Covid-19 crisis.

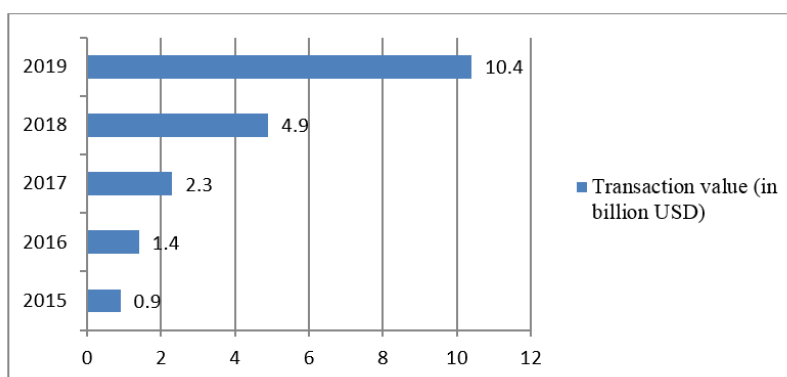
According to FSB (2017), Fintech activities are classified into five categories of financial services, including: (i) payments, clearing and settlement; (ii) deposit, lending and capital raising; (iii) insurance; (iv) investment management; and (v) market support. Fintech continues to drive new business models and business areas in the financial services industry. Over the last few years, Fintech startups have focused on disruptive technology to penetrate the financial services value chain. The impact of Fintech startups on the financial services value chain varies across countries due to regulatory barriers to market entry and the relatively different level of development of the Fintech ecosystem in countries. Customer demand for banking and financial management services is growing, creating substantial opportunities for both traditional financial institutions and fintech companies. In the coming time, the appearance of various kinds of financial services, such as investment consulting services and personal financial management, helped by applications of artificial intelligence (AI)... is inevitable.

In Vietnam, Fintech market has grown strongly since 2015, with many fluctuations. The appearance of startups in the fintech sector has been gradually becoming a trend that attracts considerable attention from the community and businesses operating in this sector. According to a report by Fintech News Singapore, the number of startups in the fintech sector in Vietnam increased

almost 3 times from about 40 companies at the end of 2017 to approximately 115 companies at the end of 2020, of which payment services are still the largest segment, accounting for 31%.

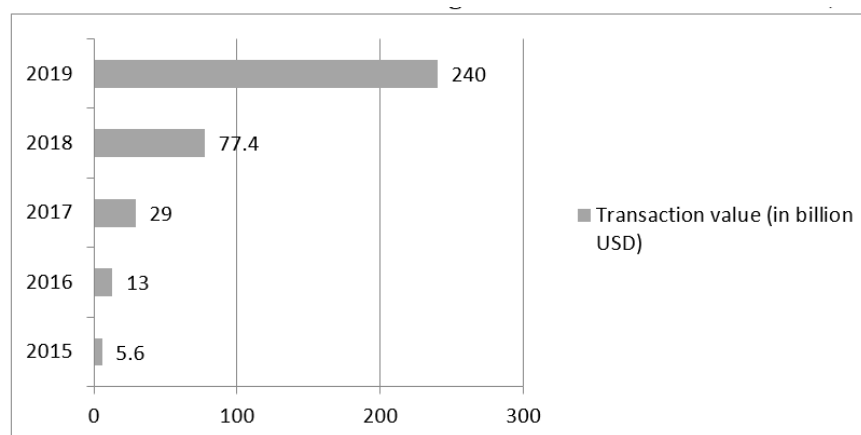
Based on statistics of the State Bank of Vietnam (SBV), by the end of 2020, Vietnam had 41 non-banking institutions licensed to provide intermediary payment services, with five most popular e-wallets (digital wallets), including MoMo, Payoo, Moca, Zalo Pay and ViettelPay. At the same time, TopDev's Vietnam Information Technology Market Report 2020 indicates that the number of users of electronic payment services (transactions via the Internet and mobile phones) is about 36.2 million people, up 12.1% over the same period last year. This figure shows the positive changes in cashless payment activities of people. The electronic payment market in Vietnam has been getting more active, and the value of e-wallet transactions also has been increasing dramatically over the last few years that indicates a change in customer habits and the great need for these services, such as mobile top-ups, money transfers, bill payments, online ordering. As can be seen from the chart below, in 2019, the total value of transactions on e-wallets in Vietnam amounted to 10.4 billion US dollars, more than twice the value of the previous year. Besides, the total value of transactions through mobile banking in Vietnam has been growing fast and reached about 240 billion US dollars in 2019, more than triple the value of the previous year.

Chart 1. Transaction value of E-wallet in Vietnam from 2015 to 2019 (in billion USD)



Source: Statista 2021

Chart 2. Transaction value of mobile banking in Vietnam from 2015 to 2019 (in billion USD)



Source: Statista 2021

Considering the total population of Vietnam, the proportion of population using electronic payment services accounts for only about 37%, mainly concentrated in urban areas and big cities, where the majority of people have bank accounts. Accordingly, the domestic electronic payment market is considered a potential market but also challenging.

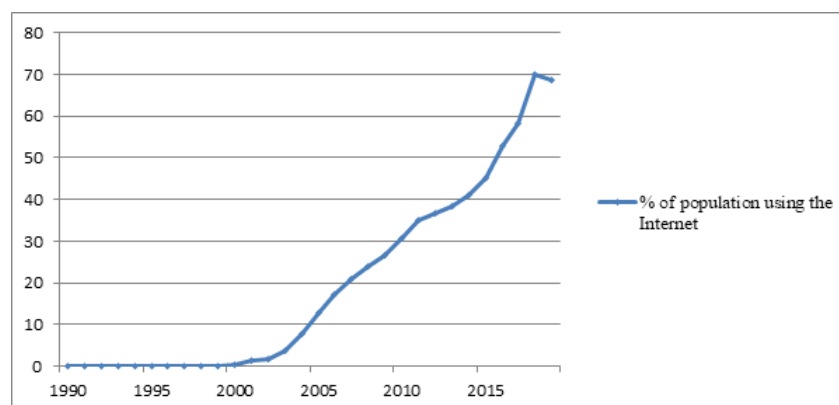
While fintech companies in the payments segment in Vietnam continue to grow and attract investors' interest, peer-to-peer lending and the cryptocurrency space/blockchain are two segments that have strongest growth rate with more than 15 startups emerging in 2020. In fact, Vietnam has not yet had a specific legal document regulating the business of peer-to-peer lending services as well as the issuance, storage and trading of cryptocurrencies. Therefore, many organizations and individuals have taken advantage of legal loopholes to carry out loan sharking (lending at unreasonably high interest rates) and manipulate the buying and selling prices of cryptocurrencies, leading to negative effects on the economy and society.

In 2020, Vietnam's Fintech market also witnessed the emergence of insurance technology, digital banks and small- and medium-sized financial enterprises. The majority of Vietnamese banks have either implemented or been in the process of developing their digital transformation strategies, with the aim of gaining a competitive advantage and capturing a larger share of the market. Digital transformation has the potential to allow banks to capture a larger amount of data from a variety of sources and better use this data to support business decision making. It could also enable banks to reduce costs while improving both operational efficiency and revenues through innovation in products, services and distribution channels.

By the end of 2019, 60 percent already had digital transformation initiatives in place. In particular, the most notable initiative is the digital banking model with pioneering entities such as Vietcombank, TP Bank, VP Bank, MB Bank, BIDV. Most of these banks are following the path of association with, or acquisition of a fintech company to develop a digital banking model. For example, TPBank launched LiveBank in 2017. It provides 24/7 automated banking services through around 250 LiveBank stations nationwide by applying innovative technologies such as eKYC, OCR, QR code, cash recycler and biometrics. Through the strategic partnership with VP Bank, Timo was launched in 2016 as Vietnam's first fully digital bank. This service comprises a mobile app and allows customers to request a new debit card. However, after 5 years of operation, Timo terminated its partnership with VP Bank and moved to cooperate with Viet Capital Bank.

Investment in Vietnamese fintech companies, especially in the payment sector, is driven by potential business opportunities with large population, high internet and mobile networks penetration rates in Vietnam, as well as relatively favorable market along with government supports aiming to accelerate a cashless economy and promote mobile and digital payments.

In Vietnam, over 70 percent of the population has access to the Internet. Internet usage in Vietnam is predominantly mobile based as a large share of the population lives in rural areas where mobile internet is more accessible. According to World Bank data, Internet penetration rose significantly in Vietnam since 2001. In 2015, 45 percent of the Vietnamese population had access to the internet, and this figure amounted to 68.7 percent in 2019. In January 2021, there were 68.72 million Internet users in Vietnam.

Chart 3. Percentage of population using the Internet in Vietnam over 1990 - 2019

Source: World Bank Data

In 2019, Vietnam ranked second in ASEAN in fintech funding, attracting 36% of the region's total investment in fintech, as reported by PricewaterhouseCoopers, United Overseas Bank, and the Singapore Fintech Association. The optimism has come as Vietnam is experiencing a boom in digital payments and e-commerce activities in the context of Covid-19. In general, Vietnam's fintech market has made remarkable progress but is still immature when compared to other countries in the same region such as China, Singapore, and Malaysia.

3. FINTECH AND SUSTAINABLE DEVELOPMENT OF VIETNAM'S FINANCIAL MARKET IN THE CONTEXT OF COVID-19 PANDEMIC

3.1. Impact of Fintech on the sustainable development of Vietnam's financial market

While governments have been implementing restrictive containment measures, including lockdowns, quarantines and other social distancing measures, to bring the Covid-19 outbreak under control, digital financial services have created new opportunities to promote financial inclusion. Fintech may help people and businesses to maintain and increase access to financial services during social distancing periods, given higher preference for cashless and contactless transactions to mitigate the spread of the coronavirus disease. In fact, Fintech is playing an important role in mitigating the detrimental impact of the COVID-19 by facilitating the timely and effective execution of fiscal support measures to the intended beneficiaries, even those who are unbanked. By reducing or eliminating physical interactions and the use of cash, Fintech helps governments deliver support packages to people and businesses in a fast and safe way. In countries where access to banking services is limited, mobile money networks are being used to deliver government transfers (e.g., Namibia, Peru, Uganda, Zambia). Some fintech companies are also involved in meeting the liquidity needs of SMEs, such as in China, or offering preferential loans or flexibility in loan repayments to borrowers affected by the pandemic, such as India, Kenya, and United Kingdom (IMF, 2020).

In Vietnam, the fintech industry has been developing strongly in terms of quantity and diversity in products and services, attracting great attention of investors. In the context of the Fourth Industrial Revolution (Industry 4.0), the digitization of the government, businesses and banks are facilitating Vietnamese people to get used to cashless payments and accept the use of convenient electronic payment services (e.g., utility payments), and payment service on mobile devices. Fintech in Vietnam currently focuses on three main services: payment, peer-to-peer (P2P) lending

and crowdfunding. Digital payment is the fastest growing segment, with about 35 companies; P2P lending includes more than 20 companies. Other services such as asset management services, liquidity management, investment management, insurance, and automated financial advisory services are still at their early stage of development.

In the context of the strong development of Fintech, Vietnamese financial services market has been impacted significantly, some changes are as follows:

Firstly, the entities engaging in provision of financial services in the market have become more diverse and business models have also changed notably in the direction of digital transformation in recent years. Regarding payment services, besides banks, Vietnamese financial market currently has over 30 licensed intermediary payment service providers, in which there are many fintech enterprises as well as owners of e-wallets (e.g., Momo, VNPay, Airpay, Moca...). Fintech companies and startups have the advantage of using the latest technologies and analyzing data to identify their target customers, including low-income groups, and design their products to deliver customer-centric experience. Therefore, these companies have succeeded in providing financial services with better customer experience, more convenience and lower prices. Commercial banks have been in the process of renovating the system, with the intention of developing digital banks.

Although fintech companies have advantages in new technology, innovative ideas and flexibility, there are still some limitations, such as inadequate experience in the banking and financial sector, their brand and reputation that is not big enough to expand the market easily and quickly, especially in Vietnam. Traditional banks have long-standing history and reputation, large networks, the advantage of large amounts of customer data, and have enough finance and operating experience, but they always have a certain lag in terms of technology compared to fintech companies. Therefore, Vietnamese banks have also strengthened partnerships with fintech companies to take advantage of innovative technology, accelerate their digital transformation. In Vietnam, in 2018, 72% of fintech companies chose to collaborate with traditional banks in providing services, rather than engaging in a direct competition. The collaboration between fintech companies and banks has been tightened on the basis of mutual benefits, based on the advantages of each party they can provide products and services with more satisfying experience, better quality and importantly, more reasonable costs for customers. In 2020, the evolution of digital banking is accelerated, helped by the rapid adoption of fintech and the boom in e-commerce industry during the COVID-19 pandemic. Many banks have chosen to partner with foreign fintech, for example, VietinBank associated with Opportunity Network (UK), CIMB Bank Vietnam and Toss (Korea), VPBank and BE Group (Sweden), OCB and RippleNet (USA), and TPBank with Backbase (Netherlands). Some other banks have entered into partnerships with local fintech startups.

Second, the market witnessed the emergence and explosion of new financial services, such as e-wallets, digital banking services, e-payment services, etc. The financial services powered by Fintech have filled the gaps left by traditional financial institutions, which often provide services based on existing technologies with high operating costs and even expensive upgrades. In the last two years, some e-wallets have experienced a fast growth rate and 19% of e-commerce transaction value in Vietnam was performed via e-wallets. The e-wallet market has been one of the biggest driving forces behind Vietnam's move towards a cashless society, but it is also considered a highly competitive market. Although the market is fairly crowded with more than 30 providers

by the end of 2020, the most popular names such as MoMo, Moca and ZaloPay are dominating. P2P lending has appeared in Vietnam since 2015, aiming to reach unbanked customers, and the number of companies providing the platform for this service is rising. Along with the development trends of crowdfunding services in the world, Vietnam presently has many crowdfunding website platforms which have been created, developed and have built up the prestige and trust of the community. From disadvantaged households to SMEs, fintech has been facilitating access to accounts, transactions, and credit in recent years, thereby bringing opportunities for larger proportion of the population to participate in formal economic activity. The contagion of the Covid-19 has partly led to growing preference for cashless and contactless transactions; consequently Fintech, including mobile money and digital lending, may respond these needs, help people and firms to access financial services quickly and conveniently amid social distancing.

Third, fintech companies in Vietnam tend to engage in sharing the potential retail market share with traditional banks when P2P lending, e-wallet, card payment activities have been penetrating strongly into daily life. For instance, concerning non-cash transactions, there are currently five e-wallets (Payoo, MoMo, AirPay, Moca, ZaloPay) accounting for 90% of the total intermediary payment market share in terms of both transaction volume and value. Digital solutions, which can serve Vietnam's large underbanked and unbanked population in a convenient and effective manner, become a strategic determinant in dominating the financial services market.

In particular, the COVID-19 crisis accelerated an expansion of e-commerce towards new firms, customers and variety of products (e.g., necessities, groceries), and a shift in consumer behaviour towards online shopping, especially when physical stores closed due to social distancing measures. As a result of an increase in consumers' online shopping, there may be a change in their payment habits towards using more cashless payments, such as e-wallets, online banking, e-payment. In the context of the Covid-19 pandemic, convenient payment products and services together with many promotions and practical support have created favorable conditions and encouraged people and businesses to use cashless payment services, thereby contributing to physical contact restrictions and preventing the spread of the epidemic under the direction of the government.

Given the high internet penetration rate, a strong push for a cashless economy and a change in payment habits, the number of mobile payments reached nearly 700 million by the end of August 2020, although cash still prevails in Vietnam. The number of mobile wallet users has also increased sharply in recent years. For instance, with more than 20 million users in 2020, MoMo wallet has been dominating the mobile payments market in Vietnam. Momo, a super app offering an array of services, is Vietnam's leading e-wallet by users and aims to reach 50 million users in the next two years (Reuters, 2021).

3.2. Challenges for the financial market in Vietnam

However, fintech brings some challenges to the market in terms of legal framework, cybersecurity and information security, consumer protection, business culture and environment. Despite great potential, for Fintech, Vietnam has only explored at a low level with a primitive legal framework, which includes mainly a number of macro projects and payment regulations, such as the project of supporting the national innovative startup ecosystem by 2025, the project of improving access to banking services for the economy, etc, and has been continuing to improve the legal framework with some projects such as the trial management mechanism for Fintech activities,

collecting comments to develop a decree regulating cashless payments to replace Decree No. 101/2012/ND-CP dated November 21, 2012 of the government on cashless payments.

The incomplete legal framework has created loopholes for some institutions and individuals to take advantage of the P2P lending and crowdfunding models to perform “black credit” activities or fraud. Under Vietnamese law, there is no regulation on this form of lending, so lending and capital raising activities still contain many risks for participants. The current regulations on credit are not suitable for the P2P lending and crowdfunding models, and also not suitable for the companies that provide the platform for these services. The fact that its nature has not been properly recognized makes sharing economy activities in the financial sector in Vietnam vulnerable to exploitation, distortion and posing potential risks for the parties involved. The experience of developing P2P lending in the context of the lack of control by the Chinese government shows that this type of business has caused serious damage to society. The Chinese government considers P2P lending as a loan information exchange system, making regulations relatively lax, thus creating loopholes for violations (e.g., raising capital illegally or under the multi-level investment model).

Vietnam currently does not have specific regulations on the status, jurisdictions and responsibilities of each party in the crowdfunding relationship. Crowdfunding should be recognized as a capital mobilization channel, which is facilitated to operate and managed within the legal framework in line with the needs and general trends of the market as well as the government’s policy on the utilization of the capabilities of startups and social idle capital instead of using the state budget to directly support start-up projects. In the ASEAN region, Malaysia was the first country to officially promulgate the legal framework for crowdfunding in 2015, through amendments and supplements to the Law on Capital Markets and Services. The law stipulates the maximum amount of investment through crowdfunding, below RM5 million, SMEs are allowed to raise an amount of up to RM3 million in a year.

As there are still limitations in the cybersecurity and information security in Vietnam, the fact that customers easily provide personal information to P2P lending platforms, online shopping websites, etc., can increase the risk of the loss of data and personal information, and create loopholes for hacker attacks. The trend of cybercrimes is shifting from mechanical attacks to exploiting vulnerabilities in technology and users. Technology-related risks may affect both banks and non-bank financial institutions, for example, confidential corporate and customer data can be leaked through cyberattacks. Vulnerabilities from users can be exploited through users accidentally accessing strange links, or accessing unsafe websites. According to a survey in six Asian countries (including Indonesia, Korea, Thailand, Philippines, Malaysia and Vietnam) by the International Finance Corporation (IFC), the consumer protection activities for users of financial products and services in Vietnam are considered quite sketchy. Specifically, out of 6 criteria to evaluate consumer protection activities in the financial sector, Vietnam only meets two factors, including having a complaints management agency and providing customer support via hotline. Other criteria (e.g., direct handling of complaints, receipt of complaint reports from financial institutions, and service quality control, etc.) are applied in other countries, but not yet applied in Vietnam.

Lack of financial and digital literacy or inaccurate information could exacerbate the risks of financial exclusion and result in distrust for new technology, especially amongst the most vulnerable groups. Furthermore, many fintech companies, which are young, including domestic fintech startups in Vietnam, have never experienced an economic fallout before. The COVID-19 crisis is the first major test of the fintech sector’s resilience during a crisis. Stalled funding for fintech would affect fintech companies, leading to smaller fintech firms being acquired by larger firms or

disappearing altogether. Besides, during the economic downturn, the collapse in consumption (notably in sectors such as hotels, restaurants, airlines, and even retail) would cause a drop in fintech payments firms' revenues. At the same time, some microfinance institutions might also be struggling to operate digitally in the context of the Covid-19 crisis.

4. SOME RECOMMENDATIONS TO FOSTER FINTECH IN VIETNAM

In the coming period, the efforts to fight the epidemic in many countries along with the greater supply of many Covid-19 vaccines will bring hope that the disease will be controlled and the economy will recover worldwide. However, in order to take advantage of opportunities and address challenges in the post-Covid-19 period, several solutions for enhancing Fintech need to be focused.

Firstly, in order to increase finance access of people and businesses, especially low-income people in rural and remote areas, it is necessary to increase investment in digital infrastructure, diversify products, and importantly enhance digital and financial literacy to ensure greater inclusion. On that basis, financial regulators, banks, and technology providers should consider implementing a number of pilot projects to develop novel financial products and services to fulfill customer needs.

Second, it is important to establish a solid legal environment and innovate digital financial services. The key factors to be considered include: facilitating digital identity, ensuring technological neutrality (the market decides on its own to choose the most appropriate technology); ensuring responsiveness and monitoring; using controlled testing mechanism and other mechanisms to facilitate innovation. In particular, it is necessary to establish rules and regulations for the fintech ecosystem; focus on building a legal framework on the provision of fintech products/ services; quickly develop legal regulations on virtual currency, cryptocurrency, recognizing it as a type of "virtual property"; standards of product and service portfolio for Fintech companies to operate transparently, including credit activities, savings, online payment and money transfer services, investment, insurance, financial consulting, data analysis... Furthermore, the regulators also need to implement policy pilots (specifically, regulatory sandbox, which is a regulatory framework that provides Fintech startups and firms a controlled environment to live test their innovative financial products, services and business models for a specified period under the regulator's supervision) to handle the "hot" issues of the market and the practical application of new technologies.

Third, in the digital era, the government needs to focus on protecting consumers in the financial market. More specifically, it is necessary to develop a comprehensive and effective financial consumer protection framework that is suitable for the digital environment. At the same time, it also should promote information, guidance and education for people in accessing and using financial services, especially digital finance, provide thoroughly knowledge about fintech to consumers, and improve skills in financial management as well as application of technology in financial transactions.

Fourth, building development strategies, development policies, and vision for Fintech development in association with the development of the financial and banking system and the economy is needed. The evolution of fintech associated with boosting the adoption of technology in the financial and banking sector is considered a part of the finance industry, under the management of specific industry. Moreover, there are policies on tax exemption and reduction; policy supporting access to capital; creating a favorable environment for fintech investment, partnership with traditional banks and financial institutions.

Fifth, it is necessary to strengthen inspection, examination and supervision for the operations of fintech companies, banks and non-banking financial institutions in order to promptly detect and prevent risks, in which special attention should be paid to non-banking financial institutions. Policymakers need to consider approaches to ensure high-quality supervision and regulation, support the safe use of innovative technologies, while ensuring that regulation remain proportionate to the risks. Fintech firms and financial institutions also need to strengthen cybersecurity, confidentiality, and information security, such as: taking measures to ensure security and safety for important payment systems; coordinating closely and effectively with law enforcement agencies. In addition, the State Bank of Vietnam should actively monitor and update the situation of domestic and international cybersecurity to warn as well as direct entities to promptly prevent and handle security risks and information technology vulnerabilities.

5. CONCLUSION

The strong evolution of Fintech over the last few years shows that this is a potential area that will continue to attract investors and have a breakthrough growth rate in the coming time. Fintech plays an important role in developing sustainable financial market and supporting countries to quickly promote financial inclusion by increasing access to financial services for a segment of the population, who is unbanked or have difficulty in accessing traditional financial services; thereby contributing to achieving sustainable development goals. Therefore, encouraging the adoption of fintech in promoting financial inclusion and sustainable development while controlling potential risks is a critical issue that needs continued attention, especially in the context of the ongoing Covid-19 pandemic.

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SOME SOLUTIONS FOR SUSTAINABLE REAL ESTATE MARKET DEVELOPMENT

PhD. Vuong Minh Phuong¹

ABSTRACT: *The real estate market plays an important role, creating valuable assets for the economy, meeting the housing needs of the people, and facilitating the development of other markets. The development of a sustainable and healthy real estate market in line with the socio-economic model contributing to economic development is an extremely significant task in the current period, especially when Vietnam's international integration process is going strong.*

Keywords: *real estate, real estate market*

1. INTRODUCTION

In the past years, Vietnam's real estate market has undergone four changes, including the period 1993-1995 associated with the introduction of the Land Law 1993. the period of 2009-2010 with a hot development due to the loose credit policy, and the quiet and frozen period of 2011-2013. In the period 2014-2019, the market that has been recovered and developed again and from the beginning of 2020 until now, the market was affected by the COVID-19 epidemic. As of 2021, it is estimated that the whole country has been implementing over 5,000 projects with a total investment capital of more than 4.5 million billion VND, 3 times higher than 2009. In the past 5 years, FDI that has poured in the real estate market accounts for about 17.63 billion USD, always ranking 2nd in total FDI registered to invest in Vietnam [1].

Although the real estate market has made the certain achievements in recent years, there are still many restrictions. In general, the developed market is still unstable, sometimes it develops too "hot", sometimes "frozen", investment in real estate is still spontaneous, following the movement, supply and demand mismatch, and price of real estate is still too high compared to people's income.

2. LITERATURE REVIEW AND PREVIOUS RESEARCH STUDIES

Many domestic and foreign authors carried out researching issues related to the real estate market.

Pirounakis, "*Economic Real Estate*", Routledge, Oxford, UK, (2013), An Introduction to Financial Instruments and Concepts of Real Estate Economics. The author researches some issues such as: the relationship between real estate and the macro economy, real estate financial policies (taxes, real estate supply and demand, etc.), market dynamics, price bubbles, etc. and price estimates in the aftermath of the collapse in U.S housing prices that exacerbated the global crisis in 2008.

In their work, Eugenio Cerutti, Jihad Dagher, and Giovanni Dell'Arice, *Housing Finance and Real-Estate*, (2015) confirmed, the recent global economic crisis has been partly attributed to the risks

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arising out of and/or related to the real estate boom. In this book, the authors complements the previous research by (i) exploiting more in-depth analytical data on real estate credit and finance policy and (ii) analyzing the characteristics of real estate credit, the influencing factors between countries, in which the authors offer new perspectives in the study of real estate credit and finance policy.

Miller, NG and Sklarz, in their article, “*Integrating real estate market into Home price forecast system*”, *Housing Research Review*, 21:2, pp. 183-213, (2012); Terry Boyd, in his/her article, “*Property Market Analysis - The Key to Looking Forward*”, (2014), all analyzed the nature of the real estate and housing market, the volatility of housing prices in the change and development of the current market economy. The authors research the factors affecting real estate and the real estate market, house prices, then forecast their fluctuations through surveys on real estate, the real estate market, and simultaneously furnish recommendations and suggest directions for future research.

In recent years, there have been many scientific research projects on real estate in Vietnam, such as:

Ministerial-level scientific project: “*Development policy of Vietnam’s real estate market*” (2011) by Dr. Dinh Van An, in which the main content of the project is to clarify theoretical issues about the formation and development of the real estate market, clarify the characteristics of the real estate market in the modern market economy, and assess the current situation and pressing market issues and propose directions and solutions to develop the real estate market in Vietnam until 2020.

In recent dissertations, the authors have continued to research issues related to the real estate market such as State management, real estate bubble phenomenon, building market research indexes, developing products financial products for the real estate market in Vietnam, etc., in particularly as follows: “*State management of the real estate market in Ho Chi Minh City*” (2011) by PhD student Nguyen Van Dien. The doctoral thesis “*Real estate bubble for housing*” by Le Thanh Ngoc (Banking University of Ho Chi Minh City), (2014); “*Research on building applied real estate market index in Ho Chi Minh City*” by PhD student Le Van Cu (Central Institute for Economic Management, Vietnam), (2015), have studied concepts, characteristics of the housing market classification, the phenomenon of housing bubbles, the theoretical basis for building the real estate market index such as: the role, meaning, classification of real estate market indexes, pointing out the causes, then groups of recommendations proposed to limit speculation and development of the real estate market in Ho Chi Minh City.

The thesis of Dr. Le Van Binh, “*Financial solutions to develop the real estate market in Vietnam*” has studied the financial policies for the real estate market in Vietnam. But this study is carried out in the period before Land Law 2013, Business Law 2014 adopted and amended.

The author himself has also initially researched issues in the real estate market such as “*Personal income tax on real estate transfer activities on the real estate market in Hanoi*” published in the *Journal of Corporate Accounting and Finance*, Issue 1 (162) 2017, page 32; “*Management, lease and transfer of State-owned housing in Hanoi city*” published in *Figures and Events Review – Journal of the General Statistics Office of Vietnam*, No. 11, 2016, page 36; “*Forming a real estate investment trust fund - Problems raised*” published in *Financial Inspector Journal* Issue 175 + 176 (1 + 2 – 2017), page 78.

In general, the research works of domestic and foreign scientists related to the development of the real estate market have partly helped to perfect the theoretical and practical system in Vietnam.

The research works in some respects have pointed out many realities, as well as causes, in the inefficient operation of the real estate market. Thus, it can be seen that the current research gap is that there is no summarized, comprehensive and complete study on the transparent and sustainable development of the real estate market. Especially in the context of many changes in economic development in the context of integration, laws along with enforcement guiding documents related to the real estate market have come into effect such as Land Law 2013, Law on Real Estate Business 2014, Housing Law 2014, Construction Law 2020, Law on Investment Amendment 2020, etc.

3. RESEARCH METHOD

In the article, the author applied the theory and methodology of dialectical materialism, historical materialism, systematic approach, statistical method, comparative method, etc. The article uses secondary data sources, mainly from reports and information originating from official sources of the State management agencies, scientific research works, books, textbooks, journals, e- information pages, reputable companies such as CBRE, etc.

4. RESEARCH CONTENT

In 2021, during the complicated developments of the Covid-19 pandemic, which have affected all different areas in the social life of many countries in general and Vietnam in particular. Almost all real estate businesses are in a difficult situation. The real estate market has shown signs of instability and unsustainable development, reflected in the ups and downs of the market.

Looking back at the market's movements in recent years, it can be seen that the phenomenon of land "fever" in Vietnam appeared from the years 1993 to 1995, associated with the introduction of Land Code 1993. Land use right that is permitted to transfer more easily and conveniently has created a land "fever" across the country.

Next was the fever in the period 2002-2003 in Hanoi. "This is the period when Hanoi has just developed. Investors always expect foreign investment to increase rapidly. The economy grows strongly. Families buy land, even borrow money from banks to invest in land to expect to be sold quickly to make a profit due to difference. But with just an administrative order, not long after that, the house and land fell in price and fell into disrepair.

By 2008, Hanoi was expanded, with an explosion of projects in the West of the city, such as: Galeximco, Nam An Khanh, Bac An Khanh, etc. Simultaneously, an information source was provided that according to the Capital planning, the administrative center of ministries and branches will move to the West of the city, and will then form urban areas around Hanoi. At that time, the amount of remittances and FDI flowing into Vietnam was also very large, investors from all over the country flocked to Hanoi to buy real estate. Land prices were blown up beyond the purchasing power of the majority of people. But only after a while, the economic situation declined because of the impact of the world economic crisis and some macro policies, public debt increased, and the State tightened credit. In particular, in 2011, the Prime Minister approved the Capital construction planning until 2030, with a vision to 2050, without planning for an administrative center in Ba Vi area, the market was almost frozen.

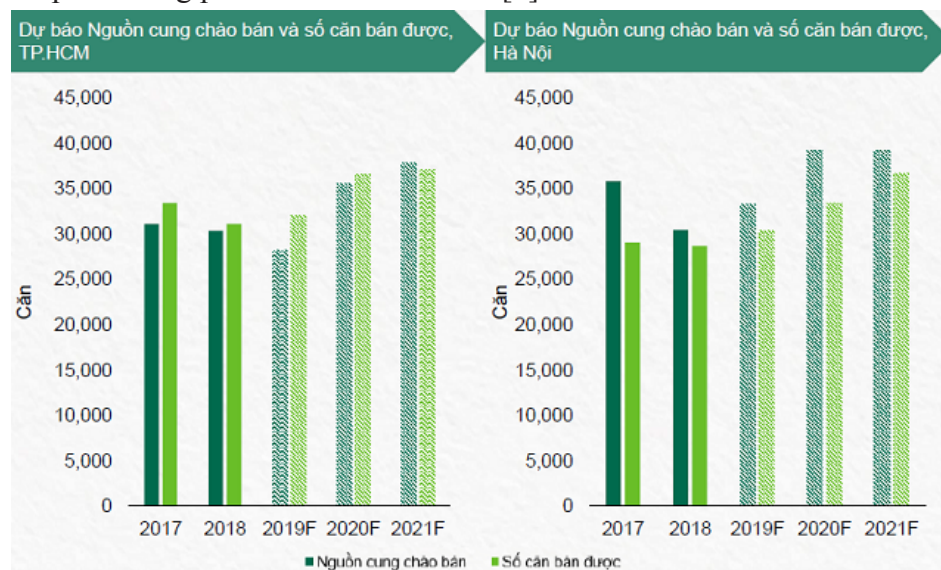
In the period of 2015 - 2018, under the impact of credit easing, low house-purchase loan interest rates, policies for foreigners to own their houses in Vietnam, real estate prices have increased sharply. Transactions took place extremely actively in the segment of resort real estate,

island real estate and localities with potential for economic and tourism development. After a period of hot development, in 2018 the real estate market showed signs of slowing down and going down. The key reason is due to the government’s legal review of a series of projects. At the same time, the State Bank of Vietnam began to tighten its credit policies for real estate loans.

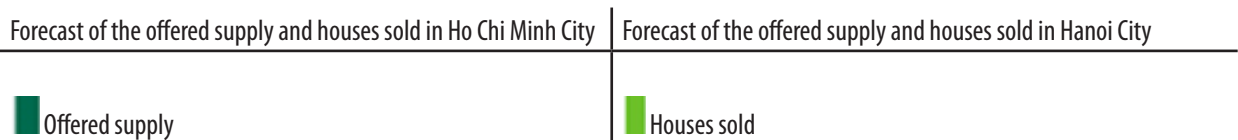
In 2020, the Covid-19 pandemic had a negative impact on the economy. In that context, it seems that the real estate market will then decline and freeze. However, in 2020 and early 2021, real estate prices reversed and increased sharply on a large scale, from Hanoi, Ho Chi Minh City to Bac Giang, Bac Ninh, Thanh Hoa, etc. The key reason is due to the amendment of the Construction Law in 2020, Enterprise Law and Investment Law 2020 took effect from January 1, 2021, contributing to solving bottlenecks in the approval of residential projects and shortening the length of construction permit period from 2021, along with a series of new plans announced.

However, the impact of the ongoing COVID-19 crisis is difficult to predict, depending on the scale and duration of the pandemic.

When the Covid-19 epidemic appeared, it reduced the purchasing power of the whole economy in general and in the real estate industry in particular. According to a report by the Vietnam Association of Realtors on the real estate market in Hanoi City and Ho Chi Minh City in the second quarter and the first 6 months of the year, after the strong fluctuations in “land fever” and the prolonged COVID-19 epidemic, the market was weak with few transactions and supply source and the purchasing power decreased much [2].



Bar Chart 1: Forecast of the offered supply and houses sold in Hanoi City and Ho Chi Minh City



Source: CBRE

In the National Housing Development Strategy to 2020, with a vision to 2030, the Government sets a target by the end of 2020, to build 12.5 million m² of social housing floor. However, up to now, there has only completed 249 projects in the country, with a construction scale of 5.21 million

m² of floor, reaching 41.7% of the plan [3]. Social housing development faces with difficulties because the policy on social housing development is facing many problems, especially the 20% land fund for social housing in commercial housing projects is currently insufficient.

The resort real estate market, especially the condotel type, is constantly facing many piling up difficulties such as legal problems, tax collection and especially being continuously affected by the Covid-19 pandemic.

In particular, in the first 6 months of 2021, the southern market has almost only a few new projects in Ho Chi Minh City in the mid-high-end & high-end segments and neighboring provinces, including Binh Duong. Many projects planned to launch this year due to the impact of the pandemic situation also had to adjust the implementation time. The real estate sector was severely affected.

In the field of tourism and resort real estate, in the last 6 months of the year, the impact lasting from 3 outbreaks to date has made this segment still heavily affected even if the pandemic situation is effectively controlled. The retail market, commercial centers and traditional supermarkets also face great difficulties when they have to compete with online sales methods and advanced technology platforms.

In order to support the development of the real estate market and limit shortcomings and difficulties, the Government has issued many mechanisms and policies to facilitate the development of this field, specifically: Resolution No. 19 -2017/NQ-CP dated February 06, 2017, Resolution No. 61/NQ-CP dated July 11, 2017, Decree No. 30/2015/NĐ-CP, Decree No. 148/2020/NĐ-CP, Decree No. 25/2020/NĐ-CP, etc. However, the real estate market has not really developed transparently and sustainably. The market developments rose and fell erratically, showing signs of unstable development. Besides, the real estate market showed signs of a sharp decline in both supply and transactions in some segments; alarmed the supply-demand mismatch in the high-end segment, while there was a shortage of affordable housing. There are still price fevers causing consequences for the real estate market. Specifically, the phenomenon of realtor and leader caused land prices to increase virtually in some areas; Many companies and employers showed signs of deceiving customers for their profit and market disturbances.

The Government has issued many mechanisms and policies to facilitate the development of the real estate field, specifically Resolution No. 19-2017/NQ-CP dated February 06, 2017, Resolution No. 61/NQ-CP dated July 11, 2017, Decree No. 30/2015/NĐ-CP, Decree No. 148/2020/NĐ-CP, Decree No. 25/2020/NĐ-CP, etc. in order to support the development of the real estate market and the limitations of shortcomings and difficulties. However, the real estate market has not really developed transparently and sustainably.

Vietnam belongs to the group of “less transparency” real estate in the Asia-Pacific region. Particularly, we are ranked 61st globally on the global Real Estate Transparency Index, and only ahead of Sri Lanka, Myanmar in the regional group.

Table 1: The Asia-Pacific region's real estate market transparency in 2018

Transparency	Global ranking	Market	Index	
Super-transparent	2	Australia	1.32	
	7	New Zealand	1.59	
Transparent	12	Singapore	1.97	Singapore, Hong Kong and Japan gradually move up to the ranking of "super-transparent" countries
	13	Hong Kong	1.97	
	14	Japan	1.98	
	26	Taiwan	2.32	
	30	Malaysia	2.57	
	31	Korea	2.60	Korea ranks "transparency" thanks to the improvements in market information
Semi-transparent	33	China	2.67	China aims to rank "Transparency"
	34	Thailand	2.69	Thailand and India have the most improvements
	35	India	2.71	
	42	Indonesia	2.87	
	48	Philippines	3.11	
	60	Macau	3.49	
Less transparency	61	Vietnam	3.52	Vietnam ranks highest in the "Less Transparency" group and is at a transitional threshold to "Semi-transparent"
	66	Sri Lanka	3.70	
	73	Myanmar	3.96	Myanmar is among the top countries with the greatest improvement from the "Non-transparent" ranking.

Source: Investment manager Jll, LaSalle

5. SOME MAIN CAUSES

- The transparency of the market, from investment activities and real estate formation to purchase, sale, transfer, and lease transactions is still limited. Speculation is still common, and primary real estate transactions are still difficult to control, making the market operations unsustainable and stable.

- Database and information on the real estate market from planning, investor selection, project implementation to real estate transactions are not synchronized, complete, unreliable and less transparency. This makes it difficult for the state management as well as for the people to participate in the market. There have been signs of speculation and falsifying information through distribution.

- The real estate market still has many shortcomings such as the related legal system is overlapping, inconsistent, and the products structure is not suitable in some localities and regions. The structure of real estate is not reasonable, in which there is an excess of high-class housing products, with a large area, high selling prices, and a lack of social housing products as well as low-priced housing products that are suitable to the needs of the majority of people. Real estate prices, especially housing prices, are still quite high compared to people's incomes, and mobilized resources are not diversified.

- Although social housing development has achieved the positive results, it is still far short of actual needs. Lack of land fund to invest in building social housing in favorable locations in big urban areas.

- Financial resources for investment in real estate projects are not diversified and sustainable, still mainly depend on credit capital furnished by banks and advance from customers.

- Tax policy for real estate sales in Vietnam in recent years has promoted its role. The implementation of tax law on real estate sales has contributed to creating a stable source of revenue for the State budget. In addition to the results achieved, the implementation of tax policies and laws for real estate sales still has some shortcomings, in which there is still the fact that the price stated in the transfer contract is always much lower than the actual price, difficulties in managing taxpayers' information and lack of synchronous coordination among agencies and sectors in handling tax violations, etc. resulting in loss of the State budget. That is also one of the causes leading to the real estate bubble, causing a market instability.

- Some new types of real estate such as condotels (tourist apartments), office-apartments and tourist villas, etc. even though they have existed for a long time, they still lack legality, maintain a spontaneous development, and difficulties related to trading regulations, leading to a lack of transparency in the market and many potential risks warned.

6. PROPOSED SOLUTIONS

Firstly, continue to study and perfect the system of mechanisms, policies, legal documents on housing and real estate market; develop a system of tools and instruments to manage and control the market development towards stability and sustainability.

Secondly, organize public disclosure of information on the planning and implementation progress of infrastructure development projects, real estate projects, particularly large projects and the merger, establishment, and upgrade of administrative division, etc. in the locality to contribute to transparent information, then prevent spreading rumors, and speculation in order to push prices higher for illegal profiteering.

Thirdly, the management and transparency of information data about real estate and land should be based on a digital platform and prioritize the tasks deployed on the platform of the digital nation, including the information on real estate and land in order to integrate and synchronize information and facilitate the real estate and land management. The State must have very strict and specific regulations, especially for the transactions and contracts conducted on e-commerce to force the parties involved to comply with the provisions of the law, thereby reduce any negatives, troubles and risks in the process of performing such transactions and contracts.

Fourthly, request the People's Committees of the provinces and municipalities to focus on directing the implementation of solutions to promote the development of social housing, pay attention to the arrangement of land fund and furnish a support mechanism to promote the development of social housing, affordable housing, and rental housing (especially in Hanoi City, Ho Chi Minh City and cities with many workers).

Strengthen the work of inspection and review of real estate projects that delay to be implemented, so that the fallow land is not suitable for market demand, the weak employer is no longer able to implement the project to decide whether to extend the progress, adjust the planning to suit market demand or withdraw the project.

Fifthly, the State Bank of Vietnam closely monitors the situation, continues to administer the flexible monetary policy solutions, controls credit scale in line with the macroeconomic

developments, and controls tightly credit for the real estate sales. Actively deploy the derivative financial instruments associated with inspection, supervision, and strong sanctions against financial risks on real estate. Promote the formation and development of investment funds associated with strong sanctions against variations of the application to deploy and application of investment funds on real estate. Research and launch the real estate re-mortgage system, and the mutual savings fund system.

In addition, it is proposed to use a measure to reduce the rate of credit loans of real estate purchase to control “surfing” investment, as well as strictly control “consumer credit”, prevent the transfer of part of the loans to build, repair and buy a house, to “surf” when the real estate market is hot “bubble”.

Sixthly, Give a proposal to promulgate house and land anti-speculation tax; taxable income with a very high tax rate on the acts of selling or re-transferring houses and land right after formation to eliminate the speculative will of investors in the event that the market shows its signs of speculation or hot “bubbles” fever.

Seventhly, the Ministry of Natural Resources and Environment should soon issue specific guidance documents on the land use regime for some new types of real estate (tourist apartments, tourist villas, complex of office and accommodation, etc.) in accordance with the provisions of the law. Perfect the legal framework for new types of condotel and officetel real estate in the direction of clarifying the content of apartment standards, relationship of apartment ownership among interested parties, relationship in operating costs, and relationship in the enjoyment of benefits, etc.

7. CONCLUSION

Thus, it can be seen that the Government needs to immediately and synchronously implement the above solutions for the market to develop stably, overcome the supply-demand mismatch, and focus on encouraging real estate products to meet the great needs of society (social housing, low-priced commercial housing, etc.), regularly follow the market, to promptly adjust and remove any difficulties and inadequacies of the mechanism, especially the impact of the Covid-19 epidemic to ensure a healthy, smooth and sustainable development of the market in the coming time.

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SOLUTIONS TO ENHANCE ACCOUNTING MANAGEMENT, CONTRIBUTING TO STRENGTHENING INTERNAL CONTROL VIA ECONOMETRIC MODEL - A CASE IN LAF, VIETNAM

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Abstract: *International economic integration has brought many opportunities, but also challenges for Vietnam's economic development. In the context of international economic integration, Vietnamese enterprises must constantly improve their competitiveness. Therefore, we select Long An Food Processing exporting company (LAF) to build qualitative solutions for financial accounting management via an econometric model. From that evidence we analyze the relationship between internal control systems and the LAF's performance are measured by profits and liquidity. We mainly use combination of quantitative methods (statistics, calculation formulas) and qualitative methods including synthesis, inductive and explanatory methods and dialectical materialism methods. The research findings tell us that due to negative correlation between administrative expense, sale cost and COGS and accounting net profit of LAF, it would suggest that management need to control cost better, COGS better and reduce administrative cost to increase net profit. Meaning of this study focus on giving out recommendations for enhancing accounting management policies, then contribute to strengthening internal control at LAF, Vietnam. Therefore, this paper plays a notable role as "applied research" in LAF's performance.*

Keywords: *Accounting management, solutions, LAF, food processing, Vietnam.*

INTRODUCTION

Internal control is an effective management tool in an enterprise. Internal control plays a very important role in the development of the business. Internal control not only helps reduce business risks but also prevents fraud and encourages business performance. Internal control also ensures compliance with the policies or procedures established by businesses. However, internal control is a new content for Vietnamese businesses both theoretically and practically.

Food processing and exporting has been becoming one of major industries in Vietnam, starting from as an initial country in agriculture. Long An Export Processing Joint Stock Company was formerly known as Long An Export Processing Enterprise - a State-owned enterprise established in 1986 and directly under the People's Committee of Long An Province. July 1, 1995 Long An Export Processing Enterprise was approved by the People's Committee of Long An Province to officially transform its ownership form with a new legal entity up to now: Export Processing Joint Stock Company Long An (LAF).

Looking at below charts we make some qualitative analysis:

- Although there is small ratio of foreign investors in LAFCO, it shows a diverged structure of ownership.

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- Ratio of COGS/income increased in year 2018 and reduced in 2019-2020.
- Sale cost decreased but admin costs increased slightly from 2019 to 2020.

We see Ownership Structure of LongAn Food (LAF) as below until 2020:

Shareholders	Share	% Ratio
• Internal staffs	11,860,041	80.53
• Domestic individuals	2,236,880	15.19
• Domestic institutions	280,854	1.91
• Foreign individuals	236,042	1.6
• Foreign institutions	114,202	0.78

(Source: www.mbs.com.vn, access date 3/6/2021)

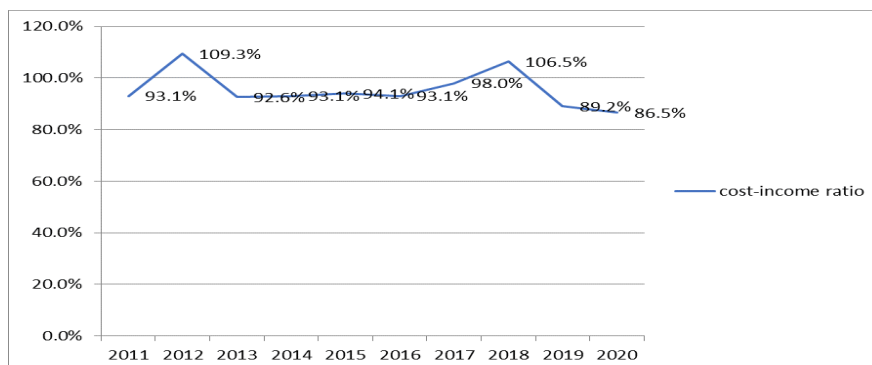


Chart 1. Ratio of Cost/Income

(Source: stock exchange, financial reports and author calculation)

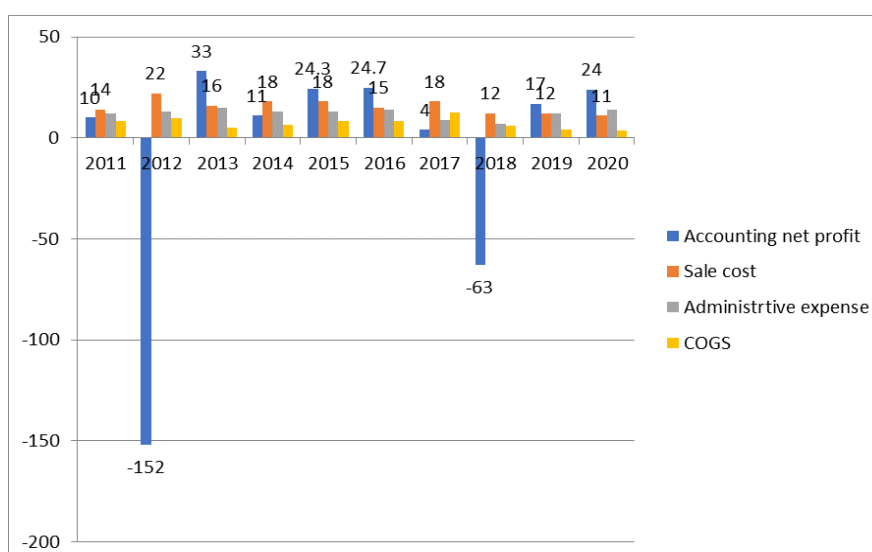


Chart 2. Net Profit, COGS and Sale Cost of LAF

(Source: Stock exchange, financial reports and author calculation)

All internet data such as lending rate, cost and revenue factors we take from reliable internet data sources, esp. from website of company, annual reports from stock exchange, Bureau of Statistics, banks, etc.

We organize our study with introduction, literature review, method, main results, discussion and conclusion.

Research Questions

Question 1: What are effects from cost and revenue factors on accounting profit of LAF?

Question 2: What are qualitative analysis and solutions for accounting management in LAF?

Question 3: How does enhancing accounting management contribute to strengthening internal control in LAF?

Literature Review

According to the international federation of accountants (IFAC), the internal control system is the plan of the entity and all the methods and work steps that the managers of the business adhere. The internal control system helps managers achieve their objectives with certainty in order and business efficiency, including respecting management regulations; keep assets safe, prevent and detect wrongdoing and fraud; make complete and accurate planning records, timely and reliable Financial Statements.

The concept of internal control was first appeared in 1929 and continuously improved to now, in which the biggest milestone is the introduction of the internal control framework of the Association of American Sponsoring Organizations (Committee of Sponsoring Organization - COSO) in 1992. COSO (1992) defined the internal control as "Internal control is a process governed by management, managers and employees of the application, position, designed to provide a reasonable assurance to achieve the objectives: the credibility of financial reporting objectives; the goal of compliance with laws and regulations; goal of effectiveness and efficiency". In 2013, continued to inherit the frame of internal control as in 1992, COSO developed more about internal control but emphasized the expansion of reporting objectives and five elements of internal control, namely: Control environment; Risk management and assessment system; Control activities; Information and communication system; Monitoring activities. Internal control will work effectively if focusing on building and operating these 5 elements well.

Muraleetharan (2011) conducted research in Jaffna, examining the relationship between internal control systems and the enterprise's performance. In particular, the factors of internal control are measured by the control environment, risk assessment, control activities and financial efficiency are measured by profits and liquidity. The author used questionnaires, observations and interviews with a sample of 181 people working in companies, using regression testing to measure the influence of internal control on the enterprise's performance. Research results show that internal control has a significant influence on the performance of the company.

Trivelas and Satouridis (2013) stated that in Greece a) the externally focused Management Information System (MIS) effectiveness archetypes (OS, RM) reflecting innovation, creativity, goal setting and planning enhance task productivity b) the Internal process (IP) model of MIS effectiveness influences negatively task productivity.

Njoki (2015) measured the impact of internal control on the financial performance in Nairobi. This study uses secondary data that is the annual report of 35 enterprises during the period from 2013 to 2014. Through multivariate regression analysis, with the dependent variable being return on assets (ROA) and the independent variables are control environment, risk assessment, control activities, communication and monitoring. The results showed that the control environment components, risk assessment, control activities, communication information of the internal control system have a positive impact on the ROA, while monitoring has a negative impact on the ROA.

Haliti et al (2016) stated data with SPSS 21 version, and the hypotheses were tested by means of correlation and linear regression. The findings of the study proved that commercial banks in Kosovo could enlarge their profitability by increasing the level of bank loaning and other investments, except for managing risk and liquidity properly.

Besides, Alzeban (2018) pointed that if they find procedures of monitoring absence, there is weakness in internal control activity. In other hand Younas and Kassim (2019) specified that the company image will be enhanced by effective internal control. Then internal control could prove value-added and show vital role in auditing process and proved foundation for external auditors.

Chang et al (2019) stated that firm management can be supported with the internal audit function (IAF) then they can serve for reporting and compliance. Sibanda et al (2020) mentioned digital technology has transformed banking from classical model to innovative Fintech collaborative model.

And last but not least, Hanh Hoang Thanh (2021) measure effects of Accounting Net Revenue of Company - A Case in Vietnam Commerce Sector, which left the direction for further researches on internal factors effects measuring.

Methodology

Method and Data

This study mainly uses combination of quantitative methods and qualitative methods including synthesis inductive and explanatory methods.

In Vietnam, according to Auditing Standard 400, "Internal control system is understood as the rules and control procedures that the entity complies with laws and regulations, to check, control, preventing and detecting fraud and errors; to prepare true and fair financial statements; to preserve, manage and effectively use the assets of the entity". The concept of internal control system according to Auditing Standard No. 400 focuses mainly on auditing and accounting rather than control for internal management purposes. With the great change from the international business environment, the process of globalization and the rapid development of information technology, the update of the international auditing standard system and the specific conditions of Vietnam, the Ministry of Finance issued Circular No. 214/2012/TT-BTC dated December 6, 2012 with a system of 37 Vietnamese auditing standards, in which Auditing Standard 315 was born to replace Auditing Standard No. 400.

Besides, approaching internal control in the direction of risk management, the Vietnam Accounting Law 2015 defines: "Internal control is the establishment and organization of implementation within the accounting unit of internal control mechanisms, policies, processes and internal regulations in accordance with the provisions of law in order to ensure timely prevention, detection and

handling of risks and achieve the set requirements”. Thus, LAF has enough legal basis to implement internal control. And internal control applied by LAF depends on accounting information system.

We derive quantitative analysis and solutions from regression model:

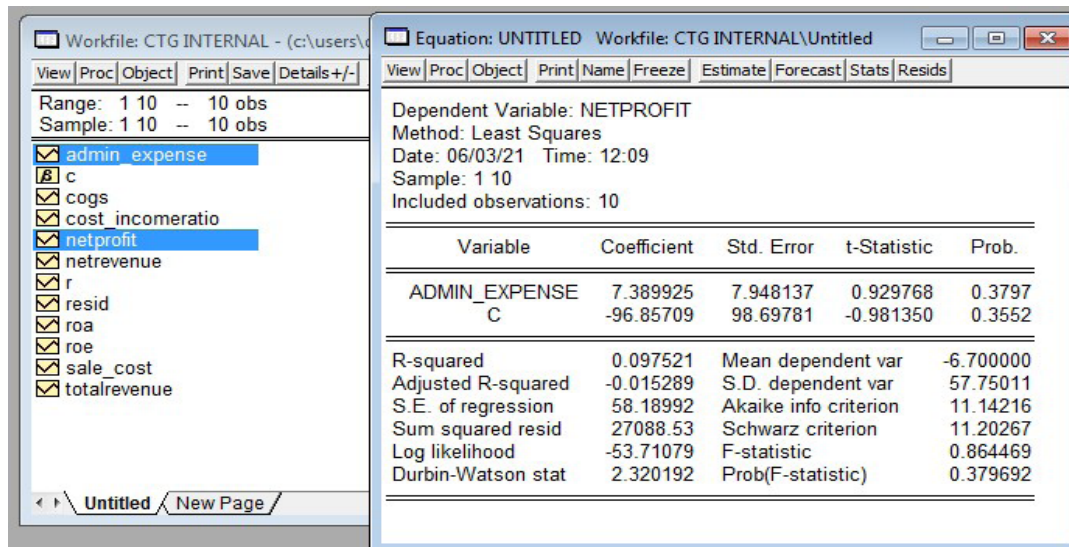


Figure 1. Model of OLS regression

(Source: Stock exchange, financial reports and author calculation) Data is collected from reliable internet sources and websites.

Looking at descriptive statistics below, we see that:

	NETPROFIT	ADMIN_EX...	COGS	R	SALE_COST
Mean	-6.700000	12.20000	729.5000	0.115260	15.60000
Median	14.00000	13.00000	733.5000	0.100000	15.50000
Maximum	33.00000	15.00000	1278.000	0.190000	22.00000
Minimum	-152.0000	7.000000	353.0000	0.080000	11.00000
Std. Dev.	57.75011	2.440401	281.9445	0.039225	3.470511
Skewness	-1.866298	-1.114003	0.466630	1.138882	0.304625
Kurtosis	5.122863	3.201270	2.505180	2.705184	2.185115
Jarque-Bera	7.682842	2.085218	0.464926	2.197970	0.431343
Probability	0.021463	0.352534	0.792579	0.333209	0.806000
Sum	-67.00000	122.0000	7295.000	1.152600	156.0000
Sum Sq. Dev.	30015.68	53.60000	715434.5	0.013847	108.4000

Figure 2. Descriptive Statistics of Cost Factors

Correlation Matrix					
	NETPROFIT	ADMIN_EX...	COGS	R	SALE_COST
NETPROFIT	1.000000	0.312283	-0.324704	-0.523795	-0.466182
ADMIN_EX...	0.312283	1.000000	-0.327169	0.259635	0.167924
COGS	-0.324704	-0.327169	1.000000	0.318689	0.682116
R	-0.523795	0.259635	0.318689	1.000000	0.491556
SALE_COST	-0.466182	0.167924	0.682116	0.491556	1.000000

Figure 3. Cost Factors Correlation Matrix

	NETPROFIT	COST_INC...	NETREVE...	ROA	ROE	TOTALREV...
Mean	-6.700000	0.955500	753.6000	-0.036400	-0.140000	756.9000
Median	14.000000	0.931000	783.0000	0.056500	0.107000	788.0000
Maximum	33.000000	1.093000	1300.0000	0.176000	0.287000	1304.0000
Minimum	-152.0000	0.865000	405.0000	-0.647000	-1.877000	408.0000
Std. Dev.	57.75011	0.071957	271.1229	0.248491	0.649725	272.0390
Skewness	-1.866298	0.898144	0.539212	-1.735184	-2.183328	0.533914
Kurtosis	5.122863	2.702121	2.636048	4.747114	6.369568	2.617645
Jarque-Bera	7.682842	1.381410	0.539774	6.289942	12.67570	0.536021
Probability	0.021463	0.501223	0.763466	0.043068	0.001768	0.764900
Sum	-67.000000	9.555000	7536.0000	-0.364000	-1.400000	7569.0000
Sum Sq. Dev.	30015.68	0.046600	661568.4	0.555730	3.799284	666046.9

Figure 4. Descriptive Statistics of Revenue Factors

	NETPROFIT	COST_INC...	NETREVE...	ROA	ROE	TOTALREV...
NETPROFIT	1.000000	-0.892986	-0.162672	0.996209	0.989890	-0.162359
COST_INC...	-0.892986	1.000000	0.361248	-0.903941	-0.846702	0.359620
NETREVE...	-0.162672	0.361248	1.000000	-0.196643	-0.180951	0.999982
ROA	0.996209	-0.903941	-0.196643	1.000000	0.983122	-0.196367
ROE	0.989890	-0.846702	-0.180951	0.983122	1.000000	-0.181264
TOTALREV...	-0.162359	0.359620	0.999982	-0.196367	-0.181264	1.000000

Figure 5. Revenue Factors Correlation Matrix

(Source: Stock exchange, financial reports and author calculation)

We also find out that:

- Correlation between net profit and ROA and ROE (0.99 and 0.98) is higher than that of between net profit and net revenue (-0.16) (figure 5)
- Correlation between net profit and COGS (-0.3) is higher than that between net profit and sale cost (-0.4) (figure 3).

Main Results

Overall Results

As shown in below figure:

- Between net profit and administrative expenses, sale cost, COGS and cost-income ratio there is negative correlation.
- Between net profit and ROA, ROE there is positive correlation.

Figure 6. Cost/Income Ratio and Net Profit

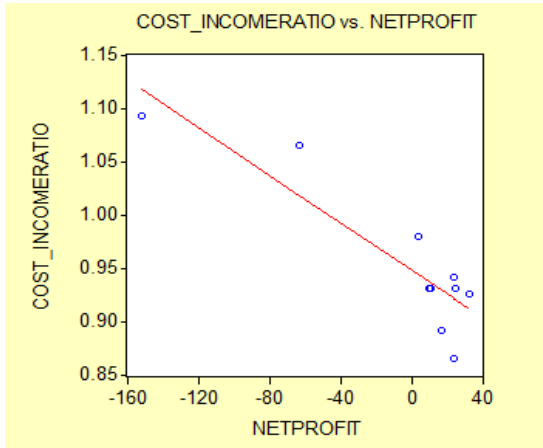


Figure 7. COGS and Net Profit

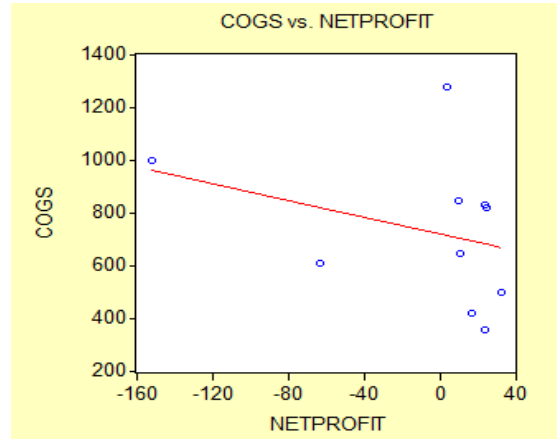


Figure 8. R and Net Profit

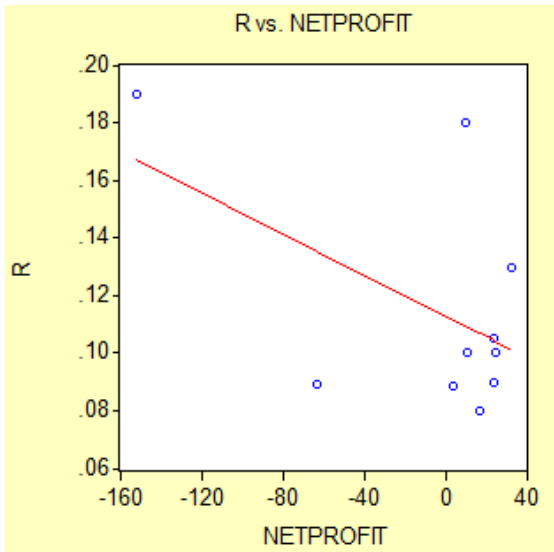


Figure 9. ROA and Net Profit

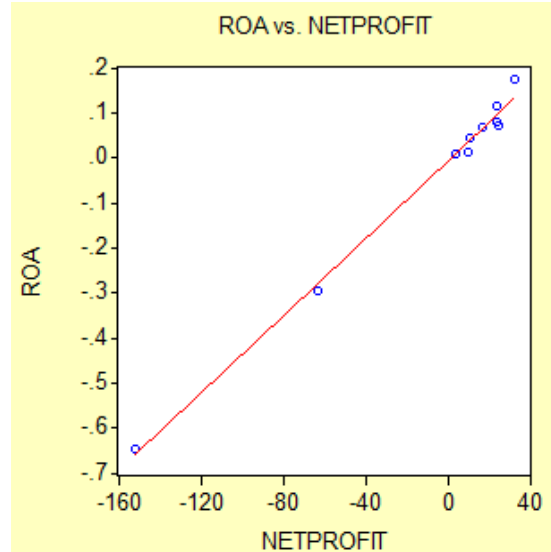


Figure 11. Sale Cost and Net Profit

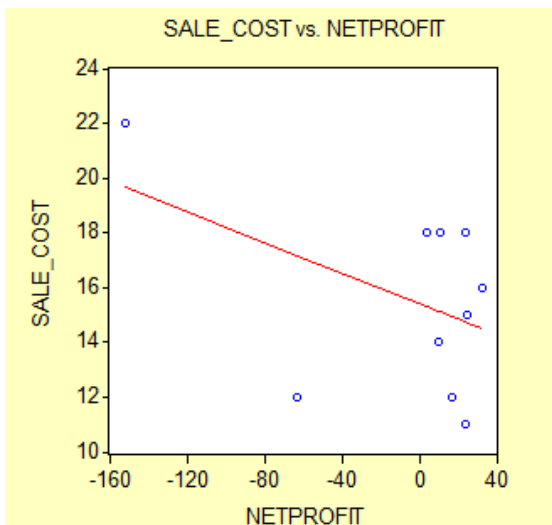
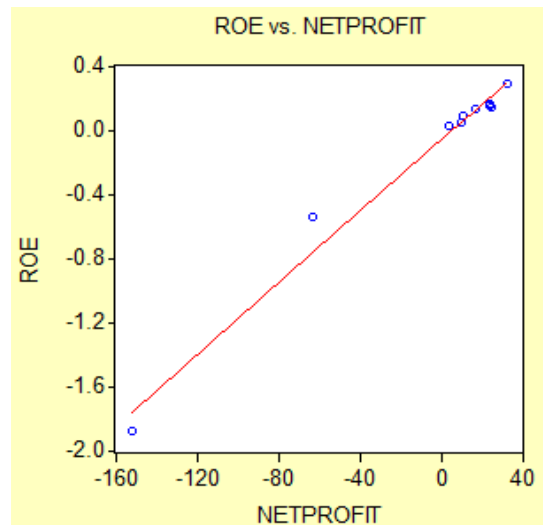


Figure 10. ROE and Net Profit



(Source: Stock exchange, financial reports and author calculation)

OLS Regression Results

Run OLS regression with EViews gives below results:

- First, because coefficient is of 7.3, there is positive correlation between admin expense and accounting net profit (figure 12) whereas negative correlation b.t COGS, sale cost and net profit (Figure 13 and 14).
- It means that the firm (LAF) need to increase admin expense while reduce COGS.

Dependent Variable: NETPROFIT
Method: Least Squares
Date: 06/03/21 Time: 12:09
Sample: 1 10
Included observations: 10

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ADMIN_EXPENSE	7.389925	7.948137	0.929768	0.3797
C	-96.85709	98.69781	-0.981350	0.3552
R-squared	0.097521	Mean dependent var		-6.700000
Adjusted R-squared	-0.015289	S.D. dependent var		57.75011
S.E. of regression	58.18992	Akaike info criterion		11.14216
Sum squared resid	27088.53	Schwarz criterion		11.20267
Log likelihood	-53.71079	F-statistic		0.864469
Durbin-Watson stat	2.320192	Prob(F-statistic)		0.379692

Figure 12. Regression Results for Single Factor Admin Expense

(Source: stock exchange, financial reports and author calculation)

Dependent Variable: NETPROFIT
Method: Least Squares
Date: 06/03/21 Time: 12:11
Sample: 1 10
Included observations: 10

Variable	Coefficient	Std. Error	t-Statistic	Prob.
COGS	-0.066509	0.068494	-0.971017	0.3600
C	41.81798	53.21893	0.785773	0.4546
R-squared	0.105433	Mean dependent var		-6.700000
Adjusted R-squared	-0.006388	S.D. dependent var		57.75011
S.E. of regression	57.93427	Akaike info criterion		11.13335
Sum squared resid	26851.04	Schwarz criterion		11.19387
Log likelihood	-53.66676	F-statistic		0.942874
Durbin-Watson stat	2.386242	Prob(F-statistic)		0.359979

Figure 13. Regression Results for Single Factor COGS

Dependent Variable: NETPROFIT
Method: Least Squares
Date: 06/03/21 Time: 12:11
Sample: 1 10
Included observations: 10

Variable	Coefficient	Std. Error	t-Statistic	Prob.
SALE_COST	-7.757380	5.204811	-1.490425	0.1744
C	114.3151	82.98369	1.377561	0.2056
R-squared	0.217326	Mean dependent var		-6.700000
Adjusted R-squared	0.119491	S.D. dependent var		57.75011
S.E. of regression	54.19006	Akaike info criterion		10.99973
Sum squared resid	23492.50	Schwarz criterion		11.06025
Log likelihood	-52.99864	F-statistic		2.221366
Durbin-Watson stat	2.094275	Prob(F-statistic)		0.174446

Figure 14. Regression Results for Single Factor Sale Cost

(Source: Stock exchange, financial reports and author calculation)

Next we see regression table with 4-5 factors

- We see, there are negative relationship between net profit and lending rate.

Table 1. Regression 4-5 Factors Effects on Accounting Profit

	Coefficient:	
	4 factors	5 factors
Admin expense	18.5	-0.4
COGS	0.12	-1.1
R	-821	-260
Sale cost	-12.4	1.3
Net revenue		1.09
R -squared	0.68	0.96
Akaike info criterion	10.6	8.6

(Source: Stock exchange, financial reports and author calculation)

And we see regression table with 6-7 factors:

- We see, there are positive relationship between net profit and admin expense and net revenue.

Table 2. Regression 6-7 Factors Effects on Accounting Profit

	Coefficient	
	6 factors	7 factors
Admin expense	1.3	0.8
COGS	-1.2	-0.4
R	-304	-81.7
Sale cost	0.7	-0.6
Net revenue	1.2	0.4
Cost - income ratio	191	144
ROA		179
R -squared	0.96	0.99
Akaike info criterion	8.8	4.4

(Source: Stock exchange, financial reports and author calculation)

Next, we see regression table with 8 factors:

Table 3. Regression 8 Factors Effects on Accounting Profit

	Coefficient	
	8 factors	8 factors
Admin expense	-3.9	-2.3
COGS	-0.05	-1.02
R	208	-160
Sale cost	-1	-0.9
Net revenue	-5.9	1
Cost - income ratio	146.7	462

ROA	280	433
Total revenue	5.9	
ROE		-112
R-squared	1	0.99
Akaike info criterion	-1.9	4.2

(Source: Stock exchange, financial reports and author calculation)

DISCUSSION

In cost factors: Admin expense has higher coefficient and negative correlation with net profit, compared to sale cost. Reducing costs increases profitability, but only if sales prices and number of sales remain constant. If cost reductions result in a lowering of the quality of the company's products, then the company may be forced to reduce prices to maintain the same level of sales. This can wipe out any potential gains and result in a net loss. An even greater negative impact may result over time from a gradual loss of market share as the reduction in quality makes it impossible to maintain sales figures. However, if LAF can efficiently cut costs without affecting quality, sales price, or sales figures, then that provides a path to higher profitability.

In revenue factors: total revenue and net revenue and ROA, ROE they all have positive correlation with net profit. Reducing costs or increasing revenue can add to a company's net profit figure, but it may not improve the company's net profit margin. LAF has to address the question of whether the lower profit margin is acceptable in return for the absolute dollar increase in profits, as the lower margin may not offer a sufficient financial cushion to ensure the company's continued viability. The company may have additional dollars in the bank, but it may be in a less healthy or less secure financial condition.

The benefits of effective Internal Control on accounting performance to advise the firm - LAF that: Because admin expense, lending rate and sale cost have negative correlation with ROE, LAF need to pay more attention to control admin expense and sale cost more rationally to increase ROE.

Information system of LAF into internal controls enhances the efficiency of accounting and auditing processes in an internal LAF. Notably, information systems improve the maintenance of accountability pertaining equity, assets, and liability (Boland et al., 2015). Additionally, information systems provided by internal controls have a positive influence on financial performance since they facilitate the resolution of incorrect processing and transactions. Furthermore, information technologies integrated into the internal controls help in the processing and accounting of system overrides, such as using OLS to evaluate accounting profits.

Suggestions for a better management information system:

- When LAF company can build system of accounting information and financial data, they can prove better pictures of accounting factors (internal and external) to net profit and then, they can help company management and director to make sound business decision.
- Accounting information system also contribute to support planning and controlling and other functions of management better such as risk management.
- Also, steps of risk management contribute to strengthening internal control in LAF. Because the goal of internal control is risk reduction in organizations.

CONCLUSION

Accounting Management Implications

Because administrative expense, sale cost and COGS all have negative relationship with accounting net profit of LAF company, it would suggest that management need to control cost better, COGS better and reduce administrative cost to increase net profit.

Moreover, cost-income ratio also has positive correlation with net profit, so we suggest that firms need to increase COGS/income ratio to be in favor of net profit.

Besides, we see policies implications

Factors are not increasing much to be in favor of ROE of LAF and toward benefits for managing risk. Diamond (2013) specified that there are targets of internal control in public financial management (PFM), such as, compliance with regulations and law, and make sure reliability of data and reports.

Njoki (2015) showed that the control environment components, risk assessment, control activities, communication information of the internal control system have a positive impact on the ROA, while monitoring has a negative impact on the ROA.

The observance of proper financial reporting, efficient operations, and policy compliance goes a long way in fostering the financial accounting performance of an organization. Notably, the various components of internal control guarantee the realization of accountability in the management of finances, the engagement in appropriate business processes, and operating within the stipulated provisions.

Limitation of Research

We can expand our research model for other industries and other markets.

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LEASE ACCOUNTING UNDER IFRS 16 IN VIET NAM

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Abstract: Financial statement becomes familiar and well known in Vietnam recently. The integration of Vietnamese accounting to international accounting standard, the requirement of information transparency is getting higher and higher. Thus, this asks for the movement of financial statement in order to meet the need of the market. International Financial Reporting Standard 16 – Lease accounting (**IFRS16**) replaces International Accounting Standard 17 (**IAS17**) and effective from January 1, 2019. The new accounting standard almost eliminates leases “off balance sheet accounting” activities. Therefore, the information represented on the financial statement is transparented and sufficient. This is one of the biggest change to accounting standard over this decade.

Keywords: IFRS16, enterprise, lease, accounting.

1. INTRODUCTION

International economic integration has become an inevitable trend of all economies. As of a part of the world economy, Vietnam also follow this trend. However, the intergration process brings a lot of opportunities as well as challenges of which we have to face and surpass. One of the biggest challenges is the completion of the legal framework for accounting activities in Vietnam. This action helps Vietnam catching up the intergartion of accounting standard in the world. Further, it creates and complete the legal environment which is suitable for intergarating with countries in the region and around the world.

Because of this reason, the analytics and finding out the similarities between International Financial Reporting Standard (IFRS) and Vietnamese accounting standard (VAS) is in need and necessary.

International Financial Reporting Standard 16 (IFRS16) is approved by International Accounting Standards Board (IASB) after 30 long year project of adjusting lease accounting principles. As of IAS17 classifying lease accounting into operating leases and finance leases, IASB considered that is not suitable and leads to a many structure and off balance sheet information.

The new lease accounting principle (IFRS16) is effective from the start of the new financial year or after 1/1/2019. IFRS16 allows enterprises choosing early accounting period when IFRS 15 “Revenue from contracts with customers” co-applicable. Therefore, Vietnamese enterprises should have specific studies about the principles in IFRS16 in order to have the right movement to apply this principle.

2. METHODOLOGY AND PROPOSED MODEL

- **Analyze and synthesize theories method:** Analysis is the study of various documents and arguments by breaking them down into parts to gain insight into the subject matter. Synthesis is

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the connection of each side, each part of information has been analyzed to create a complete and profound new theoretical system about the object.

- **Methods of classification and systematization of theory:** Classification is to arrange scientific documents according to each side, each unit, each problem with the same sign of nature, the same development direction. Systematization is the arrangement of knowledge into a system based on a theoretical model that makes the understanding of the object more complete.

3. RESEARCH RESULTS

3.1. New features of lease accounting in IFRS16

IFRS 16 describes how lease transactions are recognized, measured, prepared and presented in the financial statements under IFRS. This standard introduces a lessee accounting method that requires lessees to recognize assets and liabilities for all lease transactions except assets with a lease term of 12 months or less and low value property. The lessor continues to classify the lease as a financial lease or an operating lease. The lessor's accounting method under IFRS 16 has not changed significantly from the guidance in the international accounting standards that replaced IAS 17.

Table 1: Compare IFRS 16 and IAS 17

Criteria	IFRS 16	IAS 17
Target	Ensure that the lessor and lessee provide relevant information to faithfully present these transactions	To stipulate for lessees and lessors, to apply appropriate accounting regimes and content to disclose property leases.
Scope	Leases apply to all leases including subleases, except: <ul style="list-style-type: none"> • Lease rights to exploit or use mineral resources, oil or natural gas and similar non-renewable resources. • Lease of biological property • Translation franchise contracts • The intellectual property license is awarded to the donor • The lessee's rights under the copyright contract for items such as films, videos, plays, manuscripts, patents and copyrights to the extent of IAS 38 – Intangibles. IAS 17 does not apply as a basis of measurement for: <ul style="list-style-type: none"> - Assets held by the lessee are recorded as of investment assets - Investment property provided by the lessor under the terms of the operating lease - Agricultural assets (biological) held by the lessee under the terms of the finance lease 	
Finance leases	According to accounting standards, lease transactions with one of the following characteristics would normally be considered finance leases: <ul style="list-style-type: none"> - Transfer ownership of the property to the lessee at the end of the lease term. - At the end of the lease term under the contract, the lessee will be given priority to purchase the leased asset at a nominal price of which is lower than the actual value of the leased asset at the time of acquisition. 	<ul style="list-style-type: none"> - At the time of rental initiation: <ul style="list-style-type: none"> + The lessee recognizes the finance lease asset and the lease principal at the same amount which is lower than the fair value of the asset and the present value of the minimum lease payments. + The discount rate used to calculate the present value of the MLP is the implicit interest rate, or lessee's marginal borrowing rate. + Expenses incurred directly related to the lessee's lease are included in the value of the leased asset.

	<ul style="list-style-type: none"> - The lease term accounts for the majority (usually more than 60%) of the useful life of the leased asset. - At the beginning of the lease, the present value of the total minimum lease payments is at least equal to the fair value of the leased asset. - The characteristic nature of the leased asset is that only the lessee can use it without major changes to the leased asset. 	<ul style="list-style-type: none"> + Liabilities on finance leases need to be differentiated into short-term and long-term liabilities <p>During the rental period:</p> <ul style="list-style-type: none"> + The rental payment must be divided into the principal payable each period and the financial expense <p>This standard specifies how to recognize the initial direct costs such as commissions, legal fees and other costs incurred during the negotiation and preparation of the leased asset by the lessor as of cost or cost pending allocation.</p>
Sale and leaseback transactions	To determine whether the transfer of an asset is considered a sale, the enterprise should apply the conditions in IFRS 16 to determine when a performance obligation has been satisfied.	The sale and leaseback of an asset to the sale and leaseback of the asset itself. Rent payments and sales prices are often interdependent and are negotiated as a package.

3.2. Impact of IFRS 16 on financial statements

First, IFRS 16 affects the Balance Sheet and its related metrics such as the Total Debt/Equity ratio. In addition, IFRS 16 will also affect the income statement because the enterprise needs to recognize interest expense on the lease obligation (the obligation to pay rent) and the enterprise also needs to calculate amortization, depreciation for the “right to use the property” (the property reflects the right to use the leased asset). Therefore, for a lease previously classified as an operating lease, the total cost at the beginning of the lease will be higher than that of IAS 17.

Second, another consequence of the changes under IFRS 16 is that interest income and taxes (EBIT) and earnings before taxes, interest and amortization (EBITDA) will be higher for companies with operating leases. Enterprises should consider the impact of IFRS 16 on EBIT and EBITDA because the impact is expected to be very large, especially for enterprises with loan contracts specifically required these two indicators. PwC conducted a global leased capital study to assess the impact of the new Lease Accounting Standard on the areas of debt reporting, leverage, solvency and EBITDA with a sample of more than 3,000 listed enterprises operating in many different industries and countries. They all prepare and present their reports in accordance with International Financial Reporting Standards. Research has identified a number of industries that will be particularly affected by the New Standard on key measures of leverage and EBITDA.

The above studies show that the industries that use the most of operating leases that will be most affected - like the retail industry with average debt increasing by 98% and EBITDA by 41%.

Third, the new guidance also change the cash flow statement. Previously, under IAS 17, lease payments related to leases classified as operating leases were presented in their entirety in the cash flows from operating activities section. However, under IFRS 16, only a portion of a lease payment that reflects the interest expense of a lease liability can be presented in the cash flow from operating activities (depending on the accounting policies of the entity related to interest payments). Cash payments for the principal portion of the lease liability are classified under cash flows from financing activities. Short-term lease payments, low-value rentals, and variable lease payments that are not included in the amount of the lease liability are still presented in the cash flow from operating activities.

4. DISCUSSION AND CONCLUSION

4.1. The application of IFRS16 in Vietnam - Main influences and challenges

Main influences

For lessees, recognition of a lease under IFRS16 increases assets but also increases liabilities. In terms of operating results, total depreciation expense and interest expense tend to be higher in the early years and gradually decrease in the later years of the lease, even though the rental payment cash flow remains constant. Accordingly, some financial indicators of the enterprise will also change, such as debt ratio, current ratio, asset turnover, profit before tax, interest and depreciation, rate of return on total assets.

The adoption of IFRS16 will not only affect financial results, but may also affect the operations of the business at a broader level. For example, changes in information systems, processes, and data are essential to meet the information collection, calculation, and recording and disclosure needs of IFRS16.

Challenges

For lessees, the challenges in applying IFRS16 come from both the professional aspects of accounting as well as day-to-day accounting activities. Examples of questions that arise when applying IFRS16: whether the contract is a lease as defined by IFRS16, whether the lease term includes options for renewal or termination, how to determine the discount rate in situations where information is not available, what is the impact on accounting when lease terms are changed due to Covid19,...

Therefore, businesses must collect more information in order to make this important assessment. For many businesses, it is also a challenge to collect sufficient information for accounting and disclosure of leases under IFRS 16.

The lessor basically continues to do the accounting as it is currently applied. However, there are also some differences where the lessor must also assess the effect of applying IFRS16 on certain transactions such as sale and leaseback transactions or secondary lease transactions.

4.2. Conclusion

Although the accounting guidelines are basically unchanged for the lessor, the changes under IFRS 16 still affect this entity. In particular, lessors should update new guidelines on the definition of leases, subleases, and the accounting for sale and leaseback transactions. Changes in lessee accounting will affect the needs and behavior of lessees as they enter into negotiations for leases.

4.2.1. Solutions

a. For the lessee

Eliminate the distinction between operating leases and finance leases as well as accounting for leases on the balance sheet. Proposing a single accounting method for all leases (similar to financial leases under IAS 17) to implement this solution, the accounting system for leases in Vietnam will need to:

- + Change the definition of rental property;
- + Set out requirements for accounting for assets (rights) and liabilities (obligations), including complex contracts with non-lease elements, variable lease payments, and optional lease periods;

+ Changes in accounting for sale and leaseback agreements;

b. For the lessor:

Retains most of the accounting information for lessor under IAS 17

Effects of IFRS 16 adoption: updating applicable financial accounting policies, procedures and systems. Applying IFRS 16 also affects the recognition of controls and contracts. In addition, IFRS 16 requires a large number of disclosures in financial statements and information on lease management activities.

4.2.2. Conditions for implementing the solution

a. For Businesses

Prepare systems and processes – For teams with a large number of lease contracts, there can be significant impacts to system and process that need to be prepared for IFRS16 requirements.

Managing stakeholder information – Understanding and communicating with stakeholders (e.g. senior management, shareholders and lenders) about the impact of the new IFRS16 on financial statements. It will be crucial and important to ensure that key information can be managed appropriately;

Entering into new contracts – understanding the effects of IFRS 16 helps avoid inadvertently entering into a contract that would have adverse accounting consequences. Although it is not necessary for accountants to adjust commercial agreements, it is possible to structure new agreements in a practical way that minimizes the impact of IFRS 16.

b. For the government

First of all, on the side of the Ministry of Finance, the government and regulatory agencies, it is necessary to quickly complete the development and approval of the IFRS16 application scheme in Vietnam.

Before and during the development of the project, the management agency should consult domestic and foreign experts, take advantage of the support of the IASB, international associations, organizations, large auditing firms, universities. school, research agency... to build a successful project.

After the project is approved, the dissemination and propaganda should be promoted as soon as possible, in order to create a consensus of the society and clearly inform the roadmap for the stakeholders to gain awareness as well as to prepare in time.

The Ministry of Finance should coordinate with relevant regulatory agencies to issue a more detailed legal framework. It supports the identification, presentation and accounting of leases.

The Ministry of Finance promulgates regulations allowing the application of IFRS16 in Vietnam according to the approved official translated text (VFRS) or the original IFRS16 in English for the compulsory application of Group 1 enterprises.

For group 2 enterprises, it is necessary to officially publish the draft Vietnamese financial reporting standards (VAS) based on international financial reporting standards for comments and adjustments before issuance.

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THE DEVELOPMENT OF GREEN CREDIT AT COMMERCIAL BANKS IN VIET NAM

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Abstract: *By using qualitative research methods, the paper focuses on analyzing and assessing the current landscape of green credit development in Vietnamese commercial banks in terms of: (i) credit policy (ii) scale and growth rate; (iii) green credit structure; (vi) number of credit institutions providing green credit. Simultaneously, the study analyzes some shortcomings and difficulties in the implementation process, thereby proposing solutions to develop green credit at Vietnamese commercial banks in the coming time.*

Keywords: *green credit, green banking, sustainable development*

1. INTRODUCTION

The growth of the economy contributes to the general development of social life, but also causes increasingly serious impacts on the environment. As a financial intermediary, the commercial banking system is an important capital channel in the economy, and credit activities performed by banks directly affect the growth rate and economic structure. Hence, every country considers green credit development one of the important solutions to promote the economy in a sustainable way. Green credit is a form of credit extension whereby a credit institution grants credit in order to meet consumption, investment, production and business needs without causing risks to the environment, while contributing to protect the ecosystem. Green credit development is both a requirement and a trend in every country towards the goal of sustainable economic development.

In Vietnam, the Government promulgated different guidelines and policies on green growth and promoted sustainable development of the economy, i.e. the Decision No. 1393/QĐ-TTg of the Prime Minister in 2012 on “*Approval of National Strategy on Green Growth*”, with the common goals of promoting green growth and a low-carbon economy, enriching natural capital as the mainstream in sustainable economic development; reducing emissions and increasing the ability to absorb greenhouse gases as mandatory and important indicators in socio-economic development. Then, the Prime Minister issued the Decision No. 403/QĐ-TTg dated March 20, 2014 to “*Approve the National Action Plan for Green Growth for the 2014-2020*”, which specifies the main activities of the green growth action plan to be implemented synchronously, including: Raising awareness; improving legal institutions; changing the economic structure of industries, localities and enterprises; and innovating technology. Currently, Vietnamese commercial banks are making efforts to promote green credit. Fostering green credit is, however, facing some difficulties and obstacles that require a comprehensive analysis and assessment of practical situation in order to propose concentrated solutions.

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2. LITERATURE REVIEW AND PREVIOUS RESEARCH STUDIES

Over the past few years, there have been a number of articles on green credit in Vietnam: Tran Trong Phong, Thieu Thuy Duong (2016); Bui Thi Hoang Lan (2020); Phan Thi Hoang Yen, Tran Thi Chau (2021); ... These researchs has presented and analyzed green credit in certain aspects, such as the green credit policy of the State Bank or the current status of green credit outstanding balances at some Vietnamese commercial banks to propose some solutions mainly from the perspective of state management agencies but yet to fully analyze the neccessity; evaluation criteria; the landscape of green credit development in commercial banks in Vietnam and suggest development solutions. This is the research gap for the authors to conduct this study.

3. RESEARCH METHODS AND DATA COLLECTION

To attain the research objectives, the article uses basic qualitative research methods such as collecting published data, relating scientific works and combines with other traditional research methods including synthesis, statistical and expert evaluation methods.

4. RESEARCH RESULTS

4.1. The neccessity and evaluation criteria for green credit development

Developing green credit is a popular tendency but also an inevitable need, because:

- For individuals and organizations, green credit is an important solution to help minimize negative impacts from living activities and production processes on the environment and society.
- For credit institutions: green credit development has many meanings: *(i)* Expand market share through new environmentally friendly products/services (financing energy saving, renewable energy, clean technology, untapped markets, etc.), strengthen existing customer network and attract new good quality customers; *(ii)* Significantly improve the quality of credit portfolio through effective identification and management of environmental and social risks, better control of credit risks and collateral of individual loans caused by environmental and social issues; *(iii)* Improve the organization's reputation and brand value by reducing reputation and legal risks related to projects or activities that do not comply with environmental and social regulations; *(iv)* Open up more cooperation opportunities to attract resources and support from international financial institutions when climate change, green growth and sustainable development become a major concern of the international community.

To evaluate the development of green credit, a number of main indicators are regularly used, including: green credit outstanding balances and green credit growth rate; green credit balance structure; number of banks granting green credit; bad debt ratio,...

4.2. Current situation of green credit at commercial banks in Vietnam

(i) Green credit development policy in Vietnam:

In Vietnam, the Government promulgated different guidelines and policies on green growth and promoted sustainable development of the economy, i.e. the Decision No. 1393/QĐ-TTg of the Prime Minister in 2012 on “*Approval of National Strategy on Green Growth*”, with the common goals of promoting green growth and a low-carbon economy, enriching natural capital as the mainstream in sustainable economic development; reducing emissions and increasing the ability to

absorb greenhouse gases as mandatory and important indicators in socio-economic development. Then, the Prime Minister issued the Decision No. 403/QD-TTg dated March 20, 2014 to “*Approve the National Action Plan for Green Growth for the 2014-2020*”, which specifies the main activities of the green growth action plan to be implemented synchronously, including: Raising awareness; improving legal institutions; changing the economic structure of industries, localities and enterprises; and innovating technology.

For the banking sector, during the implementation of the National Strategy on Green Growth, the State Bank of Vietnam (SBV) issued the Directive No. 03/2015/CT-NHNN dated on March 24, 2015 on promoting green credit and managing environmental and social risks in credit extension, with the aim of protecting the environment, improving the efficiency of resource and energy use; improving the quality of the environment, protecting human health, and promoting sustainable development, etc.; After that, SBV issued the Decision No. 1552/QD-NHNN dated August 6, 2015 on the Action Plan of the banking sector to implement the National Strategy on Green Growth towards 2020.

In order to supplement the policy to promote green credit, SBV continued to issue the Decision No. 813/2017/QD-NHNN on “Criteria to identify high-tech, clean agricultural programs and projects, list of high technologies applied in agriculture” based on the Resolution No. 30/NQ-CP dated March 7, 2017 of the Government. On August 7, 2018, SBV officially approved the Scheme on green banking growth in Vietnam according to the Decision No. 1604/QD-NHNN. The scheme has three specific goals: Gradually increase the proportion of credit granted to green sectors; Promote technology application and build environmentally friendly habits for customers; Aim to achieve the target of 100% of banks implementing assessment of environmental and social risks in credit extension by 2025, applying environmental standards to projects financed by banks with 60% of banks’ access to green capital and provide credit for green projects, etc.

At the same time, the State Bank of Vietnam cooperated with the International Finance Corporation (IFC) to issue a Manual for the assessment of environmental and social risks in credit extensions for 10 economic sectors. In order to support credit institutions to implement green credit policies comprehensively, based on the manual, SBV continues to coordinate with IFC to issue the Guidelines for assessing environmental - social risks for 5 other economic sectors, including: Thermal power generation, pulp and paper production, fabric dyeing, seafood processing, battery and accumulator production. This is a “handbook” to help credit institutions proactively identify and manage socio-environmental risks that may adversely affect the efficiency of credit granted projects as well as the debt service coverage ratio of customers, thereby, helping credit institutions minimize risks in credit extension. In addition, SBV has integrated the green credit program into legal documents issued or drafted by SBV and submitted to the Government for promulgation.

(ii) Scale and growth rate of green credit:

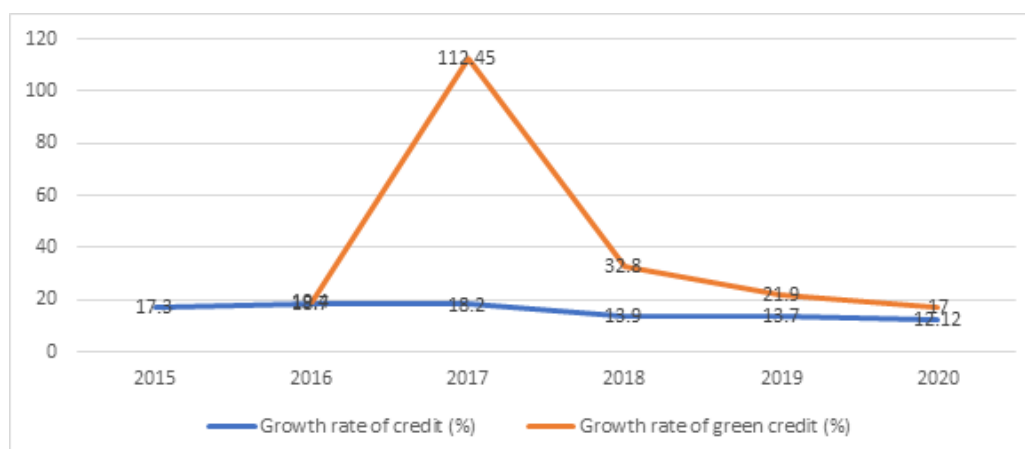
After more than 6 years of implementing the Directive No. 03/2015/CT-NHNN on promoting “green credit” growth and managing environmental and social risks in credit extension, the growth rate of green credit increases but still accounts for a small proportion of total credit outstanding. Green credit outstanding has increased from VND 71 trillion at the end of 2015 to VND 340 trillion at the end of 2020. As at May 31, 2021, the credit of the whole economy reached nearly VND 9.7 million billion, leading to the outstanding balance of “green credit” increasing to VND 345,126 billion.

Table 1: Outstanding balance and the proportion of green credit outstanding in Vietnam*Unit: Billions VND*

Targets	2015	2016	2017	2018	2019	2020	The first 5 months in 2021
Green credit outstanding balance	71,000	84,781	180,121	239,201	291,586	341,156	345,126
% Green credit outstanding/total outstanding balance of the economy	1.58%	1.54%	2.73%	3.3%	3.54%	3.7%	3.6%
Growth rate of green credit outstanding balance (%)		+19.4%	+112.45%	+32.8%	+21.9%	+17%	+1.2%

*Source: Report prepared by Department of Credit for Economic Sectors**- The State Bank of Vietnam*

Statistics show that the proportion of green credit outstanding/total credit outstanding balance of the economy in the whole system has increased significantly, reaching 3.6% of the total credit outstanding balance of the banking system as at May 31, 2021. Green credit outstanding balance at the end of May 2021 is nearly 4 times higher than 2015, the average growth rate is 63.4%/year.

Chart 1: Growth rate of green credit outstanding balance and the total credit outstanding balance of the economy*Source: Summary from reports of the State Bank of Vietnam*

In the period 2015-2020, the growth rate of green credit outstanding balance is always higher than the credit growth rate of the economy, especially in 2017, increasing 112.45% compared to 2016. However, in the period of 2018-2020, the growth rate of green credit outstanding balance tends to decrease and its scale is still too small (compared to the need of USD 30.6 billion in green finance in 2020) [2], only accounting for less than 4% of the total credit outstanding balance of the economy.

(iii) The structure of green credit outstanding balance

It is assessed that green credit outstanding balance has been reasonably distributed in the context of Vietnamese economic development, focusing mainly on green agriculture and clean and renewable energy. According to data at the end of 2020, short-term green credit outstanding balance accounts for 25%, medium and long-term credit outstanding balance accounts for 75%. By sector, green credit is mainly granted to green agriculture, accounting for more than 39% of the total outstanding green credit; and renewable energy, clean energy, accounting for 37%. Credit

outstanding balances assessed for environmental and social risks accounted for 14.17% of total outstanding loans and there have been 734,167 credits assessed for environmental and social risks. The rest includes green credits for the following sectors [2],[4].

(iv) Number of credit institutions granting green credit

Among 84 credit institutions submitting their reports on the results of the implementation of the Decision No. 1552/QD-NHNN dated August 6, 2015 on the Action Plan of the banking sector to implement the National Strategy on Green Growth towards 2020, representing over 80% of the loan balance of the banking system, only 67 credit institutions have implemented relevant activities on the development of green banking and green credit on the basis of integrating regulations and documents guiding the administration in banking activities; 53/84 banks have developed strategies with contents on developing green banks and green credit; 44/84 banks have researched and developed regulations/guidelines for environmental and social risk assessment; 9/84 credit institutions, equivalent to 10.7% of the total number of banks, have set up support and incentives for green credits. Support and incentives for green credits are usually interest rate incentives; There are 11 banks, equivalent to 13% of the total number, have their own due diligence process for green credits. The results of the implementation of the National Strategy on Green Growth at 84 commercial banks submitted their survey reports to SBV are shown in Table 2.

Table 2: The status of implementing the National Strategy on Green Growth at commercial banks in Vietnam by the end of 2020

Criteria	The number of banks
Implementing activities integrating into regulations and guidelines	67
Developing strategies with contents on developing green banks and green credit	53
Researching and developing regulations/guidelines for environmental and social risk assessment	44
Having green banking, green credit products	24
Having internal regulations on green banking and green credit	23
Having department in charge of green banking and green credit	13
Having a separate due diligence process for green credits	11
Setting up support and incentives for green credits	9

Source: The State Bank of Vietnam

5. DISCUSSION AND CONCLUSION

Discussion

* Firstly, the legal corridor on green credit is incomplete

Currently, Vietnam does not have adequate provisions which directly request banks to consider the environmental and social risks of credits. Most of the legal documents focus only on the responsibilities of those directly causing pollution. This has led to the negligence of credit officers not to pay attention to the assessment of environmental risks when performing due diligence process. Strict control right from the credit appraisal stage can eliminate environmental and social risks by agreeing or refusing to lend money to projects with red flags.

Green criteria have not been fully indicated in the legal framework governing credit extension. The applicable law on credit extension does not have adequate regulations on credit products for green growth. Green credit growth has only reflected at recommended measures to proactively

develop green credit programs and policies in order to gradually increase the proportion of green credit in the credit portfolio structure of the credit institutions.

* Second, commercial banks face many difficulties:

- Difficulties in mobilizing capital to grant green credits

Investing in green sector has a long payback period, large investment costs, and market risks, so the appraisal process for projects is complicated, while the capital mobilized by credit institutions is mainly short-term and subject to commercial capital expense in the market. Currently, commercial banks must meet the safety ratio requirements in their operations. Any bank wishing to expand its credit lines for customers or increase capital for capital contribution or business expansion must increase its charter capital. In addition, the increase in charter capital is to invest in information technology system, facilities and risk management system.

In addition to the capital problem, commercial banks lack experience, especially techniques for analyzing, evaluating and appraising complex environmental issues, as well as possible risks that lead to them making decisions on granting credit to projects that affect or even cause serious pollution to the environment.

The risk management framework for green finance in general and specifically for green credit of commercial banks is currently incomplete. Currently, the percentage of banks in Vietnam that have an environmental and social risk management system is still low. The development and application of environmental and social risk management systems of commercial banks face some challenges such as: lack of institutional capacity, lack of customer information and commitment from senior management, risk assessment capacity of banking officers, etc.

Banks have not yet developed a set of environmental standards for each sector: Different sectors will have different environmental impacts, for example, heavy industries such as mining, metallurgy, and mechanical engineering will have a higher level of environmental impact than agriculture, forestry, services, tourism, etc.

Many investors have limited experience, especially in electricity sector in general and renewable energy sector in particular. Meanwhile, the financial capacity of enterprises in this sector is not really stable.

* Third, there is still a lack of many supporting mechanisms to promote green credit growth; lack of cohesion and coordination from relevant agencies such as the State Bank of Vietnam, the Ministry of Finance, and the Ministry of Science and Technology when working with international organizations.

The development of green economic sectors requires synchronous solutions and mechanisms from tax policy, capital, technology, market, planning and development strategy for each new sector to encourage the active participation from both businesses and banks.

* *For the Government, the State Bank and relevant Ministries:*

- Continue to develop and gradually complete the legal framework on green credit, with comprehensive credit standards, lists of green sectors for unified implementation as the basis for credit institutions to select, appraise, evaluate and supervise projects when granting green credit.

- The State Bank of Vietnam develops and implements an appropriate interest rate policy for green credit by prioritizing support on interest rates and accessibility to credit capital for environmentally friendly investment projects. In addition, there should be regulations on risk prevention in green credit granting projects.

- To offer timely solutions to handle arising issues; consider promulgating tax and fee support policies, specialized bank guarantee mechanisms, and financial interest subsidies to support credit financing for green projects.

- To mobilize resources to implement credit policies in Vietnam, including: state budget, long-term preferential capital from international financial institutions such as the World Bank, IFC, etc.; mobilizing capital by issuing green bonds to finance large-scale renewable, energy-saving projects; strengthening the coordination among ministries and agencies in developing and promulgating mechanisms to promote green credit.

** For commercial banks:*

To develop comprehensive internal regulations on environmental and social risk management; develop policies on green credit in line with the operation of each bank, and in compliance with the national strategy and international standards; diversify green credit products; focus on training, improving professional capacity and ethics for banking staff. To pay special attention to environmental and social risk management issues in loan approval. To create trust, reputation and brand with customers, investors;

** In addition,* for borrowers, it is necessary to raise awareness about sustainable development; improve financial capacity, innovate technology towards green technology, and publish social responsibility reports. Business managers need to raise their own awareness on social and environmental issues, be aware of the position and importance of providing clean, environmentally friendly products that benefit consumers.

CONCLUSIONS

Green credit development is one of the important solutions to promote the sustainable development of the banking system in particular and the entire economy in general. The promotion and improvement of green credit efficiency requires a synchronous implementation of a system of solutions/measures and the active participation of all players in the economy, including an important role of the Government, commercial banks and investors.

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GREEN CONSUMPTION IN THE CONTEXT OF COVID-19 IN VIETNAM

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Abstract: *Green consumption in Vietnam is not only a trend, a potential business field, but through economic activities, it also contributes to solving social and environmental problems. Although we have now made progress on green consumption, the transition from consumer awareness to action depends on many factors, both objective and subjective. The COVID-19 pandemic has been causing huge impacts on all aspects of life, negatively affecting the economy and the health and safety of many people around the world. However, this epidemic also brings certain positive effects, including consumers' awareness about green consumption. This is also an opportunity for consumers to "stabilize" their daily consumption in order to contribute to the safety of themselves, society, and future generations. This study has important practical implications for green product businesses, non-governmental organizations as well as state agencies, and public organizations in communicating to promote intentions and spread behavior green consumerism.*

Keywords: *Green consumption, sustainable consumption, COVID-19, green products*

1. INTRODUCTION

The economy is developing, people's living standards are increasingly improved, demand for good quality and safe products and services is also increasing, it is mainly direct service products for daily life. A survey by market research company Nielsen (2017) shows that up to 86% of Vietnamese consumers are willing to pay more for products from brands that have a positive impact on society and the environment (the average rate of Southeast Asia is 76%). Enterprises' commitment to environmental responsibility also affects the purchasing decisions of 62% of Vietnamese buyers. This shows that there has been a drastic change in the perception of Vietnamese consumers.

In Vietnam, like many countries in the world, green consumption is gradually becoming a smart and modern consumption trend and consumers' awareness of green consumption and green products has also been enhanced. In the context of the COVID-19 pandemic, which is developing very unpredictably, the economy is stagnant, and people's incomes decrease, consumption trends also change. Accordingly, people will balance their spending by paying more attention to products useful for health, environment-friendly, and energy-saving, etc.

In Japan, at the G20 Summit in June 2019, Vietnam affirmed that it has been mobilizing the participation of the whole society in the movement against plastic waste, striving to not use single-use plastic by 2025. This statement demonstrates Vietnam's determination to reduce plastic waste. In-depth studies on environmental issues and consumer behavior are essential to achieve that goal. From there, it will serve as a scientific basis for policy development, in order to offer solutions to

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promote the consumption of environmentally friendly products and protect the environment and public health, towards sustainable development.

The article focuses on analyzing the current situation of green consumption in Vietnam in the past time, and at the same time, clarifies the impact of the COVID-19 pandemic on the green consumption trend of Vietnamese consumers. As a result, it proposes some solutions to promote green consumption during and after the pandemic.

2. LITERATURE REVIEW

2.1. Research approach on green consumption

Green living and green consumption are becoming a trend in many countries around the world, especially in developed countries, and spreading sharply to developing countries with middle income and above. This is considered a practical and important implementation in the concept of sustainable consumption to reduce the impact of society on the environment.

Terra Choice (2010) defined a green yield as a product that brings benefit to the environment. Elkington & Makower (1988) and Wasik (1996) said that a product with low environmental impact materials or packaging can also be considered a green one. Expanding that concept, Shamdasamin et al. (1993) clarified a green product as a yield that does not pollute the earth or damage natural resources and can be recycled and preserved.

Green consumption is understood as part of sustainable consumption. Green consumption is the act of buying, using, throwing away, in which consumers need to consider their responsibilities towards society and the environment by minimizing their impact on that. While they still meet their needs and desires, ensure the quality of life in daily living-eating-working activities (Getgreen, 2012).

Green buying is considered as a green consumer and environmental protection behavior, buying good products for the environment (Kim & Choi, 2005, Lee, 2009).

Within the scope of this article, the author conceives that *green consumption is the purchase and use of environmentally friendly products, which are not harmful to human health and do not threaten the natural ecosystem*. Green products are all types in categories such as household appliances, foodstuffs, cosmetics, etc., produced from natural and organic materials or simple ingredients that are less harmful to the environment and health. In addition, products may include factors, for instance, environmentally friendly manufacturing processes, no toxic chemicals, or energy saving.

It comes from the desire to protect resources for future generations and improve the quality of life for people. In the trend of green consumption, green and environmentally friendly products are prioritized and considered a standard for high-quality types and services.

2.2. Research overview on factors affecting green consumption behavior

Green consumer behavior is driven by many factors. Attitude is an important factor promoting green consumption intention (Kamonthip Maichum, Surakiat Parichitnon, Ke-Chung Peng, 2017) and green consumption behavior (Taylor & Todd, 1995; Kaman Lee, 2008; The Ninh Nguyen), (Antonio Lobo, Bach Khoa Nguyen, 2017; Hoang Trong Hung, Huynh Thi Thu Quyen, Huynh Thi Nhi, 2018).

Concern for the environment has a positive effect on green purchase intention (Schultz et al., 2004; Kamonthip Maichum, Surakiat Parrichatnon, Ke-Chung Peng, 2017) and green consumption

behavior (Kaman Lee, 2008; Hoang Trong Hung, Huynh Thi Thu Quyen, Huynh Thi Nhi, 2018). Society also has a positive influence on green consumption behavior (Kaman Lee, 2008; Ho Huy Tuu, Nguyen Van Ngoc, Do Phuong Linh, 2018).

One of the most important drivers of green consumer behavior is the awareness of the effective activities for environment (Manzo & Weinstem, 1987; Kaman Lee, 2008; Kamyar Kianpour, Roya Anvari, Ahmad Jusoh, Muhammed Fauzi Othman, 2015; Hoang Thi Bao Thoa, 2017; Nguyen Vu Hung, Nguyen Hung Cuong, Hoang Thi Bao Tho, 2018; Uliana Paramzina, Amin Babazade, 2019). In addition, in the study by Leslie Lu, Dora Bock and Mathew Joseph (2013), there are the driving factors for green consumption including product availability, recyclability and reuse, biodegradability, no animal testing, method eco-friendly production methods, non-toxic ingredients or materials, and environmentally related branding.

Awareness of environmental responsibility and the seriousness of environmental problems also stimulate green consumption behavior (Kaman Lee, 2018). Research by The Ninh Nguyen, Antonio Lobo, Bach Khoa Nguyen (2017) shows that knowledge of energy-saving equipment, personal standards, self-consciousness as an environmental protector are the prerequisites for consumers to buy energy-saving appliances.

Promotional and communication tools have a great influence in persuading consumers to buy eco-friendly products and make them aware of natural issues or climate change (Kamyar Kianpour, Roya Anvari, Ahmad Jusoh, Muhammed Fauzi Othman, 2015). According to Yongtao Li, Changbiao Zhong (2017), self-efficacy or social structural conditions are also factors that promote green consumption behavior. This behavior is also motivated by green personality (or green identity) (Arpita Khare, 2014), past environmentally friendly buying behavior (Arpita Khare, 2014), or expected outcomes (Thagersen & Granhaj, 2010).

Many studies on pro-environmental behavior have used the TPB - Theory of Planned Behavior (Ajzen, 1991) as the basis for their conceptual frameworks (Morren & Grinstein, 2016). Virtually, the determinants of actual behavior are behavioral intentions which identified by three basic factors including attitude towards the behavior, subjective norm, and perceived behavioral control.

After noticing the wide application of the TPB, Lindenberg and Steg (2007) argued that the TPB mainly focuses on self-interest, thus it best explains environmentally friendly behavior and gender limited by money, time and effort. Therefore, the TPB has combined factors such as knowledge, environment, identity and emotional factors in predicting pro-environmental behavior (Dean, Raats & Shepherd, 2012; Hartmann & Apaolaza Ibáñez, 2012); Polonsky, Vocalino, Grau, Garma, & Ferdous, 2012).

Through the previous analysis and research of the authors, the writer would like to summarize the basic factors affecting green consumption behavior as follows:

- **First, environmental awareness:** An environmentally conscious consumer is someone who is always aware of preserving and protecting the environment as well as responsible for individuals, society, and future generations in the exploitation, consumption, and protection of natural resources. Because people are aware of the finiteness of resources and climate change that are having a significant impact on their lives. It can be said that environmental awareness is defined as an understanding of the impact of human behavior on the environment. Environmental awareness includes perception, awareness, and feeling.

- **Second, characteristics of green products:** The characteristics of green products are also one of the important factors affecting green consumption behavior. Consumers are very interested in the origin of the items. These are the products of natural origin, organic or simple ingredients, less harmful to the environment and human health or no. In addition, buyers are also interested in the production process of the product (for instance, it is environmentally friendly and does not contain harmful chemicals, or those products help consumers save energy).

- **Third, price of green products:** The price of green products will often be higher than other similar ones. Therefore, it is not easy to convince consumers to buy green products in terms of price. If production costs are reduced and core values are increased, the products can be competitive in the market. A group of buyers who know the value of green products will be willing to pay for that product.

- **Fourth, green promotion activities:** Green promotion is the activities of advertising and introducing products to the target market, including paid commercials, public relations, sales encouragement, direct marketing, and promotional programs on the website. Advertising is a greatly important part of a green promotion strategy, as it helps consumers realize the business's contribution to environmental protection. Green promotion strategies that enterprises can use include advertising about enjoying a daily lifestyle when using green products, thereby showing that the business is responsible for the environment. In addition to advertising, businesses can use other forms of promotion such as giving discount cards, gift certificates, lucky draws, etc.

2.3. Research overview on the impact of the COVID-19 pandemic on green consumption behavior

According to Worldbank (2020), sustainability is a factor that modern consumers care about when shopping in the context of global pandemics and climate change. They are ready to contribute to building a sustainable living environment through spending on “green” or “no environmental impact” products.

A survey among 14,000 people from 9 countries by IBM Corporation's Institute of Corporate Value (IBV) (2020) showed amazing results. Specifically, 55% of consumers said sustainability is an important factor when choosing a brand, an increase of 22% compared to pre-COVID-19 survey results. 54% of shoppers are also willing to pay more for products and services provided by environmentally responsible businesses, despite the narrowing of financial capacity due to the economic impact of the pandemic.

The results of a survey conducted by Accenture PLC, a Fortune Global 500 company (April 2020), also show that 60% of consumers want to buy environmentally friendly products. Using less plastic was a priority for consumers before COVID-19, but now there are concerns about climate change and the environment.

The results of a survey of Vietnamese consumers conducted by Deloitte Vietnam Co., Ltd. show that changes in spending of customers due to the impact of the COVID-19 pandemic reflect a shift of priorities in consumption habits to essential products, reducing purchasing on discretionary products.

This is in line with the consumption trend in recent years, as income levels increase, consumers seek higher quality alternatives. People also give more priority to items in the list of essential necessities in their monthly family spending budget due to the effects of observing social distancing measures like staying at home more or self-sufficient cooking.

Consumers are more sympathetic to responsible brands, which can help make the world cleaner. Therefore, enterprises will also have to change their production and business models, from sourcing standards and sustainability to building production processes that do not pollute, negatively impact the environment and distribute products with “green label” that are environmentally friendly for consumers.

As a result, consumers’ green consumption behavior has also changed under the influence of the COVID-19 pandemic. Consumers are still interested in the characteristics, quality, price, promotion activities, etc. of green products. However, there was an increase in the level of interest for each factor. In addition, customers pay more attention to the “environmentally friendly” characteristics of green products and tend to increase spending on these products.

3. RESEARCH RESULTS

3.1. Status of green consumption in Vietnam

Green consumption is already quite popular in developed countries and has made initial strides in developing countries as personal income and consumption consciousness increase. Consumers are increasingly concerned about the environment and environmentally friendly buying behavior. Environmental experts consider green consumption as a measure to “save the earth” against the bad changes in the global living environment. Therefore, the trend of producing and using environmentally friendly products is expected to grow strongly in the coming time.

Green consumption has been known and implemented by Vietnamese consumers for more than 20 years, marked by Vietnam’s participation in signing international legal documents on green consumption such as the International Declaration and National Action Plan on Sustainable Production and Consumption (1999), Law on Economical and Efficient Use of Energy; International Declaration on Cleaner Production (1999), legal documents related to the protection of consumer rights and more. Plans related to green products are also implemented, for example, the program for granting Eco-labels (Ministry of Natural Resources and Environment), Energy-saving labels (Ministry of Industry and Trade), and Eco-labels for the tourism industry.

Vietnam’s socio-economic development strategy for the period 2011 - 2020 has affirmed the urgent requirement of transforming consumption modes towards sustainability in order to protect and improve the quality of the environment. Proactive is important to respond to climate change with the content “raise the awareness of environmental protection, linking environmental protection tasks and objectives with socio-economic development; focus on developing a green and environmentally friendly economy; implement sustainable production and consumption; gradually develop clean energy, production, and consumption”.

The Vietnam Sustainable Development Strategy for the period 2011-2020 also clearly states the necessary views to build an environmentally friendly lifestyle, sustainable production, and consumption with the specific orientation of “building a civilized consumer culture and friendly with nature; gradually implementing eco-labeling and green procurement; developing market ecological products and community initiatives on sustainable production and consumption; applying policies to correct unreasonable consumption behaviors”.

Decision No. 1393 of the Prime Minister on “Approval of Green Growth Strategy for the period 2011 - 2020 and vision to 2050” indicates two tasks related to green consumption, including

greening production and greening consumption. The Green Growth Strategy is an important legal basis for developing policies related to green consumption in Vietnam in the coming period. Thus, transforming the consumption model towards green and sustainable has become the guiding line, viewpoint, and policy of the Party and State and is a fundamental content of development goals in Vietnam today. This means, when people's income increases, the demand for products made from environmentally friendly materials also tends to rise. In addition, consumers also have the move to turn away, boycott the use of products of businesses that pollute the environment through being denounced by the people or announced by the authorities.

As implementing the Government's policy of building a green consumer culture, since 2010, the Ministry of Natural Resources and Environment has developed and issued criteria for green label certification and implemented eco-labeling for products groups, for instance, detergents, fluorescent bulbs, and biodegradable plastic packaging used to package goods when shopping, batteries, laptop products, printers, ink, washing machines, refrigerators, televisions, etc. Along with that, the Ministry of Industry and Trade has also issued specific regulations in Circular No. 07/2012/TT-BCT on energy labeling for energy-using vehicles and equipment.

In some localities, many programs are implemented to raise awareness of businesses and consumers about the use of environmentally friendly products and services and promote the production of that as well.

* ***Green consumption campaign is held annually in Ho Chi Minh City*** with a large number of volunteers and people participating in the commitment to respond. In recent years, as one of the leading units implementing the Green Consumption Campaign, the Union of Trade Cooperatives of Ho Chi Minh City (Saigon Co.op) has cooperated with prestigious brands such as Comet, Sharp, Sunhouse, Spring, Pond's, Vinamilk, Co.op Organic, etc, in order to develop sales and marketing policies with the arrangement of separate display areas for environmentally friendly products of green businesses. Therefore, it provides and prepares the community with the necessary information in order to increase awareness and promote the consumption of environmentally friendly products as well.

* ***The Green Destination Network Program (Hanoi)*** is also implemented with the expectation of becoming a reliable green place for environmentally responsible communities. In order to reduce plastic bags and products derived from plastic in the field of consumer production and distribution, many shopping centers and supermarkets in the area have joined hands to sign a commitment to combat plastic waste. Accordingly, commercial centers and supermarkets 100% do not use non-degradable plastic bags by December 31, 2020, and reduce the rate of non-degradable packaging by 50% at residential markets. Hanoi is determined to completely replace non-biodegradable and single-use plastic bags with natural materials and environmentally friendly products. For instance, people use banana leaves to pack vegetables and food or distributing environmental packaging products. 100% of waste generated from the factory is collected and sorted by source. By 2025, single-use plastic products and hard-to-decompose plastic bags will not be produced.

It can be said that the trend of green consumption has been receiving great consensus in the community, from state agencies, businesses, production, and supply units to consumers. According to the research results of Nielsen Vietnam Company, brands with a commitment to "green" and "clean" have a relatively high growth rate of 4% per year. For example, in the food and beverage industry, the growth rate is faster than the whole market from 2.5% to 11.4%. At the same time,

sales of brands committed to prioritizing sustainability are up to four times higher than those of competitors that do not. Actual statistics from the Campaign to Consume Green Products also show that the consumption of products of businesses participating at Co.opMart supermarkets in the month of program implementation usually increases by 50% to 60% compared to other months of the year, creating a spillover effect in the consumer community. This is the motivation for businesses to launch “green” and “clean” products and create their competitiveness in the market.

There are many ways to respond to the movement of green living, “saying no” to plastic waste, from small stores to big brands. For example, it is necessary to replace plastic straws with rice, grass, bamboo, stainless steel ones, plastic cups with paper cups to protect the environment and limit the use of bottled water with non-biodegradable packaging, or encourage customers to bring a water bottle when buying drinks. The trend of green consumption also leads to the trend of “greening” in branding with the proliferation of clean food chains such as Soi Bien, Bac Tom, Home Food, Hano Farm, Meat Deli, etc, in order to meet the needs of people to buy clean, clear products. Many milk tea and coffee shops turn to green business by using bamboo or stainless steel straws instead of plastic straws and only applying paper bags instead of plastic bags. A lot of supermarkets across the country, for instance, Co.opmart and LOTTE Mart recently made efforts to reduce the use of plastic bags by using banana leaves to pack vegetables, food and distributing environmentally friendly packaging products.

As a result, over the past time, it can be seen that our propaganda and green consumption promotion activities have contributed to raising public awareness in the use of ecological products, eco-plastic bags, 3R. Although a trend of smart and positive consumption has been formed, green consumption in Vietnam is considered to be an only single activity with a narrow impact range. Sustainability is not high because Vietnam does not have a strong enough tool to adjust production and consumption behavior. In addition, the transition from consumer awareness to action is influenced by many factors such as customs, practices, culture, education level, residency status, and economic ability. As a developing country, the average income of the people is not high (estimated average income per person per month in 2019 at current prices is about 4.2 million VND - data from the General Statistics Office), price is still an important factor affecting people’s sustainable consumption behavior. Besides, the consumption habits of Vietnamese people are still “convenient to buy everywhere” when toad markets and sidewalk shops are still quite popular. It shows that it will take a long time to change consumption habits, however, the above results are positive signals for the green consumption movement to spread and develop strongly in the coming time. Therefore, it brings benefits to consumers, opens new development directions for businesses, and effectively promotes the country’s sustainable development goals.

3.2. Impact of COVID-19 on green consumption behavior of Vietnamese people

The COVID-19 pandemic has caused terrible impacts on all aspects of life and many economies have fallen into stagnation, threatening the health, lives, and livelihoods of billions of people around the world. However, this great disaster also seems to be signaling the beginning of a new era, from lessons of community solidarity, outstanding achievements in science and technology application to experience in risk management and the need to strengthen the supply chain.

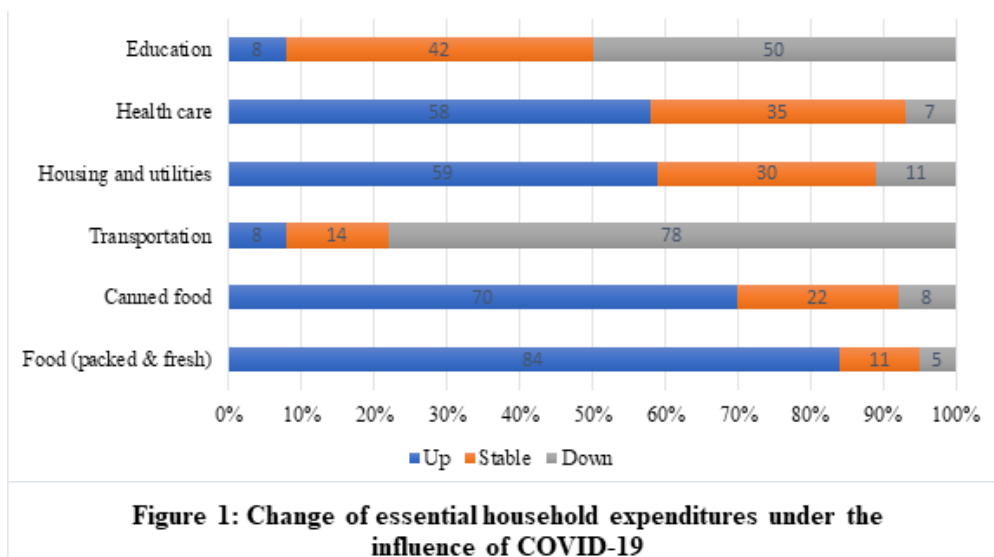
In the context of the current complicated developments of the COVID-19 epidemic, consumers are increasingly interested in sustainable consumption and environmentally friendly products and

services right from the manufacturing, consumption process. In particular, consumers' awareness and willingness to change behavior towards sustainable values has also been significantly enhanced under the impact of the COVID-19 pandemic.

In Vietnam, the COVID-19 pandemic has also changed many habits and trends of shoppers, including affecting green consumption behavior. Specifically:

Vietnamese consumers tend to change priorities in consumption habits to essential items, including necessities and medicines.

In the context of complicated epidemic developments, the Government continuously advised people to limit going out as well as encourage working from home, and shopping online, so the demand of Vietnamese consumers for different types of products also change significantly. Specifically, citizens reduce discretionary items and spend more on shopping for essential such as necessities and medicines. The majority (84%) increased purchases of fresh food items, more than half focused on buying health care and housing products. A lot of people lessen the needs relating to transportation and education.



Source: Adsota Vietnam Survey (2020)

Vietnamese consumers tend to seek information about healthier products with the desire to improve health, regardless of price.

Consumers tend to search for information and purchase lots of green, clean, environmentally friendly items, organic products and healthy products, etc. Some required necessities such as rice, meat, eggs, milk, vegetables, etc, are also preferred to buy at clean food stores and supermarkets. Some famous brands are favored by Vietnamese such as Bac Tom Store, Meat Deli, Soi Bien, Biggreen, V-Organic.

The survey of Kantar Vietnam (2020) also shows that there is a change in the factors of choosing to buy products. In the past, consumers were first interested in the eye-catching appearance of the product, however, factors such as hygiene safe, good for health, and specific information (expiry date, ingredients, instructions for use, origin) are more attractive with shoppers when choosing to buy products now.

Vietnamese consumers increase online shopping

In 2020, Vietnam has 68 million internet customers and is forecast to increase to 75.7 million by 2023. According to the report of Vietnam’s Search for Tomorrow-Google Vietnam 2020, more than 90% of users connect to the internet via phones in order to communicate, study, entertain, shop, and follow the trend. Vietnamese consumers have had a big change in their shopping behavior during the epidemic period. It is the transition from in-person shopping to online shopping.

After the outbreak of the epidemic in 2020, 93% of survey respondents said that they shopped online regularly at least once a week. The number of people who regularly purchased (more than 4 times a week) accounted for 39%. In which, 58% of people often shopped on e-commerce more after the impact of the pandemic.

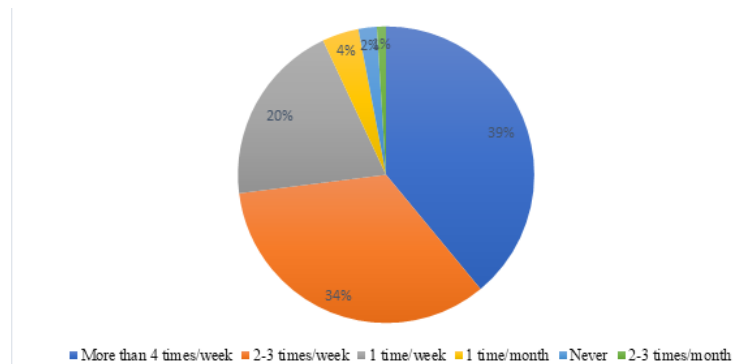


Figure 2: Frequency of using online shopping/e-commerce channels by Vietnamese during the COVID-19 pandemic

Source: Adsota Vietnam Survey (2020)

Vietnamese consumers have also increased their use of digital platforms by accepting e-commerce levels and online shopping channels faster, especially when buying certain product items. In Vietnam, as of June 2020, the modern sales channel recorded positive growth compared to the same period last year (up 13% of sales compared to 2019) with an increased number of stores (up 35%) and led by the mini supermarket (up 51%).

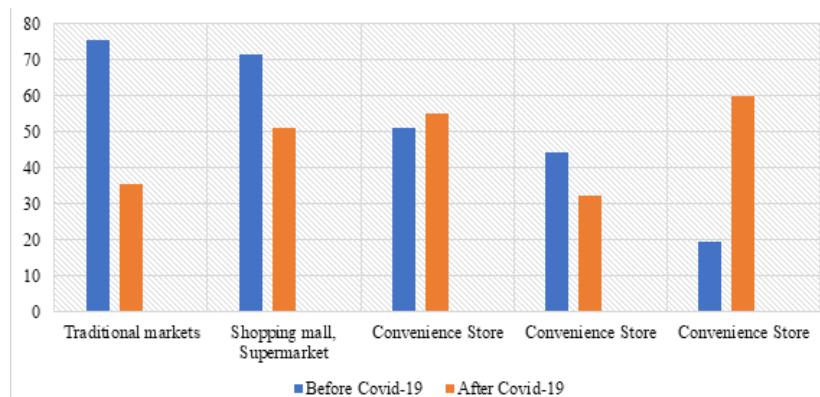


Figure 3: Necessity shopping channel before and after the COVID-19 pandemic in Vietnam

Source: Adsota Vietnam Survey (2020)

For the necessities industry, the proportion of consumers buying online stores increased sharply, up to 59.8%, which is the highest number among consumption channels. Channels of trade centers, supermarkets, and grocery stores are reduced, in which the traditional market decreased sharply (35% reduction compared to 73.5% before the epidemic). Convenience store purchases are on the rise.

Vietnamese consumers want a better shopping experience

Vietnamese consumers expressed their desire to have a better shopping experience so that this wish takes precedence over deep discounts or big promotions and incentives from delivery services. Since COVID-19 started and Vietnam implemented a social distancing order, consumers have been choosing to stay at home and require home delivery. Specifically, the phrase “home delivery service” on Google searched increased by 40%, the phrase “same-day delivery” rose by 30% compared to the same period last year. (Vietnam’s Search for Tomorrow-Google Vietnam, (2020).

The change in customers’ consumption habits is both an opportunity and a challenge for units, stores, and businesses in the production and supply of goods according to green, clean criteria, or transparent product information in order to attract consumers.

4. DISCUSSION AND CONCLUSION

Although green consumption brings many benefits to consumers and the living environment, there are still a lot of difficulties for green products to completely replace polluting conventional items, especially for a developing country like Vietnam. Therefore, it requires the cooperation of the whole society for green consumption to not stop as a short-lived movement.

* *On the side of the State*: The State needs to develop and perfect the legal framework and policies on green consumption so that it is synchronous and consistent, for instance:

- Propose policies to encourage creating green products and services and develop industries and fields that apply clean technology. It should promote greening of production and give priority to the development of renewable energy, economical and efficient use of resources, and green technology development. Besides, it is necessary to develop and replicate green business models, and support prices for green products and services to boost consumer demand.

- Continue to promote propaganda to raise people’s knowledge about the meaning and importance of green consumption for the living environment and human health, towards changing the awareness and actions of the whole society in environmental protection activities.

* *On the side of businesses*

Enterprises need to comply strictly with regulations on environmental protection; proactively improve production processes, or innovate technologies, develop clean energy sources, renewable energy, and production technologies in order to save resources and consume less energy; prioritize the use of environmentally friendly input materials. In particular, consumers’ health must always be the focus of product development and have improvement strategies associated with a commitment to sustainability.

From studying the impact of the COVID-19 pandemic on the change in green consumption behavior of Vietnamese people, the author proposes some solutions as follows:

- Product strategy: Essential and health care products will be priorities in life. Businesses should capitalize on this trend by encouraging consumers to maintain good, health-conscious habits. Emphasis is placed on provenance, organic ingredients, and the good health and environmental benefits of green products. The quality and value of these items will be the key factors affecting people’s consumption intentions.

- Price strategy: The price of green products will always be higher than other similar ones. The

introduction of a discount strategy can affect the cost and revenue of the business. As a result, enterprises can keep the same price but may add some additional services to the item, and have a discount policy when buying many products, coupons for later purchases, or discount cards for VIP members, etc.

- Distribution strategy: In general, COVID-19 has become the motivation for digital transformation activities in Vietnam. In particular, shopping and entertainment activities have shifted strongly to online, turning Vietnam into a potential country for the digital economy. Therefore, businesses should use modern distribution channels (supermarkets, convenience stores, buffet shops) and shopping sites on e-commerce exchanges.

- Mixed promotion strategy: Advertising programs and product promotions should be integrated into online shopping channels or websites, YouTube, social networks, etc.

*** *On the side of the individual customers – Be a smart and responsible consumer***

Consumers also need to improve their awareness and understanding of green products and green consumption by learning relevant information from different channels. Customers themselves must distinguish between green products and substitutes of the same type. It is important to be aware of the health and environmental benefits of green products. As a result, it promotes changes in behavior and daily consumption habits.

Although the complicated development of the COVID-19 epidemic brings many difficulties, this is also an opportunity for consumers to “stabilize” their daily consumption in order to contribute to the safety of themselves, society, and for future generations, specifically:

- Using cloth bags with many compartments, containers, lanes, baskets, ect, to go to the market or the supermarket so as to limit the use of plastic bags;

- Using environmentally friendly straws made from bamboo, grass, metal, paper instead of plastic ones;

- Bringing personal water bottle to buy drinks to reduce plastic cups;

- Increasing the consumption of seasonal local products in order to minimize the environmental harm caused by transportation from far away as well as ensure the health of consumers;

- Responding to enterprises’ business activities towards sustainable consumption including bringing bottles and jars to buy products (the “refill” form as above), choosing not to take plastic eating utensils through shopping online, purchasing from stores that use green materials in the distribution channel such as paper bags, banana leaves, etc.

The change in consumption habits in the context of the COVID-19 epidemic will be both an opportunity and a challenge for production and business units, stores, and businesses in the production and supply of goods according to green, clean, and transparent products’ information to attract consumers.

In recent years, many enterprises have focused on investing in modern machinery and equipment according to international standards towards green and clean production criteria. This contributes to helping businesses’ products improve their competitive value in the market, updating new trends and tastes of consumers.

Towards green production and sustainable consumption models, it requires efforts from manufacturers and suppliers, and changes in consumers’ shopping habits. In addition, there is a

need for appropriate mechanisms, policies, and support programs from functional agencies and localities in encouraging green and sustainable production and consumption models.

It can be said that it will take a long time to change consumption habits, however, the trend of green consumption will be certainly more and more pervasive with the willingness of consumers, the participation of state management agencies, and the joint commitment of businesses. Therefore, it brings many benefits to consumers and green businesses, and actively contributes to saying no to plastic waste, protecting the living environment, and adapting to climate change, sustainable development.

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FISCAL POLICIES SUPPORTING GREEN GROWTH IN VIETNAM ISSUES POSED

Dr. Nguyen Thi Thanh¹

Abstract:: *In the green growth strategy in Vietnam, fiscal policies from the Government play an extremely important role in providing financial resources for the consumption process of businesses, individuals and associated with the business activities of the enterprise. For the State, developing a scheme to identify green and environmentally friendly projects, the promulgation of tax policies, and the approval of expenditures from the state budget are factors to ensure the realization of business goals. Therefore, assessing the current situation and researching solutions related to fiscal policy that the State has applied in the past time to promote green growth is essential in the current period in order to innovate the economic growth model, towards green and sustainable economic growth and development.*

Keywords: *Growth; green growth; policy; fiscal policy; Tax; State budget spending*

1. INTRODUCTION

Green growth or building a green economy is the process of restructuring economic activity and infrastructure to achieve better results from investments in resources, human and financial resources, and at the same time reduce greenhouse gas emissions, respond to climate change, exploit and use less natural resources, generate less waste, contribute to hunger eradication, poverty reduction, create the driving force for sustainable economic growth and reduce inequality in society. Green growth focuses on the interaction and interdependence between the economy and the environment in order to ensure stable, effective, continuous and sustainable development on the basis of environmental protection and the goal of people-centered.

Currently, Vietnam has specific orientations on green growth such as Decision No. 1393/QĐ-TTg dated September 25, 2012 of the Prime Minister of Vietnam approving the national strategy on green growth in the period 2011-2020 and a vision to 2050 have set out the following goals: Green growth, moving towards a low-carbon economy, enriching natural resources becomes the mainstream in sustainable economic development; reducing emissions and increasing the ability to absorb greenhouse gases has gradually become a mandatory and important indicator in socio-economic development. Thus, to meet the set target, it is necessary to reduce the intensity of greenhouse gas emissions and promote the use of clean and renewable energy; Greening production; Greening lifestyles and promote sustainable consumption.

On the basis of the Government's National Strategy on Green Growth, on October 20, 2015, the Ministry of Finance issued Decision No. 2183/QĐ-BTC on the action plan of the Finance

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sector to implement the National Strategy on green growth until 2020 with a clear identification of the general adjustment direction.

Accordingly, the adjustment of financial policies towards green growth follows trends such as: Raising awareness, mobilizing maximum resources of the financial system for the purpose of renewing the economic growth model, aiming sustainable and green economic growth and development; Consolidate revenue sources, change state budget structure, economic structure, business model towards greening and sustainability; Thoroughly reduce environmental harmful agents through expanding the scope of taxable objects, adjusting tax regulation levels and environmental protection fees; encourage the improvement of efficiency in the management, protection, exploitation and use of natural resources through tax instruments and state budget expenditures for the national target program; Encourage financial institutions, businesses, especially small and medium-sized enterprises to deploy production and business activities according to green growth criteria through the expansion of tax and credit incentives...

In addition to limiting and preventing environmental harmful agents, fiscal policy also aims to encourage green production and consumption through tax and state budget spending tools. Specifically:

For tax policy: In fact, tax policy is considered to be an effective tool to influence the behavior of producers and consumers, thereby orienting the behavior towards green, environmentally friendly, promoting sustainable development. Currently, policies on corporate income tax, special consumption tax, import-export tax, value-added tax have been gradually improved in the direction of focusing on encouraging investment and production according to clean, economical and energy-saving technology and support for the implementation of the National Green Growth Strategy.

Tax policies related to this goal include promotion policies to encourage green production and consumption, such as tax policies related to corporate income (Corporate income tax exemption for income from transfer certificate of emission reduction; apply the tax rate of 10% to enterprises' incomes from socializing activities in the field of environment...); excise tax policy (applying lower tax rates for cars running on gasoline combined with electric energy, bio-energy, etc.)... The Law on Environmental Protection Tax 2010 (effective from 2012), is applied to limit the production and consumption of goods that cause environmental pollution when used, and to encourage the production and use of eco-friendly goods, applicable to objects such as gasoline, oil, grease, coal, plastic bags, herbicides,... or the Law on Natural Resources Tax stipulates a tax of 10-20% for the group of metallic minerals; the level of 6-27% for the group of non-metallic minerals; level 1-10% for natural water group. Therefore, natural resource tax has become an important tool for state management departments to strengthen the management and supervision of the process of exploiting natural resources in accordance with the law for those organizations and individuals, contributing to raising awareness about the importance of resources for sustainable economic development. At the same time, the environmental protection tax policy has contributed to raising the awareness of environmental protection of the whole society and generating revenue to solve environmental problems and ensure green growth. Besides, in order to encourage the use of bio-fuels and contribute to environmental protection, starting from 2014, according to the provisions of Law No. 70/2014/QH13 dated November 26, 2014 amending and supplementing the Law on Taxation for excise tax, the excise tax rate for biofuels shall be lower than the excise tax rate for

mineral gasoline, specifically: the excise tax rate for gasoline E5 is 8%, E10 is 7%, while the excise tax rate for mineral gasoline is 10%.

For state budget expenditure: State budget expenditure is increasingly giving priority to national target programs related to environmental protection with the following key contents: Expenditures from the State budget for the environment, with a budget not less than 1% of the total balanced expenditure of the State budget in the budget estimated in order to support environmental protection tasks under the project, implement prevention and response to national environmental incidents; formulating and promulgating standards on environmental protection; formulating strategies, projects and plans on environmental protection...; National environmental programs such as the 327 Program to reforest the bare land and bare hills or the Program of 5 million hectares of forest, spending the State budget on poverty reduction, clean water and sanitation; State budget expenditure for the national target program on climate change and sea level rise has been paid attention by the State, specifically, 2 billion VND in 2018, 1.5 billion VND in 2019 and 4,446 VND in 2020. 671,000 VND had been spent.

In general, the fiscal policy to support green growth in Vietnam has made positive contributions to the implementation of the National Green Growth Strategy. Tax policies have played an important role in guiding and encouraging organizations and individuals to consider in choosing investment plans, environmentally friendly technologies and equipment, and investing in environmental protection. State budget expenditure aimed at Vietnam's green economy includes environmental warning activities, prevention and control of environmental pollution, response to climate change...

Some limitations in fiscal policy to support green growth

About tax policy

Tax policy is not practical, the revenue from these taxes is not commensurate with the damage caused by production and consumption activities (environmental protection tax, natural resource tax...). Some tax policies do not encourage the use of less polluting products. The documents on excise tax only stipulate the deductible excise tax amount for biofuel based on the excise tax already paid or paid per unit of raw materials purchased in the preceding tax period of petrol and mineral materials, there is no specific guidance on the mixing ratio applied in the selling period or the preceding period; amending the value-added tax policy in the direction of stipulating a tax rate of 0% for maintenance services of zoos, flower gardens, parks, street trees as well as passenger transport by bus and tram.

In addition, the scope of subjects subject to environmental protection tax has not yet been expanded to cover all products that cause damage to the environment such as chemical fertilizers and emissions; approach according to the market value mechanism, ensuring the principle that polluters must pay; perfecting the resource tax policy and improving the effectiveness and efficiency of resource tax management in terms of taxable output, taxable price, tax rate, etc.

Currently, there are many tax policies to limit harm to the environment such as regulations on taxable objects for environmental protection including gasoline, oil, grease, coal, taxable plastic bags...; for cars with less than 24 seats, the larger the cylinder capacity, the higher the excise tax rate...

About state budget spending

Budget spending on investment in developing clean technology and encouraging support for production and business industries using clean technology and energy is not much. There has not been a summary assessment of the investment level for the environment in Vietnam in the past time as well as based on the national development strategy in the coming time to set the appropriate investment level.

• **Some solutions on fiscal policy to support green growth in Vietnam**

In order to realize green growth, in the coming time, it is necessary to perfect the financial policy framework, especially the State's fiscal policy for green growth. Develop a policy framework for national budget allocation and management to serve the implementation of the green growth strategy. Specifically:

For tax policy:

+ Tax policy orientations encourage the use of products with low environmental pollution, and at the same time combine price subsidies and subsidies for unnecessary fossil fuels (such as gasoline, kerosene, fuel oil, etc.). In addition, it is necessary to study the feasibility of alternative fuel sources, such as biofuel. Specifically, it is necessary to prescribe the excise tax rate for bio-fuels equal to 50% of the tax rate for mineral gasoline to create a significant difference between bio-fuel and mineral gasoline to increase the consumption of bio-fuel; amending the value-added tax policy in the direction of stipulating a tax rate of 0% for maintenance services of zoos, flower gardens, parks, street trees as well as passenger transport by bus and tram.

+ It is necessary to expand the scope of subjects subject to environmental protection tax to cover all products that cause damage to the environment such as chemical fertilizers and emissions; approach according to the market value mechanism, ensuring the principle that polluters must pay; perfecting the resource tax policy and improving the effectiveness and efficiency of resource tax management in terms of taxable output, taxable price, tax rate, etc.

+ It is necessary to develop preferential policies, especially tax and fee incentives, suitable for the business sector in order to encourage enterprises to invest in technological innovation in the direction of green technology, green jobs, creating advantages in the competition of enterprises in the market. This is necessary because the costs of building and handling systems to reduce environmental pollution or for clean production are often quite large, making it difficult for businesses who want to deploy these systems, especially are small and medium enterprises which make up the majority of the Vietnamese economy.

- *For state budget expenditures:* Increase budget spending on investment in clean technology development and encourage support for production and business industries using clean technology and energy. Based on the international criteria as estimated by UNEP on global public investment 2% of GDP for green economic development, however, a summary assessment of the level of investment for the environment in Vietnam in recent years is needed as well as based on the national development strategy in the coming time to put the appropriate investment level.

Expenditure on investment in clean technology development is used by the Government to support research and application of production technology that saves resources and consumes less energy, and at the same time offers support programs to promote each stage in the technology cycle, including research and development (R&D), commercialization and propaganda. In addition, it is

necessary to encourage companies to directly invest in the development and implementation of new technologies, reduce outdated technology, and at the same time encourage businesses to use clean technology through channels such as tax policy, legal documents, procedures, favorable investment mechanism.

CONCLUSION

Fiscal policy is one of the policies contributing to the prevention of harmful environmental effects, encouraging green production and consumption. The study of some limitations in fiscal policy such as tax policy and state budget expenditure and the proposal of awards will contribute to ensuring the goal of renewing the economic growth model towards green and sustainable economy growth and development..

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STATE MANAGEMENT OF THE ECONOMY DECENTRALIZATION: FACTORS AFFECTING AND REQUIREMENTS IN VIETNAM

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Abstract: *Renovating and improving the effectiveness and efficiency of state management of the economy has become a basic and urgent requirement in today's conditions, especially in the process of developing a market economy with socialist orientation and international economic integration of our country. One of the important contents to improve the efficiency of state management of the economy is decentralization of state management of the economy. Completing the decentralization of state management of the economy is one of the key tasks identified by Vietnam in recent years. However, in order to perform this task, it is necessary to study to clarify the nature and factors affecting the process of decentralization of state management of the economy, thereby setting out the requirements that need to be met.*

Keywords: *Decentralization of management, state management of the economy, factors affecting*

1. STATE MANAGEMENT DECENTRALIZATION

State management is the most important function operated regularly by the state apparatus to ensure that all activities of society as well as in each field of social life moving in a certain direction set by the State.

Decentralization in state management is understood as the arrangement of tasks and powers among different levels of government, between the central and local governments, and between levels of local government in the exercise of state management rights in a specific field.

Currently, the concepts of decentralization and authorization are mentioned in the 2013 Constitution, the Law on Organization of the Government 2015, the Law on Organization of Local Government 2015. In Clause 4, Article 5 of the Law on Organization of the Government 2015, the principles are set out for organization and operation of the Government: “Rational decentralization and authorization of powers between the Government and local authorities, ensuring the Government’s unified management right and promoting the initiative, creativity, and self-responsibility of local government”. The Law on Organization of Local Government 2015 also has provisions on decentralization and authorization in Articles 12 and 13.

According to the above provisions, decentralization in state management is understood as the arrangement of tasks and powers between levels of government, between the central and local governments, between levels of local government in the exercise of state management in a particular sector. The decentralization entity is the central government or local government; the subject of decentralization is the lower-level local government.

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2. THE NATURE OF DECENTRALIZATION IN STATE MANAGEMENT OF THE ECONOMY

When states were not formed, the social management role has gradually formed and its content and scope have been continuously expanded. The state gradually becomes the main force in charge of social management. Since then, social management has gradually become a function of the State. In the contents and areas in which the state assumes a management role, there are economic relations. State management of the economy plays an increasingly important role, especially when the scale of economic development has reached a large enough level that society and the economy cannot maintain stability and sustainable development without State regulation.

When society was still in its infancy, the scope of its activities was still limited, the management task of the state was simple, and its scope was also small. Therefore, the scale of the state apparatus is also small and has a simple structure. When the scope of the country grows, the scope of activities of the state is expanded, the volume of tasks to be performed increases, and the objects of state management increase, making the state management apparatus also become larger. At this time, the state management apparatus itself becomes complicated and the activities of its constituent parts also need to be arranged, assigned, coordinated and regulated. The trend of specialization among departments in the state management agency creates the division of responsibilities and tasks among such departments, creating a system of functional departments in the state management apparatus.

In addition, with the expansion of the territory, the state cannot manage all activities on a national scale, but must divide it into smaller territorial units. Due to various reasons, the relationship between territories and central state agencies has also become more diverse. In different ways, central state agencies and state agencies have divided among themselves different functions and roles to manage such territories. From there, the decentralization in state management was born.

In essence, management decentralization is the division of rights and responsibilities of agencies, organizations and departments at different levels in the entire system within the organization in making decisions to solve problems that arise within their management. The content of this decision covers the entire object, content, form and method, decision-making tool. Depending on the philosophies, principles and viewpoints that guide the organization and operation of the system as well as the complexity, size and capacity of each component of the system, each level of the management system are given different authority over what decisions (the content and audience of the decisions), the scope and extent to which these decisions are made and effected, the conditions under which the decisions are made as well as deployed (including legal framework resources, decision-making context and decision-making, etc.).

Academically, management hierarchy is defined as deciding the number of levels in the management system, deciding on specific levels and clearly delineating functions, tasks, powers, and responsibilities for agencies and organizations at all levels in the management system. In a narrower scope, management decentralization is understood as the division of functions, tasks, powers and responsibilities, rights and obligations of levels in an established system. Thus, decentralization of management is one of the two basic contents of the organization of the management apparatus.

In research, people distinguish authorization, delegation and decentralization. Authorization/trust is understood as a form of delegating specific decision-making powers, financial functions and management that belong to the central authority to representative agencies of the central government in localities, while legal power and responsibility still rests with the central authority system.

Delegation is a form where local government is granted by the central government the authority to decide and administer the responsibility in the local area to the local authority, but the central government is still responsible for these decisions.

Decentralization is the assignment of powers, tasks, and material means... from the central government to all levels of local government for implementation, in which local governments are allowed to decide on their own local issues on the basis of the legal system, while the central government exercises control over local activities through the legal system. Experts also distinguish three components constituting management decentralization: (1) Decentralization of functions, tasks, responsibilities and powers of each level in the management system; (2) Decentralization of the right to have and use resources and financial and material conditions for each level to perform its functions and tasks; and (3) Decentralization of the right to have and use human resources to perform functions and tasks.

In state management, management decentralization is understood as “the transfer of resources, powers and responsibilities in the performance of public tasks from the central level to local agencies or assigning these tasks to the local authorities”. In addition, the decentralization of management is also placed in relation to economic decentralization. To some extent, the process of decentralization of management leads to a change in the management model, shifting from “centralized management” to “central leadership, local management”. Since then, one of the requirements for the decentralization of economic management is that it must closely follow and be consistent with the economic decentralization.

Some experts believe that decentralization is when a superior state management agency transfers some of its powers to lower-level state management agencies. It is a one-way transfer of authority that the responsible subordinates must accept, whether they want to or not. This transfer (both content, extent, time and object) depends on the awareness as well as the will of the superior state management agency. Objective conditions have a certain influence on the decentralization, but it also depends on the superior state management agency. Like state management in general, decentralization of state management includes decentralization of management in all aspects-politics, administration, finance and market.

3. FACTORS AFFECTING THE DECENTRALIZATION OF STATE MANAGEMENT OF VIETNAM'S ECONOMY

After more than 30 years of economy and economic management mechanism reform, Vietnam has made important progress. In order to create conditions for the formation and development of the market economy and respond to the conditions and requirements of that development, the role of the state in economic management has also been gradually renewed. The State reduced the normative norms, narrowed down and gradually eliminated the management of production and business activities of the state-owned enterprises by centralized planning, bureaucracy, and subsidies. Instead, the State manages and regulates the economy through laws, strategies, planning, plans, policies, economic tools and necessary physical forces. The State plays the role of an economic actor in the market, through capital investment and management of public assets; separation of ownership and management and use rights; stronger decentralization to promote the initiative and creativity of the locality and grassroots; abolish all forms of subsidies; restricting, controlling and abolishing business monopolies... Vietnam has overcome the economic crisis, overcame the status of underdevelopment, become a middle-income developing country, and

achieved continuous economic growth level, despite the decline of the world economy, deepening international integration.

That result was brought from the innovations in state management of the economy in the direction of both creating the premise and conditions for the market economy to be born and develop, while managing, regulating and orienting economy development, maintaining macroeconomic stability, while maintaining and strengthening the factors that ensure the socialist orientation of the market economy, thus making an important contribution to the country's renovation achievements over the years. However, besides the positive results, the reality also shows that: The effectiveness and efficiency of state management of the economy has not yet met the requirements of developing a socialist-oriented market economy, have not fully used the positive aspects and limit the spontaneity, negatives and defects of the market economy; The function of the owner is not clearly separated from the management function of the State, the function of state management from the function of production and business of state enterprises...

Faced with this fact, the requirement is to improve the efficiency of state management of the economy. And one of the requirements of state management of the economy is decentralization of management. In order to do this well, it is necessary to clearly identify the factors affecting the decentralization of state management of the economy of Vietnam.

State management and decentralization of state management are influenced by many different factors. Currently, the main factors affecting the decentralization of state management in Vietnam include:

First, the natural, socio-economic, cultural, legal and scientific-technological context and conditions in which the management decentralization options are developed and implemented.

Many studies have suggested that the political environment strongly influences the pattern and content of decentralization because, in essence, the state is a tool of the political leadership force of each country, designed, maintained and operated by this force to solve the common problems of society and realize its goals and program. In addition, the number and structure of political forces that exist in the country as well as the way in which they participate in the state power system will also influence how the state management apparatus is organized, how consultation when deciding socio-economic issues at the national level as well as in each specific locality.

Economically, the expansion of the economy, the process of high economic growth, the diversification of the economic structure, the process of globalization and the establishment and rapid transformation of global economic supply chains requires the state to make important changes in the way it operates, controls and solves arising problems of the national economy. These requirements lead to changes both in the organization of the state management apparatus and in the assignment and decentralization among agencies in the state management apparatus.

In terms of culture - society, when general intellectual level is improved, awareness and capacity in participating in social activities, including social management, democratization of social life becomes a growth factor. To be able to exploit this capacity to serve the process of socio-economic development (including economic development, strengthening of the political regime, human development as a social subject), the State management methods will have changes, leading to changes in state management decentralization.

The natural, socio-economic, cultural, legal and scientific-technological context and conditions combine a composite factor, containing both positive and negative factors detrimental to all management decentralization options. Furthermore, most factors have both positive and negative effects on management decentralization. Because there is an impact in many dimensions and it is difficult to quantify it, subjectivity may lead to inaccurate assessments when analyzing the impact of this factor.

Therefore, when considering contextual factors and natural, socio-economic, cultural, legal and scientific-technological conditions, it is always necessary to analyze specifically the impact of each factor as well as the interaction between factors, thereby assessing their combined impact on the hierarchical options.

Second, the model of state organization and the role of levels in the state management system. The content of this factor includes the contents of the state type, the function, the role of the state, the state structure and the role of each agency in the state management apparatus. First of all, it governs the organizational model of the state management apparatus, then comes the functions, tasks, responsibilities and powers of each level and each organization in the entire system.

For states organized under a unitary state model, power is inherently centralized and is only assigned to subordinate agencies and organizations in the state management apparatus. For the federal state model, the decentralization between the central government and the state governments, the constituent states can be determined on the basis of negotiations and agreements. Decentralization within the states is carried out as in unitary nations, influenced by the historical factors of these states and member nations. After the state is consolidated, the hierarchical model of states and member states can be “standardized” into a unified model. However, some characteristics from the past hierarchical model may still be maintained. Recently, the model of “good governance” has been widely discussed, with the core ideas being to expand the self-determination of socio-economic actors and strengthen the decentralization among management agencies at all levels in the state management system. The meaning and impact of this factor is becoming more and more important and great because the institution is tending to become a constitutive factor that contributes more and more directly to the national competitiveness.

At present, the process of globalization and integration has given rise to “hybrid” models, in which the state management apparatus is organized according to a dominant model, but has the characteristics and advantages of the other state management system models. Combinations of state organization models can be designed to varying degrees. When conducting decentralization of state management in general, and decentralization of state management of the economy in particular, it is necessary to recognize and clearly distinguish the characteristic features of each model in order to have a reasonable combination plan.

Third, the policy and orientation that the State chooses to organize and manage society and the economy. State organization plans are always adjusted accordingly so that the political, economic and social objectives of the political force holding the leadership of the country can be implemented in the most thorough, effective and convenient manner. These goals are expressed in many different forms, but most commonly in the political programs of this force. On that basis, the state management agency at the highest level will propose the main ideas, principles and views governing the building and completion of the current organizational structure, including

the adjustment of the current organizational structure and decentralization among agencies and organizations in this apparatus.

In fact, in most countries, these guidelines and orientations are presented not only in a single document, but in plenty of different documents, showing the systematization and concretization of these ideas, views and policies. Therefore, mastering the guidelines and orientations on perfecting the organization of state management of the economy in general and on the decentralization of state management of the economy requires a systematic and comprehensive study of relevant documents of the leading agencies of the country.

In Vietnam, the State's guidelines and orientations on perfecting the decentralization of state management of the economy in general are reflected in the Party's resolutions, the laws on organization and improvement of state management, resolutions of the National Assembly, Decrees and Resolutions of the National Assembly. These guidelines and orientations continue to be concretized by the regulations of the local state management agencies (from the provincial/municipal level directly under the central government to grassroots levels) or functional management agencies of the state (ministries and ministerial-level agencies).

Fourth, the capacity of the state management apparatus and the resources it can mobilize to serve the management. For superior management agencies, the capacity to recognize the need for decentralization, the capacity to develop decentralization plans and organize the assignment of tasks to subordinates, the capacity to inspect and supervise the process of performing the functions, tasks and powers of subordinates are decisive for the content as well as the effectiveness and impact of the decentralization process. Without this capacity, superior management agencies do not dare to develop and implement strong decentralization options for subordinates or do not control the decentralization process, leading to low level of efficiencies and expected impacts, even making state management disordered.

For lower-level management agencies, the capacity to ensure is, of course, the ability to actively perform assigned powers and responsibilities. However, other necessary competencies are the ability to concretize and apply regulations on decentralization, the capacity to handle relations with superiors to avoid illegal interference in the performance of functions and rights and the ability to self-control the assigned power. Another factor belonging to the capacity of all levels in the management apparatus that can influence the decentralization of management and the results of decentralization is the awareness and will to implement the selected decentralization plan. This is important because in the process of decentralization of management, there are always difficulties and obstacles at different levels that arise, requiring both levels to coordinate and make their own efforts to overcome.

Fifth, the history of the country's development and the history of the state's organization and operation. After a long development process, most countries are now formed on the basis of those that existed in the past. Thus, the state traditional values, forms of social management that have formed in history govern the perception, habits and behavior of citizens, social organizations, officials and public employees in the state management apparatus. The institutions constituting the management apparatus that have existed in the development history of the country are the premise for the operation of contemporary state management agencies.

4. REQUIREMENTS FOR THE DECENTRALIZATION OF STATE MANAGEMENT OF THE ECONOMY IN VIETNAM

Renovating and improving the effectiveness and efficiency of state management of the economy in our country today is extremely urgent, but this is also a very difficult, complicated, long-term and cannot be subjective, hasty, “as soon as in one day”. To achieve this goal and task requires a high degree of positivity, initiative, effort and creativity of the whole political system, with synchronous roadmaps, steps, methods and scientific and feasible solutions. In which, the most important content is decentralization of state management of the economy.

If decentralization in state management is not a self-advocacy method, the implementation of state management decentralization cannot be deployed arbitrarily and spontaneously, but must be organized carefully, with consideration and must ensure certain requirements. A study by experts from the World Bank said that the decentralization of management should meet at least 6 basic requirements as follows:

First, the organization of decentralization must be associated with the creation and assurance of coordination among agencies and organizations in the state management apparatus. One of the principles that should be thoroughly grasped throughout the state management is to ensure the unified management of the state over society in general and the economy in particular. The decentralization of management is not the separation of state power to give to different agencies and organizations. Therefore, in addition to building and implementing a mechanism for cooperation and information sharing, it is necessary to have close supervision by the society as well as by all agencies in the state management apparatus at all levels on the perform the functions, tasks and powers of all agencies in the state management apparatus. This requirement should be complied with first, because only then will the power of the state be maintained. It must be guaranteed not only in unitary states, but also in federal states. To make sure this requirement, first, necessary contents must be clearly defined in the regulatory documents on decentralization of management. Next, it is necessary to ensure that all levels have the necessary capacity, awareness and will to seriously implement the issued regulations.

Second, the decentralization of management must be done with both functions, tasks, responsibilities as well as authority and resources in a comprehensive and consistent manner to ensure long-term feasibility (ensure the sustainability in the decentralization of state management). In other words, the framework of decentralization of management functions, tasks and responsibilities must be associated with the decentralization of financial management and the use of resources at the corresponding level to ensure the feasibility of implementing the objectives. functions, duties and responsibilities at each level. In fact, the problem is not only to ensure the balance and compatibility between the hierarchy of functions and tasks with the authority and resources to perform the functions and tasks, but also to be compatible with the corresponding initiative rights on organizational structure, operating mechanism of the apparatus and relevant personnel.

Third, local communities must be informed about the public services they undertake at the local level, about the options for ensuring their delivery, and the allocation of relevant resources so that the community can participate in the planning, implementation as well as monitor this process. In essence, this is the requirement to ensure transparency in the implementation of state management activities in general, in the field of economic state management in particular. It is also the concretization of the requirements (and principles) of democratizing social life.

Fourth, in parallel with the process of decentralization of management for localities, there should be a mechanism for them to really participate in the initiatives to organize life and activities in the locality by given by politicians and local leaders. This requirement also strengthens the ability of state management agencies to be “close to the people”, ensuring that state management agencies deeply understand the needs, aspirations and capacities of the local communities. population, both nationally and locally. It also allows the requirements of power control to be fulfilled, helping to limit bureaucracy and abuse of power in state management.

Fifth, the decentralization of state management should be done in a transparent manner, ensuring that the community and agencies in the state management system can monitor and evaluate the decentralization work itself as well as its implementation.

Sixth, the tools for implementing decentralization of state management must be designed so that they help maintain the smooth operation of the management apparatus, and at the same time contribute to ensuring the achievement of the major socio-political objectives of the country. The highest and most comprehensive requirement for state management decentralization is that it must help consolidate and strengthen state management, ensure the effectiveness and efficiency of state management to be continuously improved.

In addition to the above requirements, the policy on state management of the economy of Vietnam is also clearly reflected in the following basic contents:

First, constantly improving the content and renewing the state’s economic leadership and management methods. This is the premise and condition for the State to uphold the nature of the people, by the people and for the people, and promote the socialist-oriented market economy. However, facing the requirements of our country’s development and international economic integration in the new period, the requirements are to: improve implementation efficiency and continue to strongly innovate leadership methods, better bring into play the initiative and creativity of the State and state agencies, while avoiding excuses, doing things instead, and avoiding loosening the leadership.

Clearly separate between the subject, the leadership function of the Party and the subject and function of the State in economic management, clearly define the principles, contents, methods, form, authority and responsibility of the leading subject and of the subject to be led by strict and scientific principles, regulations and processes; promote the role, responsibility, initiative of the head and handling mechanism for the head when violations happen.

Second, strongly renovate the thinking and methods of economic management of the State. In fact, in our country over the past time, there is still a phenomenon that the State plays the role of both “arbitrator” and participates in the economy when performing the function of capital investment and exercise of ownership rights over government economic entities. The state also intervenes directly and intensively in the economy, the issues of subsidies, ask-give mechanism still exists in the development and implementation of a number of mechanisms and policies. Therefore, it is necessary to innovate in the following directions: renovating economic management thinking, gradually shifting the function of “doing business” to performing well the role of “arbitrator” in the economy; thoroughly remove the ask-give mechanism; clearly distinguish the economic management function of the State; separation of production-business tasks and political tasks and public benefits; separation of the function of property owner, state capital and state management function...

Third, reform the method of state management of the economy by pushing the decentralized network, minimizing excessive interference by direct and administrative orders of the State. The State performs management and administration indirectly, with more orientation and supervision, focusing on macroeconomic management by laws and economic measures.

Fourthly, perfecting the legal system, ensuring uniformity, consistency, publicity and transparency, meeting the requirements of socio-economic development and international integration. Clearly define the powers and responsibilities in economic and social management between the central and local levels, ensure the centralization and unification of central management, and promote the initiative and self-responsibility of all levels of government.

Fifth, to focus on reforming administrative procedures in association with improving the quality of policies and laws; improve the investment and business environment, meet the reality requirements and state management tasks, conform to the commitment to integration and international practices, and create facilitation and confidence for business activities.

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TAX MANAGEMENT IN THE SHARING ECONOMIC MODEL IN VIETNAM

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Abstract: *The model and activities of the sharing economy have appeared for a long time in the world, however, not until now have there been breakthrough developments thanks to the development achievements of science and technology. In particular, during the Fourth industrial revolution, sharing economy is considered the core of the digital economy. The development of the sharing economy can help Vietnam adapt quickly to the major changes taking place in the global economy. Along with many benefits from new business methods, the sharing economy has arisen difficulties and challenges related to the market, fair competition, innovation capacity and especially challenges regarding the state management of taxes that requires a complete solution in both tax policy as well as tax administration. This article will summarize the impacts of the sharing economy on developing countries, thereby pointing out challenges and proposing solutions to strengthen tax administration for the sharing economy in Vietnam.*

Keyword: *sharing economy; Tax Administration; sharing economy model; applied solutions, Vietnam.*

1. INTRODUCTION

In fact, there are many different definitions of the sharing economy, and there is no universal definition for all cases or all countries. The breadth and narrowing of the definitions also vary, as definitions can come from different perspectives. The sharing economy is also known by many different names such as the collaborative economy, the demand economy, the platform economy, the access economy, the mobile app-based economy (Cristiano Codagnone and Bertin Martens, 2016). The boundaries between concepts are similar in some respects, but in general, all other names of the sharing economy model are essentially a new business model of peer-to-peer business., taking advantage of digital technology development to save transaction costs and reach a large number of customers through digital platforms.

Currently, the legal framework on tax policy and tax management for business activities under the sharing economy model has been relatively complete from tax registration, tax payment documents, tax declaration and payment. tax. The development of the sharing economy model also poses risks to tax administration, to budget revenue, which requires finding solutions to strengthen tax administration for the sharing economy. in Vietnam in the near future.

The author's research objective is to propose some key solutions to strengthen tax administration for the sharing economy model in Vietnam in the coming years in order to ensure

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state budget revenue and meet the needs of the public. meet the requirements of sustainable economic development.

2. LITERATURE REVIEW AND PREVIOUS RESEARCH

There are many domestic and foreign researches on the sharing economy, the impact of the sharing economy on the economies of other countries, and the difficulties in tax administration on the sharing economy model. shall.

Foreign studies have analyzed and evaluated common issues of the sharing economy such as the concept, nature and impact of the sharing economy.... These studies help the author develop understand the theoretical issues of the sharing economy and refer to specific conditions in Vietnam.

Domestic studies in the form of articles have mentioned tax administration for the sharing economy but are still at a suggestive level, not yet associated with the current tax administration in Vietnam.

These works were carried out in the specific economic, cultural, political and institutional environments and periods at the time of the study. Due to the difference in political, cultural, economic and educational background, it is necessary to study tax administration in the sharing economy in a specific country, in a specific period. in order to improve tax administration in the sharing economy in accordance with the characteristics of each country from time to time. It is necessary to continue to research and propose specific solutions on tax administration with the sharing economy to get more practical results.

3. METHODOLOGY AND MATERIALS

Some scientific methods such as observation, analysis, synthesis, generalization were used in this study. Observational and analytical methods are used to assess the impact of the sharing economy on developing countries. The method of synthesis and generalization helps the author to present the research results with relative arguments and solutions. And expert reviews are also used with speeches published in verifiable journals. This study is based on the hypothesis that it may affect the tax administration for the sharing economy model in Vietnam as well as the state budget revenue if there are no appropriate solutions.. The material is collected from the data of the General Department of Taxation of Vietnam, the Ministry of Finance and information of other government agencies. International Organization documents and reports from NGOs were used.

4. RESULTS AND DISCUSSION

4. 1. Impact of sharing economy on Vietnam's economy

There are many different definitions and interpretations, but in the most common sense, a sharing economy is an economic system in which shared assets or services are shared between individuals without a fee, typically through internet tools. This is a new connection method between customers (users) and sellers (suppliers) for an economic activity.

The essence of the sharing economy model is that participants collectively gain access to a product or service rather than taking personal ownership of that product or service. This phenomenon stems from the desire of consumers who want to control their consumption instead of “passive victims” of consumption. The cooperative consumption model is used in online marketplaces as

well as emerging areas such as social lending, home rental, travel rental, travel advice, personal car sharing, etc... Through the support of high-tech equipment in the development context of the fourth industrial revolution, hard infrastructure and soft infrastructure can well meet connectivity in the sharing economy. The essence of the sharing economy model is peer-to-peer business, taking advantage of digital technology development to save transaction costs and reach a large number of customers through digital platforms.

The impact of the sharing economy model on the economies of countries is:

First, improve the efficiency of resources for society. The sharing economy helps mobilize idle means and assets for production and business, contributing to the improvement of the efficiency of resource use for development. It also promotes and attracts new investment, especially in the field of innovation and creativity, contributing to accelerating the development of the digital economy in other countries. Only in the field of online transportation in Vietnam, in 2 years (2016-2018) when implementing the pilot project “Implementing the application of science and technology to support management and connection of passenger transport activities”. customers under contract”, the whole country had 866 transport units (enterprises, transport cooperatives) participating, mobilized 36,809 vehicles, attracting tens of thousands of employees to participate in providing services. [6]

Second, promote business, expand and develop markets. The sharing economy model helps expand and accelerate economic transactions in the market, adding new business channels besides the traditional business model. The sharing economy also helps expand business opportunities, increase the number of market participants in the economy, diversify products and goods, expand the spatial scope for the commodity market services, thanks to cross-border transactions.

The sharing economy also helps to diversify and increase the range of products and services, providing and offering more products and services to be exchanged, bought and sold on the market. For example, in the field of road passenger transport services, in addition to traditional products, there are now more products and services for online transport by means of transport, products and services for online transport by means of transport. motorbike, delivery service... Similarly, in the field of accommodation services, there have also appeared many diverse products and services of sharing rooms, apartments and houses. In addition, the scale (quantity, volume, value) of goods and services exchanged, bought and sold on the market under the sharing economy model has increased rapidly. The revenue size of the online ride-hailing and food delivery market in Vietnam has increased more than 5 times from \$0.2 billion in 2015 to \$1.1 billion in 2019 and is forecast to reach \$4 billion by 2020. 2025. It shows that the potential of this business model in Vietnam is still very large (PCWorld, 2017).

Third, promote competition and increase market transparency. However, too much competition can lead to unfairness between traditional business and business in the sharing economy. Another manifestation is giving rise to conflicts of interest in society, causing unemployment in the traditional economic sector and wasting resources invested by traditional business enterprises, increasing inequality among society. This form easily gives rise to technology risks, information leakage, unpredictable and difficult-to-control variations of the sharing economy.

In the transportation service market, the market entry and increasing market share of online transportation (Grab and other connected platforms such as Live Taxi, Return Taxi, Uber, Easy Taxi) make the market share of the The reduction of traditional transport companies is

correspondingly, creating strong pressure to push the traditional transport businesses to change their business operation methods, shift from traditional business to technology application. Thanks to increased competition, service quality is improved and service prices are becoming more and more competitive. Similarly, in the accommodation service market, thanks to the emergence and expansion of market share of room-sharing business models in new ways (such as Airbnb, Luxstay, etc.), businesses have been forced to do business. Traditional tourist accommodation, especially small and medium enterprises face strong competition to change and adapt to the new situation.

Fourth, the ability to promote economic restructuring to industries with high technology content, innovation growth model. However, the downside of this type, if developed too quickly, can be invasive and break the structure of the traditional economy, creating certain losses to the traditional economy.

Fifth, the sharing economy has an impact on ensuring the independence, autonomy and security of the economy. Especially based on the application of digital technology, this type of business promotes the development of technology enterprises, contributing to improving the resilience and adaptability of the economy. However, the downside is the increased dependence on the outside of the economy, potentially risking the security and safety of the economy. Along with that is the risk of increasing illegal economic activities, which are detrimental to the economy and social security.

Sixth, saving resources through the wise usage throughout its entire life cycle, help protect the environment, increase the efficiency of the economy, reduce waste cost of social resources and overcapacity of products and services. These are the factors that make the sharing economy model have even greater growth potential in the future, which will not only be a temporary market but the future of the global business environment.

Currently, in Vietnam, there are a number of applications towards the reuse and recycling of waste, waste source owners can use a number of applications, such as Rada, mGreen, Grac, Ralava to request services. segregated recyclable waste at source. As of June 2019, with the deployment and use of the application in 30 apartment buildings corresponding to 3,000 households and by 2,000 students and teachers in Hanoi and Ho Chi Minh City. In Ho Chi Minh City, the mGreen project has collected 8 tons of recyclable waste. By December 2019, 450 collection requests (corresponding to about 410-420 users) through Ralava gave 1.6 tons of trash a chance to be recycled. As of February 2020, 38 applications for electronic waste collection services from households via Rada have been made. [6]

Seventh, reduce transaction costs in the economic activity. Especially with online platforms, customers and sellers quickly find each other. In this process, the connection is free of barriers, the intermediary stages and the intermediary supply and demand connection will be reduced, customers and sellers will be able to interact directly with each other. Parties in the sharing economy do not waste time finding other partners, negotiating and closing deals. Thereby it helps to increase competition among suppliers in terms of delivery time, price and quality of products or services. The end result is that consumers benefit and production efficiency in the economy increases. The increase in supply in the market through participation in the sharing economy as well as competitive pressure has forced businesses to offer the same type of service at a reduced price (regardless of whether they are traditional businesses or sharing economy)

Eighth, contributing to the development of technology in general and information technology in particular. Due to the nature of the sharing economy with increasing demand, the fast and efficient use and analysis of big data by customers is an important “demand” for the development of information technology. Goods and products also need to become more and more perfect, so they contribute to promoting production technologies to meet better quality and designs because consumers can quickly appraise such aspects and can better compare the quality of products. This is a new business method that makes it easy for customers and service providers to connect with each other, thereby increasing sales transactions, thus helping the state increase tax revenue. On the other hand, thanks to technology, it also helps regulators to better grasp sharing economy activities.

4.2 Problems with tax administration in the sharing economy in Vietnam

First, as a new business model in the market, the system of legal documents regulating the sharing economy model is not complete and synchronous.

The issuance of business licenses and tax declarations are still problematic because this activity is still not included in the list of business lines, thereby causing difficulties for state management agencies in classifying business to determine tax liability. The Law on Information Technology does not have provisions for foreign individuals or organizations that have business cooperation and do not have a representative office in Vietnam. There is a lack of policies to ensure fair competition between the traditional economy and the sharing economy in each specific industry; lack of regulations on product or service quality management to protect consumers; lack of mechanisms and policies to manage cross-border electronic payment transactions and lack of regulations on information security. There is a lack of mechanisms/unfinished policies to manage cross-border e-payment transactions so that they can monitor the tax obligations of foreign partners involved in business activities in Vietnam. These are gaps in the legal environment that need to be completed in order to both create conditions for the sharing economy model to operate in Vietnam, and to ensure that State management agencies in general and other agencies operating in Vietnam in particular to perform tax effectively.

Second, the risk of conflicts of interest between customers and sellers. This potential risk should be taken care of by regulators to ensure the interests of both customers (consumers) and sellers (service providers). Although the parties have more complete information about each other, the verification of information and direct contact with each other are reduced, so there is also a greater risk if it is not overcome by specific regulations that is plausible and effective. The issue of insurance and safety for parties including service providers and service users/users or customers is also more acute. This will affect tax policy as well as tax administration, suppliers or consumers should be applied to (for indirect taxes); The right to tax will belong to the country of residence or the country of origin (for direct taxes) is a matter of consideration for the tax authorities of countries in general and Vietnam in particular.

Third, the risk of unfair competition. A conflict of interest between a sharing economy enterprise and a traditional business model will occur. Most of these conflicts would be extremely acute if there are no good policies of the State with the role of “arbitrator” to resolve. In the absence of synchronous policies, the issue of unfair competition with traditional enterprises is a big risk that needs to be addressed. In fact, in Vietnam, tax policies are commonly applied

to the traditional business model. To ensure fairness, these tax policies will also apply to the sharing economy model. In fact, sharing economy has its own characteristics from the registration, declaration and taxes and activities management so it will cause difficulties in the management of tax by the tax authorities, divisive equality in determining tax obligations between sharing economy and traditional business. The gaps on tax obligations of share economy in Vietnam need to be overcome.

Fourth, the risk of fulfilling tax obligations. Sharing economy applies to online business technology, so it is very difficult for tax authorities to determine the revenue of the establishment to pay tax because their transactions are mainly electronic documents. The determination of the tax bases a lot on the honesty of businesses and business establishments. For intermediary service providers who are foreign contractors, it is also difficult for management agencies to inspect, supervise and collect their taxes because they do not have offices or branches in Vietnam. It is also difficult to determine the responsibility of domestic service providers who are obliged to declare and pay taxes on behalf of foreign contractors because Vietnam has joined and signed 76 Agreements on the avoidance of double taxation, so the regulations on tax payment will have to comply with the provisions of these agreements. Even in the field of peer-to-peer lending (P2P Lending), there are tax and foreign exchange management risks because the transaction participants are non-residents, which will lead to difficulties in foreign exchange management tax collection. Or if the participant is intentionally fraudulent, anonymous, or impersonated, it may not be possible to collect income tax.

Promulgating the Law on regulation and management of sharing economy in Vietnam in the present time is absolutely necessary. The legal system will help regulate all business activities in the sharing economy, while ensuring a favorable environment for the development of the sharing economy model and creating a fair competitive environment between the sharing economy model with the traditional service business model. The legal corridor also helps the Government of Vietnam control taxes from service providers and “asset sharers” - this is considered a large tax source that many countries have not been able to control.

Fifth, the feature of sharing economy model is mainly based on digital technology. This is also an inevitable development trend in all countries. With the level of development of information technology and digital infrastructure in developing countries in general and Vietnam in particular, the management of taxpayers is really difficult. Access to this model as a business entity of the economy and research, test and offer appropriate legal framework for practice in Vietnam as well as international conventions. In the spirit of creating favorable conditions for all of these models, both domestically and internationally, to have the same development opportunities and are most beneficial to the country and the whole society. It is necessary to organize the propagation of tax legislation on e-commerce platforms such as links to websites on tax management on e-commerce sites, to have cooperation between countries or participate in tax administration forums or set up tax administration forums in the region, to agree on agreements on information supply and sharing, and to facilitate tax administration.

Sixth, information collected from e-commerce activities can be via e-commerce platforms or social networks (such as Facebook, Zalo...), so to ensure efficiency and consistency regarding

data for tax administration , it is necessary to research and invest in tools to convert unstructured data about commercial transactions on social networks and e-commerce platforms into structured data for common use by related agencies and units.

Seventh, the sharing economy model involves taxpayers and cross-border transactions, with the subjects being multinational companies. This is a big challenge to identify taxpayers, tax bases as well as measures to ensure adequate tax collection into the state budget. The method of coordinated approach between countries or engage in tax administration forum or forum founder of tax administration in the region... to unify the supply agreements, sharing information... for effective tax management is also a reference channel for Vietnamese authorities.

Eighth, the self-declaration and self-payment mechanism is not suitable for individuals doing business under the sharing economy model. According to the provisions of the Tax Administration Law, taxpayers have to self-declare, self-determine of payable tax amounts and self-responsible for tax declaration and payment obligations . Due to the irregular nature of this economic model, taxpayers cannot declare tax by themselves or are unable to determine the taxable revenue in the period or year. This makes it difficult for tax authorities to manage taxpayers, taxable revenue and in many cases there is no database to perform tax assessment. Applying a separate tax management model specific to the sharing economy is also a problem that Vietnamese tax authorities need to consider in the current period.

Ninth , there is no coordinated mechanism between state management agencies for business transactions under the sharing economy model. According to their functions and tasks, each ministry or branch manages one or several stages of the production and business process according to the sharing economy model. However, the state management responsibilities of each ministry or branch or the identification of the lead ministry or management focal point for business activities under this economic model is not really clear. Legal documents have not yet provided a mechanism for information sharing, a mechanism to connect tax registration, and automatic tax identification number issuance between specialized management agencies and tax agencies. In order to effectively manage taxes with the sharing economy model, close coordination between the tax authorities and the ministries, branches and functional agencies will be a measure to focus on in tax administration.

Tenth, it is not possible to apply the management model of the State management agency to the sharing economy in developed countries to tax administration in Vietnam. The success in bringing the share economy into each country is contributed by the sharing culture of foreign countries as well as the infrastructure with many favorable conditions such as the application of information technology which is quite common in many countries. Electronic devices, low crime rate, strict legal management system of the government... That is also the reason why the sharing economy model has been developed for a long time in the US but it is not popular among businesses in general and startups in particular in many Asian countries. Therefore, apart from consulting and learning from management experiences in developed countries and countries in the region, Vietnam needs to have synchronous solutions but must ensure that they are consistent with the reality of economic conditions, society, infrastructure and qualifications of tax officials. Only then will the solutions really come to life and promote positive results.

4.3. Proposed solutions for tax administration for the sharing economy model in Vietnam

Firstly, it is necessary to organize the propagation of tax legislation on e-commerce platforms such as: Link to tax management websites on e-commerce sites; Coordinate with e-commerce platforms to create forms on tax declaration and on necessary information about taxpayers...

Second, completing the system of legal documents in general and tax legislation in particular on the sharing economy.

For the legal system in general: The State needs to study and complete the legal system on investment, business and e-commerce. Focus on perfecting regulations on contracts in electronic form, on responsibilities of vendors and service providers. Clearly define the responsibilities of service providers under the sharing economy model to buyers and relevant state agencies.

For the tax legal system

- Specifying the method of taxing according to the status of residence, both for domestic enterprises and foreign-invested enterprises or foreign companies doing business through their permanent establishment in Vietnam in order to clearly define the obligation to declare and pay tax and determine the tax base for the cases that may arise. Supplemented in the CIT Law, taxpayers include both resident and non-resident companies and their tax obligations. There are clear regulations on the criteria for determining the residency status of companies in accordance with international conditions and new relationships arising in the current context of globalization and economic integration.

- Adding to the Law on Tax Administration, content allows tax administration agencies to collect and use information provided by foreign partners on the basis of international treaties. In fact, in the past, Vietnam's tax industry still received information from tax authorities of other countries, but there is no legal document allowing the use of this information in handling issues related to tax administration for the sharing economy model. It is necessary to add this provision to the Law on Tax Administration in the direction of allowing tax administration agencies to collect, exchange and use information provided by foreign partners on the basis of international treaties that Vietnam has signed.

- Specify clearly the mechanism of responsibility of service providers (applications) in declaring and paying tax on income of individuals participating in the sharing economy model; Research and complete tax calculation of service providers (applications) and individuals participating in the sharing economy model to avoid tax duplication.

- Clearly define the responsibilities of individuals and businesses for declaring information about sharing economy activities to State management agencies, including operational information, tax obligations, and specialized management regulations.

- Add tax investigation power to tax authorities in the Law on Tax Administration. Tax inspection for e-commerce in general and the sharing economy in particular is a difficult, complicated, time-consuming and resource-intensive field to collect, analyze, compare, and identify. Currently, tax authorities do not have the right to investigate taxpayers. This limitation has led to the low efficiency of tax inspection with the sharing economy in Vietnam. Allowing tax authorities the right to conduct criminal investigations into tax law violations, prolonging the inspection and examination time.

Third, apply a management model specific to the sharing economy. Tax regulations for connection service providers are not lacking, but the scope of tax administration for each service activity in the sharing economy model is different from tax management in the traditional business model. The sharing economy model raises the issue of taxing rights for cross-border transactions because it is not clear whether a business line is a connection service provider or a traditional service provider...

We need to think in an open way for connection service providers. Tax administration needs to consider this as a new service industry, the tax obligations being the same with similar services... As for the service providers, organizations/individuals are responsible for tax declaration, payment and finalization if there are different sources of income as well as social insurance obligations and other regimes. The legal basis for tax administration for sharing economy activities in Vietnam must be supplemented or adjusted.

Research to establish a specialized department or supplement for the tax management function for activities arising in the digital economy from policy making to propaganda, support, registration management, tax declaration and payment, tax refund and inspection. This department is responsible for analyzing trends of industries related to the digital economy, e-commerce and questions of tax evasion; collect information from different sources at home and abroad to identify and detect enterprises that make false declarations or fail to declare tax revenue; develop programs to improve compliance of target groups operating with related-party transactions. This department must include high-tech experts who are able to detect the names and URLs of business websites, and staff with extensive experience and regular training.

Research on the establishment of regional tax departments: Through actual operation, it can be seen that the workload of large tax departments is much higher than that of small tax departments. Large tax departments are always overloaded in performing their assigned tasks. In order to overcome the above limitations, the tax sector needs to research, review and rearrange the organizational structure to ensure a streamlined, efficient and consistent system with management practices by means of merging tax departments in remote and large areas with small budget revenues in Vietnam.

Fourth, strengthen tax inspection and examination and ensure information security in the context of rapidly increasing sharing economy activities. It is necessary to have policies to guide individuals and organizations at home and abroad who are responsible for information security (do not provide information to third parties except at the request of competent State management agencies and authorized persons) and communicate the obligation and responsibility to keep the personal information of others confidential. It is important that we build a mechanism so that parties in the sharing economy can control the use of information by platforms and businesses using their personal and organizational data in accordance with the agreement between the parties.

Set up a “*tax intelligence*” department in the tax industry. This is the agency responsible for collecting information for tax administration both domestically and internationally. “*Tax intelligence*” is not only necessary for anti-transfer pricing activities, tax management in the digital economy and tax management for the sharing economy model, but also very useful for tax inspection and examination.. Establishing relationships with tax authorities of countries around the

world to gain experience as well as databases on businesses, prices of goods, materials, machinery, technology... of those countries. On that basis, make a reference table of input prices of enterprises as a basis for reasonable calculation in the process of inspection and examination when necessary.

Fifth, it is necessary to have cooperation between countries, participate in tax management forums or set up tax management forums nationally... to agree on provision, sharing of information, and standards. At present, the tax administration forum of the Organization for Economic Cooperation and Development (OECD consisting of 30 member countries) is developing a draft code of conduct for the sharing economic platform, which clearly outlines the contents and solutions for coordination among countries for effective tax management in the sharing economy.

Sixth, limit cash transactions. Service providers only apply the form of payment through banks or payment intermediaries in the form of wire transfer to facilitate the determination of the value of transactions when participating in online services.. Promoting cross-border payment transactions through a national payment gateway owned by a unit (this unit is licensed by the State Bank).

Seventh, strengthen coordination with agencies and units in tax administration for the sharing economy. Research and invest in building tools to convert unstructured data about commercial transactions on the system of social networks and e-commerce platforms into structured data to be shared by related agencies units. Develop a mechanism to share information and data between governments at all levels and businesses, industry associations, and business households; strengthen inspection solutions; improve state management capacity to ensure network security, information safety, protect the privacy of citizens and organizations, and ensure sovereignty in cyberspace.

Eighth, attach importance to the work of training, fostering and arranging staff. Step by step build a professional team in tax administration for e-commerce and sharing economy. Focusing on training a team of professional inspectors, fluent in skills and foreign languages, trained in domestic and foreign knowledge. Improve the inspection profession, professional knowledge, raise the sense of responsibility of tax officials.

5. DISCUSSION AND CONCLUSION

The development of the sharing economy model in Vietnam will help customers have better and cheaper choices, giving the market an incentive to innovate, but it also comes with some problems regarding legal issues and concerns about potential risks of social security and unfair competition. To ensure effective tax management for the sharing economy model, it is necessary to have synchronous solutions, including: completing the legal corridor, supporting taxpayers, researching and promulgating specific tax management model for the sharing economy, strengthening the coordination and exchange of information with tax authorities of other countries and improving the qualifications of tax officials....

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THE IMPACT OF MACROECONOMIC FACTORS ON THE VIETNAM'S STOCK MARKET

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Abstract: *The research aims to investigate the impact of macroeconomic factors on Vietnam's stock market (via VN-Index stock price index), which are inflation rate (CPI), gold price, exchange rate, Vietnam interbank rate, S&P 500 Index and business cycle. The data were collected for the period beginning January 2008 to December 2020 with 156 observations and no missing monthly observations. The findings reveal that gold price, Vietnam interbank rate, S&P 500 index and business cycle have effect on the Vietnam's stock market.*

Keywords: *Macroeconomic factors, Vietnam's stock market, Vn-Index*

1. INTRODUCTION

The stock market is one of the significant capital mobilization channels of corporate sector on one hand and on the other it offers individual and institutional investors alternative investment options for maximizing their wealth..

The Efficient Market Hypothesis (EMH) developed by Fama in 1970 states that the price of stocks in financial markets is fully reflected by the information that investors already know (Malkiel & Fama, 1970). However, the results of many practical studies in recent times can be mentioned as research by (Muhammad, Akbar & Farhan, Iqbal & Farzana, Noor, 2019); (Wei, Y., Qin, S., Li, X., Zhu, S., & Wei, G., 2019) proved that the majority of the market is ineffective. It means that the prices of securities have not reflected the reality of the market and how other factors influence them.

The stock market of emerging economies are likely to be sensitive to various macroeconomic factors (Naik and Padhi, 2012). Investors hence tend to evaluate the macroeconomies factors that would potentially significant in determining the stock market behavior. Using the Arbitrage Pricing Theory (APT), Chen et al (1986) is attempted to provide theoretical background to explain the relationship between the macroeconomic factors with the stock price. Various empirical studies investigated the connection between macroeconomic factors with stock market behavior. However the finding is not similar in all studies. There exist significant disparities in the strength and direction impact of relationship between macroeconomic factors and stock market.

Vietnam stock exchange has tremendous changes and it has been becoming more open to international investors. There are empirical studies investigating the impact of macroeconomic factors on Vietnam stock market behavior. Thuy (2014) has focused on studying the influence of macro factors including 10-year government bond interest rate, exchange rate (USD/VND) and

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inflation on stock prices on the Vietnamese stock market through the index. VN-Index of the Ho Chi Minh Stock Exchange. Ho Chi Minh City using the error correction vector method VECM. The study used monthly data from January 2006 to January 2014. The long-term estimation model has found that the above macro factors all have an impact on the VN-Index in the long term. In which, the 10-year government bond interest rate and inflation have an inverse relationship with the VN-Index; and the exchange rate has a positive relationship with the VN-Index. The short-term estimation model shows that the return of stocks on the Vietnam stock market is only affected in the same direction by the fluctuation of 10-year government bond interest rates with a lag of 1 and 2 months. The return variables in the previous months, the volatility of the exchange rate and the inflation rate did not affect the return on the stock market. Thuy & Duong (2015) measures the impact of inflation, interest rate, M2 money supply, VND/USD exchange rate, industrial output value and FDI on stock price indexes published on the Ho Chi Minh City Stock Exchange. The results show that in the long term, inflation has a negative impact on stock price indexes while the remaining macro variables have a positive impact on most stock price indexes on HOSE in the long term.

The findings may differ when it is repeated with different frequency of data and different period. Therefore, the study on how does and at what extent the Vietnam stock exchange respond to macroeconomic factors changes still remains an open question, especially during the volatile economic period.

The main motivation of this research is to investigate the impact of macro factors on returns of Vietnam's stock market (VN index). The study uses monthly data from 2008 to 2020. It is expected that the findings of this study would contribute to investor to make optimal investment decisions when macroeconomic factors vary. This study would also provide the experimental evidence for policymakers to offer solutions to develop Vietnam's stock market.

The remainder of of this paper is organized as follows: Section 2 reviews the previous studies. Section 3 describes the data, methodology and develop the hypothesis, while Section 4 discuss the empirical findings. Finally, conclusions are presented in Section 5.

2. LITERATURE REVIEW

Concept of stock market

The stock market index is a statistical value that reflects the situation of the stock market. According to Nguyen Minh Kieu and Bui Kim Yen (2009): "The stock price index is a stock price index reflecting the development trend of the stock market, reflecting the changing trend of the stock price and the trading situation in the market." The stock price index is the average stock price at a specific date compared to the original date (Bui, 2013). In Vietnam, VN-Index is the Ho Chi Minh Stock Exchange (HOSE), which shows the price fluctuations of all stocks listed on HOSE.

The Vn-Index is calculated by the formula Passcher:

$$\text{VnIndex} = \frac{\sum_i (P_{it} \times Q_{it})}{\sum_i (P_{io} \times Q_{io})} \times 100$$

Inside:

P_{it} : is the price of the stocks (i) at (t) time

P_{io} : is the price of the stocks (i) at the original (o) time

Q_{it} : is the number of stocks (i) at (t) time

Q_{io} is the number of stocks (i) at the original (o) time

i: As the stocks participate in calculating price indexes.

The stocks (i) in the representative basket are frequently changed to more typical stocks.

Macroeconomic factors that influence to the stock market

According to the researchers' survey, there are two main research directions when studying the impact of macro factors on stock exchanges. Firstly, studies on the effects of macroeconomic factors on the stock price index to the share prices, i.e., Adam and Tweneboah (2008); Nguyen and Nguyen (2013). Secondly, studies on the impact of factors on stock profit fluctuations of companies such as Schwert (1989), Subhani, M. I., Gul, A., & Osman, A. (2020). This article focuses on the first research of identifying macro factors to stock indices.

The impact of macroeconomic variables on the stock market represented by a stock index began to be of interest to economists and studied after Fama and Schwert, two pioneers in this field, prove that there is a close relationship between real economic variables and stock market. The study of (Jiranyakul, 2009) explained the relationship between stock price index and 13 macroeconomic variables in Thailand. The data is collected quarterly from the first quarter of 1993 to the fourth quarter of 2007. The test results show that the variables are related to each other and there is a long-term relationship between the stock price index and the fourth quarter. Macroeconomic variables: real GDP, money supply, effective nominal exchange rate, and inflation. The results of the VECM test showed that the nominal exchange rate has a positive effect while inflation has a negative effect on stock prices. (Hasan Mohammed El-Nader; Ahmad Diab Alraimony, 2013) examine the impact of money supply, GDP, CPI, exchange rate, interest rate and world political fluctuations on the Jordan stock market from January 1999 to December 2010. The study shows that money supply, CPI, exchange rate, interest rate and political volatility are negatively correlated with stock market volatility, while GDP growth rate has a positive effect on Jordan Stock Exchange.

Keeping up with the research momentum on the influence of macroeconomic factors on the world stock market, many articles and scientific research in Vietnam were published in turn marking an attempt to approach the economic model modern. (Nguyen Minh Kieu, Nguyen Van Diep, 2013) presented theoretical bases on the effects of 4 macroeconomic factors including consumer price index, VND/USD exchange rate, money supply and gold price on the stock market. In the long term, the research results show that inflation has a negative relationship with the stock price index, the money supply M2 and the domestic gold price have a positive relationship with the stock price index; while the exchange rate has no effect on the stock price index. In the short term, the current stock price index has a relationship with the stock price index last month with positive and negative correlation with the exchange rate.

Based on the theoretical background and previous empirical studies, the causal relations and dynamic interactions among macroeconomic variables and stock prices were summarized as follows:

Consumer Price Index (CPI)

Inflation is a phenomenon that occurs when the overall price in the economy increases for a certain period. Inflation usually measures through CPI. This result implies that the market ef-

ficiently allocates resources by adjusting upward to the overall increase in prices in the long run. However, most other studies conclude that inflation has a negative effect on the stock market according to the study of (Subhani, M. I., Gul, A., & Osman, A., 2020); (Geetha, C., Mohidin, R., Chandran, V. V., & Chong, V., 2011); (Mousa, S. N., Safi, W. A., Hasoneh, A., & Mohammad, M., 2012). Indeed, when inflation increases and money depreciates, people tend to hold gold, real estate, etc., instead of highly liquid assets such as cash, bank deposits, or other assets.

Besides, for production and business enterprises, high inflation also directly affects businesses. Although the company is still profitable and paying dividends, the dividend rate will not be too attractive when inflation is high. That makes stock investment no longer a good channel. Leeb and Conrad (1996) reported the inflation rate, the growth rate of the US stock market from 1929 to 1981. They stated the relationship: "High inflation is always the enemy of the stock market". This result is completely consistent with Jiranyakul (2009). Rising inflation causes businesses to incur more costs, increasing the price of goods, causing a decrease in demand, leading to the reduction in business revenue.

Gold price (GP)

Gold is a store of value. Unlike other assets, gold has the potential to be highly liquid. The volatility of gold prices affects most of the economies, including the stock market. The basis for explaining this correlation is that when the gold price increases, investors withdraw their capital to invest in the gold market instead of investing in stocks due to the higher return on the gold market. As a result, the demand for the stock will decrease, stock's price decrease. According to Truong (2014), the volatility of the gold price is negatively correlated with the profitability of stocks. While the gold price increases or decreases by 1%, the profitability of stocks will decrease or increase by 0.72%.

Exchange rate (ER)

According to (Cecchetti, S. G., Schoenholtz, K. L., & Fackler, J., 2006) an exchange rate is a rate at which one country's currency is exchanged for the currency of another. The exchange rate is a crucial variable, affecting the balance of trade and balance of payments and affecting the balance of the economy as a whole. In addition, the exchange rate also directly affects businesses in the economy. When the exchange rate rises, exporters will earn more in their local currency than converting the same foreign currency from exports. When the exchange rate decreases, it will cost businesses a lot in local currency to import goods with the same foreign currency. Therefore, an increase in the exchange rate is favorable for export enterprises to develop, but it will cause difficulties for importers. Thus, the exchange rate will have different impacts on businesses in the Vietnamese stock market. Since then, the influence of the exchange rate on stock price movements and VN-Index cannot determine a specific direction.

In Vietnam, the research results of (Dinh, L. T. T., & Nguyen, T. T. T., 2008) have shown that the exchange rate is a detrimental factor for the stock market. Then, 1 USD will be exchanged for more VND, and there will be an increased profit from converting from USD to VND. At that time, investors can earn more profits than investing in the stock market. However, other studies show that the positive impact between the exchange rate and the stock market price index of this country is negative for other countries. According to (Ho, L.-C., & Huang, C.-H., 2015), the exchange rate affects Brazil, India, and Russia's stock price indexes but not affect the Chinese stock market.

When researching the Vietnamese stock market (Bùi Kim Yên & Nguyễn Thái Sơn, 2014) said that the exchange rate has a positive effect. However, (Phan Thị Bích Nguyệt & Phạm Dương Phương Thảo, 2013) think that it has a negative impact because Vietnam is often a trade deficit country, so Vietnam has to import machinery and materials from abroad out mainly. Therefore, the relationship between the exchange rate and the stock price index is still a question that needs to be answered.

Vietnam interbank rate (IR)

Interest rates have a direct effect on stock prices according to the following securities valuation formula:

$$P_0 = \frac{CF_1}{(1+r)} + \frac{CF_2}{(1+r)^2} + \frac{CF_3}{(1+r)^3} + \dots + \frac{CF_n}{(1+r)^n}$$

Inside:

P_0 : stock price at present

CF_1, CF_2, \dots, CF_n : cash flow at first, second, ..., n time.

r: interest rate

From this expression, it can be seen that there is a negative relationship between interest rates and stock prices. When interest rates rise, stock prices fall, and vice versa. In addition, an increase in interest rates will attract deposits into the banking system because of the high profitability of depositing, causing less money to flow into the stock market and affecting the stock market. In contrast, investors will no longer be attracted when interest rates are low, leading to choosing the stock market as an alternative investment channel with higher profits.

When the demand for capital increases, the interest rate will increase and vice versa. From the business point of view, credit to finance working capital or expenditure will increase the cost of debt, leading to reduce corporate profits and shareholder dividends. Many studies have shown that the relationship between interest rates and stock prices is often negative. Alam and Uddin (2009) concluded that most countries' stock prices are negatively affected by interest rates, which has also been proven by Adam and Tweneboah (2008). In Vietnam, (Nguyễn, Thị Hải Thanh; Đinh, Thị Thu Thủy, 2017) was research impact of exchange rate and interest rate on stock return and also conclude interest rate have a negative effect on the stock return.

S&P 500

Standard and Poor's 500 or simply the S&P 500 is a stock market index comprised of 500 large companies listed on stock exchanges in the United States. It is one of the most commonly followed equity indices.

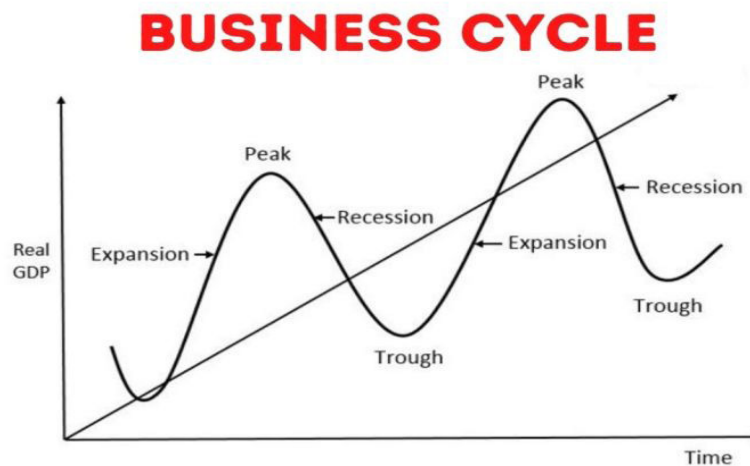
Panda and Nanda (2017) studied the relationship among the stock market of 17 countries in Western Europe as well as the world market using time series techniques. Their research provides evidence of short-term interactions between international stock indices in European markets. Husainey and Le Khanh Ngoc (2009) found each positive relationship of the US stock price index to the stock price of Vietnam. The same is also proven by (Nguyen, 2011) in her research. Due to the impact of the time zone of each place and the time series statistics using the GJR-GARCH model and the ARDL model (Hoang Thanh Hue Ton, Van Duy Nguyen, 2015) demonstrated that the previous VN-index (1 unit delay) and S&P500 had a positive impact on VNINDEX.

Total Export

Exporting is an international trading activity, exchanging goods between countries based on the principle of parity exchange in currencies. Exports are considered one of the important motivations for economic growth, especially for developing countries.

Based on the demand-side approach (Keynes), a school of macroeconomics that increases aggregate demand for goods and services is a determining factor for economic growth. Accordingly, an increase in exports is one of the factors that can promote an increase in aggregate demand and, therefore, will inevitably lead to an increase in output. However, for the financial market, the effect of export turnover has been shown to have a negative effect on the stock market. Specifically proven by the APT test by Tursoy et al. (2008) and research by (Zhu, 2012) both show a negative impact of Export to Stock Return in Shanghai Stock Market. Therefore, the author expects total export to have a negative effect on VN-Index.

Business cycle



Graph 1: The business cycle

According to (Arthur F. Burns and Wesley C. Mitchell., 1946), “Business cycles are a type of fluctuation found in the aggregate economic activity of nations... a cycle consists of expansions occurring at about the same time in many economic activities, followed by similarly general recessions... this sequence of changes is recurrent but not periodic.” The business cycle directly affects the performance of the economy, especially employment and inflation.

Specifically in Vietnam, in 2008 the whole world suffered an economic crisis. From 2008 to 2012, Vietnam fell into a recession and suffered heavy economic losses. At that time, businesses were severely affected and the state introduced many fiscal policies to control and improve the situation. By the end of 2012, Vietnam’s situation has somewhat stabilized and a new economic cycle has begun. Vietnam’s macro indicators are generally quite positive; the GDP growth rate is positive at a moderate rate (5.03%), inflation at 6.81%, exchange rate relatively stable throughout the year, foreign exchange reserves doubled.

Therefore, in this study, to show the economic cycle factors affecting the stock market, the author uses dummy variables to divide two time points: milestone one from 2008-2012 and milestone two from 2013 to 2020.

3. RESEARCH METHODOLOGY AND HYPOTHESIS

3.1. Data collection

For our investigation, based on the theoretical background and previous studies the significant factors that have been selected to explain the impact of macroeconomic factors on the stock market were collected at the end of each month from January 2008 to December 2020. The final sample consist with 156 observations. The dependent variable is the Vn index. Among classical macroeconomic variable like CPI, exchange rate, our dataset of independent variables contains gold price, Vietnam interate bank and S&P 500. For our investigation, we work with different data sources: Vietnam's state bank, General Statistic office and Ho Chi Minh Stock exchange.

3.2. Data analysis

The study used EViews 10 software to estimate parameters and perform necessary tests. First, the study conducted: (1) descriptive statistics to have basic parameters about variables, (2) testing the stationary of variables; (3) preliminary analysis by the correlation coefficient between macroeconomic factors to the value of Vietnam's stock market.

After having the evaluation results of the impact direction, the study conducted steps to regress the model. Because data are collected and processed in time series, the study uses the ARMA model, which aims to investigate the value of the Vietnam stock market from 2008 to 2020. Therefore, the regress result will conclude the relationship with Vietnam's stock market and seven macroeconomic variables: inflation, exchange rate, gold price, S&P 500 index, Vietnam interbank rate, and the business cycle.

3.3. Model selection and hypothesis

Research data are returned to logarithmic form to reduce dispersion, limit observations with unusual signs of the original data, and limit the difference due to the single estimate of each variable. Detail in Table 1 below:

Table 1: Variable and measured scale description

Name	Variable label	Units	Type of variable	Measurement
VN – Index	VNI	Points	Dependent	=Ln(VNI)
CPI	CPI	%	Independent	=Ln(CPI)
Gold price	GP	USD/Ounce	Independent	= Ln(GP)
Exchange rate	ER	USD/VND	Independent	=Ln(ER)
Vietnam interbank rate	VNIBOR	%	Independent	= VNIBOR
S&P 500	SP500	Points	Independent	=Ln(Sp500)
Total Export	EXP	Million USD	Independent	=Ln(EXP)
Business cycle	Dum		Dummy	=Dum

The model as follows:

$$LN(VNI)_{it} = \beta_1 + \beta_2 LN(CPI)_{it} + \beta_3 LN(GP)_{it} + \beta_4 LN(ER)_{it} + \beta_5 VNIBOR_{it} + \beta_6 LN(SP500)_{it} + \beta_7 LN(EX)_{it} + \beta_8 DUM_{it} + \varepsilon_{it}$$

β_1 : constant

$\beta_{2...8}$: the coefficient of independent variables

ε_{it} : errors

Hypothesis development

H1: The Consumer Price Index (CPI) has a negative impact on Vietnam's stock market

H2: The Gold price (GP) has a negative impact on Vietnam's stock market

H3: The Exchange rate (ER) has a positive impact on Vietnam's stock market

H4: The Vietnam interbank rate (VNIBOR) has a negative impact on Vietnam's stock market

H5: The S&P 500 index (SP500) has a positive impact on Vietnam's stock market

H6: The Total Export (EX) has a negative impact on Vietnam's stock market

H7: The economic cycle has a negative impact on Vietnam's stock market

4. RESEARCH RESULTS

4.1. Describe statistics of the variables

Table 2: Descriptive statistics

	LN_VNI	LN_CPI	LN_GP	LN_ER	VNIBOR	LN_SP500	LN_EX	DUM
Mean	6.386053	4.610732	7.162766	9.950201	6.387564	7.491598	9.336009	0.615385
Median	6.338001	4.608963	7.157015	9.960813	4.820000	7.563780	9.443315	1.000000
Maximum	7.068564	4.643525	7.588167	10.06968	18.24000	8.231128	10.22550	1.000000
Minimum	5.504274	4.589650	6.586241	9.675991	0.330000	6.599993	8.135933	0.000000
Std. Dev.	0.339176	0.007858	0.200561	0.102410	4.210710	0.389448	0.540702	0.488071
Skewness	0.110479	1.460096	-0.209560	-1.072092	0.881335	-0.142468	-0.354453	-0.474342
Kurtosis	2.302858	6.364512	2.887429	3.235479	2.857508	1.983000	2.020420	1.225000
Jarque-Bera	3.476394	129.0085	1.224173	30.24435	20.32752	7.250600	9.503815	26.32906
Probability	0.175837	0.000000	0.542218	0.000000	0.000039	0.026641	0.008635	0.000002
Sum	996.2242	719.2742	1117.392	1552.231	996.4600	1168.689	1456.417	96.00000
Sum Sq. Dev.	17.83124	0.009570	6.234849	1.625621	2748.162	23.50882	45.31558	36.92308
Observations	156	156	156	156	156	156	156	156

(Source: Extract from EViews under author's valuation)

From the statistical description, we have all 156 observational samples. The variables involved in the model have been converted to base logarithm e (natural logarithm - ln). The purpose of transferring data to logarithmic form is to reduce high dispersion. For some unusually valuable observations, using data in the form of logarithm will be more convenient in identifying and analyzing data.

From Table 2, we can see that the mean value and median value are approximately the same. That means there is not much difference between the maximum and minimum values. The low standard deviation shows that the variables' observations have a high degree of similarity and concentration.

4.2. Multicollinearity

Multicollinearity is a situation in which more than two explanatory variables in a multiple regression model are highly linearly related. Regression model with multicollinearity will cause

many indexes to be skewed, leading to the results obtained are no longer meaningful. However, the macroeconomic variables all affect each other, so the phenomenon of multicollinearity is obvious.

Table 3: Correlation

	LN_VNI	LN_CPI	LN_GP	LN_ER	VNIBOR	LN_SP500	LN_EX	DUM
LN_VNI	1.000000	-0.203856	0.227358	0.664472	-0.678533	0.889484	0.784574	0.703711
LN_CPI	-0.203856	1.000000	-0.099962	-0.434580	0.450314	-0.293106	-0.421461	-0.426089
LN_GP	0.227358	-0.099962	1.000000	0.624201	-0.249900	0.413036	0.494540	0.199659
LN_ER	0.664472	-0.434580	0.624201	1.000000	-0.717077	0.847990	0.911427	0.782604
VNIBOR	-0.678533	0.450314	-0.249900	-0.717077	1.000000	-0.763371	-0.769710	-0.847468
LN_SP500	0.889484	-0.293106	0.413036	0.847990	-0.763371	1.000000	0.948720	0.856752
LN_EX	0.784574	-0.421461	0.494540	0.911427	-0.769710	0.948720	1.000000	0.847277
DUM	0.703711	-0.426089	0.199659	0.782604	-0.847468	0.856752	0.847277	1.000000

(Source: Extract from EViews under author's valuation)

Table 4: VIF testing

Variance Inflation Factors
Date: 08/06/21 Time: 23:03
Sample: 2008M01 2020M12
Included observations: 156

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	71.89823	688449.7	NA
LN_CPI	2.853810	580925.1	1.676365
LN_GP	0.007025	3453.969	2.688562
LN_ER	0.093661	88801.61	9.345574
VNIBOR	2.26E-05	12.64639	3.813662
LN_SP500	0.009784	5272.133	14.11819
LN_EX	0.006944	5814.483	19.31375
DUM	0.003380	19.91575	7.659902

(Source: Extract from EViews under author's valuation)

The macroeconomic factors are partly highly correlated. Therefore, a common OLS estimation, which includes all macroeconomic factors, leads to problems of multicollinearity. The table 4 shows the variable Total export with high VIF. In this case, the variable total export is eliminated, and the VIF testing as follows:

Table 5: VIF testing

Variance Inflation Factors
 Date: 08/23/21 Time: 20:07
 Sample: 2008M01 2020M12
 Included observations: 156

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	10.39829	93911.84	NA
CPI	0.000265	24176.07	1.500210
LN_GP	0.007339	3403.120	2.648981
LN_ER	0.085062	76067.93	8.005468
VNIBOR	2.40E-05	12.65001	3.814753
LN_SP500	0.004469	2271.347	6.082417
DUM	0.003573	19.85849	7.637882

Unit root test

The research uses the Augmented Dickey-Fuller test statistic (ADF, 1974) to test unit root in the model. The result of the ADF unit root test was shown in table 3 below:

Table 6: Unit root test

	Variable	ADF test statistic	Test critical values		
			1% level	5% level	10% level
Level	Ln_VNI	-4.426017	-4.018748	-3.439267	-3.143999
	Ln_CPI	-5.842889	-4.018349	-3.439075	-3.143887
	Ln_GP	-1.836128	-4.020822	-3.440263	-3.144585
	Ln_ER	-2.977309	-4.021691	-3.440681	-3.14483
	VNIBOR	-3.986934	-4.019561	-3.439658	-3.144229
	Ln_SP500	-3.992017	-4.018349	-3.439075	-3.143887
First Difference	Ln_VNI	-10.41195	-4.018748	-3.439267	-3.143999
	Ln_CPI	-9.092508	-4.019561	-3.439658	-3.144229
	Ln_GP	-14.41132	-4.018748	-3.439267	-3.143999
	Ln_ER	-11.35281	-4.019151	-3.439461	-3.144113
	VNIBOR	-5.746397	-4.019561	-3.439658	-3.144229
	Ln_SP500	-11.38936	-4.018748	-3.439267	-3.143999

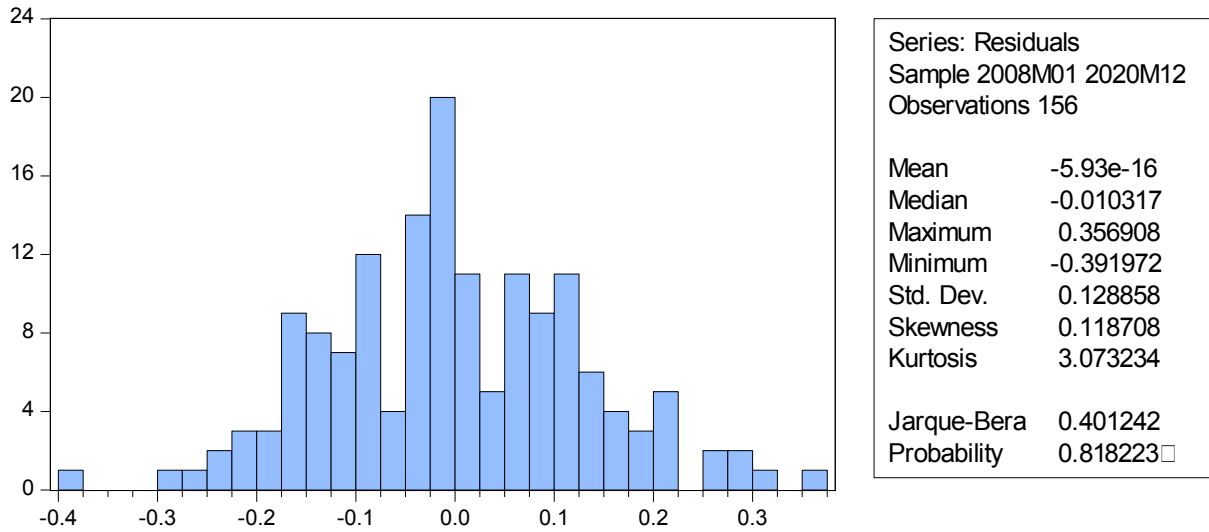
(Source: Extract from EViews under author's valuation and summary)

As a result of the ADF Unit root test show as at "Level", only the data of Ln_VNI and Ln_CPI are stationarity, leaving the data of 4 variables Ln-GP, Ln_ER, VNIBOR, Ln_SP500 all non- sta-

tionarity. The author decides to have the first difference, then the result is that all variables have the absolute value of ADF test statistic > the absolute value test critical values which mean all variable are stationary series.

4.4. Normally distributed residuals

Figure 1: Normal distributed residuals



(Source: Extract from EViews under author's valuation)

The thesis uses the Jarque-Bera test to test the normal distribution of the model residuals. The test results show that the P-value of the residuals is greater than the significance level $\alpha=5\%$, so accept H_0 , the residuals have a standard normal distribution.

4.5. Correlation Coefficient Test

Table 7: Breusch-Godfrey Serial Correlation LM Test result

Breusch-Godfrey Serial Correlation LM Test:				
F-statistic	123.2313	Prob. F(2,147)		0.0000
Obs*R-squared	97.71747	Prob. Chi-Square(2)		0.0000
Test Equation:				
Dependent Variable: RESID				
Method: Least Squares				
Date: 08/23/21 Time: 21:16				
Sample: 2008M01 2020M12				
Included observations: 156				
Presample missing value lagged residuals set to zero.				
Variable	Coefficient	Std. Error	t-Statistic	Prob.

C	2.252602	1.996659	1.128186	0.2611
CPI	-0.009767	0.010031	-0.973628	0.3318
LN_GP	0.054665	0.053276	1.026074	0.3065
LN_ER	-0.169770	0.180825	-0.938862	0.3493
VNIBOR	0.002816	0.003040	0.926495	0.3557
LN_SP500	-0.002223	0.041325	-0.053802	0.9572
DUM	0.042198	0.037860	1.114592	0.2668
RESID(-1)	0.902697	0.081415	11.08759	0.0000
RESID(-2)	-0.143691	0.082993	-1.731363	0.0855
R-squared	0.626394	Mean dependent var		-5.93E-16
Adjusted R-squared	0.606062	S.D. dependent var		0.128858
S.E. of regression	0.080877	Akaike info criterion		-2.135816
Sum squared resid	0.961537	Schwarz criterion		-1.959863
Log likelihood	175.5937	Hannan-Quinn criter.		-2.064352
F-statistic	30.80783	Durbin-Watson stat		1.832121
Prob(F-statistic)	0.000000			

(Source: Extract from EViews under author's valuation)

This research uses the Breusch-Godfrey test to check whether there is a correlation in the model's residuals. The p-value $< \alpha$, should reject hypothesis H_0 , the residuals of the model have a first-order serial correlation.

4.6. Heteroskedasticity Test

Table 8: Heteroskedasticity test result

Variable	Coefficient	Std. Error	t-Statistic
C	79.13825	50.65076	1.562430
CPI	-0.270889	0.255550	-1.060024
LN_GP	-0.101579	1.345596	-0.075490
LN_ER	-5.675617	4.581122	-1.238914
VNIBOR	-0.108944	0.076913	-1.416454
LN_SP500	0.212191	1.050052	0.202077
DUM	-1.652313	0.938914	-1.759814
R-squared	0.145127	Mean dependent var	
Adjusted R-squared	0.110702	S.D. dependent var	
S.E. of regression	2.064373	Akaike info criterion	
Sum squared resid	634.9836	Schwarz criterion	
Log likelihood	-330.8464	Hannan-Quinn criter.	
F-statistic	4.215799	Durbin-Watson stat	
Prob(F-statistic)	0.000600		

(Source: Extract from EViews under author's valuation)

The research using Harvey to heteroscedasticity test in the model, the results show that the P-value (=0.0792) is greater than the significance level $\alpha = 5\%$ (p-value > 0.05). Hence, it is not eligible to reject H_0 , which means the residual of the model homoscedasticity.

4.7. Regression result

Table 9: Result of estimate equation

Dependent Variable: LN_VNI

Method: Least Squares

Date: 08/23/21 Time: 14:52

Sample: 2008M01 2020M12

Included observations: 156

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.643925	3.224637	0.509801	0.6109
CPI	0.007382	0.016269	0.453707	0.6507
LN_GP	-0.388976	0.085666	-4.540602	0.0000
LN_ER	-0.125807	0.291653	-0.431358	0.6668
VNIBOR	-0.016179	0.004897	-3.304106	0.0012
LN_SP500	1.114069	0.066851	16.66504	0.0000
DUM	-0.333172	0.059775	-5.573752	0.0000
R-squared	0.855665	Mean dependent var		6.386053
Adjusted R-squared	0.849853	S.D. dependent var		0.339176
S.E. of regression	0.131427	Akaike info criterion		-1.176904
Sum squared resid	2.573667	Schwarz criterion		-1.040051
Log likelihood	98.79850	Hannan-Quinn criter.		-1.121320
F-statistic	147.2205	Durbin-Watson stat		0.407990
Prob(F-statistic)	0.000000			

(Source: Extract from Eviews under author's valuation)

The above results show that the P-value of GP, VNIBOR, S&P500, and DUM are lower than the 0.05 significance level. Therefore, Gold price, Vietnam interbank rate, S&P 500 index and Business cycle are statistically significant. The CPI and Exchange rates are not statistically significant.

The value $R^2 = 85.56\%$ is very large, this means that the statistics are consistent with the regression model of 85.56%, or the VN-Index fluctuates 85.56% due to the influence of macro variables.

4.8. Discussion

a. Independent variable Gold price (GP)

Based on the obtained results, Gold price (GP) has a negative effect on the stock market; when Gold price increase or decrease 1%, the value of the VN-index (VNI) will decrease or increase 0.3890%, with the p-value < 0.001, the relationship has been proved to be trustworthy. This result is the same as the studies of (Truong, 2014) or (Dinh, L. T. T., & Nguyen, T. T. T., 2008) or

(Muhammad, Akbar & Farhan, Iqbal & Farzana, Noor, 2019). Because gold and securities are both valuable investment and hoarding channels, when money in the economy pours into stocks, the amount of money to buy gold will be less and vice versa.

b. Independent variable Vietnam interbank rate (VNIBOR)

The Vietnam interbank rate (VNIBOR) has a contra-variant relationship to VNI. When VNIBOR increase (decrease) 1%, the VNI will decrease (increase) 0.016%. VNIBOR has the same p-value under 1%, so this estimate is very reliable. This negative relationship between interest rates and were also found by (Muhammad, Akbar & Farhan, Iqbal & Farzana, Noor, 2019) (Nguyễn, Thị Hải Thanh; Đinh, Thị Thu Thủy, 2017).

Rising interest rates are also a recognizable signal of macroeconomic instability leading to the opportunity cost increase, so investors will demand a higher rate of return when investing in the stock market. Otherwise, their capital will be transferred to bank deposits to be safer when the macro-economy is unstable. This further causes the stock price index to decline when interest rates rise. Therefore, the negative relationship between interest rate and stock price index is similar to previous studies and is consistent with the theory.

c. Independent variable S&P500 index (SP500)

The S&P500 index (SP500) has a considerably positive influence on VNI. The ratios for VNI impact are 1.14; the figure for p-value <0.0001 are proved to be remarkably trustworthy. The US is the world's No. 1 economy, so the US stock market will impact the world when there is a shock in the market. Based on this research, we can see SP500 has a positive effect that means when the S&P500 index increases, the VN-index also increases. The same result was also proved by (Hoang Thanh Hue Ton, Van Duy Nguyen, 2015); this study demonstrates that the S&P500 index has a positive effect on the VN-index with a lag of 1 day, that is, US stock prices have effects last from the previous day to the present day.

d. Dummy variable: Business cycle

The economic cycle is the dummy variable of the model to show the impact of the business cycle on the Vietnam stock market. After the regress result, the estimated coefficient is -0.333 with the P-value = 0 is significantly lower than the significance level of 0.05, which proved to be remarkably trustworthy. This result is completely reasonable when from 2013 to 2020, the Vietnamese government has introduced monetary policies to control and orient the economy to stabilize and develop the stock market.

e. Other variables

The CPI and Exchange rate with a P-value is more than 10%, and there is no meaningful relationship between them and the stock market. Due to the accuracy when implementing the research variable and the limitation due to the small sample size, this result is not completely close to the previous studies. The reason may come from the internal differences in Vietnam's economy compared to other countries in previous studies and differences at the period for data collection compared with previous studies.

5. CONCLUSION

The findings of the study confirms that there exists a strong causality between macroeconomic factors and Vietnam stock market performance. The study focused on studying the impact of macroeconomic factors including inflation rate (CPI), gold price, exchange rate, Vietnam interbank

rate, S&P 500 Index and business cycle to Vietnam's stock market through the Vn-index by method LS- least square (NLS and ARMA) in Eviews 10. The study used data from January 2008 to December 2020, with 156 observations and no missing samples. To analyze the effectiveness, the study used the methods of testing for stationarity, autocorrelation, variance. The results show that the model estimates that 4/6 macro factors affect the VN-Index in the long term. The S&P 500 index has a positive effect and gold price, Vietnam interbank rate, and business cycle have a negative effect on Vietnam's stock market. It is therefore recommended that in order to maximize the performance of stock market prudently managed macroeconomic policies are necessary. This finding is also to contribute to investors to make optimal economic decisions. The study is limited to only six selected macroeconomic variables and 156 months of time series data. Inclusion of more variables with a longer time period may improve the results. Apart from including additional macroeconomic factors, further research could be applied on the impact of these factors on Vietnam stock market for the crisis, pre-and post-crisis periods.

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FACTORS AFFECTING SUSTAINABLE GROWTH OF PLASTIC BUSINESSES IN VIETNAM

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Abstract: *The article clarifies the theoretical basis of sustainable growth and models to measure the influence of factors on the indicator of sustainable growth rate. The article uses econometric models and Stata 20 software to determine the impact of a number of factors on the sustainable growth rate of listed plastic enterprises in Vietnam. The results of FEM regression - firm estimate show that: the factor reflecting the capacity to operate the total asset turnover has a positive relationship; debt-to-total capital ratio and loan interest payment coefficient have a positive relationship; The proportion of fixed assets in total assets has a positive relationship with the sustainable growth rate, and all have high statistical significance. Based on the results of measuring the influence of factors, the author offers solutions to ensure sustainable growth in plastic enterprises in Vietnam.*

Keywords: *sustainable growth, sustainable growth rate, plastic businesses, factors*

1. INTRODUCTION

The concept of sustainable development dates back to the 1970s when the world struggled to cope with threats such as rapid population growth and the depletion of natural resources. Sustainable development or green economy has become a trend to help businesses find solutions to recover, grow and develop in a volatile and unpredictable period of changes ahead...

Despite of many difficulties, in 2020 Vietnam's plastic industry still maintains production and business growth. In particular, exports of plastic remarkable growth of about 6.3 % compared to 2019. However, sustainable development towards harmony between the growth of the business and undertake responsibility with society, with the environment still poses risks and challenges. The businesses that set the sustainable growth target have to deal with many challenges. The study of sustainable growth and factors affecting the sustainable growth of plastic enterprises in Vietnam is necessary that brings managers a scientific basis to devise development strategies for corporate sustainability in the future.

2. LITERATURE REVIEW AND PREVIOUS RESEARCH STUDIES

Analysis of the growth situation helps managers plan the future development of the business to have a basis for appropriate management decisions and allows managers to see the basic factors. impact on growth, causes of hot growth, no growth or recession in each period, opportunities for sustainable growth of the unit, suggestions for solutions to improve the growth situation.

When analyzing the growth situation, analysts have recently been interested in the sustainable growth rate: "The sustainable growth rate is the maximum growth rate in assets in accordance

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with the growth rate. grow total net cash flow and net cash flow from operating activities without depleting the financial resources of the business” [3, p369].

The sustainable growth rate is determined as follows:

$$\text{SGR} = \frac{\text{Changing equity due to retained earnings}}{\text{Equity}_{\text{beginning}}} \times 100$$

Based on the above equation, we can implement this formula as follows:

$$\text{SGR} = \text{A/E} \times \text{TO/A} \times \text{NPAT/TO} \times (1 - \text{DIV/E}) \times 100$$

Where:

SGR: Sustainable growth rate

NPAT: Profit after tax

NPBT: Net profit before tax

TO: Turnover

RI: Retained earnings

A: Assets

E: Equity

NA: Net Assets

DIV: Dividend

Thus, there are 4 factors affecting the growth of profits and dividends for current owners, which are:

- Asset turnover ratio and Return on sales ratio: this is a group of factors created by capital investment policy.

- Assets to equity at the beginning of the period: This is a group of factors created by the capital financing policy.

- Retention ratio: This is a group of factors created by the profit distribution policy.

Some of the previous authors have researched and provided models to measure the sustainable growth of enterprises as follows:

Higgins' sustainable growth model (2001, 2007)

The concept of sustainable growth was developed by Robert C. Higgins in 1977 and includes four specific factors: dividend payout ratio, profit margin, total asset turnover ratio, and financial ratio, assets on equity.

$$\text{SGR} = \frac{\text{RI}}{\text{NPAT}} \times \frac{\text{NPBT}}{\text{TO}} \times \frac{\text{TO}}{\text{NA}} \times \frac{\text{NA}}{\text{E}}$$

Where:

NPAT: Net profit after tax

NPBT: Net profit before tax

TO: Turnover

RI: retained earnings

E: Book value of Equity

NA: Net Assets

Higgins analyzed the change in growth rate from the source of growth, in which the important function of return on equity is the function of return on equity. Part of retained earnings, retained debt is invested in assets, which will help increase revenue then ultimately generate the company's profit growth. However, we see that the model still has assumptions that have not considered the delay in profits generated by assets, the issue of total assets and capital in the formula is the beginning or the end of the period, there are still opinions. In contrast, Higgins' model has not yet clarified the effect of leverage on growth rate.

James C. Van- Horn' sustainable growth model

Model of Van Horne growth is quantitatively described the change of collecting import, sales and it is also a tool to check the consistency between revenue growth goals, operational efficiency, and financial goals.

Van Horne's growth model is as follows:

$$SGR = \frac{b (PBIT/TO) * (1 + D/E)}{(A/S) - (b (PBIT/TO) * (1 + D/E))}$$

In there:

D/E: Debt to Equity

A/S: Assets to Sale ratio

PBIT: Profit before interest and taxes

b : Retained profit ratio

Thus, in essence, Van Horne' sustainable growth rate is also analyzed based on four factors such as the Higgins model and the assumptions of not adding new equity, but he mainly emphasizes the financial goal. If Higgin offers a model with the aim of increasing sales, the Van Horne's model is aimed at being compliant with financial goals. In addition, the model still has the same assumptions and weaknesses as the Higgins model, which has not clearly analyzed the impact of leverage.

Rui Huang & Guiying Liu (2009)' sustainable growth model

Huang & Liu's sustainable growth model is inherited and developed from two models of Higgin and Van Horne. This model analyzed the impact of financial leverage (using debt), business leverage (using fixed costs). Like Higgins, the growth rate is based on four factors:

$$SG = ((PBIT / TO) * (1 / DFL) (1- T)) * ((VC / TA) + (FC / TA)) * (1 / DOL)* (A / EQ) * (1 - (DIV/ E))$$

Where:

VC: Total variable cost

DFL: Level of financial leverage

TA: Total assets

DOL: Level of Operating Leverage

FC: Total fixed cost

DIV/ E: Dividend payout ratio

A/EQ: Equity Ratio

T: Tax rate

The model has a disadvantage when it applies to business situations such as intensely competitive bull markets, rapidly expanding firm size, rapidly increasing investment in fixed assets and debt.

3. METHODOLOGY AND PROPOSED MODEL

In this study, author used Stata 20 software to analyze secondary data. Secondary data is collected through financial statements of 14 listed companies in the Plastics industry in the period 2012 - 2019 (14 * 8 = 112 observations), then Microsoft Excel software is used to calculate variables in the model (ROS, Assets Turnover Ratio, Retention ratio, Debt Ratio, Fixed assets to total assets ratio, Interest Coverage Ratio) and finally determine the sustainable growth rate (G).

* *Research model*

Diagram 1: Research model affecting factors to sustainable growth rate G



(Source: Compiled by the author)

The variables in the model are selected and synthesized based on the rationality according to theoretical inference and based on previous research and personal views to propose independent variables and synthesize according to the model below. this:

Table 1 : Summary of the variables studied in the econometric model to measure the impact of these factors on indicators of sustainable growth

STT	Variable name	Symbol	Recipe	References
Dependent variable				
01	Sustainable growth rate	SGR	$G = \text{Assets on equity ratio} \times \text{Assets Turnover Ratio} \times \text{ROS} \times \text{Retention Rate}$	Rui Huang & Guiying Liu (2009), Robert C Higgins (2001, 2007), James C.Van Horne ()
Independent variables				

01	Return on Sales	X1	$ROS = \frac{\text{Operating profit}}{\text{Net sale revenue}} \times 100$	Cu Thu Thuy, Nguyen Tuan Nam, Truong Thi Minh Hanh, Pham Xuan Toan (2016)
02	Total asset turnover	X2	$\text{Total asset turnover} = \frac{\text{Net sales}}{\text{Average total assets}}$	Cu Thu Thuy, Nguyen Tuan Nam, Truong Thi Minh Hanh, Pham Xuan Toan (2016), Robert C Higgins (2001, 2007)
03	Debt ratio	X3	$\text{Debt Ratio} = \frac{\text{Total Liabilities}}{\text{Total Assets}}$	Cu Thu Thuy, Nguyen Tuan Nam, Truong Thi Minh Hanh, Pham Xuan Toan (2016)
04	Retention ratio	X4	$\text{Retention Ratio} = \frac{\text{Retained Earning}}{\text{Net income}}$	Cu Thu Thuy, Nguyen Tuan Nam, Truong Thi Minh Hanh, Pham Xuan Toan (2016), Robert C Higgins (2001, 2007), Rui Huang & Guiying Liu (2009)
05	Fixed asset to Total asset ratio	X5	$\text{Fixed asset to Total Asset Ratio} = \frac{\text{Average fixed asset}}{\text{Average total asset}}$	Rui Huang & Guiying Liu (2009), Cu Thu Thuy, Nguyen Tuan Nam, Truong Thi Minh Hanh, Pham Xuan Toan (2016) .
06	Interest coverage ratio	X6	$\text{Interest coverage ratio} = \frac{\text{Total interest payment}}{\text{EBIT}}$	Cu Thu Thuy, Nguyen Tuan Nam, Truong Thi Minh Hanh, Pham Xuan Toan (2016) .

(Source: Compiled by the author)

* Research hypothesis

Based on relevant empirical and theoretical studies, the PhD student proposes the following research hypotheses:

Return on sales ratio (X1) is expected to have a positive impact on the sustainable growth rate. From a business perspective, growth can be understood as an increase in business or the scale of revenue and profit achieved in the production and business process. Therefore, the increase in profit contributes to the growth of the business, so the variable X1 is expected to have a positive value.

Assets turnover ratio (X2) represents the results of the enterprise's asset use process, the effective use of assets of the business contributing to the generation of revenue is the basis for growth. Therefore, the independent variable of asset turnover is expected to have a positive value.

Debt ratio (X3), Interest coverage ratio (X6) are the factors that show the capital structure, financial leverage of the enterprise, the capital structure that affects the value of the enterprise, the maintenance a high debt ratio will affect the performance of the business in two ways. A high debt ratio can give businesses the advantage of financial leverage, increasing the specific value of the business through ROE, However, a high debt ratio also brings risks to the company. business in some cases when the enterprise is insolvent. Thus, the variable debt ratio is expected to have a positive/reverse effect with the growth rate.

Retained earnings ratio (X4) the retained earnings is part receivable entered retained-asset investment, assets will help increase revenue, will eventually make the company profitable growth. However, the use of high retained earnings also increases the cost of capital and reduces dividends paid to shareholders, causing investors to lack confidence in the business, affecting the growth of the business. Therefore, the variable retained earnings is expected to have an inverse/positive effect with the growth rate G.

Fixed assets to total assets ratio (X5) represents the use of fixed assets in the total assets of the business. According to Rui Huang and Guiying Liu, an increase in fixed costs leads to an increase in growth rate. Therefore, variable X5 is expected to have a positive impact on sustainable growth.

4. RESEARCH RESULTS

4.1. Characteristics of listed plastic enterprises

Listed plastic enterprises are divided into two main sub-sectors: the production of packaging plastics and construction plastics based on the company's main products. Although most listed companies are quite large in scale, they do not represent all segments of Vietnam's plastic industry. Packaging plastic sub-sector: 14 out of the total listed companies belong to the packaging manufacturing sub-sector with very diverse products and technologies. Based on product, this sub-sector is divided into plastic construction packaging, food packaging, PET and flexible packaging. Some household and industrial plastic manufacturers are present in the plastic packaging sub-sector because packaging products have the largest proportion, while the proportion of industrial plastic products accounts for just over 20%. 14 listed companies in the plastic packaging sub-sector, including: AAA, RDP, SPP, PBP, PMP, DTT, TPC, TPP, NHP, BPC, BXH, VBC, BBS, DPC are the research subjects of the article.

Table 2: Structure of Vietnamese listed plastic packaging enterprises

STT	Segment	Company's name	Code stock	Floor listing	Five listing
1	Soft packaging plastic	An Phat Bioplastics., JSC	AAA	HOSE	2016
2		Rang Dong Holding Plastic JSC	RDP	HOSE	2009
3		Saigon Plastic Packaging JSC	SPP	HNX	2008
4		PetroVietnam Packaging JSC	PBP	HNX	2015
5		Dam Phu My Packaging Joint Stock Company	PMP	HNX	2015
6	Food packaging plastic, PET	Do Thanh Technology Corporation	DTT	HOSE	2007
7		Tan Dai Hung Plastic Joint Stock Company	TPC	HOSE	2007
8		Tan Phu Viet Nam Joint Stock Company	TPP	HNX	2008
9		NHP Production Import - Export JSC	NHP	HNX	2015
10	Construction plastic packaging	Vicem Packaging Bim Son JSC	BPC	HNX	2009
11		Hai Phong Cement Packing JSC	BXH	HNX	2009
12		Vinh Plastic & Bags JSC	VBC	HNX	2010
13		VICEM Packaging But Son JSC	BBS	HNX	2005
14		Da Nang Plastic Joint Stock Company	DPC	HNX	2009

(Source: Compiled by the author)

According to the scale of business capital, the listed enterprises in the sample can be divided into 3 groups: Large-scale state-owned enterprises with an average total business capital of over 1,000 billion VND; The group of medium-sized enterprises with the average total business capital is from 100 to 1,000 billion VND; The group of small-sized enterprises with an average total business capital of less than VND 100 billion.

Table 3: Classification of state-owned enterprises by size of business capital (Unit: billion VND)

Average working capital	Over 1,000	From 100 - 1,000 won	Less than 100
Number of businesses	2	11	first
Ratio %	14.28%	78.57%	7.15%

(Source: Compiled by the author)

4.2 Analysis results

* Descriptive statistical analysis

The descriptive statistics include: Obs (Observation) – number of observations; Mean Std. - Average number; Dev. (Standard Deviation) – Standard Deviation; Min – Minimum value; Max – The maximum value is shown in the following table of results:

Table 4: Descriptive statistics of research variables

Variable	Obs	Mean	Std. Dev.	Min	Max
SGR	112	0.14335	0.193739	-0.33259	1.642392
X1	109	-0.00029	0.291368	-2.70395	0.1494
X2	110	1.382075	0.563333	0.005292	2.816372
X3	112	0.54274	0.251687	0	2.0306
X4	112	0.974624	0.148337	0	1.307783
X5	110	35.62406	20.04621	1.314393	81.17415
X6	110	18.20677	99.82729	-30.1258	959.01

Source: Author synthesized on research results

* Correlation analysis

The results of the correlation analysis between the variables in the model are shown in the following table: The results of the model's correlation analysis show that the dependent variable G has the strongest correlation with the debt-to-total capital ratio. (X3) with the correlation coefficient value at 0.60. The following indicators: profit-to-sales ratio (X1), total asset turnover (X2) have a positive relationship with the growth rate G with the correlation value of 0.4772 respectively; 0.4732. In addition, the growth rate G is negatively correlated with the ratio of retained earnings (X4), the proportion of fixed assets in total assets (X5), the ratio of interest payments (X6) with the value of fixed assets (X5). correlation at -0.07, respectively; 0.064; -0.052.

Table 5 : Correlation between research variables

	WOOD	X1	X2	X3	X4	X5	X6
WOOD	first						
X1	0.4772	first					
X2	0.4732	-0.0902	first				
X3	0.6029	-0.1229	0.2077	first			
X4	-0.07	-0.0847	-0.0619	-0.1011	first		
X5	-0.0643	0.1311	-0.4584	-0.0965	-0.169	first	
X6	-0.0525	0.3936	0.2171	-0.5675	-0.0172	-0.1658	first

Source: Author synthesized on research results

* Analysis of the influence of factors on G

The author performs multicollinearity test by VIF test and the results are obtained in the following table:

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. vif ,uncentered // kiểm tra đa cộng tuyến
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Variable	VIF	1/VIF
X4	21.84	0.045788
X3	10.47	0.095538
X2	10.02	0.099778
X5	5.24	0.190769
X1	1.59	0.629577
X6	1.27	0.787849
Mean VIF	8.40	

From the results of the table above, the researcher found that with the VIF = 4.76 value less than 10, however, there are two factors X2, X3, X4 with VIF > 10. Thus, the model used has the phenomenon of multicollinearity. The author removes the factor with the strongest multicollinearity in the model to continue testing, the results are as follows:

```
. vif ,uncentered // kiểm tra đa cộng tuyến
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Variable	VIF	1/VIF
X3	8.24	0.121345
X2	6.72	0.148762
X5	2.89	0.345973
X1	1.55	0.643530
X6	1.13	0.883626
Mean VIF	4.11	

With the VIF = 4.11 value less than 10 and the VIF value of the variables all less than 10, it is concluded that no serious multicollinearity occurs. Thus, it can be confirmed once again that from checking the multicollinearity of VIF and the correlation matrix, the research model has absolutely no serious multicollinearity between the independent variables.

Test the variance of the error according to the Lagrange multiplier method:

```
test3 // kiểm tra phương sai sai số thay đổi
```

```
fied Wald test for groupwise heteroskedasticity  
ixed effect regression model
```

```
sigma(i)^2 = sigma^2 for all i
```

```
(14) = 3078.56
```

```
>chi2 = 0.0000
```

Notice that $\text{Prob}>\chi^2 = 0.0000 < 0.05$. Thus, the model has the phenomenon of variable variance.

Test the phenomenon of autocorrelation using Lagram-Multiplier criteria with a pair of test hypotheses:

H0: The model has no series correlation.

H1: The model has series correlation.

```
. xtserial G X1 X2 X3 X5 X6
```

```
Wooldridge test for autocorrelation in panel data
```

```
H0: no first-order autocorrelation
```

```
F( 1, 13) = 1.107
```

```
Prob > F = 0.3119
```

Notice that $\text{Prob} > \chi^2 = 0.3119 < 0.05$. Thus, the model does not have autocorrelation.

- Correction of defects in the model: Due to the defects existing in the model, the obtained estimates will no longer be reliable. Using PCSE model regression with hetonly selection to overcome the defects, the results are given in the table below:

**Baits Table 6 : Table analysis econometric models measure
The influence of factors on the sustainable growth rate indicator**

Variable	FEM	REM	Hieuchinh
X1	0.267***	0.0465	0.0465
X2	0.195***	0.104***	0.104***
X3	1,004***	0.511***	0.511***
X5	0.00845***	0.00268***	0.00268***
X6	0.000395**	0.000358**	0.000358***
Constant	-0.993***	-0.384***	-0.384***
Observations	107	107	107
R-squared	0.443		0.422
Number of names	14	14	14

The significance level of each factor

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

The results of the table above show that the regression estimation results of the factors affecting the sustainable growth rate (G) of listed plastic enterprises by the method (PCSE). With the Wald test (or F - test) to test the fit of the model for a P-value of 0.0000, the hypothesis H0 (that the model is not suitable) is rejected. It is concluded that the regression model is suitable for all significance levels.

This regression model suitability is 42.2 %. In other words, the model explains PCSE 42.2 % of the rate change for sustainable growth (G).

From the PCSE model results, it shows:

There are 4 factors that are statistically significant to the sustainable growth rate: Total asset turnover (X2) at 1% significance level, Debt to total capital ratio (X3) with significance level 1. %, Fixed assets ratio (X5) at 1% significance level, Interest payment ratio (X6) at 1% significance level. We have a regression model showing the influence of the factors on the index G as follows:

$$G = -0.384 + 0.104X2 + 0.511X3 + 0.00268X5 + 0.000358X6$$

Assets turnover ratio: correlates positively with the rate of sustainable growth according to which the asset turnover shows the results of the use of assets of the business, increasing the number of revolutions of assets contribute to business growth. Specifically, when the total asset turnover increased by 1%, the sustainable growth rate increased by 0.104 %.

Debt ratio and Interest coverage ratio: are the factors that show the financial structure of the enterprise, these factors have a positive relationship with the sustainable growth rate of the enterprise., when the financial structure increases by 1%, the sustainable growth rate of the enterprise increases by 0.511%, when the interest payment ratio increases by 1%, the sustainable growth rate of the enterprise increases by 0.000358%. This shows that for listed plastic enterprises, taking advantage of financial leverage will contribute to the sustainable growth of their businesses.

Fixed assets to total assets ratio: there is a positive relationship with the sustainable growth rate of the enterprise, specifically when the proportion of fixed assets increases by 1%, the sustainable growth rate increases by 0.00268%.

5. DISCUSSION AND CONCLUSION

Through testing and measuring the influence of factors on the indicator of sustainable growth rate G , the author obtains results on the influence of specific factors as follows: Assets turnover ratio; Debt ratio; Interest Coverage ratio and Fixed assets to total assets ratio have a positive relationship with the sustainable growth rate. This result is similar to the conclusion of previous studies, which is theoretically and practically consistent in plastic enterprises.

Thus, about the growth of listed plastic enterprises, it can be seen that, although there is an increase in assets and equity, there are a number of enterprises that have not effectively taken advantage of the growth in terms of assets to improve revenue and profit, there was even a decrease in revenue and profit compared to previous years. Since then see that businesses need to have an improvement in the use of capital to ensure the increase of sales revenue and profit. Through the research results of econometric models, the author proposes solutions to ensure sustainable growth in plastic enterprises. Specifically, in the short term, it is necessary to focus on improving the efficiency of using fixed assets, limiting the increase in debt to invest in fixed assets to avoid financial risks. In the long term, increase investment in fixed assets in terms of: investment in new technology, investment in invention of environmentally friendly plastic products. In order to increase total asset turnover, businesses need to have a plan to increase revenue, one of which is to increase exports, take advantage of preferential tax rates on plastic products in Korea and Japan. Europe, businesses should have an international market expansion strategy. In terms of COVID – 19 disease turned increasingly complex, dangerous and unexpected, the situation boosts export online is one of the solutions to urgent, the participation in E-commerce platform like B2B (Business to Business - online business model between business and business) will help exporters directly approach customers around the world thereby expanding market access globally. In addition, an important solution is to improve the efficiency of financial analysis, in which increasing the use of econometric models to clarify the influence of factors on the analytical indicators, helping businesses have a better understanding of the situation. Scientific evidence provides specific solutions to improve financial management.

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PROMOTING EXPORTS OF HANOI CITY IN THE CONTEXT OF IMPLEMENTATING NEW-GENERATION FREE TRADE AGREEMENTS

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Abstract: *Although Hanoi's export activities in the context of implementing the new-generation free trade agreements (FTAs) have achieved many important results, there are still many limitations. Hanoi has not made good use of incentives on market opening and tariff reduction in new generation FTAs. As an economic center with many advantages in terms of human resources, technology, infrastructure, and geographical location, Hanoi's exports are behind small provinces such as Bac Ninh, Thai Nguyen, and Dong Nai. In general, the country has a trade surplus, but Hanoi has a very large trade deficit, the proportion of export turnover of products with a high level of processing and high technology content is leveling off and tends to decrease. The article proposes solutions for Hanoi to boost exports in the context of implementing new generation FTAs, contributing to the capital's socio-economic development.*

Keywords: *Exports of Hanoi, new-generation FTA, new-generation free trade agreement.*

1. INTRODUCTION

Vietnam signed and joined many free trade agreements (FTAs), especially Vietnam has joined a number of new-generation FTAs recently. A free trade agreement is a diplomatic document negotiated and signed between two or more countries' governments on a roadmap to reduce tariff and non-tariff barriers in order to create a free trade region.

In fact, the new-generation FTA is a higher development level of the traditional FTA in order to remove all kinds of trade barriers and promote faster international trade. The difference between a new generation FTA and a traditional one is that the overall content of the new-generation FTAs is much broader than one in traditional FTA. In a traditional FTA, the content mainly focuses on issues related trade while in the new generation FTA, "non-commercial" issues are also covered in the content of the agreement including: international investment, policy institutions, environment, employees, state-owned enterprises, etc. Thus, the contents of the new generation FTAs are more comprehensive, completed, broader, and have higher standards than the traditional FTAs.

FTAs in general and new generation FTAs in particular bring both opportunities and challenges to local areas such as Hanoi and other regions in the country, especially in the field of imports and export. If any dynamic and creative region finds reasonable solutions, it will have a higher ability to take advantage of opportunities and overcome challenges, promote international trade, and contribute to socio-economic development of that region and of the whole country.

2. LITERATURE REVIEW AND PREVIOUS RESEARCH STUDIES

Some previous studies related to Hanoi's exports:

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- The article by author Huong Thuy: “Hanoi: Five main groups of solutions to boost exports in 2020” on the New Hanoi newspaper on February 13, 2020 presented 5 groups of solutions to boost Hanoi’s exports. The article stands from the perspective of the administrative agencies and is based on the opportunities and challenges of Hanoi in 2020 but has not been associated with the implementation of the new-generation FTA.

- The article by author Khanh Nguyen: “Removing difficulties for businesses to boost exports in Hanoi” in Communist magazine on October 15, 2020 also proposes solutions to boost exports in Hanoi. This article is associated with the context of the Covid-19 epidemic, but not with the implementation of the new-generation FTA

- Research work by the Vietnam Chamber of Commerce and Industry and the Australian aid agency on the impact of the CPTPP on Vietnam after 2 years of implementing this Agreement. The work comprehensively studies the impact of a new-generation FTA on Vietnam but does not study the impact on Hanoi separately.

Almost previous studies on Hanoi’s exports have not been associated with the context of implementing two very important new-generation FTAs, CPTPP and EVFTA.

3. METHODOLOGY AND PROPOSED MODEL

The article uses traditional research methods such as analysis, comparison, synthesis, statistic collection, and expert consultation.

The article uses primary data from the General Statistics Office, Hanoi Statistical Office, Ministry of Industry and Trade

In addition, the article uses secondary data from the export scheme and plan of Hanoi city

4. RESEARCH RESULTS

4.1. The current situation of Hanoi’s exports during the implementation of new-generation free trade agreements

4.1.1. Achievements

- *Hanoi’s export turnover tends to increase*

Export turnover (export turnover) of Hanoi continuously increased in the period of 2016 - 2020; however, the growth rate was uneven. For example, in 2016 and 2020, the growth rate was low. Especially in 2020, due to the heavy impact of the Covid-19 pandemic, Hanoi’s export growth is quite low (1.8%). Hanoi’s average export turnover growth in the period 2016-2020 reached 9%/year, higher than the period 2011-2015 (5.3%/year), which is a positive signal. Nevertheless, the average export turnover growth of Hanoi in the 2016-2020 period was still lower than the plan (average growth of 13-14%/year) and also lower than the average export turnover growth of nation in the period 2016-2020 (11.78%/year).

Table 1: Hanoi’s export turnover and growth compared to Vietnam’s in the period 2016-2020

Year	2016	2017	2018	2019	2020	2016-2020
1. Exports of Hanoi						
Turnover (Million USD)	10.683	11.705	13.909	15.694	15.976	
Growth (%)	2,0	9,6	18,8	12,8	1,8	9,0
2. Exports of Vietnam						

Turnover (Million USD)	176.580	215.100	243.483	264.190	282.660	
Growth (%)	9,0	21,2	13,2	8,5	7,0	11,78
3. Export turnover of Hanoi/ Vietnam(%)	6,0	5,5	5,7	5,9	5,7	5,76

Source: General Statistics Office, Hanoi Statistical Office

- *The export turnover of the domestic economic sector is higher than that of the foreign-invested economic sector*

Export activities in Hanoi region in recent years have attracted many economic sectors, including the domestic economic sector (the state sector and the private sector) and the foreign investment capital sector (FDI sector). However, the structure of economic sectors participating in export activities in Hanoi is gradually shifting towards increasing the proportion of export turnover of the domestic economic sector (mainly the private sector) from 51.1% in 2016 to 61.5% in 2020 and gradually reducing the proportion of the FDI sector from 48.9% in 2016 to 38.5% in 2020.

This shows that the competitiveness of domestic economic sector in Hanoi is increasingly improved compared to that of FDI sector. This is a positive point because in the period 2015-2020, the FDI sector has always dominated the export sector in Hanoi.

Table 2: Export turnover and growth by economic sector of Hanoi in the period 2016-2020

	2016	2017	2018	2019	2020	2016-2020
Total export turnover	10.683	11.705	13.909	15.694	15.976	
Sector						
<i>Domestic economic sector (Million USD)</i>	5.457	5.716	7.499	9.193	9.800	
Growth (%)	3,9	4,7	31,2	22,6	6,6	13,8
Proportion (%)	51,1	48,8	53,9	58,6	61,5	
<i>Economic sector with FDI (Million USD)</i>	5.226	5.989	6.410	6.501	6.176	
Growth (%)	0,1	14,6	7,0	1,4	-5,1	3,6
Proportion (%)	48,9	51,2	46,1	41,4	38,5	

Source: General Statistics Office, Hanoi Statistical Office

- *The structure of export products has changed dramatically.*

In the period of 2015 - 2020, the structure of Hanoi's export products has shifted to the direction that the proportion of export turnovers of less processed products gradually decreases, for example, the proportion of export turnovers of agricultural products decreased from 9% in 2016 to 5.1% in 2020. Products with high processing level and high technology content account for a high proportion in export turnover, for example, computers and peripherals always account for the highest proportion from 17% to 18%; machinery, equipment and spare parts account for 13% to 14%.

- *Diversifying export markets, shifting to large, highly qualified markets*

The ASEAN market is always the largest market for Hanoi's exports, accounting for 16% to 17%. However, the proportion of the ASEAN market has decreased in recent years due to large markets with high standards and qualifications.

The US market is Hanoi's fastest growing and most stable market in recent years. From being the 5th market in 2011 (accounting for only 8.9%), the US has now become the second largest export market. This market is constantly growing, reaching an average of 12.3%/year.

EU is the third largest export market for Hanoi, accounting for 11.7-14.5%. This market grows steadily at 8.2%/year.

China market: In recent years, export turnover to this market has decreased lower than that of the US and EU, from the 2nd position in 2011 to the 4th position. The export turnover grows unstably at the rate of 12.4 - 17.3%.

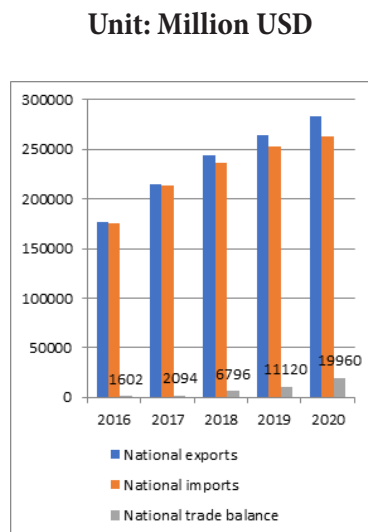
4.1.2. Limitations on Hanoi's export activities

- *Not commensurate with the potential and position of Hanoi*

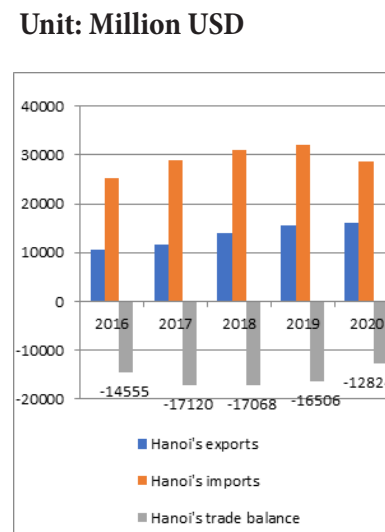
Hanoi is the capital and the major economic center of the country, therefore, Hanoi has many resources, many large enterprises, and has a higher level of technology than other local areas. Hanoi also has better-trained and skilled human resources than other areas. 82% of universities and 80% of key scientific research laboratories, 65% of intellectuals and scientists, and 2/5 of the country's high-tech industrial parks situate in Hanoi. The conditions of infrastructure such as traffic, airport, port, etc in Hanoi are also much advantageous. However, Hanoi has not taken advantage of its advantages in producing and exporting goods. Although it is a major economic center of the country, in 2020 Hanoi's export turnover only ranked 7th, behind provinces such as Bac Ninh, Thai Nguyen, Binh Duong, Dong Nai and Hai Phong.

- *While Vietnam had a trade surplus in the past 5 years, Hanoi had a very large trade deficit.*

Over the past decades, Vietnam's trade balance has always been in a state of trade deficit. However, thanks to economic reform, international integration, and free trade agreements (FTAs), Vietnam's trade balance has been greatly improved. In the 2016-2020 period, Vietnam's trade balance has turned into an increasingly large trade surplus. In 2016, Vietnam's trade surplus reached 1,602 million USD, then by 2020 it reached a record of 19,960 million USD.



Source: General Statistics Office



Nguồn: Hanoi Statistical Office

Figure 1: Trade balance of Vietnam from 2016 - 2020 Figure 2: Trade balance of Hanoi in from 2016 - 2020

While the trade balance of Vietnam moved in the positive direction as above, on the contrary, Hanoi's trade balance was in a state of very large trade deficit. In 2017 and 2018, Hanoi's trade deficit was at the highest level, over 17,000 million USD. In 2020, despite being greatly affected by the Covid-19 epidemic, Hanoi made a lot of efforts to boost exports, export turnover increased by 1.8% and curbed imports, import turnover decreased by 9.1%. As a result, Hanoi's trade deficit decreased in 2020, but stood still at 12,284 million USD. If Hanoi's trade balance can be improved, the country's trade balance will have an even larger surplus.

- There is a tendency of slight decrease in the proportion of export turnover for some products with high level of processing and high technology content.

Thanks to the advantage of a high-tech center of the country and a highly skilled workforce, the proportion of exports turnovers of highly processed and high technology products of Hanoi is higher than the national average. For example, in the period 2016-2020, computers and peripherals always account for 17% to 18% of Hanoi's export turnover, the national average of this item is only 13% to 15%; machinery, equipment and spare parts account for 13% to 14% of Hanoi's export turnover, the national average of this item is only 11% to 14%.

Hanoi's limitation is that it has not brought into full play its strengths in high technology and human resources in the production and processing of exports. Therefore, the proportion of products with deep processing and high technology tends to decrease slightly in recent years. For example in Hanoi case: the proportion of exports of computers and peripherals decreased from 18.4% in 2017 to 17.1% in 2018 and to 16.4% in 2020; The proportion of exports of machinery, equipment and spare parts decreased from 14.9% in 2017 to 12.6% in 2018 and to 10.1% in 2020.

- In the early stages, new free trade agreements such as the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) and the Vietnam-European Union Free Trade Agreement (EVFTA) have not been taken advantage of to boost exports.

New generation FTAs along with market opening, tariff reductions and many other incentives have facilitated the exports of Hanoi in particular and of the whole country in general. The most significant new-generation FTAs are the CPTPP, which took effect from the beginning of 2019 and the EVFTA, which took effect from August 2020. Nevertheless, the utilization of these two major agreements is still slow and less effective. By the end of 2020, the CPTPP Agreement has been in effect for 2 years, but Hanoi and the whole country have not made good use of this Agreement. This can be seen through the very few changes in the export situation to CPTPP countries.

Hanoi has made better use of EVFTA Agreement, especially in the first 6 months of 2021. Some key products have an increase in export turnover in the first 6 months of 2021 thanks to taking advantage of free trade agreements better than before, especially taking advantage of the EVFTA Agreement, for instance, phones and components reached 177 million USD, twice as much as the same period last year; footwear reached 176 million USD, increased by 47.7%; wood and wooden products reached 313 million USD, increased by 22.3%; glass and its products reached 199 million USD, increased by 21.9%; machinery, equipment and spare parts reached USD 885 million, increased by 16.8%.

4.1.3. Causes for limitations

Certain limitations for exports of Hanoi in the recent period are due to the following main reasons:

- Hanoi has not yet upheld its advantages of well-qualified human resources, as well as advantages in technology, infrastructure, geographical location, etc when there is still an on-going waste of resources such as capital, land, and intelligence.

- Hanoi's policy mechanism is relatively restricted, which is reflected in the low provincial governance and public administration efficiency index (PAPI). In 2019 with a score of 41.53, Hanoi maintains its rank compared to 2018 (53/63 provinces-cities). In 2020, Hanoi's PAPI index increased to 41.63 points; however, still ranked at low position, 48 out of 63 provinces and cities

under the Central Government. Regarding the provincial competitiveness index (PCI), Hanoi PCI is relatively good, usually ranked 13th or 14th, and it rose to 9th in 2019.

- Hanoi attract lots of large businesses and enterprises, thus, the demand for importing high-tech equipment and sophisticated production materials for research and production activities is high. That expensively technological equipment and means of production make the import turnover very large increases the trade deficit of Hanoi. Since Hanoi's population is the second largest in the country after Ho Chi Minh City with large proportion of high income people, the demand for imported goods is also great.

- Other localities' import mainly serves for their own needs while Hanoi is the capital and Hanoi's imports not only meet the needs of Hanoi but also the needs of the Central Government. This also increases the import turnover and increases the trade deficit of Hanoi.

- The export turnover is reduced and the trade deficit is increased are due to the fact that some big manufacturing companies and export businessess have to relocate to other provinces to ensure a clean green environment for the capital.

- Part of citizens and businesses have low awareness of FTAs. Many enterprises do not identify the opportunities or challenges from FTAs, hence they do not actively take advantage of opportunities and do not take measures to prevent risks.

4.2. Solutions for Hanoi to boost exports during the implementation of new-generation free trade agreements

4.2.1. Solutions for municipal government

- The municipal government as well as Vietnamese Government needs to continue strengthening macroeconomic stability in order to create a favorable and predictable environment for production, business and trade activities in the new-normal context. Through implementing macroeconomic policies synchronously, consistently, timely and flexibly for macroeconomic stability priority, a favorable environment for economic reform and growth can be established. It is immediately urgent to control the Covid-19 epidemic well to avoid the epidemic's effect on the economy in order to accomplish the dual goal of both fighting the epidemic and developing the economy. Good disease control and macroeconomic stability will be a solid basis to take advantage of opportunities and overcome challenges from new generation FTAs as well as traditional FTAs.

- It is essential for the municipal government to accelerate the process of business environment reform to create a favorable environment; especially, improve the Provincial Governance and Public Administration Performance Index (PAPI) strongly. It is also necessary to step up administrative reform in the fields of trade, services and investment in order to improve competitiveness and actively take advantage of opportunities from international economic integration. Accordingly, solutions to trade facilitation improvement, helping businesses shorten transaction time, administrative cost reduction, thereby cutting input costs and improving competitiveness should be concentrated on. One of the focuses is to quickly connect and fully implement the national single window mechanism - NSW (integration of all import and export procedures into one point and electronicization) and deepen the connection into the ASEAN Single Window -ASW, towards connecting into areas where Vietnam has FTAs.

- The management agencies, including Hanoi Department of Industry and Trade, Customs Department, Tax Department, and Export Processing and Industrial Parks Management Board

need to consolidate the information publicization about the CPTPP, EVFTA as well as other new-generation FTA in order to enable stakeholders to participate more deeply in this process. The development of a national trade policy portal is necessary; however, it will be merely sufficient unless there is an integration of interaction mechanisms between import and export enterprises and agencies that develop trade policy and related regulations. It is necessary to harmonize the trade policy portal in accordance with commitments in FTAs. Governments at all levels also need to promote information and communication about opportunities and challenges when Vietnam joins a new-generation of FTAs in order to avoid over-optimism. The belief that the participation in new generation FTAs (for example CPTPP, EVFTA) will automatically bring benefits, thereby having the thought that difficulties and challenges are overlooked, will easily fall into subjective psychology, and will be passive to the competitiveness of foreign partners during execution.

- In order to improve the effectiveness of trade promotion and investment promotion programs, Hanoi needs to strengthen coordination with central ministries, agencies, branches, embassies and Vietnamese trade deals abroad and Vietnamese trade deals in Vietnam, provinces and cities across the country to limit individual activities to avoid overlap, duplication and waste of resources

Focus on supporting enterprises to find sources to import goods, raw materials, supplies and components for production inputs for substitution in case the supply is affected by the epidemic; Screen, search and expand new export markets to reduce dependence on the Chinese market; diversify promotion activities abroad (attending fairs and exhibitions; penetrating into the distribution system; promoting exports through e-commerce channels, promoting online trade, etc.); Maximize the advantages and incentives of trade agreements, especially the CPTPP and EVFTA Agreements

Promote the provision of information and guidance to businesses: information on the market, industry (especially analysis and assessment of the markets after the impact of the Covid 19 pandemic), regulations, standards, requirements for import conditions of other countries, international commitments, free trade agreements, etc; enhance the competitiveness of enterprises

Concentrate on implementing promotional activities to assist businesses in increasing added value for products; knowledge dissemination, training, market training, brand promotion and development, traceability of origin; Enhance business support for promotion activities, accession and advanced technology transfer.

Closely monitor the progress of trade remedy lawsuits between the new generation FTA markets and Vietnamese exporters in general and Hanoi in particular in order to have a timely response; Complete the national standard system of imported goods, especially quality standards, environmental standards and hygiene safety standards for domestic consumers; Operate an effective early warning system for imports from new-generation FTAs' markets.

- To promote the advantages of human resources and technology for investment development in production and export of products with high processing level, high technology content and great added value to improve export efficiency, Hanoi needs to have a policy on attracting qualified scientists and managers and rewarding for their creativity and dedication. Resources in terms of intelligence and technology should be given priority to production and exports because Hanoi has a large trade deficit and large consumption of foreign currency; Hanoi's exports are not commensurate with its potential advantages.

- Keep connecting labor supply - demand to create a labor source to meet the demand of export-manufacturing enterprises. The Department of Labor, War Invalids and Social Affairs should be the focal point to promote research on labor supply and demand for the development of the city's labor market; Organize on job sessions to create a quality workforce; Announce activities of the Exchange to universities, colleges, vocational schools and businesses; Organize extensive talk shows to answer businesses about recruitment and personnel issues, and help employees understand and meet the needs of the business to have suitable job positions.

- Enhance investment attraction to develop infrastructure and services for export business. The Department of Industry and Trade should coordinate with the Department of Planning and Investment to give guidance in investing and building logistics service infrastructure projects in Hanoi.

Management Board of Hanoi Industrial Parks and Export Processing Zones: guide and monitor the progress of construction of Industrial Parks in the city.

The Hanoi Center for Investment, Trade, and Tourism Promotion will host and coordinate with relevant agencies in: completing the database system in all four fields of investment, trade, tourism and agriculture; focusing on data collection and forming about business lines, enterprises, useful information that businesses are interested in. On that basis, effective connection for businesses will be organized to help businesses understand basic and necessary information and to find out interested partners, markets and industries.

- Restricting imports of non-essential commodities that cause foreign currency waste and trade deficit in Hanoi. Many a domestic product produced with fine designs and quality still finds difficulty in consumption. This is, on the one hand, due to the psychology of buying foreign goods from a part of citizens, partly because domestic goods are not as good as foreign ones. In order to limit the import for non-essential products, the most important thing is to improve the competitiveness of domestic products, promote the promotion of domestic products, and educate people and raise their awareness of purchasing domestic goods in stead of imported goods.

4.2.2. Solutions for enterprises

- Enterprises must carefully study FTAs, especially new-generation FTAs such as CPTPP, EVFTA to fully exploit the benefits brought by FTAs. The first thing that Hanoi enterprises as well as national enterprises needs to do is to carefully study the commitments of the agreement, especially those related to their business fields, including the roadmap to reduce and eliminate tariffs on goods of Vietnam and the countries participated in the agreement rules of origin of the agreement, commitments to open markets in the fields of services and investment, regulations on customs procedures and trade facilitation, etc. In addition to the benefits, it is also necessary for domestic enterprises to proactively grasp and prepare in advance for the adverse effects caused by FTAs, especially the increased competition in the domestic market.

- Improving the competitiveness of Hanoi's goods is a very important issue when implementing new-generation FTAs, especially for advantageous items. In international trade, both relative advantage, absolute advantage and competitive advantage must be considered. For new-generation FTAs, goods include not only finished-products but also inputs and intermediate components. Furthermore, competitive thinking must be aligned with the value chain which contains price, quality, and ability to fulfill large orders, on-time delivery, distribution channel organization, and responsive serviceability to economic shocks. On that basis, it should develop and implement a strategy to produce products with competitive advantages of Hanoi in line with requirements

of the international market. Here with, participating and building more competitiveness in new generation FTAs is to gradually bring Hanoi's goods to compete on a global level.

Hanoi enterprises need to focus on strengthening competitiveness, overcoming weaknesses in unprofessionalism, unequal quality, production process, etc. In particular, they should focus on investment in technology, develop appropriate strategic products, and simultaneously take advantage of development cooperation with member countries in FTAs. It is also advisable to focus on effectively taking advantage of the benefits of Certificate of Origin (C/O) in exporting goods, especially to fastidious markets, for example, Japan, Korea, Australia, and the EU.

- Enterprises must create a differential in products and goods compared to their competitors in the FTAs that Vietnam participates in. The key issue here is to develop product diversification, regularly innovate to increase attractiveness; Invest in improving product quality and meeting the standards of the imported country; Effectively exploit the market access channel through the network of Vietnamese overseas communities in general and markets where Vietnam has an FTA in particular.

- Strengthen the link between Hanoi's enterprises and domestic enterprises, especially those with vertical and horizontal relationships, forming linkage chains in the stages of production, processing and export to support or take advantage of each other. To further promote the role of industrial associations in providing market information, promoting products, and capturing market demand in imported countries.

5. DISCUSSION AND CONCLUSION

Although Hanoi's imports and exports have achieved certain accomplishments, many limitations that are not commensurate with the potentials and advantages of a capital city still exist. Vietnam's participation in FTAs, especially new-generation FTAs with many incentives, is a good opportunity to exploit to boost Hanoi's exports towards trade balance and a greater contribution to the country's economic development for building a more civilized and modern capital.

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ASSESSMENT OF THE SITUATION OF THE GREEN ECONOMY IN VIETNAM

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Abstract: *Green economic development is one of the fundamental shifts in the process of restructuring the economy with the goal of sustainable development. In Vietnam, the concept of green economic development has been clearly manifested throughout many legal documents, such as Resolution No. 41 – Resolution of the Politburo, Resolution No. 24 - Resolution at the 7th Conference of the Central Executive Committee, Session XI... In this process, Vietnam has gained many important achievements but also faced many challenges. This article focuses on clarifying of some issues in the process of building a green economy in Vietnam in the period from 2012 to 2019.*

Keywords: *green economy, sustainable development.*

1. INTRODUCTION

After over 30 years of renovation, Vietnam has achieved outstanding achievements of historical significance. From a poor, war-torn country and a closed, subsidized centralized planning, Vietnam has come out of underdeveloped status, becoming a middle-income developing country. The success of over 30 years of innovation also places greater expectations and burdens on the future. The goal of Vietnam as stated in the Constitution is “Rich people, powerful country, democracy, justice, and civilization”. Vietnam has a strong aspiration that by 2035 it will become a modern industrialized country, towards prosperity, creativity, justice, and democracy. With that spirit, one of the important transformations to achieve the above goal, Vietnam has identified the need to modernize the economy; develop environmentally sustainable and strengthen the capacity to respond to climate change; ensure equity and social inclusion; Economic prosperity goes hand in hand with environmental sustainability... To achieve this goal, it has also reflected the perspective of sustainable development throughout the socio-economic development strategies at many party congresses., notably Resolution No. 41 - NQ/TW dated November 15, 2004, of the Politburo, aiming to strengthen environmental protection in the period of industrialization and modernization of the country; Resolution No. 24 - NQ/TW dated June 3, 2013, on proactively responding to climate change, strengthening natural resource management and environmental protection, at the 7th Conference of the Central Committee, term XI..

However, because of many subjective and aim reasons, the economic development model in Vietnam in the recent period, although there has been a shift, is still mainly in breadth, using many input factors. For the development process. In the new situation, changing the development mode towards green economic development is an alternative approach.

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2. LITERATURE REVIEW

In the world, the terminology “green economy” has been used for a long time. In 1989, the terminology appeared in the report “Blueprint for a Green Economy” presented by a group of leading environmental economists to the UK Government. However, this terminology has become only popular when it appeared in the report of the United Nations Environment Program (UNEP) in 2011, in which the terminology is defined as follows: *“Green economy is the economy that enhances human well-being and social equality, while significantly reducing environmental risks and ecological deprivations. To put it simply, green economy has low emissions, efficient use of resources, and is aiming at social equality.”*

According to the Green Economy Coalition - 2012 cited in the study *“A guidebook to the Green Economy”* of the United Nations: *“A green economy is one that creates a better quality of life for all people within the ecological limits of the Earth.”*

In addition, in June 2012, the concept of “green economy” continued to be used in the United Nations Summit on Sustainable Development in Rio de Janeiro, Brazil, with the main connotation of “friendly environment” or used in association with sustainable development activities such as green production, green consumption, green lifestyle, green products...

According to Diyar et al. in the study *Green Economy - Innovation - Based Development of Kazakhstan in 2014*: *“A green economy is an economy where the growth of people’s welfare and employment is provided by state investment and society, ensuring the reduction of emissions and environmental pollution, and stimulating the efficient use of energy and resources, and preventing any harm to biodiversity and ecosystems.”*

In Vietnam, in 2012, the term “green economy” appeared in Decision No. 1393/decision on “Approval of the national strategy on green growth” which mentioned the terminologies such as: green industries, green economic development sectors, green economic standards, green economy. Moreover, in the Law of Environmental Protection in 2014, the terminology “green economy” appeared once in Article 48, Chapter IV - Responding to climate shift. And up to the Law of Environmental Protection in 2020, this terminology was still referred to in Article 5 - State Environmental Policy Acts and Article 150 - Green bonds. Thus, the terminology “green economy” has been referred to often in many legal documents, clearly demonstrating the guiding position of the Party and Government in the urgency to build a new model of economic growth in Vietnam.

However, the terminology “green economy” has not been officially defined in the Vietnam’s legal documents. Moreover, these documents also mention the terms “green growth”, “circular economy”, “sustainable development”. Therefore, the confusion between concepts and terminologies is also one of the things that makes it difficult to determine the evaluation criteria as well as to develop policies to implement the process of green economic development in Vietnam.

Nevertheless, based on the existing definitions of the green economy, as well as the guidelines of the Government of Vietnam, it can be seen that “green economy” is the terminology used to describe sustainable development, ensuring the harmony between economic benefits and environmental protection. The green economy development needs to be based on three basic pillars: economic development - environmental sustainability - social justice. In the green economy, natural resources - the environment are considered a decisive factor for economic growth, improving

value chains, bringing stability and long-term prosperity. If the “brown” economy focuses on GDP growth, GDP per capita and, is based on resources, the green economy takes the resource-environment target as the top goal. The green economic model is proven to be more effective in the long run than the “brown” economy and is being targeted by many countries. The green economy includes the following basic characteristics:

- A green economy is an economy that exploits and uses resources efficiently
- A green economy is an economy that aims to reduce greenhouse gas emissions and respond to climate change.
- A green economy is an economy that applies advanced and environmentally friendly technologies.

For the sake of consistency of of this article, according to the author’s opinion, the concept of UNEP presented above has fully and accurately reflected the basic characteristics of the term “green economy”.

3. METHODOLOGY

In the article, the author has used many theoretical research methods - this is a group of methods of collecting scientific information based on studying existing documents and documents and by manipulating logical thinking. To draw necessary scientific conclusions, which can be mentioned as: Method of analysis and synthesis, method of classification and systematization to clarify theoretical and practical issues of the topic.

Analytical and synthetic method: Through this method, the author conducts research on various documents related to green economic development by analyzing the content of each aspect of green economic development to find out. Deepening the reality of green economic development in Vietnam in the period 2012 - 2019.

Classification and systematization method: In the article, the author has used the method of classification and systematization to classify aspects of green economic development according to the goals to be achieved. From there, the author arranges the research contents into an orderly and logical system to clarify the contents of green economic development more fully and comprehensively.

4. ASSESSMENT OF THE STATUS QUO OF GREEN ECONOMY IN VIETNAM

First, on the issue of economic growth:

In 2012, Vietnam’s GDP growth rate reached 5,25%, lower than the target (6.3%) and was the lowest level since 2000 due to the effects caused by the global financial crisis in 2008. The growth rate in the following years has improved significantly and by the year 2015, the GDP of the economy had reached 154,51 billion USD with a growth rate of 6,68%. By 2016, GDP growth rate had decreased slightly, breaking the continuous uptrend with an increase of only 6,21%. However, in the context of the world economy in 2016 with many unpredictable changes, along with the domestic economy heavily affected by climate change (the marine environmental incident in the Central Region, the drought in the South and Central Highland), the growth mentioned above was still considered a success and was the foundation for the country’s economy and to grow stronger in the following years. Indeed, the GDP of the following years had outstanding growth and by

2019, although this indicator had a downward trend compared to 2018, it still reached 7,02%, higher than the target set by National Assembly (in the range of 6.6% - 6.8%).

An increase in GDP will also result in an increase in GDP per capita. Vietnam's GDP per capita in 2019 reached 2.715,28 USD/person/year, an increase of 5,8% compared to 2018 and an increase of 56,48% compared to 2012. This was a very encouraging growth. However, only in the period of 2012 - 2014 and the period of 2017 - 2018, GDP per capita had a higher growth rate than the growth rate of GDP, which shows that Vietnam's labor productivity had increased over time but it was not consistent over the years and was not stable.

Table 1: Some indicators of green economy

Criteria	Indicators	2012	2013	2014	2015	2016	2017	2018	2019
1. Economic growth	GDP (billion USD)	129,63	136,66	144,84	154,51	164,11	175,28	187,69	200,86
	GDP growth rate per year (%)	5,25	5,42	5,98	6,68	6,21	6,81	7,08	7,02
	GDP per capita (USD/person)	1.735,15	1.886,69	2.030,28	2.085,01	2.192,17	2.365,52	2.566,45	2.715,28
2. Environmental quality	CO ₂ emission (million tons)	147,27	153,63	168,56	209,20	223,87	222,13	257,86	285,90
	CO ₂ emission growth (%)	-1,17	4,32	9,72	24,11	7,01	-0,77	16,09	10,87
	CO ₂ emission per capita (tons/person)	1,64	1,69	1,84	2,26	2,39	2,35	2,70	2,96
	CO ₂ emission per GDP (kg/USD)	1,14	1,12	1,16	1,35	1,36	1,27	1,37	-
3. Natural resources	Ratio of forest coverage to total national area (%)	44,05	44,48	44,91	45,35	40,84	41,45	41,65	41,89
	Growth rate of water usage (%)	6,78	10,58	6,7	7,62	8,75	8,43	7,71	-

(Source: WB)

Second, the quality of the living environment.

It can be seen that the GDP growth rate of Vietnam as well as the growth rate of GDP per capita are very encouraging, but whether the high growth rate is accompanied by an improved quality of living environment, is one of the fundamental issues in building a green economy.

Through the data table, CO₂ emissions in Vietnam continuously increased, especially in the period 2014 - 2015 and period 2018 - 2019. In 2019, the CO₂ emissions reached 285,90 million tons, increasing 94,13% in comparison to 2012. This increase came mainly from the energy sector (including traffic and transportation activities, fuel burning, dispersion during extraction and fuel transportation); followed by agriculture, and finally by industrial processes and product consumption.

Emissions per capita and CO₂ emissions per GDP have both increased over time. Although the population of Vietnam has continuously increased with an average annual rate of about 7,4%, it can be seen that the emission level per capita has increased from 1,64 (tons/person/year – 2012) by 80% in 2019, reaching 2,96 (tons/person/year), an average of more than 10%/year. In addition, for every additional dollar of GDP generated, the amount of CO₂ released into the environment is increasing (in 2018 it reached 1.37 kg/USD – Table 1).

In addition to the problem of CO₂ emissions, the problem of fine dust pollution (defined by the concentration of fine dust PM_{2,5}) is also a concern in Vietnam. However, the data in Vietnam is still incomplete and fragmented, and some localities do not have measuring stations, causing

incomplete national data. However, according to statistics on the “current state of air quality” in 3000 cities around the world, the number of cities with fine dust pollution (over $10 \mu\text{g}/\text{m}^3$ - according to WHO standards) accounted for 64%, of which Hanoi and Ho Chi Minh City always rank high in air pollution.

The cause of the increase in $\text{PM}_{2.5}$ fine dust concentration in big cities has been pointed out by the Ministry of Natural Resources and Environment indicating six basic problems: (i) emissions from motor vehicles; (ii) the construction activities and transportation of construction materials and wastes without proper coverage; (iii) burning of straw and waste; (iv) use of fossil fuels from industrial facilities; (v) the use of bee-hive charcoal stoves in daily life and business; (vi) the effects of climate change.

Third, the issue of natural resources.

As for the forest area, it can be seen that in the period 2016 - 2019, the area of forest coverage has continuously increased. In 2016, the forest area reached 13,52 million hectares with a coverage of 40,84% and by 2019, the total forest area of Vietnam has increased to 14,6 million hectares and reached a forest coverage ratio of 41,89%. Although the forest area has increased, the increase doesn't appear to be high over the years. There are many reasons that caused the forest area not to grow as expected, include: excessive exploitation (50%); transformation of forests and forest land into agricultural production land (20%); nomadism and poverty (20%) and burning forest, natural disasters and hazards (10%).

In addition, in urban areas of Vietnam, the density of trees is still very low, especially in large cities, when it is only 1/5 - 1/10 compared to the world standards. According to data from the General Department of Forestry, the ratio of trees per person in big cities in Vietnam is between 2 and 3 m^2/person , while according to United Nations standards, the ratio index trees/person is at least 10 m^2/person . This is one of the reasons why the air quality in big cities is poor, the climate is often hot, affecting people's health.

Regarding clean water: although the country has many rivers and streams (about 3.450 rivers and streams) and spreading evenly from north to south, along with more than 2.900 surface water reservoirs and hydroelectric reservoirs... with a capacity of up to about 65m^3 , Vietnam is considered as a country with rich water resources. Even so, Vietnam's internal water resources on average are poor, at only $3.840 \text{m}^3/\text{person}/\text{year}$, lower than the global average by $400 \text{m}^3/\text{person}/\text{year}$.

The reasons for the above may be as follows: Firstly, Vietnam is often located at the downstreams of large rivers, making it dependent on water exploitation activities of countries in the upstream regions, and exposing it to many risks in the process of using water resources, especially in big cities such as Hanoi and Ho Chi Minh City. Secondly, although Vietnam's surface water resources are relatively abundant, it is not clean water for eating and drinking because the water in rivers, streams, ponds and lakes is heavily polluted. Even groundwater in many places today is becoming polluted and in shortage due to overexploitation. Third, wastewater treatment is also a big challenge for Vietnam. It is estimated that in Vietnam, on average, about 80% of the water supplied for domestic use becomes domestic wastewater, but the rate of treated domestic wastewater is only about 10% - 11% of the total amount of urban wastewater.

5. DISCUSSION AND CONCLUSION

In order to bring Vietnam's economy to a fast and sustainable development, promoting a green economy is a mandated requirement. This is a new development method, superior to the traditional brown economy-based development method, capable of bringing great socio-economic benefits. However, the transformation of the model of the economic growth, namely the building of a green economy - a pioneering trend for even developed economies, always poses many difficulties and challenges so that Vietnam needs a meticulous preparation. To promote the development of a green economy, Vietnam's government may focus on the following basic issues:

Firstly, to complete the system of evaluation criteria for the green economy.

Determining the exact criteria for building a green economy plays a predominant role in providing guidelines and solutions to achieve the goals. Therefore, the Government needs to complete and issue a set of indicators to measure Vietnam's green economy soon. Although this step has been done early on, for example, in 2010, the Prime Minister issued Decision No. 43/2010/Decision promulgating the set of National Indicators that includes the green GDP target. But in the mean time, with many problems occurred in connection with methods, data, and human resources, these indicators have not been used. In addition, in order for the indicators to measure the green economy to be highly practical, it is necessary to include these indicators in the system of socio-economic development indicators and be ready to apply the set of indicators of green growth targets in conjunction with the formulation of socio-economic development plans in the following years, specifically the period 2021 - 2025.

Second, to build a green economic development process at the national and local levels.

One of the basic issues of green economic development is the environmental protection. However, each province and city has its own characteristics in terms of geography, level of economic development, level of pollution, etc. A general development policy at the national level will not be adequate to promote the development of green economy. Therefore, the Government needs to have a policy that requires the coordination of ministries, agencies as well as local governments to develop specific plans, suitable for each agency and locality.

Third, to encourage the application of green scientific technology to daily life and production.

One of the tools that the Government can use to limit the use of products and goods that pollute the environment is an environmental tax. Therefore, the Government needs to continue to improve this taxation by reviewing to adjust the appropriate tax rates and tax payers, which not only creates a source of revenues for the State budget but also affects positively the people's consumption habits in increasing the use of environmentally friendly goods.

In addition, the State should have policies to support finance, training, information, etc. to help enterprises transform production methods, increase the application of scientific technology, and eliminate outdated production methods, reduce the use of fossil fuels such as coal, petroleum, gas... and replace them with clean and renewable energy sources.

Fourth, to strengthen communication, change thinking and behavior of participants in the economy to reduce pollution levels.

To build a green economy and move towards a sustainable economy, one of the core issues is to change the life-style and production habits of people and businesses. Therefore, it is necessary to raise

the awareness of every citizen so that they can truly become green workers and green consumers. For example, the use of public transport instead of personal vehicles, or the problem of burning straw, garbage, and non-sorting out the garbage at the source and before dumping may be addressed

Currently, the Covid-19 pandemic has caused heavy impacts on the world economy in general and Vietnam's economy in particular, Vietnam's economic growth rate in 2020 has a sharp decline reaching only 2.91%. This has reduced the average growth rate for the whole period 2016-2020. Although this positive growth is still a bright spot in the serious epidemic environment and Vietnam has risen to be one of the few countries with this achievement, this poses a significant challenge for Vietnam to build a green economy.

Although many economic indicators have been adversely affected, the Covid-19 pandemic has caused a sharp decrease in the rate of CO₂ emissions in the world in general and in Vietnam in particular. This is definitely an advantage of this pandemic when the problem of global climate change is going on. Thus, it should take into account that the higher the economic growth of Vietnam, the more environmental hazards and the risk of resource scarcity will occur.

In summary, the development of a green economy has been identified by Vietnam as one of the important factors for a sustainable economic development that will ensure stability and prosperity for the country. However, through the research, it is recognized that Vietnam is still in the process of defining a green economy, while lacking experience in macro management of the green economy. Therefore, the author of this paper while raising a number of theoretical and practical issues in the process of developing a green economy, has proposed some recommendations to promote the green economy in Vietnam in the near future.

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LAW ON PROPERTY TAX IN VIETNAM WITH THE ECONOMIC DEVELOPMENT

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Abstract: *The law on property tax is a legal tool that establishes the State's right to collect taxes on taxable assets. It not only contributes to ensuring revenue for the state budget but also make an important contribution to the economic development and sustainable business process in the context of globalization. In Viet Nam, the law on property tax still has shortcomings such as 2 specific tax laws including the law on agricultural land use tax and the Law on non- agricultural land use tax and practical implementation. In addition to the land use tax, other assets like buildings, construction entity on land...are not taxed under property tax in Vietnam. Therefore, this paper research on the current legal system of property tax in Vietnam to suggest several solutions to complete.*

Keywords: *assets, taxable property, property tax, the law on property tax.*

Tóm tắt: *Pháp luật về thuế tài sản là công cụ pháp lý xác lập quyền thu thuế của Nhà nước đối với tài sản chịu thuế, không chỉ góp phần bảo đảm nguồn thu cho ngân sách nhà nước mà còn góp phần quan trọng vào quá trình phát triển kinh tế, kinh doanh bền vững trong điều kiện toàn cầu hoá. Ở Việt Nam hiện nay pháp luật về thuế tài sản còn có những bất cập thể hiện thông qua pháp luật về thuế sử dụng đất nông nghiệp và thuế sử dụng đất phi nông nghiệp với hai Luật thuế cụ thể và từ thực tiễn thực hiện. Ngoài thuế sử dụng đất, với các tài sản khác như nhà ở, các công trình xây dựng trên đất,... ở Việt Nam chưa đánh thuế - với bản chất là thuế tài sản. Do đó, tác giả bài viết đã nghiên cứu chuyên sâu hệ thống pháp luật về thuế tài sản hiện nay ở Việt Nam để đưa ra giải pháp hoàn thiện.*

Từ khoá: *Tài sản, tài sản chịu thuế, thuế tài sản, pháp luật về thuế tài sản.*

1. INTRODUCTION

Assets are material wealth not only for consumption but also an indispensable material resource to carry out business activities. Property is an investment resource and is also one of the goals to be achieved by business investors. Property and common property relations are governed by legislation, including the law on property tax.

Property exists in the form of tangible property and intangible property. Property is always attached to a certain subject (organization or individual), owned by that subject (has sufficient ownership, use and disposition rights) and could identify the taxable subject, the taxpayer.

Assets are the quantifiable wealth owned by an organization or individual at a certain time, as opposed to the income of an organization or individual, which is the amount of wealth they have acquired in a certain period of time. Therefore, the property tax is also different in nature from the income tax.

Property tax is the kind of tax that takes property as an object to be taxed (Do Duc Minh et al, 2010). Property tax is based on property ownership (Nguyen Thi Lan Huong, 2015). In nature, the property tax is a tax on assets that could identify the owner or who have the right to use (for example, in Vietnam, organizations and individuals have the right to use land). In different countries,

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in different periods, this tax has different specific names according to taxable assets such as rice-field tax, land tax (agricultural land use tax, non-agricultural land use tax), house tax... Revenue from property tax, which is mainly real estate tax, usually accounts for a small proportion of total budget revenue but it is necessary revenue for local governments to perform their functions and tasks.

Property tax revenue accounts for an average of 3-4% of total tax revenue in developed countries, in some countries this rate is up to 8% like Japan. In developing and transition countries, the rate is lower. In the period 2005-2013, the ratio of property tax revenue (annual tax, during the use of property) to GDP in developed countries and some developing countries in Asia is about 2% of GDP. In Vietnam, the annual tax collected during the use of assets (non-agricultural land use tax, agricultural land use tax) accounts for about 0.036% of GDP and has only been adjusted for soil (Do Thi Thanh Huong, 2019).

Property taxes are normally levied on property which the owner benefits from (preserved, increased in value, etc.) by inheriting benefits from public services of the State.

The law on property tax includes the legal regulations governing the relationship of collection and payment of property tax between the State and the property tax payer.

Property tax relations are associated with the process by which the State exercises the right to collect tax with taxable properties on the basis of legal provisions on property tax in the Tax Law (documents promulgated by the National Assembly- the highest state authority).

The property tax legal relationship is a submissive relationship. The State has the right to collect tax through the competent authority, the property taxpayer is obliged to pay tax when there is enough base.

So what role do property taxes and property tax laws play in the process of sustainable economic and business development in the context of globalization? What is the current status of property tax legislation in Vietnam? And what are solutions to complete the law on property tax in order to make a legal tool to contribute to sustainable economic and business development?

To answer the above questions, the article has researched the theory of property, property tax and the law on property tax, assessed the current status of the law on property tax in Vietnam, made recommendations to improve the law on property tax in Vietnam, creating a perfect legal basis for the State to collect tax on taxable property using comparative methods (compare the theory of property tax, the law of property tax with the practice of property tax collection, and other countries), analysis and synthesizing methods.

2. ROLES OF THE LAW ON PROPERTY TAX

The law on property tax has some roles in the process of sustainable economic and business development in the context of globalization.

Firstly, the law on property tax is a legal tool that determines the State's right to collect property tax, contributing to ensuring revenue for the state budget. This budget is used to promote sustainable economic and business development, satisfies the requirements of international economic integration, and reduces inequality in society.

Secondly, the law on property tax is a legal tool to regulate production and careful use of taxable assets, thereby ensuring that taxable assets are used effectively. It promotes activities of using assets for development to create financial benefits, and regulate production and using behavior for limited and scarce assets (land).

Land tax is the first kind of property tax that is mentioned. Land is a limited and scarce property that plays an extremely important role in social economic development. So the law on land tax has to ensure using land effectively. It means that land could be transferred from inefficient users to more efficient users or land could be accumulated and focused on applying science and technology to production, especially agricultural production. Vacant land, unused land should be imposed heavy tax on in order to avoid the cost of this limited and scarce resource.

Besides land tax, some countries also impose taxes on houses, construction entity on land... Thereby, the law on property tax is a legal tool to limit speculation, raising capital source for production and business, contributing to sustainable economic development.

Thirdly, the law on property tax is a legal tool to regulate taxable property relations, thereby regulate property like real estate. It regulates financial resources for investment in assets, eliminate financial sources investing in speculative assets and promote financial sources investing in business assets. As a result, real estate market could be more transparent, creating good conditions for sustainable development.

When economic and social conditions develop, the population classes have the ability to accumulate a large amount of assets (mainly real estate: houses, land) mostly for speculation. On the contrary, people who need to use them are difficult to access directly. Since then, there is inequality in the opportunity to access housing, a basic human right. In other words, when an asset is not used to generate profit, but only to maintain its existence, it is not added value. Therefore, combating real estate speculation is an urgent issue. It is possible to use the property tax as a tool to combat this situation (Tran Thi Be Duyen, 2020).

3. THE CURRENT STATUS OF THE LAW ON PROPERTY TAX IN VIETNAM

In Vietnam, property is defined as things, money, valuable papers and property rights (property rights are rights valued in money, including property rights to the subject matter of ownership rights, intellectual property rights, land use rights and other property rights). Assets include immovable and movables. They could be existed assets and assets formed in the future (National Assembly of the Socialist Republic of Vietnam. (2015).

Therefore, taxes belonging to the property tax impose on existing assets including agricultural land use tax and non-agricultural land use tax. These taxes have been regulated by 2 laws: Law on Agricultural Land Use Tax, Law on Non-Agricultural Land Use Tax. These Tax Laws are also concretized and guided for implementation by legal documents (Decree of the Government, Circular of the Ministry of Finance...).

Land is the natural resource of each country. It is not possible to increase in quantity but through the action of land users, land has the ability to be productive in perpetuity. So most countries impose tax on land. In countries where the law states that land is a commodity, which can be bought and sold on the market, the property tax on land is often called land tax. However, in some countries like Vietnam, the law stipulates that the entire citizen owns land and the State represents the owner and uniformly manages it. Organizations and individuals, that have land use rights, are allowed to buy, sell, and exchange land use rights on the market. In this case, this tax is usually called land use tax that is a tax imposes on land profitability or the value of land use rights.

Current status of the law on agricultural land use tax in Vietnam

Agricultural land use tax is prescribed in the Law on Agricultural Land Use Tax 1993, Ordinance on additional tax on households using agricultural land in excess of the area limit No.

31-L/CTN 1994 of the National Assembly Standing Committee, detailed regulations by Decrees of the Government, Circulars of the Ministry of Finance, Resolution of the National Assembly on the policy of exemption from tax on agricultural land use.

In the process of implementing the law on agricultural land use tax, there are some problems.

Firstly, the Law on Agricultural Land Use Tax, the Land Law and guiding legal documents are the legal basis for organizations and individuals using agricultural land pay agricultural land use tax to the state budget, thereby contributing to the implementation of policies on agricultural, farmer and rural development.

Agricultural land use tax is a fixed levy determined on land classes, forcing land users to use limited assets reasonably and effectively. It is meaningful when agricultural production is an important industry in Vietnam. It encourages organizations and individuals to participate in agricultural production activities for economic development, implements agricultural, farmers and rural areas development policies.

Regulations on exemption from agricultural land use tax for non-profit agricultural production activities and no tax on agricultural land use according to the Resolution of the National Assembly aim to reduce difficulties for households and individuals directly producing agricultural, forestry and salt products. In addition to improving the lives of people in rural areas, the regulations on exemption from agricultural land use tax according to the Resolution of the National Assembly also create a motivation to accumulate capital, increase investment, and promote agricultural economic development. It contributes to promote the process of restructuring the agricultural industry, producing agricultural goods on a large and efficient scale, improves the competitiveness of Vietnamese agricultural products in both domestic and foreign markets.

Secondly, the agricultural land use tax law is a legal tool that contributes to strengthening the State's management of agricultural land, in order to implement policies on agriculture, farmers and rural areas.

Through the implementation of the law on agricultural land use tax, the state agencies clearly recognize the real situation of land in general and land used in agriculture in particular, contributing to the management of land for agriculture effectively. It also encourages individuals, households and organizations to invest in agriculture, encourages the construction and development of large fields, farm economy, and accelerates the application of science, technology and technology in agriculture to satisfy the requirements of the market economy in the context of deeper and wider international economic integration and improvement of people's living standards.

Regulations on expanding the area of agricultural land use tax exemption have contributed to the implementation of the policy of government. This policy is that transforming the structure of agriculture and rural areas towards industrialization, promoting the strengths of each region; developing quality and efficient production of agricultural products; linking production with domestic and international markets in order to improve the efficiency of resource use (according to the Vietnam Sustainable Development Strategy for the period 2011-2020).

This regulation also attracts foreign investment capital along with domestic investment resources in agricultural production development, contributing to agricultural restructuring towards industrialization and sustainability.

Thirdly, the regulation on quotas for calculating agricultural land use tax is no longer appropriate in the current conditions because (i) the calculation of tax inside and outside the limit becomes complicated, making it difficult to declare, calculate, collect and pay tax; (ii) regulations on agricultural land use quotas used for tax calculation have limited large-scale agricultural production, investment and application of science and technology in agricultural production.

Fourthly, the regulations on agricultural land use tax exemption and reduction are complicated, especially regulations on agricultural land use tax exemption. In addition to the cases of tax exemption and reduction specified in the Law on Agricultural Land Use Tax, there are also tax exemptions and reductions according to the Resolution of the National Assembly, so there are often difficulties in implementation.

In addition to the cases of tax exemption and reduction specified in the 1993 Law on Agricultural Land Use Tax (Articles: 19, 20, 21, 22, 23), the National Assembly of the Socialist Republic of Vietnam has issued a Resolution on exemption and reduction of agricultural land use tax (Resolution No. 55/2010/QH12 dated November 24, 2010 on exemption and reduction of agricultural land use tax, effective from January 1, 2011; Amended and supplemented by Resolution No. 28/2016/QH14 dated November 11, 2016, effective from January 1, 2017). In June 2020 the National Assembly passed a Resolution to continue exempting agricultural land use tax (as prescribed) until the end of 2025.

In order to continue to exempt agricultural land use tax to implement policies of the Party and State on agriculture, farmers and rural areas, the National Assembly has continued to issue a Resolution on exemption from agricultural land use tax besides agricultural land use tax exemptions under the Law on Agricultural Land Use Tax.

Current status of law on non-agricultural land use tax in Vietnam

Non-agricultural land use tax, imposed on the area that organizations and individuals have the right to use, is adjusted by the Law on Non-agricultural Land Use Tax and guiding legal documents. During the implementation, there are some problems.

Firstly, the law on tax on non-agricultural land use is the legal basis for the State to exercise the right to collect taxes on individuals and organizations using non-agricultural land, determine the amount of tax that individuals and organizations use non-agricultural land use must be paid into the state budget. It not only ensures budget revenue but also be a legal basis to strengthen state management of land, and it encourages organizations, individuals and households to use land economically and effectively.

Secondly, the law on non-agricultural land use tax is a legal basis regulating business activities of special property “land use rights”, regulating the status of establishment and exercise of non-agriculture land use rights, reducing speculation, using land effectively. In addition, the law on tax on non-agricultural land use is also a legal basis, ensuring fairness for taxpayers, protecting vulnerable subjects with tax obligations and overcoming some inadequacies in tax policy for land.

Thirdly, some provisions in legal documents on non-agricultural land use tax are very complicated, so it is difficult to implement in practice or increase the cost of tax collection and payment activities. For example, there are some cases such as (i) a parcel of land with different locations has different tax base, (ii) the land within the quota and the land outside the quota have

different the tax rates, or (iii) the same parcel of land has both residential land, residential land in excess of the norm, garden land, encroached land... The calculation of land use tax in these cases is difficult. Too many social policies integrate into the non-agricultural land use tax law make the regulations on tax exemption and reduction difficult to implement.

Fourthly, the non-agricultural land use tax rate according to current regulations is very low and unreasonable. For example, the tax rates are 0.07% and 0.15% respectively for the land area exceeding the land use limit once to three times and more than three times. Tax rate for land used for improper purposes, unused land according to regulations is 0.15%. Tax rate for encroached, occupied land is 0.2% and no quota. These regulations have made the implementation of the law on non-agricultural land use tax unattainable. It leads to small budget revenue. Moreover, the purpose of strong regulation for people who own a lot of land is not effective. Taxes could not create motivation for land users to save land and use land effectively. Land that is not used efficiently for production and business, vacant land, land encroachment is still common, causing a waste of national resources.

Fifthly, not all taxable objects are covered, thus causing difficulties in the implementation process, omitting revenue from non-agricultural land use tax. The objective of the law on non-agricultural land use tax has not been achieved.

Advantages and disadvantages of the current law on property tax in Vietnam

Main advantages: (i) It is a legal basis for tax collection on land use, in which tax is mainly collected on non-agricultural land use, creating a stable domestic revenue source for the state budget, contributing to income regulation, reducing inequality in society; (ii) It strengthens land use planning for development and sustainable business; (iii) It is the legal basis for regulating the land use right. Organizations and individuals that use land must be responsible to the State and society. The more land they use (reducing others' chances of using it), the more taxes they have to pay. Non-agricultural land use is taxed more than agricultural land use. (iv) It is also a legal basis contributing to the regulation and management of the real estate market, makes this market public and transparent.

Main disadvantages:

Firstly, the law on property tax has not yet covered great value assets of individuals and organizations, which can be regulated by property tax, creating revenue for the state budget to formulate, complete and implement policies and strategies on socio-economic development (such as houses, construction entity on land...).

Secondly, regulations on land use tax are still inadequate.

In addition to the shortcomings of the law governing each land use tax mentioned above, in general, the law on land use tax in Vietnam still has problems.

(i) Due to the division of land into agricultural land and non-agricultural land, the tax law governing each type of land has a separate Law and guiding documents, but in practice there are land classified as agricultural land but used for non-agricultural purposes, or in some cases where it is difficult to determine which category, or when the purpose of use is changed... It leads to difficulties in the process of tax collection, tax administration and omission of taxable objects.

(ii) The agricultural land use tax law that stipulates the tax base in kind (kg of rice) is no longer suitable with the current conditions, inconsistent with the Land Law and with international practices.

(iii) The land data system is not very complete to serve as a basis for tax administration and tax collection on land, and has not yet achieved the adjustment purpose.

Thirdly, there are still regulations that are not really consistent between the law on agricultural land use tax, non-agricultural land use tax with the law on land and other related legal documents, so the implementation is difficult.

4. RECOMMENDATIONS TO IMPROVE THE CURRENT LAW ON PROPERTY TAX IN VIETNAM

Completing the tax law in general and the law on property tax in particular needs to have a theoretical basis, a practical basis and to ensure the increase in the state budget revenue. It also has to regulate the behavior of organizations and individuals in order to perform the State's functions and tasks. It is also required to be feasible and suitable to socio-economic development conditions and international practices.

In order for property tax to promote its role and objectives, there are some suggestions to perfect the law on property tax.

Firstly, it is not advisable to issue a law called Property Tax Law but could issue different tax law for different types of property that are subject to specific tax such as Law on land use tax, Law on housing and construction on land tax. There are some reasons:

- Each type of property has different characteristics, requiring appropriate legal regulations to regulate. For example, the adjustment to the land use tax must be different from the adjustment to the tax on housing, or the adjustment to the tax on automobiles... Therefore, using only one legal document to adjust taxes on many kinds of properties is difficult to design in terms of legislative techniques and difficult to effectively implement.

- Each type of property that is subject to property tax has different characteristics, requires different valuation methods, be applied different tax rates and different tax calculation methods. In addition, legal facts that make arising, changing, terminating various tax obligations also are different. For example, houses can be destroyed by fire, fall...while cars/aircraft/yachts may be damaged or disappear due to accidents...

Secondly, it is suggested to combine the Law on Agricultural Land Use Tax and the Law on Non-Agricultural Land tax into one document (Law on Land Use Tax), because:

- Land is divided by using purposes, including agricultural land and non-agricultural land, and any classification criteria are relative. In fact there are difficult cases to determine whether to be subject to agricultural land use tax or non-agricultural land use tax.

- The conversion between land types (for example, from agricultural land to non-agricultural land) could be done at any time when necessary conditions are met. Therefore, the same land parcel, when changing the using purpose, must change the legal basis to collect and pay taxes with different tax rates. The problem is that the law must clearly stipulate the time of conversion, the legal event that changes the tax obligations of user, the subject of the tax declaration and payment... while at present there is no clear document on this issue.

- One Law on land use tax will determine uniform regulation if land is not used, or used for improper purposes, or in case of encroachment on land...

Accordingly, the Law on land use tax must be redesigned, on the basis of the current Law on agricultural land use tax and the Law on non-agricultural land use tax. In which, it is necessary to clearly identify taxable and non-taxable subjects, cases of land use tax exemption and reduction, tax calculation methods, tax base, tax rates... It is necessary to increase tax rates, use the simple and easy to apply tax rate system to ensure transparency. The tax rate is changed according to the status of use and is progressive on the value and area of land used. It is recommended to apply high tax rates for unused land, improperly used land and encroached land. The tax base per 1m² of land should be at the market price.

Promulgating the land use tax law must overcome the existing shortcomings in the agricultural land use tax law and the non-agricultural land use tax law.

Thirdly, in Vietnam, besides taxing property on land, it is advisable to promulgate a Law on taxing houses and constructions on land. Other assets such as cars, aircraft, and yachts...should not be taxed until the socio-economic conditions are more developed, the state has the ability to manage income fairly. It is suggested to gradually expand the subjects to property tax according to the roadmap that is suitable to the level of socio-economic development and the ability to manage tax collection and payment. There are some reasons:

- Land is a rare and limited resource, a valuable tangible fixed asset. In order to achieve the purpose of taxing land, many countries, including Vietnam, have promulgated and implemented tax law on land. In Vietnam, it is a land use tax because the land is owned by the entire citizen and is managed by the State on behalf of the owner. Vietnam has experience and data, conditions for collecting land use tax.

- With houses and constructions on land, this is a type of real estate attached to the land and also a type of property that is not unlimited and must have to meet the minimum living needs of people – the right to have houses. Therefore, it is necessary to impose property tax on house not only to increase revenue for the state budget but also to manage and develop the housing fund, limit speculation, limit the fact that one person or group of people own too many houses leading to no opportunities for others, especially for the poor people to have houses. Moreover, property tax on houses and constructions on land will contribute to the development of efficient and sustainable real estate market.

Property tax on houses and constructions on land currently in Vietnam is feasible because there are bases for tax collection and management.

There has been a law on house tax in Vietnam (July 1, 1991, the State Council of the Socialist Republic of Vietnam issued Ordinance No. 54-LCT/HDNN8 on house and land tax). According to this Ordinance, house and land tax is the tax collected on houses and on residential land and land for construction. However, until now, taxation on houses has not been implemented in practice. In the past, the conditions were not met and the houses that are subject to impose tax were too few. Nowadays, houses have been built in large quantities, speculation has taken place widely and there is inequality in property rights. Therefore, the State should promulgate the Law on houses and constructions on land tax.

- Assets, that differ from land, houses and constructions on land such as cars, aircraft, yachts..., should not be property taxed in Vietnam at present because they are movables and it is very difficult to impose tax on movables. Principles when building tax laws for these properties are difficult to meet. The value of these assets decreases over time and during using process. So after every period - at most every tax year, the value of that property must be re-evaluated to determine taxes. It is a problem to ensure fairness or when the property disappears or is damaged... In Vietnam, in

addition to cars, aircraft and yachts are mainly owned by business as fixed assets, so property tax on these movables is not enough suitable.

Fourthly, it is suggested to promulgate specific property tax laws, such as the Law on Land Use Tax, the Law on house and construction on land tax, which must be consistent with the Civil Code, the land law, the Law on housing, the Construction Law, the Real Estate Business Law and other relevant legal documents.

5. CONCLUSION

Completing the current property tax law in Vietnam is necessary to overcome existing shortcomings. However, in order to make the property tax law to be an effective legal tool contributing to the sustainable economic and business development in the context of globalization, it is necessary to simultaneously carry out solutions on the basis of current situation studies. In addition, there should be synchronous actions, such as strengthening communication and supporting taxpayers when the property tax law is promulgated or amended; strengthening technological solutions in taxable asset management and tax administration; strengthening international cooperation activities in research, promulgation and implementation.

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ENHANCE THE ROLE OF THE CENTRAL BUDGET IN VIETNAM'S STATE BUDGET SYSTEM

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Abstract: *In the budget system, the central budget needs to ensure the leading role, maintaining the consistency and sustainability of the budget system. The leading role of the central budget is understood as the ability to centralize the account power of the central budget to carry out assigned tasks and controlling and regulating the fiscal relationship between different levels of budget, thereby, ensuring that the budget's resources are centralized, allocated and used effectively in accordance with the country's socio-economic development requirements in each period. In recent times, Vietnam has proactively implemented many solutions to redefine the role and position of budget levels in the State budget system. However, when analyzing and evaluating a long-term framework, the requirements to ensure the leading role of the central budget in Vietnam are met with risks and challenges. The article proposes a number of recommendations to ensure the leading role of the central budget in the State budget system of Vietnam in the coming time, contributing to guaranteeing the centralized mobilization and management of state budget resources, and effectively handling the requirements of socio-economic development.*

Keywords: *leading role of central budget, decentralization of revenue, local budget*

1. INTRODUCTION

The budget systems of different countries will be designed in different ways. Regardless of the design, in many countries it is shown that the central budget plays a central and dominant role in the budget system. In terms of resource concentration, the central budget holds the revenue sources that are widespread on a large scale. From the perspective of budget expenditure, the central budget is responsible for ensuring resources to perform the macro-economic tasks at national strategy level such as defense, national security, diplomacy, essential infrastructure, macroeconomic regulation, social security, etc. In Vietnam, the State Budget Law over the periods has gradually formed an important synchronous legal framework on state budget management, gradually approaching with generally recognized international practice. Accordingly, the role of the central budget in the basic budget system ensures resources to perform important tasks of the country, narrowing the disparity in socio-economic development between different regions. However, enhancing the leading role of the central budget in the budget system is still stated as the goal in the legal documents of the state

In the budget system, in order to perform the assigned functions, each budget level has its own functions and roles. Accordingly, both theory and practice in many countries have shown that the central budget needs to ensure the leading role, maintaining the unity and sustainability of the budget system. There are different ways of connoting the dominant role of the central budget

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in the budget system. The key role of the central budget is understood as the ability to centralize the account power of the central budget to carry out assigned tasks and to govern and regulate the fiscal relationship between different levels of budget, thereby, ensuring that the budget's resources are centralized, allocated and used effectively, in accordance with the country's socio-economic development requirements in each period. The assessment of the central budget's dominant role in the budget system is considered through the following four pillars:

- The ability to mobilize and develop resources of the central budget to exercise the power of fiscal policy set out for the central budget;
- The ability to effectively allocate and use resources of the central budget to carry out important and strategic spending tasks of the country in accordance with the priority orientations in the socio-economic development plan of Vietnam;
- The central budget's ability to use accessible resources to orient development and overcome the disparity in development levels among localities, regions and areas;
- The ability of the central budget to intervene, maintain stability, ensure security and safety of the public finances.

2. LITERATURE REVIEW AND PREVIOUS RESEARCH STUDIES

Research on budget decentralization and the role of budget levels in the budget system, including the central budget, has been mentioned a lot in articles, research works, both at home and abroad, as studied by Yinghua Jin, Jenny Lighthart & Mark Rider (2011), Robin Boadway & Anwar Shah (2007), Von Hagen, Jurgen (2007), Schiavo-Campo, Salvatore (2007), Jorge Martinez-Vazquez & Nguyen Van Minh (2012). These studies have shown that, in a state with many levels of government, decentralization of power, including fiscal power, to local governments always raises some problems related to fairness, equity, including vertical equity (rights go hand in hand with resources) and horizontal equity (harmony between regions).

Studies related to decentralization of state budget management and economic growth such as those of Martinez-Vazquez & Mac Nab (2003), Zhang, Zhihua and Jorge Martinez-Vazquez (2006), Arikan, Gulsun (2004). Some studies were conducted with multi-country data, while some studies focused on a specific country. Although the research results are inconsistent, most studies believe that decentralization of state budget management has a positive effect on economic growth. The possibility of increasing social welfare through decentralization of state budget management is also considered through an increase in the scale of spending on the state's public service provision functions such as education and health care.

Although there are different arguments for the need to decentralize some functions to local governments, in some respects many studies have also pointed out the need for fiscal centralization for central government to deal with issues of fairness. Antonis Adam & Manthos D. Delis & Pantelis Kammas (2008) argue that the central government should be responsible for implementing policies related to ensuring macroeconomic stability, addressing the goal of equity through redistributive policies, and in implementing policies to ensure optimal delivery of public goods and services between localities. In addition, a number of studies have also shown that the key role of the central budget is reflected not only in the size of revenue sources but also in areas where investment has a

spillover effect, connecting development for localities, or to perform important national strategic tasks, to support disadvantaged areas in socio-economic development, hunger eradication and poverty reduction.

Besides the general studies on budget decentralization as mentioned above, there have been many studies on budget decentralization in Vietnam so far. Martinez -Vazquez (2004) with a research paper in the international research program of the University of Georgia, analyzed the contents related to the decentralization of state budget management in Vietnam such as: The system of government, distribution granting spending accountability, decentralization of tax revenues, a system of subsidies from upper government to subordinates, budgeting processes with related issues such as participation, transparency and accountability, debt of local government. Accordingly, this study analyzed problems in the decentralization of state budget management in Vietnam, especially related to revenue decentralization, and offered suggestions for reforming Vietnam's state budget management hierarchy. Specific reform recommendations are as follows: i) clarifying the spending responsibilities of different levels of government, enhancing the ability to coordinate across government levels both vertically and horizontally; ii) effectively implement mechanisms for regulating and supplementing the budget to minimize the difference in fiscal capacity between localities, promote balanced and harmonious development across regions. vi nationwide; iii) improve autonomy, transparency and accountability in the budget implementation process.

Le Chi Mai's study (2016) on decentralization of state budget management for local governments in Vietnam uses research data from two provinces, Lang Son and Da Nang, to illustrate comments on decentralization of state budget management in Vietnam. The proposed solutions are (i) improving the distribution between the central and local levels for some taxes to ensure fairness; (ii) improve the method of calculating additional numbers according to a stable and public formula, and to supplement the objective, it is necessary to have an objective and clear basis; clearer regulations on local borrowing; (iii) for the system of budget allocation and expenditure norms in the locality, it is necessary to adjust to suit the actual fluctuations, ensure that each locality has sufficient capacity to provide essential public services at a moderate level; (iv) strengthen decentralization in the budget process, with the focus on separating the central budget from the local budget, eliminating the integration in budget implementation.

However, at present, there are still not many studies that directly refer to the budget system, the role of the central budget in the budget system, especially on the contents related to the content, requirements and factors affecting the leading role of the central budget in the budget system in Vietnam.

3. METHODOLOGY AND PROPOSED MODEL

This study is expected to provide the basis for proposing specific solutions to ensure the leading role of the central budget in Vietnam in the coming time, provide reference information for the revision research process, amending and supplementing the legal system on the state budget in the coming time, ensuring compliance with international practices and new development trends, especially with regard to State budget restructuring is being put in place.

To achieve the above goal, this study uses qualitative research methods mainly to analyze and synthesize theories, previous studies on the budget system, the role of budget levels; collecting

experiences from other countries on relevant contents, combining research on theoretical issues with assessing the current status of Vietnam as well as synthesizing and analyzing experiences of some countries in order to clarify issues related to the role of the central budget and the factors affecting the dominance of the central budget, on that basis to form a scientific basis for proposing solutions to ensure the leading role of the central budget in the budget system of Vietnam.

4. RESEARCH RESULTS

In recent times, Vietnam has actively implemented many solutions to redefine the role and position of budget levels in the budget system of Vietnam. The 2013 Constitution supplements new and important regulations of the state budget, budget system, national reserve, state financial fund and public financial resources. It also clearly stipulates: The state budget consists of the central budget and the local budget in which the central budget plays the leading role and ensures the national expenditure task. The 2015 State Budget Law also stipulates specific principles on decentralization of revenue sources, expenditure tasks and relationships between budget levels to ensure the leading role of the central budget. An overview assessment of the role of budget levels in Vietnam in recent periods shows that the central budget is basically guaranteed resources to perform important tasks of the country, narrowing the gap on socio-economic development among regions and localities.

However, when analyzing and evaluating a long-term framework, the requirement to ensure the leading role of the central budget in Vietnam is also facing a number of challenges and risks:

(i) The decreasing trend of the central budget revenue, the sustainability of the state budget revenue in general, and the central budget in particular, faces many risks due to its relatively large dependence on state budget revenues. non-renewable revenues, capital gains.

The share of central budget revenue in total state budget revenue in the period 2006-2010 was about 64.8% on average and in the period 2011-2015 decreased to about 61.3% and continued to decrease to about 54-56% in recent years, which is mainly due to the decreasing proportion of some revenues that the central budget enjoys 100%. A significant proportion of the revenues that the central budget is enjoying is of the nature from divestment revenues, from the after-tax profits of the state's investment capital in enterprises managed by central agencies, from the sale of public assets... These are one-time, non-renewable revenues and tend to decrease in the long term because the supply is limited. It is forecasted that revenue from import tax and from crude oil in the coming years will continue to decrease due to the reduction of tariff barriers, domestic refineries come into operation stably, reducing the scale of crude oil exports. The gradual decrease in the share of the central budget in the state budget revenue structure will narrow the role of the central budget in orienting and regulating the economy, especially in allocating resources for important infrastructure works and ensuring the harmonious development between regions.

(ii) The guiding role of the central budget in the implementation of strategic spending tasks tends to decrease, especially in investment for inter-regional works, while the efficiency of state budget expenditure is low and slow to improve.

In Vietnam, public investment has always accounted for the largest proportion of total social investment, at about 34.8% - 37.5% in 2018, 2019. However, in recent years, the average budget It

is increasingly difficult for the central government to secure resources for development investment. Investment expenditure of the central budget in the current period only accounts for about 21-22% of the total development investment expenditure of the state budget, while this proportion in the period from 2010-2017 has been up to nearly 40%. The decrease in the share of development investment spending of the central budget in the total development investment expenditure of the state budget is posing a number of challenges for Vietnam, especially for the requirement to continue to increase investment in important, essential and inter-regional infrastructure works to narrow the gap in development levels between regions, especially in the context of Vietnam's infrastructure where there are still many bottlenecks that need to be removed. Besides that, too large decentralization for localities in development investment also has the potential to easily lead to waste of capital when localities tend to invest in the same way in infrastructure and airports, seaports... While the balance of capital is very difficult, the allocation of public investment capital in general and the investment capital of the central budget in particular still has many shortcomings, is scattered, lacks focus. and waste. The budget allocation does not have a clear link between resources and goals to be achieved. Many national target programs have been implemented, but due to poor policy integration, the coordination between ministries, branches and localities is still lacking, leading to duplication of subjects. and content. In addition, the accountability of the state agency for the effectiveness of the investment project such as the profit level of the investor, the time limit for the investor to be authorized by the state to collect fees from service users, cost of using public works and services.

(iii) The ability to use the central budget in coordinating and overcoming the disparity in socio-economic development between regions is still inadequate and the differences in fiscal capacity among localities are still high.

Similar to many countries in the world, in Vietnam, there is also a vertical and horizontal imbalance in the local fiscal balance. Specifically, stemming from the reality of the level of budget allocation among different levels of government and socio-economic conditions, the 47 local governments in Vietnam (besides the 16 self-balancing localities) still are falling into a situation of insufficient disparity between revenue sources and decentralized spending tasks (vertical imbalance). The size of budget revenue in the provinces and cities has a huge difference, in 2019, the highest locality (Ho Chi Minh City) was 290 times higher than the lowest one (Bac Kan province). This shows that there is a large difference in the fiscal capacity among Vietnamese localities. Accordingly, it is very important to ensure the harmonization of fiscal capacity among regions of Vietnam through the additional budget mechanism to ensure horizontal equity. However, both the scale and implementation of the budget regulation mechanism in Vietnam are facing some problems that need to be adjusted.

(iv) Public financial security faces a number of challenges in the medium term, requiring proactive approaches to resources to expand the fiscal space of the central budget.

Ensuring security and safety of the public finances is one of the important requirements of the central budget. In Vietnam, the period since the global financial crisis in 2009, has so far been affected by macroeconomic fluctuations, including lower-than-expected GDP growth affecting the level of state budget mobilization compared to the estimate. With the increasingly narrow fiscal

space, the space for the central budget to intervene when needed will be very limited, for example, to support localities in the face of unexpected expenditure needs that are not included in the plan from the beginning of the year, such as expenses to overcome the consequences of natural disasters, unexpected epidemics, expenses to support localities that have lost revenue compared to the estimate due to difficulties in production and business in the locality. The continuous state budget deficit, which is mainly the central budget deficit, has shown that the central budget is increasingly dependent on borrowed capital to meet spending needs. At the same time, the state budget deficit for many years has caused the outstanding public debt of Vietnam to increase. Controlling the growth rate of public debt in the coming years is not easy when the pressure on central budget spending is forecasted to increase, especially the need to spend on infrastructure development investment, respond to climate change and achieve the goals of sustainable development. Along with that, borrowing costs will also be higher because access to preferential loans will become increasingly difficult. In addition, Vietnam is also facing various types of fiscal risks with increasing scale and severity, due to impacts from climate change, non-budget state financial funds or other financial risks. issues related to the government's "implicit" provisions, the challenges of population aging to the public finances.

The above limitations are caused by a variety of reasons, some of which are mainly: State management of finance is decentralized but not synchronized with the decentralization of other areas of state management; The influence of the socio-economic development process and promoting international economic integration lead to a gradual decrease in the size of revenues that the central budget collects 100%; The mechanism of decentralization of revenue sources and the method of revenues allocation between the central budget and the local budget reveal many shortcomings, affecting the level of access to resources of the central budget; The role of local authorities in mobilizing revenue is less active. Local governments are limited in their ability to raise revenues beyond centrally regulated revenue policies.

5. RECOMMENDATIONS

Some recommendations to ensure the leading role of the central budget in the state budget system of Vietnam for the coming time are as follows:

Firstly, it is advisable to reform the method of decentralization of revenues among different levels of government, and strengthen step by step the sustainability of the central budget's revenue scale. It is very important to ensure that the central budget is fully accessible, with an appropriate level of resources (the revenue that the central budget is entitled to is decentralized). As for the central budget, the central budget's revenue usually comes from two main types, that is, the central budget revenues inherit 100% and the revenues are allocated between the central and local governments. Accordingly, in order to ensure the dominant role of the central budget, it is necessary to have appropriate solutions for the following contents: (i) To clearly identify and justify the revenues to which the central budget is entitled 100% of revenue; (ii) Identify specific revenues that the central government will distributed to localities, ensuring that they are consistent with the characteristics and nature of each revenue according to generally accepted principles of budget revenue sharing; (iii) Forming an appropriate method for revenue allocation between the central budget and the local budget.

Currently, in general, the mechanism of revenue allocation in which the local budget of Vietnam is entitled to 100% of revenues basically adheres to the above principles. Along with that, the list of revenues with revenues distributed between the central budget and the local budget is also very similar to the national practice. In Vietnam, the revenue from environmental protection tax and excise tax on domestically produced goods is being categorized as a revenue allocation between the central budget and the local budget. On the contrary, this is a central budget revenue that collects 100% from the revenue in many countries. Another difference Vietnam has from common practice is the way in which revenues are distributed with respect to revenues distributed between the central and local budgets. Vietnam applies the same allocation rate for every different kind of revenues and taxes. Localities that have not been able to balance their local budgets are allocated 100% of the revenues from distributed taxes while localities that can balance them have the allocation rate ranging from 0-100%. In order to improve the leading role of revenue for central budget in Vietnam in the coming time, some solutions are proposed: (i) Adjust the method of collecting revenue to corporate income tax and value-added tax (domestic goods) and personal income tax in order to be consistent with the general principles of revenue decentralization that have been pointed out by many studies as well as the practices adopted by many countries; (ii) Research to remove regulations on incentives for bonuses exceeding budget revenue. Specifically, in case the central budget increases revenue compared with the estimated revenues distributing between the central budget and the local budget, the central budget shall deduct a portion at the rate of not more than 30% of the increase in revenue as rewards but not exceed the increase in revenue compared to the revenue collection of the previous year; (iii) Tax is collected according to the provisions of tax laws and relevant legal documents and is implemented based on the results of business activities of enterprises. The most important requirement is to organize the proper implementation of these regulations. With the above recommendations, the ratio of revenue distributed from the central budget and the local budget and the revenue allocated will be fixedly regulated in the State Budget Law and annually when the revenue collected from the central budget and the local budget will be annually determined depending on the specific situation. Thereby, the gap in fiscal capacity among localities could be narrowed down.

Second, renovate the method of decentralizing budget expenditure tasks of all governmental levels, ensure that resources of the central budget are concentrated on important and essential expenditure tasks with national scope; at the same time, and synchronously implement solutions to enhance the efficiency of public spendings, including spendings of the central budget. To implement this solution, it is necessary to: (i) Complete regulations on allocation of expenditure tasks between budget levels in accordance with the functions and tasks of different governmental levels (classification of local government levels); organize structure which clearly stipulates the roles and responsibilities of organizations and agencies, the degree of independence in management and administration of the local government, etc; Minimize the overlapping and irresponsibility caused by situations in which the same task expenditures are assigned into many levels without clear boundaries; (ii) Implement fundamental reform of the state budget allocation method, review functions and tasks of ministries and branches on the basis of clearly delineating the tasks that the central government needs to perform, tasks transferred to the localities and to the non-state sector in accordance with principle; thanks to that, central budget does not necessarily

subsidize and reserves source for obligatory spending tasks required by the central budget; (iii) Promote fundamental reform of the state budget expenditure management method, ensure that the allocation of resources is carried out complied with priority objectives. It is advisable to conduct a comprehensive budgetary expenditure review program in order to identify areas for adjustment or reduction. Cutting recurrent spending must be considered an important solution to get more resources for development investment and put pressure on agencies and units to improve the efficiency of public spending, prioritize resources of the central budget to allocate for important expenditure tasks.

Third, complete the mechanism of budgetary supplement between budget levels, including both balanced and targeted supplementary mechanisms to ensure effective implementation of the central budget's role in promoting harmonious development among regions, areas and localities. To implement this solution, it is necessary to: (i) Formulate appropriate methods to determine the size of the total budget used to supplement the localities as well as the principles used for determining the level of revenue, thereby narrowing the gap between fiscal capacities and local spendings needs and increasing more coherence with medium-term spending plans. This can be done through determining the distribution ratio for revenues between the central and local budgets and uniformly applied across localities to replace the current mechanism; (ii) Completing the system of criteria and principles on targeted and balanced supplements in the orientation of limiting overreliance on population or payroll criteria. Vietnam can consider using other criteria to increase spending efficiency instead of the current way, such as based on indicators: number of students graduating, number of patients treated, public service workload provided to people; (iii) Strengthening the connection between the implementation of targeted supplementary programs with the implementation of priority development orientations, ensuring targeted supplements are linked to the medium-term public investment plan, the level of development, the extent of infrastructure shortages of the localities. To fulfill this requirement, it is very important to perform the medium-term financial-budgetary plan well.

Fourth, synchronously implement measures to ensure security and safety of the public finances, consolidate the regular surplus of the central budget, and closely manage overspendings and borrowings, including local government liabilities. To do that, it is necessary to have the following specific solutions: (i) gradually reduce the budget deficit according to the roadmap, gradually create "large enough fiscal space" to be able to cope with unfavorable changes nationwide and abroad. Simultaneously, continue to restructure public liabilities, government liabilities and foreign liabilities, and fiscal risks are managed and closely monitored. In addition, it is necessary to keep closely and effectively monitoring the risks of public liabilities and contingent liability obligations. Borrowings needs to be commensurate with the plan and ability to pay off, with reasonable level of risk for liability cost; (ii) Strengthening the regular balance of the central budget to increase accumulation for development investment, ensuring that the regular balance of the central budget has a surplus to supplement resources for development investment through the review and reduction of recurrent expenditures that the central budget has to ensure, accelerating the reorganization of the organizational apparatus of agencies and units at central and local levels; (iii) Effectively manage the sources of fiscal risk, ensure that provisional debts, including committed provisions and "implicit" provisions are identified through appropriate reporting and monitoring mechanisms.

Fifth, closely and synchronically manage resources of the central budget, review the overall state financial funds off-budget, and mechanisms to allocate revenue sources to a number of specific units. To do this, it is necessary to thoroughly overcome the dispersion and allocation of budget resources, the distribution of state budget resources in general, the budget at central and local levels in order to narrow and eliminate unnecessary funds, and at the same time completing regulations on public and transparent reporting regimes for activities of state financial funds outside the state budget; stipulate the responsibilities and powers of branches and levels in the establishment and use of funds and report on the revenue and expenditure of each type of state and non-state financial funds. Strengthen the supervision of the elected bodies over the operation of the state financial funds off-budget. In the medium and long term, it is necessary to study a roadmap to eliminate the mechanism of allocating revenue sources to a number of agencies and units to ensure the centralization and uniformity of the central budget, ensuring all budget expenditures are disclosed in the budget estimates and must be approved by the elected bodies.

Sixth, strengthening the fiscal autonomy for local governments, thereby enabling the central budget to prioritize focusing resources to allocate to important and strategic tasks. Therefore, effective measures are recommended such as: (i) In the long term, it is necessary to study and amend the 2015 State Budget Law and related regulations in order to gradually limit and remove the integration of the state budget system, strengthen the initiative and strengthen the authority over local governments in making, deciding, disbursing budget estimates, using budgets and making budget settlements, ensuring local governments acquire the necessary powers in local resource allocation aligned with local strategic priorities; (ii) Strengthening the fiscal potential of local governments on the basis of continuing to reform tax policies related to housing, land, fees and charges decentralized to the locality. Theoretically, when the locality has autonomy in revenue sources, the locality can proactively decide to provide the required type of service to the local people; (iii) Research to form mechanisms so that local governments need to have a certain autonomy in resource allocation decisions, use resources according to local priorities, and take the initiative in how to implementation mode.

6. CONCLUSION

In Vietnam, along with the renovation of public financial management mechanisms and policies in general, in the past 20 years, the decentralization of state management of the budget has had many important changes. In the field of budget, the expansion of decentralization in such aspects as: authority to decide on revenue sources, spending tasks for local levels; expanding the right to raise capital for investment at the provincial level; decision-making authority at the provincial level. Strengthening the autonomy of local budgets, thereby creating conditions for the central budget, prioritizing the concentration of resources to allocate to important spending tasks, and long-term strategies need to study and revise regulations in the State Budget Law 2015 and related regulations in order to gradually limit and remove the integration of the state budget system, ensure the initiative and strengthen the authority over local authorities in making and deciding determining, disbursing budget estimates, using budgets and settling budgets. The key role of the central budget is clearly defined in the State Budget Law, which sets out specific principles on decentralization of revenue sources, spending tasks and the relationship between budgets at all

levels, principles to ensure the leading role of the central budget. It can be seen that in the past years, the central budget has basically ensured resources to carry out the important tasks of the country, the harmony in socio-economic development among regions and regions, contributing to ensuring ensure that the mobilization and management of state budget resources are centralized and unified, effectively handling the requirements for socio-economic development.

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THE ROLE OF GOVERNMENT MANAGEMENT IN SUSTAINABLE DEVELOPMENT OF REAL ESTATE COMPANIES IN VIETNAM

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Abstract: *This paper focuses on the facts of real estate companies in Vietnam, government management in real estate companies, opportunities, challenges and recommendations for sustainable development for real estate companies in the future. By using statistical approach, data synthesis and data analysis, the authors pointed out facts of real estates business in Vietnam today with some strengths: more competitive companies and high foreign investment attraction, diversified partners. Besides, some weaknesses were explored such as limited capital, low competition in management as well as low engineering application and low transparency in the market. In addition, the paper emphasized the role of government management to deal with these constraints with achievements and limitations. Basing on the achievements and limitations, a system of measures in government mangagement are recommended.*

Key Words: *role of government management, sustainable development, growth, real estate companies.*

1. INTRODUCTION

The development of real estate markets in general as well as real estate companies in particular plays an important part in economic and social development in every country. Vietnam is not an exception. On the way to a free market economy, real estate markets and companies are still relatively young and not really sustainable. In fact, economic development without social progress, social equality, cultural and morality preservation can lead to social unrest, wider gap between social classes etc. Therefore, to promote sustainability for companies, especially real estate companies in the context of globalization, it is important to balance 3 development cores: economic development, social development and environment protection. To do this, a system of measures should be taken and the role of government mangagement should be considered among these.

2. RESEARCH METHODOLOGY

In this study, the statistical approach was employed. After that, data were synthesized and analyzed to answer 5 research questions as follows:

1. What are strengths of real estate companies?
2. What are weaknesses of real estate companies?
3. What are achievements of government management in real estate business?
4. What are limitations of government management in real estate business?
5. What are some recommendations for the role of government management in real estate businesses?

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3. RESEARCH RESULTS

3.1. Highlights on Vietnam's economic growth

For years, GDP in Vietnam has been relatively high in comparison with others in the area ASEAN, on average approximately 6.7% during 2007- 2019. Specifically, in 2007, the rate was the highest at 8.5%. Vietnam economy slowed down in 2008 by the financial economic recession from 2007 to 2010. Inflation was high and economic growth was at 5 to 6% during this period, for example, the GDP rate was 6.23%, the lowest since 1999¹. Inflation was 10 to 20%². GDP growth rate was only at 5.32%³, 6.78% and 5.89% ⁴in 2009, 2010 and 2011. In 2014, the rate was 5.98%, higher than the XIII Congress' goal but lower than 5- year plan's goal of the XIII Congress. In 2015, GDP growth was at 6.68%. On the whole, Vietnam's GDP growth per capita has been below China for the last 10 years. However, GDP per capita does not reflect exactly people's living standard because GDP is not consistent with GNP. GDP during 2011- 2015 was 5.91%/ year, which did not reach the goal from 7- 7.5% in XI congress meeting. XII meeting in 2016 set the economic growth in 5-year plan (from 2016 to 2021) at 6.5%- 7%. In 2017, the economy grew at 6.81%, higher than 6.7% the congress expected and became the highest rate for the last 10 years⁵. In 2020, despite Covid 19, economic growth was at 2.91%.

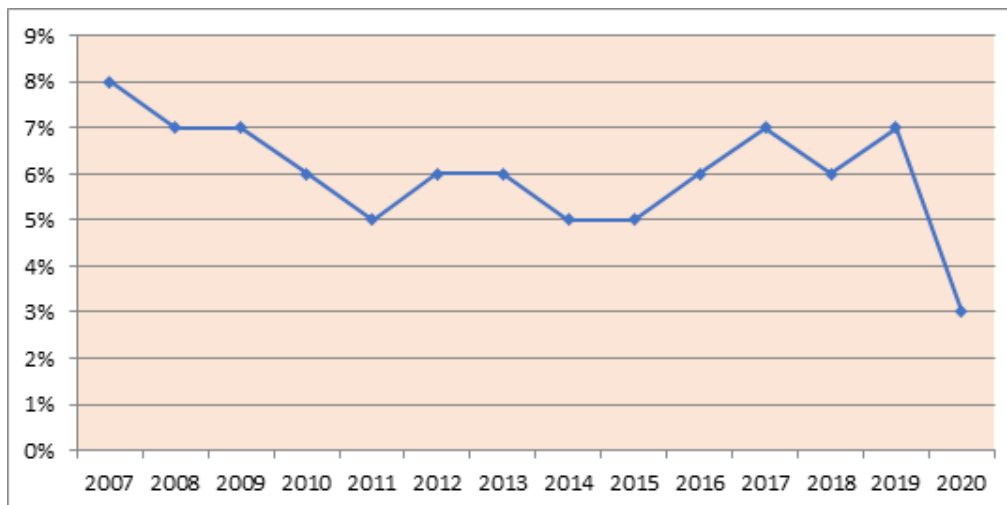


Chart 01: Economic growth in Vietnam 2007-2020 (unit: %)

(Source: Department of Statistics)

Since 2008, GDP per capita has been nearly 1,050 USD, Vietnam has left the group of low income developing countries and has joined medium- low income developing countries with current GDP/ capita of 2.385 USD. Therefore, Vietnam is turning from an agricultural country to industrial center in Asia, together with turning from low value industries to specialized and high value industries. Development in the context of globalization is both opportunity and challenge for Vietnam companies on the whole, and real estate companies in particular.

¹ Situation of economy and society in 2008.

² Situation of economy and society in 2009.

³ Situation of economy and society in 2010.

⁴ Situation of economy and society in 2011.

⁵ Department of Statistics 2019.

3.2. Facts on real estate companies in Vietnam

3.2.1 The number of companies

There are more more real estate companies nowadays, many of which have enough knowledge and finance to undertake big regional projects.

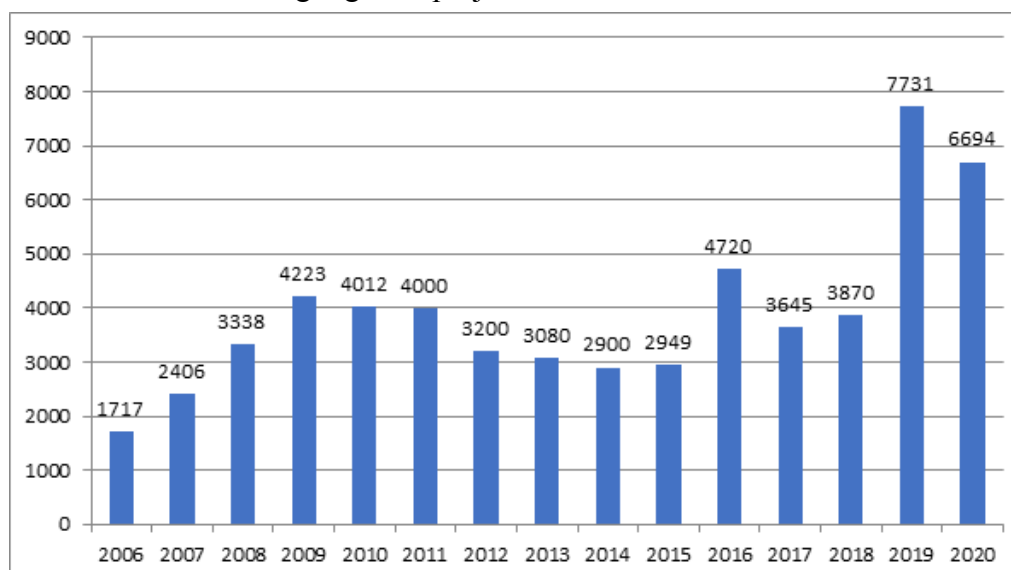


Chart 02: Number of real estate companies (during 2006-2020)

(Source: Annual report of Department of business register management)

From 2006 to 2020, the number of real estate companies annually increases nearly 50%. In 2020, the number of these companies was 6,694, nearly 6 times as much as in 2006.

3.2.2 Size of capital

Many real estate companies do not have enough financial resources, so they are badly influenced when the markets fluctuate. The number of companies with the capital from 200 to 500 billion VND is nearly 6%, companies with 500 billion VND is rated only 3%, the rest belongs to small companies which are not able to undertake big projects without the support from banks or other channels of raising capital.

Total	10- 50 billion VND	50- 200 billion VND	200- 500 billion VND	Over 500 billion VND
4223	1267	1246	250	136

Table 02: The number of real estate companies according to size of invested capital

(Source: Department of Statistics)

3.2.3. Strengths and weaknesses

3.2.3.1 Strengths

a. Attractive investment environment

Vietnam attracts investors due to young human force of over 96.3 million people, stable politic environment, and one of the fastest growth speed in the world. This is an opportunity for raising foreign investment by co operation, joint venture.

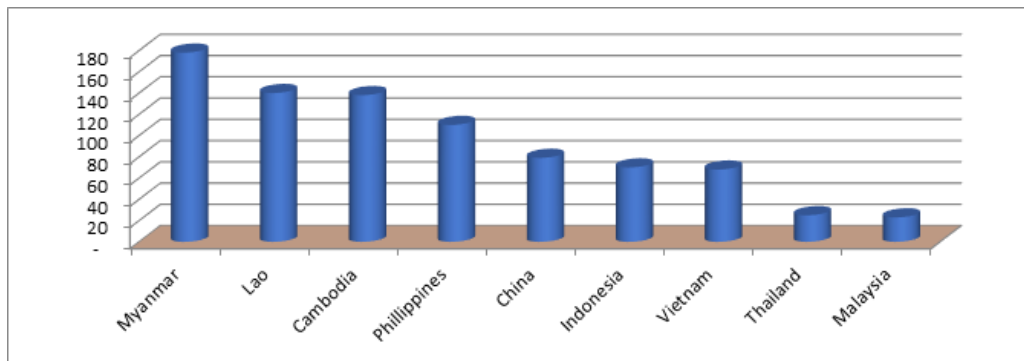


Chart 03: Business environment in 2020

(Source: World bank, 2020)

Vietnam is the 69th best business environment among 190 good business environment countries, above Indonesia (73rd), the Philippines (95th) and Myanmar (165th).

b. Attraction of foreign investment

Vietnamese investors have limited capital. Industrial zones, big urban areas and amusement parks appear thanks to FDI. Infrastructure has changed a lot and high quality real estate products are built. Although FDI has decreased lately, it is an effective channel to complement capital for real estate markets in Vietnam.

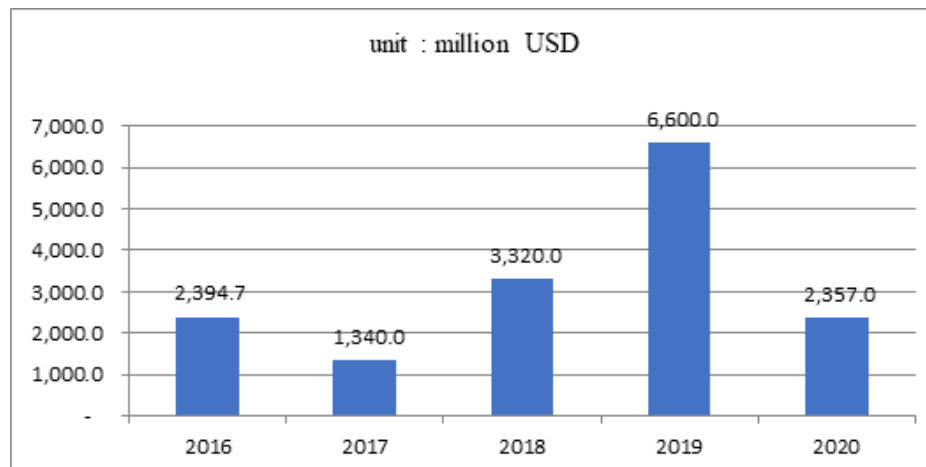


Chart 04: Foreign direct investment in real estate in Vietnam (2016 - 2020)

(Source: Report of Ministry of Plan and investment during 2006- 2020)

c. Diversification and expansion of investment partners

Beside common foreign investors such as Japan, South Korea, Singapore, investors are diversified with 178 countries. Along with Asian investors Japan (22%), Singapore (14%), South Korea (21%), Thailand (11%), HongKong (17%), Vietnam real estate market attracts others worldwide such as Accor Group, InterContinental Hotel group, big investors from Middle East like IFA, Kingdom Hotel. 3.2.3.1.4. *Improvement in business efficiency*

Free Trade Agreement: Vietnam joins this agreement with developed economies to change from exporting low value goods to exporting high value goods and exchange technological advancements.

Agreement of Complete Trans Pacific Partnership in January 2019 helped GDP increase by 1.32% in 2035, accordingly, promote the development of real estate companies.

European- Vietnam Free Trade Agreement in June 2019 eliminates 99% customs duties between Vietnam and Eu. This brings more opportunities for real estate business.

d. High technology advancement brings a lot of advantages for real estate business to turn into high value industry.

4.0 industry and more intelligent production: 4.0 industry is appealing to countries on the way to globalization, Vietnam is not an exception. Vietnam government has applied 4.0 technology in strategies and legal framework for business and industry.

Prospects and turning into high value industry: Industrial real estate segment has developed because FDI has increased 10 times for the past decade. Vietnam should carefully choose the upcoming projects to grow. Many industrial investors provide Ready- build factories (RBFs) and build factories as customers require. This service meets the needs of small and medium companies as well as small producers who need factories with the area from 500 to 5.000 m². These products create opportunities for investors and industrial developers to meet the need of industrial and production operation markets with the leasing time from 3 to 10 years. The increase in the number of investors leads to expansion of industrial zones in the form of joint venture with local companies. It also goes with real estate transfer, which contributes to increase in chain value, competitiveness and sustainability for real estate companies.

3.2.3.2 Weaknesses

Globalization not only brings opportunities but challenges for real estate companies to develop sustainably as well.

a. Size and capital competition

Vietnamese real estate companies have to compete fiercely with big international ones in the following points:

Capital for real estate businesses: Almost real estate companies have relatively small capital. The main sources of capital are bank loan and customers.

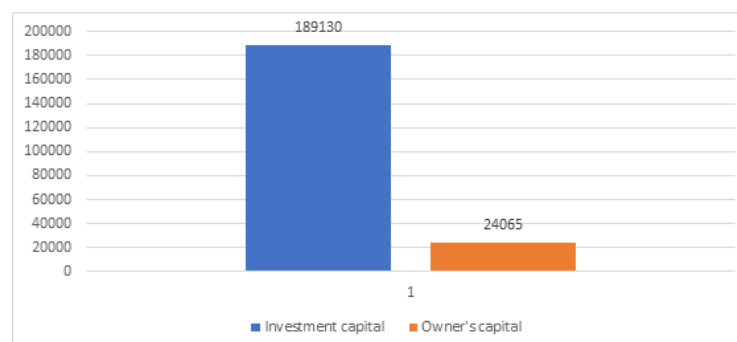


Chart 05: Demand for capital for real estate companies (unit: billion vnd)

(Source: CBRE)

Real estate businesses have nearly 13% as owner's capital (24,065 billion vnd). Because the demand for investment is higher and higher, these companies have to raise by other channels such as issuing shares etc.

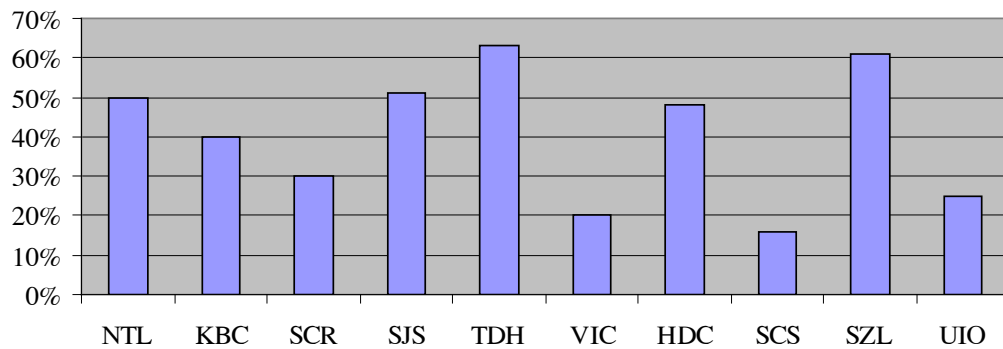


Chart 06: Owner's capital in comparison with total capital invested of real estates companies (in 2019)

Note: NTL (Tu Liem urban development JSC); KBC (Kinh Bac housing development JSC); SCR (Sai Gon Thuong Tin Property JSC); SJS (Song Da JSC); TDL (Thu Duc housing development JSC); VIC (Vincom JSC); HDC (Ba Ria- Vung Tau housing development JSC); SCS (Construction company No. 5 JSC); SZL (Sonadezi Long Thanh JSC); UIC (IDICO JSC).

Beside strong companies in property business such as Thu Duc House (TDL) 61%, Sonadezi Long Thanh (SZL) 60%, Tu Liem Housing (NTL) 50%, almost real estate companies have limited capital, low financial control.

b. Low competition in management, application of engineering science advancement to business

Real estate companies in Vietnam have constraints in management, business experience, application of engineering advancements, technological achievements.

c. Low transparency in the market

Low market transparency is a challenge for businesses. Investment, building and trading, leasing and transferring activities have a lot of difficulties. Speculation is popular in many provinces, especially in big cities, which causes real estate markets less sustainable and stable.

d. Marketability

Vietnam property market has some characteristics: (i) It has low competitiveness especially primary market. Auction regulations available in some documents are not fully followed; (ii) Real estate market reveals a lot of drawbacks. A lot of real estate transactions are underground, accounting for 70%. The reason is time-consuming, lengthy and a waste of money bureaucracy steps. (iii) Planning of land use and urban development is not focused, it frequently changes; (iv) Legal systems are not consistent. Real estate registration system is cracked, which is not good enough for transparent management. All of these disadvantages cause difficulties for real estate companies today.

3.3 The role of government control for real estate companies in Vietnam

3.3.1 The role of government control in real estate companies in Vietnam

Real estates are special goods with these features: Firstly, it is unremovable. Therefore, it requires highly appropriate plan. Its price changes according to changes in the market and using purposes. The third is scarcity because land is limited. Hence, management and plan to use land is very important and it has to show effectiveness. Governemnt control is necessary because of the following reasons:

Firstly, government designs and gives a system of legal documents to legalize real estate markets and real estate businesses.

Secondly, government sets up strategic plan of housing, construction and land use to meet the need of society for real estates.

Thirdly, government establishes monitoring mechanism of this market, including provisions of conditions, financial ability, business register of real estate agents, provisions of projects transfer, provisions for real estate on sale. Government also enacts legal regulations to set up intermediaries in real estate markets such as real estate middleman, setting the price of real estate, real estate exchanges.

In fact, Government control in real estate business in Vietnam is shown in many legal documents, especially Law on Land, Law on real estate business, Law on Housing, Law on Construction and other instruction documents. These documents range from land transfer, land lease, building to land on sale and property protection.

The role of government is clearly written in Article 76 in Law of real estate business in 2014: (i) Enact and carry out legal documents of real estate business; (ii) build and enact strategies to develop real estate markets and set up plan to undertake real estate projects; (iii) Establish and publish criteria to evaluate real estate markets; (iv) Set up information system about real estate markets; (v) Audit, check the compliance with legal documents of real estates, and undertaking of real estate projects (vi) Announce, train the law of real estates; (vii) Handle complaints and violations of real estate laws.

To sum up, government control is comprehensive, from enacting to carrying out, checking, handling complaints and violations. Besides, government also sets up supporting systems for market and businesses as well as training and communicating law of real estates.

3.3.2 Evaluation of government control for real estates businesses

3.3.2.1 Achievements

Firstly, government creates legal environment for organizing real estate markets. A system of legal documents was established: Law on Land 2013, Law on construction 2014, Law on Housing 2014 and Law on real estate business 2014. These documents established legal basis for real estate market operations with the institutions of real estate trading, buildings, land use rights trading, real estate business etc.

Secondly, Government states the role of government in specific activities such as construction planning, land use planning, property ownership registration to favor real estate business; provide legal consultancy service to support and promote real estate markets, manage the activities of setting price of properties, carry out macro policies to form and develop real estate markets.

Thirdly, these documents let agents know who is authorized to handle real estate problems. As a result, handling real estate problems is easier and more effective.

3.3.2.2 Limitations

Firstly, regulations about government management in real estate business is not clear and consistent enough to attract investment in real estates. This also is not favorable for real estate market to develop fairly.

Secondly, a lot of factors which are important to form and support real estate markets such as consultancy, setting the price, real estate management service, real estate business insurance are not well- managed. This takes a bad effect on fair development and operation of real estate markets. Financial institutions, bank credits in real estate transactions are limited in both quantity and quality.

Thirdly, provisions of land are not consistent, regulations of land use tax are not equivalent to reality and are corrected and complemented slowly. All these limitations lead to illegal speculation, land transfer and trading to earn profit. In addition, a lot of documents make it more confusing for management.

3.4 Some recommendations to improve the role of government management to help real estate businesses develop sustainably

Firstly, government should check and correct and complement contradictory or overlapping articles in a vast of legal documents of real estates to ensure consistency as well as issue regulations to handle conflicts in these legal documents.

Secondly, government continues carrying out policies, postponing tax, decreasing interest rate to help businesses in the short term, especially after Covid 19. Recently, government implements fiscal and monetary tools to support individuals and companies, stimulate government spending to increase demand or purchasing power, create jobs, for example, postponing corporate income tax payment, VAT, cutting interest rate, credit restructure, eliminating or cutting the cost of borrowing. To make it more effective, government should check to know which companies are truly in difficulties or on the edge of bankruptcy and give clear criteria for businesses to approach these supporting programs.

Thirdly, government stimulates disbursement of public investment. This is a focus to make up for growth shortage after Covid 19. To do this, government need to untie the knots about land use, administrative procedures and institutions and as a leader to disburse public investment, solve difficulties in projects, especially big projects.

Fourthly, the object in real estate business is not real estates, it is land use rights and ownership rights. Therefore, government has to investigate the original use, border, measure the area correctly and establish legal profiles for real estates. Therefore, regulations about information system should be detailed.

Fifthly, government should enact policies to encourage raising capital in investment projects, especially big projects such as delay time of tax payment, subsidize land clearance compensation. Also government should create favorable conditions and legal lobby and administrative procedures for companies to approach different channels of capital easily.

Finally, government should have specific solutions to controlling from land segmentation planning to investment planning in order to ensure stability and transparency in real estate markets. This action is also useful in attracting financial resources for real estate markets and businesses.

4. DISCUSSION AND CONCLUSION

In conclusion, there are a lot of opportunities for Vietnam real estate businesses: (1) Vietnam is an open economy (in 2020, Vietnam ranked the 105th in terms of free economy index); (2)

European Parliament officially voted for European Vietnam free trade agreement EVFTA and European Vietnam Investment Protection Agreement EVIPA on 12th Feb 2020; (3) Vietnam is considered to attract foreign investment due to investment environment reforms. In the context of trading war between US and China, investors invest more in ASEAN countries; (4) Vietnam has firm population structure and one of the fastest urbanization countries in the world; (5) Sharp increase in population in urban areas creates high demand for new housing projects; (6) Vietnam is in “Top 10” best workplace for foreign specialists. For example, we have the right manner to fight against Covid 19 to become one of the safest place to live; (7) Governemnt enacts open policies for Vietnamese abroad and foreign people to buy real estates, which hopefully brings breakthrough in real estate markets in the upcoming years. Hopefully, Vietnam economy and real estate business will gradually improve. This is the time for real estate companies to restructure and set the right goals for the development in the next years.

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MOBILIZING INVESTMENT CAPITAL FOR HUMAN RESOURCES FOR TOURISM DEVELOPMENT IN NGHE AN PROVINCE

M. Fin. Nguyen Thanh Huyen¹

Abstract: *The paper identifies human resources as an important factor in tourism development activities in Nghe An province. The paper analyzes the situation of human resources in tourism and the situation of mobilizing investment capital for human resource development in the tourism industry in Nghe An. From there, research and propose solutions to mobilize investment capital to develop human resources for tourism in Nghe An in the coming time*

Keywords: *Mobilizing investment capital, human resources, tourism development, Nghe An*

1. INTRODUCTION

With the policy of economic development, tourism becomes one of the spearhead economic sectors of the province in the coming time, Nghe An province determines that the construction and development of human resources is the key to turning the province's tourism into one of the localities with the leading tourism industry in the North Central region. However, in the process of developing the tourism industry in Nghe An province, the staff and employees have not been able to exploit the advantages of the tourism industry. Therefore, it is necessary to build and perfect this human resource of the province in order to exploit the available potential of tourism. The research topic was carried out with the desire to propose solutions to mobilize investment capital for the tourism human resources to contribute to the development of the province's tourism.

2. OVERVIEW OF TOURISM HUMAN RESOURCES IN NGHE AN PROVINCE

Up to now, the human resources working in the tourism industry in Nghe An province are more than 15,500 people. The majority of human resources are young and dynamic. Currently, there are in excess of 7 tourism training institutions in the area, including 3 universities, 3 colleges, and 1 professional secondary school. According to the data of the Department of Tourism, in the period 2016-2020, the number of direct and indirect employees in the industry increased by 8-9% per year on average. The number of young workers receiving professional training is increasing and accounts for a large proportion (nearly 50%) [1- 4]. In which, tourist accommodation establishments account for 65%, restaurants 30%, the rest are travel, transportation, attractions, tourism training institutions, administrative and non-business organizations.

However, human resources for tourism in Nghe An contains several shortcomings and have not met the requirements of tourism development in the integration trend. Human resources in the tourism industry of the province are assessed by enterprises as both weak in quality and lacking in quantity.

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Nghe An tourism human resources only meet 0.6 - 0.7 workers/bedroom in small hotels and motels (while according to the regulations of the General Department of Tourism, every 1.1 workers/bedroom). in small hotels, motels; 2.2 - 2.6 workers/bedroom in 3 star hotels or more). The proportion of qualified and professional workers is concentrated in star-rated hotels. Human resources with professional qualifications, especially communication skills in English are in short supply, so when foreign guests come, often this human resource hardly meet the requirements of customers.

The majority of the staff in the tourism industry are not qualified, most of them are unskilled and seasonal workers, so they lack professionalism. Due to the relatively low rate of in-depth training, tourism businesses, when accepting new graduates, have to spend most of their time on training and retraining to meet the requirements. The actual situation is lack of staff of managers, operators of small and medium-sized hotels, travel managers, guides, professional narrators and skilled workers in foreign languages, with high skills in hotel, restaurants, business zones and tourist attractions. The number of trained and certified workers is limited, mainly at 3-4 star hotels.

The weakness of human resources in Nghe An province is that the Nghe An inhabitants have character simple, straightforward but sometimes rigid personality. The majority of employees do not have vocational training qualifications, skills and professional culture of industrial workers. In fact, When they encounter problems in social relations, it is difficult for them to know how to handle them in a soft and flexible manner. Therefore, it has a moderately serious influence on attracting tourism development and investment in Nghe An province in recent years.

3. SITUATION OF MOBILIZING INVESTMENT CAPITAL FOR HUMAN RESOURCE DEVELOPMENT IN NGHE AN PROVINCE'S TOURISM INDUSTRY

Recently, Nghe An province has issued a wide range of policies to supervise building tourism human resources to meet the requirements of tourism development and international integration. The province has focused on developing zoning and plans for human resource development in training and retraining.

For workers in the tourism industry, Nghe An province focuses on direct labor groups to attract investment from businesses in tourism development. In the past time, under the leadership and direction of Nghe An provincial government, tourism training institutions were increasingly concerned about the quality of training. From 2016 to 2020, universities, colleges and vocational schools in Nghe An have provided an average of 1470 graduates per year for tourism business units. According to reports of training institutions, about 65-70% of graduates after graduation work at hotels, restaurants, travel agencies in Nghe An, Ha Tinh [5]. There are around 25 - 30% graduates working in other provinces and cities such as Hanoi, Da Nang, Da Lat, etc.,. Some graduates studying food processing work for collective kitchens or school kitchens locally.

The number of training students is generally increasing, but at a extremely slow rate. In 2016, tourism human resource training institutions in the province trained 1478 graduates, by 2020, 1602 graduates have been trained with an increase of only 8.39%. Universities and colleges specializing in tourism have a decreasing number of students. The schools that tend to increase are vocational colleges. It proves that students and students are looking to more specialized vocational training schools, with higher job search ability such as: Hotel management, restaurant management, reception management, food processing, restaurant operations, tour guides, etc.,.

According to the report of Nghe An Department of Tourism, in the period 2016-2020, Nghe An Department of Tourism has coordinated with superior agencies and sponsors, departments and businesses in the province to organize training courses on tourism, for example Specifically, training narrators and legal documents on international integration, training on state management of tourism for officials and tourism businesses in the northern provinces, training on communication behavior in tourism business for managers and employees of the hotel in Cua Lo town, training on responsible tourism, management of tourism planning, tourism marketing, industry hotel services, restaurants, guides, tourist legal documents, tourism security, knowledge training for drivers and service staff on inland waterway vehicles and passenger cars tourism, training on Tourism Law and guiding documents on cultural behavior skills, etc.,

In the 2016-2020 period, Nghe An province has opened 48 courses for professional development in tourism, and organized 5 tourism competitions to encourage employees to emulate and improve their skills and knowledge about tourism. However, the number of students attending is increasing, but the number of classes is decreasing because it has not actively opened classes in recent years. The quality and quantity of tourism human resources have changed positively compared to previous years, around 50 percent have been trained and fostered in tourism through the provision of tourism vocational training schools in the locality and annual training courses of the industry and professional associations. The teachers of the schools are well-trained. Some schools have actively connected with businesses to send students to do internships, and at the same time create conditions for students to easily apply for jobs at units after graduation. of the schools are methodical-trained. A number of schools have actively connected with businesses to send students to do internships, and at the same time create conditions for students to easily apply for jobs at institutions after graduation.

Achieving that achievement is the result of Nghe An province's attention and budget investment in training and developing tourism human resources. This capital includes expenditures associated with the performance of regular tasks, including expenses for professional skills, administrative management, expenditures to meet the needs of new construction, renovation and upgrading of facilities and equipment for learning, teaching and scientific research. According to a report by the Nghe An Department of Finance, in the period of 2016 - 2020, Nghe An province has invested in human resource training for colleges that train tourism human resources with the amount of VND 494,869 billion, of which is mainly spent on investment in building facilities. Over the past 5 years, the number of capital investments in tourism human resource training has increased from VND 88,319 billion (2016) to nearly double to VND 154.85 billion (2020) [6-10]. However, this number in 2020 has a decrease compared to 2019 because in 2020 Vietnam's tourism industry is affected by the Covid-19 pandemic.

Table 1: Investment capital in training human resources for tourism in Nghe An province from 2016-2020

Year	2016	2017	2018	2019	2020
Investment capital	88,319	109,078	142,622	162,502	154,85

(Source: Nghe An Department of Finance)

It can be seen that in the past time, Nghe An has paid attention to the work of mobilizing investment capital for human resource development in the tourism industry. However, Nghe An

is a province with limited budget, so although investment in tourism human resource training is concerned, the capital is moderately low compared to the training and retraining requirements to meet the needs of tourism development of the province. In which, it is mainly spent on investment in building material facilities to train tourism human resources.

Preferential policies, financial support for human resource training provided directly to enterprises, are specified in Resolution No. 26/2016/NQ-HDND of the People's Council of Nghe An province. With this policy, the Department of Finance of Nghe An province said that in the period of 2016 - 2020, no enterprise has received support for labor training costs because there has been no request to the Department of Tourism to submit a document to get province's support. The province also has no policy for tourism enterprises employing laborers in the province to contribute to improving the quality of labor resources, creating jobs, eradicating hunger and reducing poverty for inhabitants.

The training and fostering of tourism human resources is still limited due to the low demand for jobs in the tourism industry because of unstable income because Nghe An tourism is still seasonal. The tourism training program has not yet delved into professional skills and is heavily theoretical. Internship period at tourism enterprises of students is short-term and at the same time there is no close coordination between training institutions and businesses.

4. SOLUTIONS TO MOBILIZE INVESTMENT CAPITAL FOR HUMAN RESOURCE DEVELOPMENT IN THE TOURISM INDUSTRY IN NGHE AN PROVINCE

The quality of human resources plays an important role in creating an environment and favorable conditions for economic development in general and the tourism industry in particular in the current conditions. Over the past time, the mobilization of investment capital for tourism human resource development in Nghe An province is modestly low, supporting a small part and not promoting effectively. This makes tourism development uneven, low economic efficiency and lack of sustainability. In the coming time, to meet the development requirements, it is necessary for Nghe An province to organize the synchronous implementation of solutions to mobilize investment capital to improve the quality of training human resources in the tourism industry.

The tourism human resources that Nghe An province needs to pay attention to to improve the quality include 2 groups of subjects:

A group of officials who develop and implement policies to mobilize investment capital for tourism development.

Nghe An province is interested in building this team with the capacity to manage, operate, develop and implement policies and documents to mobilize input capital for tourism development. First of all, it is necessary to attract, recruit and foster people with professional capacity and sense of responsibility to agencies that develop and implement policies to mobilize investment capital for tourism development. These people are both knowledgeable about tourism and have a good work ethic. Create conditions for them to study, foster, and go on field trips in localities and countries with developed tourism economy, favorable remuneration mechanism and commensurate job requirements. The reality shows that although there are many correct solutions such as planning, administrative reform, promoting investment promotion, etc., but without the responsibility of officials, the mobilization of investment capital is ineffective. These officials need to pay attention

to implementation, especially those in the Steering Committee for Tourism Development of the province, the heads of agencies and units directly handling administrative procedures, the management agencies of the province such as Department of Planning and Investment, Department of Finance, Department of Tourism, Center for Investment Promotion, Trade and Tourism, Center for Public Administration Service, Chairman of People's Committees of districts, cities and towns..

Group of workers in the tourism industry.

Firstly, it is necessary to increase funding to support training to improve the quality of tourism human resources. The labor force in tourism nationwide in general and Nghe An province in particular is on an slowly increasing trend. In addition to focusing on building human resource planning in the field of tourism in accordance with the development orientation of the industry, financial support to improve professional qualifications for the workforce is essential. This is a long-term strategy to ensure both quantity and quality of local tourism human resources. Therefore, the solution to support tourism vocational training for local laborers is implemented in the following direction: Providing 100% funding from the state budget to organize periodic refresher courses and short-term training courses.

Secondly, it is worth suggesting a solution is to develop preferential policies to encourage schools and businesses to participate in vocational training activities for tourism workers, linking training with the labor market. It is necessary to focus on training both tourism business management workers and employees directly serving tourism services. people first decide what skills they need and what level of training they need. When businesses participate in vocational training, ensuring output standards that learners after training can apply knowledge and skills to solve practical problems. For that purpose, the government needs to have budget support policies to encourage domestic and foreign organizations, businesses and individuals to associate with vocational training institutions to support learners to practice in training programs which meet the requirements of tourism development.

Thirdly, there should be preferential policies to attract highly qualified human resources in the field of tourism. The biggest difficulty of the tourism industry today is the lack of human resources to meet the demand for foreign languages. If Nghe An province is interested in promoting training from an early age, young workers in the tourism industry can fill the gap of the shortage of high-quality human resources, especially in the hotel and resort business, which are attracting developing investment in Nghe An in the near future. Nghe An province needs to develop policies to attract foreign-trained human resources, high-quality domestic human resources to participate in tourism business activities in the province to take advantage of foreign languages, understanding of culture and interests of international tourists, experience of attracting international visitors to develop Nghe An tourism.

Fourthly, it is necessary to increase funding for investment in material and technical facilities for training and development of tourism human resources with the aim of ensuring a trained workforce to meet the requirements of enterprises. need to increase investment capital to upgrade and expand infrastructure, especially need to upgrade the system of physical and technical facilities to serve practice for learners. It is reasonable to increase investment capital to upgrade and expand infrastructure, especially to upgrade the system of physical and technical facilities to serve practice for learners.

5. CONCLUSION

In summary, it can be determined that human resources are an extremely important factor for tourism development. Improving the quality of human resources in both state management, business administration and tourism is an urgent matter. Therefore, solutions to mobilize capital to develop tourism human resources in Nghe An province need to be implemented quickly and synchronously to contribute to creating a new brand for the province's tourism the coming period.

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INTERNATIONAL EXPERIENCES ON LAND PRICE POLICY AND LESSONS LEARNED FOR VIETNAM

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Abstract: *The land price policy is one of the important financial policies on land, contributing to improving the efficiency of land use and canalizing land resources for socio-economic development. This article studies the experiences of some countries in the world on land price policy from aspects such as valuation office agency; valuation basis; land valuation methods; and mass appraisal application. From there, six lessons can be drawn so that they are applied to Vietnam.*

Keywords: *land price policy, experience on land valuation, mass appraisal of real property.*

1. INTRODUCTION

The land price policy is considered as one of the important financial policies on land, contributing to improving the efficiency of land use and creating positive changes in the canalizing of land resources for the socio-economic development. After nearly 10 years of implementing NQ19/TW in Vietnam, there have been many successes in implementing and conducting financial policies on land, including land price policy. Accordingly, the land price policy has basically been in line with the market mechanism, ensuring the interests of the following entities: the State - enterprises - individuals. However, in addition, the land price policy also has various shortcomings, leading to conflicts, potential risks of speculation, reduction of state budget revenue; and resulting inadverse effects on psychology and social life. Therefore, studying international experiences on land price policy, thereby drawing lessons that can be applied to Vietnam plays an important role in sustainable economic development in the context of current globalization.

2. INTERNATIONAL EXPERIENCES ON LAND PRICE POLICY

2.1. About the valuation office agency

In Japan, the valuation of land for land tax calculation is carried out by local governments. The land valuation method is agreed and promulgated by the Ministry of Public Administration, Ministry of Home Affairs, and the Ministry of Posts and Telecommunications. The application of land valuation is uniformly regulated to ensure fairness of the tax system across the country.

In China, real estate appraisal is carried out by a central authority. Real Estate Valuation and Consulting Center (CRECAC) was established in August 1992 with the task of performing the state management of real estate valuation, providing services related to real estate valuation,

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management and consulting real estate transactions. CRECAC belongs to the Department of Land, which is an independent agency for organization and management.

2.2. On the valuation basis and land valuation method

2.2.1. For the case of calculating land tax

For the case of land tax calculation, the commonly applied land valuation methods are determining the price by region (Finland, Ukraine, Russia, Chile, China), determining according to the market price (Colombia, Mexico, South Africa, Tanzania, India, China, Indonesia, Philippines, Thailand, Latvia, OECD countries such as: Australia, Canada, Japan, UK), according to land rental value (Australia, Germany, UK, India, Thailand) and self-determination of land prices (Hungary, Thailand).

Countries may apply one type of land price to the calculation of land taxes or a combination of different types of taxable price of land tax, depending on the characteristics of the land. The following Table 1.1. gives an overview of the types of taxable price of land tax being applied in some countries in the world.

Table 1.1. Types of taxable price of land tax applied in some countries

Taxable price of land tax	Country of application
Market price	Japan
	Canada
	Argentina
	Colombia
	Mexico
	Indonesia, Philippines
	South Africa
	Tanzania
Market price or land rental price	Australia
	UK (market price for residents and land rental price for non-residents)
	Thailand
Land price by area	Finland
	Ukraine
	Chile
Land price by area or market price	Hungary (adjusted market price)
	Kenya
Land price by area, market price or rental price	China
	India (mainly annually land rental price)
Rental price	Guinea

Source: Summary from Bird and Slack (2004)

To determine the market value of land, three valuation methods are: the comparison method, the extraction (depreciated replacement cost) method, and the income approach.

About time to announce land prices, in China, land prices are publicly announced by the State and changed every 3 years when the land price is announced or when there is a big change

in land price. This land price is usually lower than the market price, only about 71.36% or 87.2% (according to the evaluation results in 2006). In Japan, land prices are also re-evaluated every 3 years and announced on January 1st.

2.2.2. In the case of land acquisition

In Australia, when determining the land compensation price if the state recovers land, or determining the land price in the case of mortgage of land use rights and other civil transactions, the specific land valuation method for each land lot is applied. The land valuation is done individually for each land lot and valuation purpose. The land valuation method is also applied based on land type, land price information on the market, and land rental price.

In South Africa, the land valuation for compensation upon land acquisition for public purposes is regulated in The Land Use Act of 1978 and the Law of the Russian Federation of Nigeria in 2007. Accordingly, the value of acquired land is determined by the method of extraction (Depreciated replacement cost). However, according to the study of Egbenta (2017), the value of the land lot determined by this method does not reflect the market value and does not accurately reflect the value of the land lot before being acquired. As a result, most of people who were acquired were dissatisfied with the compensation, leading to delay in land allocation, complaints, impacts on the land acquisition process and project implementation.

2.2.3. In case of transferring

In Canada and Australia, the land price used to calculate tax liability in the case of land transfer is the market price. In Ontario – the state of Australian, when people make land transactions and make profits, they must pay income tax on land transfer after the transaction is finished. The transfer tax is calculated on the basis of the amount paid for the sale of the land, plus any mortgages or amounts owed in the land purchase agreement.

2.3. About mass appraisal application

According to international valuation standards, mass appraisal is “*the performance of appraisals of various properties on a fixed date, carried out in a systematic and uniform manner in terms of methods, techniques*” [4].

In many countries around the world, the results of mass appraisals are used as the basis for determining property taxes and a number of regulatory objectives. According to the Standard on Mass Appraisal of Real property (IAAO 2013), the mass appraisal model is intended to represent the market for a property type in an area and has can be applied to all three approaches: the market approach, the cost approach, and the income approach.

Mass appraisal with the help of a computer system was developed by John Q. Ebert (1965) in Lansing, Michigan, and became widely known when research by John Q. Ebert and Robert J. Anderson on the subject was presented at the IAAO Conference in 1973. Over four decades of development, today, the method of mass appraisal has become very popular and widely applied as the basis for calculating property taxes in many countries around the world such as the United States, Australia, Canada, Russia, Sweden and other countries in Europe.

2.3.1. Experience on land mass appraisal in the US

Mass appraisal was introduced in the US in the 1920s and has continued to evolve to this day. With the help of computerized systems (CAMAs), mass appraisals have become increasingly

common throughout the United States. Guidelines on the method and process of mass appraisal are provided in IAAO’s Standard for Mass Property of Real Property. In addition, since the process of mass appraisal for tax purposes is necessarily a function of the government, the process is grounded in laws, administrative regulations, and regulatory activities. This is stipulated in the laws of each state in the US, it creates a legal basis for property valuation activities in general and mass appraisal in particular.

For example, Chapter 4, Article VII of Florida’s law requires that all real estate be appraised for tax calculation, and this process is done by means of a mass appraisal with the help of a computer system (CAMA). The CAMA system is used in all 67 Florida counties. It is required to store, access, analyze, and report data for mass appraisals. At the same time, all CAMA systems must be able to store and maintain the data necessary to prepare reports and files required by the Tax Office. Property appraisals for tax purposes in the state of Florida are an iterative annual process, so the scope of a mass appraisal in any given year includes the activities necessary to updated property values only for previous years. The Florida Real Property Appraisal Guidelines for Tax purposes (2002) specifically specify sections 4, 5, and 6 to regulate mass appraisals, where article 6 requires that ensuring complete information and data accuracy be an ongoing task in the mass appraisal process. It is the responsibility of all people involved in this process. Subjects of mass appraisal in the US include farmland, residential homes, commercial and industrial real estate.

2.3.2. Experiences on mass appraisal in Australia

For mass appraisal, land valuation is carried out in all states, mainly for the purpose of land tax calculation, income tax from the sale of real estate. Mass appraisal is carried out to each lot and publicly announced on June 30, effective from July 1 every year. The mass appraisal include 4 steps: Survey and collect information, classification of land valuation areas, standard land valuation, land valuation to each lot. (Diagram 1.1)

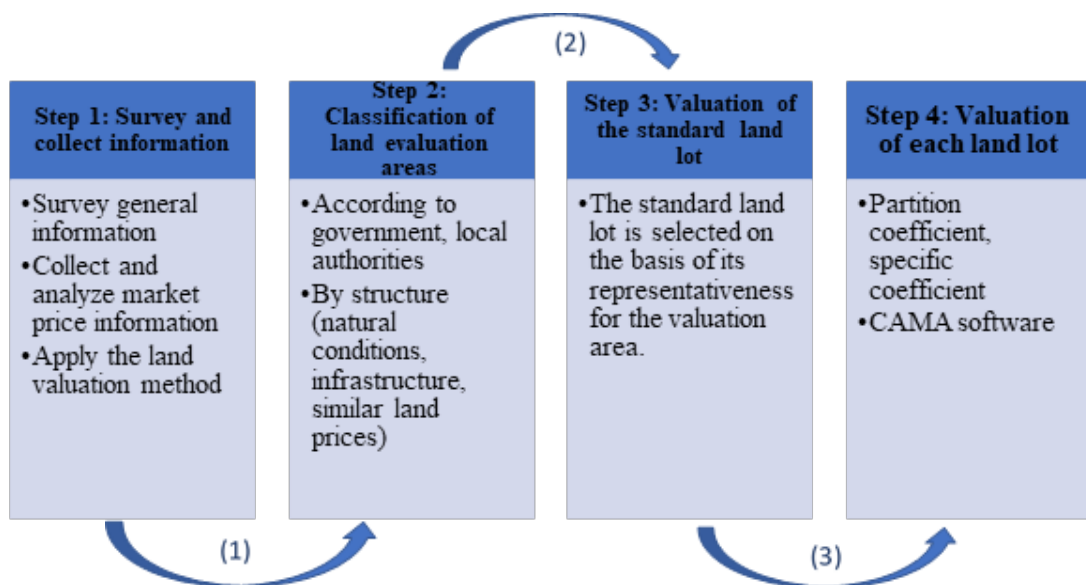


Diagram 1.1. Steps of mass appraisal in Australia

Source: Tran Duc Thang et al (2014)[7]

The methods of mass appraisal in Step 1 include: comparison method, Depreciated replacement cost method and capitalization method. The choice of method is suitable with the character-

istics of the land lot. CAMA software is used to support the analysis of land market price for each land lot in the case of compensation when the state recovers land use rights, mortgage of land/real estate use rights and other civil transactions.

2.3.3. Experiences on land mass appraisal in Sweden

All property taxes in Sweden are based on mass valuation, which is approximately 75% of the market value of the property. This rate was passed by the National Assembly to improve tax collection.

For mass appraisal, all types of property in Sweden are divided into four groups: agricultural, residential, commercial and industrial property. The National Tax Service is the agency responsible for matters related to property tax. Its mission is to establish and regularly update valuation models and real estate information. The mass appraisal model is regularly improved based on real estate market data. To do this, one carries out constant market monitoring by a number of measures:

First, monitor real estate transactions on the secondary market, the results are stored in the national database of real estate. These data are obtained from the State Registration of Rights to Real Estate at the time of recording the real estate transaction. The compatibility between the market price and the valuated price is checked for each transaction, the ratio between these two prices is added into the database. Access to the information of this database is done through the Internet without any restrictions.

The second is project quality management. Traditionally, construction quality data is received from the property owners themselves. In the year prior to the mass appraisal, property owners were given a two-page questionnaire with nearly 60 pre-determined “yes/no” answers, with the exception of the land area measured by the cadastral agency. These returns are submitted to the tax office and entered into a database, where each answer is assigned a score, corresponding to the accepted valuation model. The computer will automatically calculate the key quality factors of construction projects.

The third is to supervise rentals in the housing sector, because rent affects the market value of the property. Each property included in the database contains information about the restrictions on rights associated with the zoning in the area. Access to this database system is also free of any restrictions.

Mass appraisal models are built for residential (garden houses), commercial (apartment buildings, offices, shops, hotels), industrial, and agricultural real estate. Depending on the type of property, different information is needed to estimate the value. This information can be the location, land area, residential area, year of construction and other physical characteristics of the building and/or lot. The change of these properties is updated once a year. The National Bureau of Land Surveys notifies the tax authorities of these changes and the town hall needs to transfer the information into the data recorded on the characteristics of real estate.

3.3.4. Experiences on mass appraisal in the Russian Federation

In the Russian Federation, the tax system from before 2006 using a set price for land did not reflect the relationship between land value and land tax. The reform of the tax system in the Russian Federation requires a change in the land tax approach, moving to taxing land on the basis of market value.

In 2006, for the first time after 7 years, the mass appraisal of the whole territory of the Russian Federation began, the results of the mass appraisal of land prices were used as the basis for calculating land tax. In addition, in many regions of Russia, the results of mass appraisals are used to determine land rents for state-owned land. Mass appraisal in Russia is carried out based on the classification of land by purpose and type of land use, it is carried out at most every 3 years and at least every 5 years. Today, all information about the cadastral value of soils in Russia is accessible to the entire society. With the advent of “Cadastral Map” service, those interested can find out the latest information about the cadastral value of the land lots they own. Analyzing foreign experiences on mass appraisal, we find that the most important condition to apply this method is to form a legal corridor and a data bank system to carry out this type of valuation. In addition, the information base must be accurate and accessible. In addition, the mass appraisal system should provide for the ability to update changes in the properties of the property to provide a correct view of the laws of market development.

3. LESSONS LEARNED FOR VIETNAM

Through studying some experiences on land price policy of countries around the world, some lessons can be drawn for Vietnam as follows:

- *First, independence is valued in land valuation and land management (China).* In countries with land ownership and tax obligations similar to Vietnam, independence is emphasized in land valuation. The independence of land valuation agencies to ensure professional expertise in valuation, and not be influenced by other administrative purposes.

- *Second, many countries use market prices when calculating land tax obligations, but the methods for determining the market prices are different.* OECD countries often have developed markets, have collected a relatively stable database of land transactions, the methods of comparison, Depreciated replacement cost, and income approach are often applied. Basically, all countries want to apply the market price to determine the obligation to pay taxation-land use, land price in case the state recovers land use rights as well as calculates customs duty and taxes when transferring land.

- *Third, the determination of land value to fulfill tax and fee obligations is also relative, it is difficult to reflect the exact value. The collection of data related to land prices is a matter of great importance.* In Japan, the comparison method and application of coefficients is used to determine the market price. However, the determination of the value of the land lot to determine the market price for the tax liability is only relative for the announcement period and is not regular from 1-3 years (Japan, China). *Regulations of other countries also show that the determination of land price to calculate tax liability is usually applied synchronously (Japan, Australia), while in the case of land recovery and transfer, the market price of each specific piece of land used may need to be determined.*

- *Fourth, the methods of determining the land price mainly include the comparison method, the depreciated replacement cost method and the income method, depending on the characteristics of the land plot.* The methods of determining land prices are essentially the same across countries. The land price is determined depending on the quality of the data, the quality of the appraiser and other subjective factors. In some countries, the land valuation is determined on a 1-year or 3-year basis according to the market price and does not specify a maximum or minimum price or apply a framework like Vietnam’s regulations.

- Fifth, apply mass appraisal for land use tax purposes, apply specific valuation for compensation purposes.

Mass appraisal has shown its advantages and is widely applied in many countries. An important condition for the application of this valuation method is the need to form a legal corridor and a data bank system for implementation. In addition, the information base must be accurate and accessible. In addition, the appraisal system needs to be updated with changes in the properties of the property to reflect the fair value of the property.

- Sixth, land prices are issued one time per one (1) to three (3) years by many countries to ensure they keep up with market price fluctuations.

The above lessons can be the basis for policy makers to research, propose solutions and recommendations to improve the land price policy in the coming time, in the context that Vietnam is in the process of revising Land Law.

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HOA PHAT GROUP'S OPERATIONS IN THE CONTEXT OF GLOBALIZATION

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Abstract: Currently, along with the innovation of the market economy and the fierce competition among economic sectors, it has caused difficulties and challenges for businesses. Enterprises in the steel industry in Vietnam, including Hoa Phat, are no exception to these challenges. In addition, the protection of importing countries through the imposition of anti-dumping tax on steel has made steel enterprises in recent years encounter many difficulties in product consumption. By examining the current situation of Hoa Phat's operations, the paper proposes some solutions to help the Group develop sustainably.

Keywords: Hoa Phat Group, business activities, operation, globalization

1. INTRODUCTION

In 2020, Covid-19 pandemic has spread across the globe and left a trail of crises of all business sectors, causing consequences of employment and economic losses. However, the year 2020 has recorded the proudest achievements of Hoa Phat. Hoa Phat ecosystem that built on the foundation of a closed production chain has shown its strong resilience.

By the end of 2020, Hoa Phat restructured its operating model with 4 main sectors including Iron and Steel, Steel products, Agriculture and Real estate which are under control of independent Corporations. However, they are developed with high interoperability in the product ecosystem of the Group.

High-quality rolled steel coil is used for production of drawn steel wire, PC bar, PC Strand, core wire, etc. HRC is the raw material source for steel pipes and galvanized steel sheet. Steel pipes and steel sheet are used in the fabrication of interior, refrigeration products. In addition to selling to the market, Hoa Phat Feed Plant also provides a large amount for the Group's pig and chicken farms nationwide.

Hoa Phat's production chain is expanded and optimized gradually, which brings the highest value to its customers, shareholders, and society. Additionally, the Group's manufacturing ecosystem always focuses on sustainable development, solution implementation and investment in green manufacture. Each year, Hoa Phat has saved VND trillion by recovering heat and exhausted gas for power generation and reusing, which contributes to reduce greenhouse gas omission.

2. HOA PHAT GROUP'S BUSINESS SITUATION IN THE CONTEXT OF GLOBALIZATION

2.1. Development history

Hoa Phat Group is a leading industrial production group in Vietnam. Hoa Phat Group was established based on a group of companies, in which Hoa Phat Group Joint Stock Company plays the role of the parent company and 4 member corporations branded Hoa Phat, including Iron and Steel Corporation, Steel Products Corporation, Agriculture Corporation, Real Estate Corporation.

^{1,2} Academy of Finance.

Starting from a company specializing in trading construction machines since August 1992, Hoa Phat expanded into the fields of Furniture (1995), Steel Pipe (1996), Construction Steel (2000), Electrical Refrigeration (2001), Real Estate (2001). In 2007, Hoa Phat was restructured according to the group model. On November 15, 2007, Hoa Phat officially listed on Vietnam stock market with stock code HPG.

Since then, Hoa Phat Group has continuously invested in expanding the production of steel products. Specifically, in 2009, An Thong Mineral Investment Joint Stock Company became a member company of Hoa Phat and Hoa Phat Hai Duong Iron and Steel Complex completed the first phase of investment. In 2013, Hoa Phat Hai Duong Iron and Steel Complex completed the investment phase 2, bringing the total capacity of Hoa Phat steel to 1.15 million tons/year. In 2016, the completion of phase 3 investment in Hoa Phat Hai Duong Iron and Steel Complex increased construction steel capacity to more than 2 million tons/year. In 2017, Hoa Phat Dung Quat Iron and Steel Complex was deployed in Quang Ngai province, with a scale of 4 million tons/year, total investment capital of VND 52,000 billion, marking a new development milestone of Hoa Phat Group. The first two blast furnaces of the Hoa Phat Dung Quat Iron and Steel Complex Project were officially put into operation in 2019, bringing Hoa Phat's total construction steel capacity to 4.4 million tons/year. Especially, from the end of 2020, Hoa Phat Group started to supply hot rolled coil products to the market that help optimize the Hoa Phat steel ecosystem.

2.2. Characteristics of business activities and structure

2.2.1. Characteristics of business activities

Firstly, Hoa Phat is a multi-industry manufacturing corporation with a nationwide scale of operation.

Currently, Hoa Phat Group operates in 04 fields including iron and steel (construction steel, hot rolled steel), Steel products (steel pipes, galvanized sheet, drawn steel, prestressed steel), Agriculture and Real Estate.

Producing iron and steel is the core production field, accounting for over 80% of the Group's revenue and profit. Hoa Phat's crude steel capacity reaches 8 million tons/year. In which, Hoa Phat's construction steel reaches 5 million tons/year, hot-rolled coil 3 million tons/year with production complexes located in Hai Duong, Hung Yen and Quang Ngai. With a large scale of production, Hoa Phat is the largest steel pipe and construction steel producer in Vietnam with a market share of 32.5% and 31.7%, respectively.

In the agriculture sector, the Group holds the largest market share of Australian cow supply with 50%, leading the North in production of clean chicken egg. For pig farming in biosafety methods, Hoa Phat is also in the list of the leading enterprises.

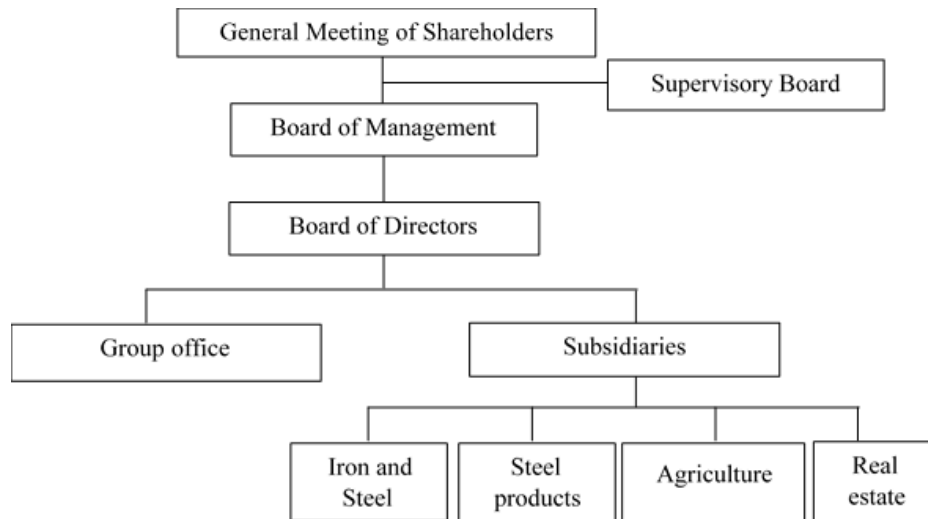
Secondly, Hoa Phat takes the lead in investing in new, advanced, and modern technologies. In all fields, Hoa Phat has built a brand name and holds a large market share. Hoa Phat is the first enterprise to build a synchronous iron and steel production complex with the input ore output being cast iron - billet - steel. Currently, Hoa Phat has the largest market share of construction steel and office furniture.

Thirdly, in the context that Vietnam's economy and society are easily affected by outside influences, Hoa Phat's activities cannot avoid risks, both objective and subjective, especially legal, policy and disease risk.

2.2.2. Characteristics of business structure

The organizational structure of Hoa Phat Group is shown in diagram 1.

Diagram 1. Hoa Phat's organizational structure



Source: Hoa Phat Group's annual report

As part of the strategy of organizational restructuring, Hoa Phat Group has decided to restructure the operating model by capital divestment at furniture sector and establishment of specialized Corporations instead. Currently, Hoa Phat Group runs its operations in four sectors: Iron and Steel (construction steel, hot-rolled coil) – Steel products (steel pipe, galvanized steel sheets, drawn steel wire, and pre-stressed concrete bar, pre-stressed concrete strand) – Agriculture – Real estate. Production of iron, steel and related products is the core.

2.3. Hoa Phat's goals and mission

From the assessments and forecasts of the economy, the development orientation of Hoa Phat Group in the coming time is as follows:

Firstly, restructuring the organizational model towards focusing on 4 main segments: Iron and Steel, Steel Products (Steel Pipe, Color Coated Steel, Drawn Steel, Prestressed Steel); Agriculture and Real Estate.

Secondly, closely monitor, follow up and quickly grasp market developments, especially in the context of large price fluctuations to propose effective and timely response solutions.

Thirdly, promote the implementation of important projects of the Group such as Hoa Phat Dung Quat steel project, strengthen the implementation of real estate projects.

Fourthly, strengthen and deepen the Group's steel ecosystem in the direction of researching high-quality steel projects, minimizing impact on the environment.

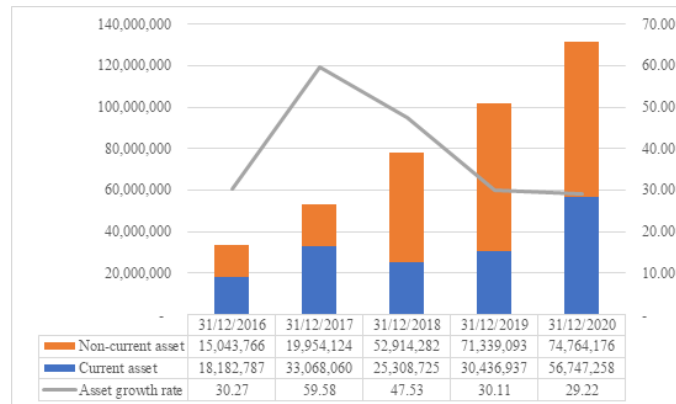
Fifthly, increase employees' income, create a stable environment for employees to work, especially during the current epidemic situation.

Sixthly, promote charity and sponsorship activities, especially in the context of the socio-economic situation experiencing many uncertainties from epidemics, natural disasters, storms, and floods.

2.4. Hoa Phat Group's financial performance

* Asset structure

Chart 1. Total asset of Hoa Phat Group over the year

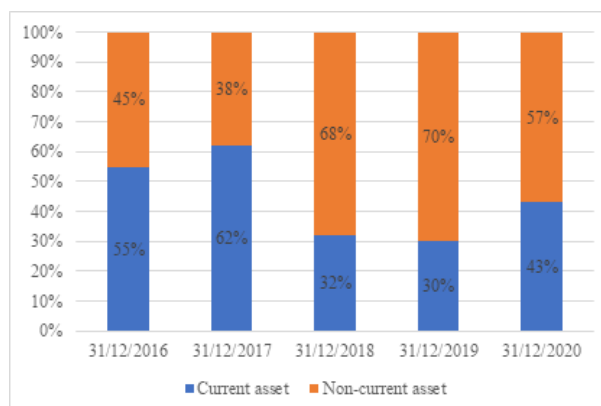


Source: Hoa Phat's financial reporting in the period of 2016 - 2020

Hoa Phat Group's total assets continuously increased in the period 2016 – 2020. The Group's total assets increased sharply by about 30% over 2019. In particular, non-current assets still accounted for the majority with an increase of VND 3,425 billion, reaching VND 74,764 billion. The Group continued to increase fixed assets which resulted by the completion of major projects. In 2020, a sharp increase of VND 26,310 billion of current assets was recognized, equivalent to an increase of 86% compared to the same period in 2019. This sharp increase aims to supplement working capita and rise production scale to a new stature. By the end of 2020, the asset structure has gradually balanced. Current and non-current assets accounted for 43% and 57% respectively. The total assets doubled after only 3 years, from 2017, the time to start investment in the construction of Hoa Phat Dung Quat Integrated Complex. This is still the appropriate and standard asset structure of the industrial production.

Current assets increased sharply, inventories accounted for 46%, and inventory turnover as at 31/12/2020 was 3.1 times. These figures show the high inventory turnover rate, and the Group's inventory management is always monitored and operated effectively. Non-current assets increased slightly due to only a few assets were recorded during the year. Specifically, as of December 31, 2020, non-current assets reached VND 74,764 billion, an increase of 5% over the same period last year. Fixed assets, investment properties and long-term work in progress accounted for 97%.

Chart 2. Asset structure from 2016 – 2020



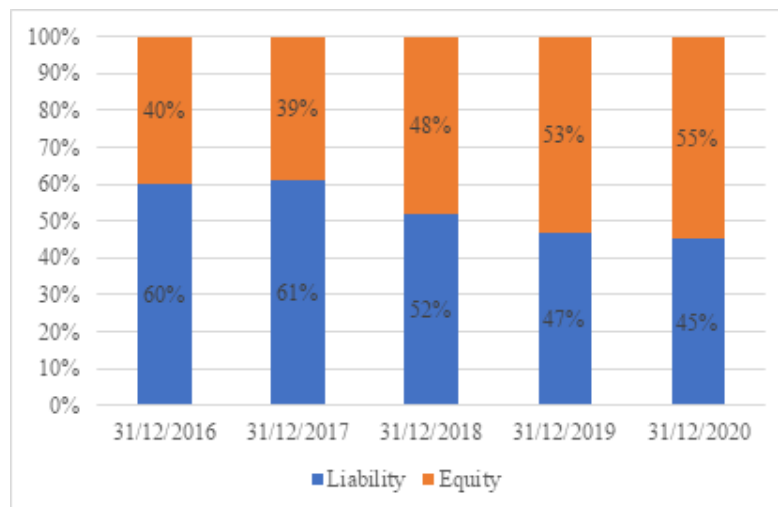
Source: Hoa Phat's financial reporting in the period of 2016 - 2020

*** Capital structure**

The Group’s capital source structure, in 2020, was maintained stably. Equity increased by 24%, from VND 47,787 billion to VND 59,220 billion, originated from the profit generated during the year. Although the debt-to-equity ratio increased to above coefficient of 1, the ratio of bank debt to equity increased at 0.91 times.

After Hoa Phat Dung Quat Steel Integrated Complex was put into operation, the high debt ratio and strongly increased short-term loans are normal for a larger production cycle. On the other hand, the ratio of net debt-to-equity is currently at 0.54 times, a low average level in use of financial leverage. Despite the year with the highest bank loan due to a strong increase in scale, it is still controlled rigidly, which helps the Group build its resilience to face the near future. Net cash flow from operating activities dawned better improvement with an increase of 17% over the last period, showing that Hoa Phat’s financial health is enhanced.

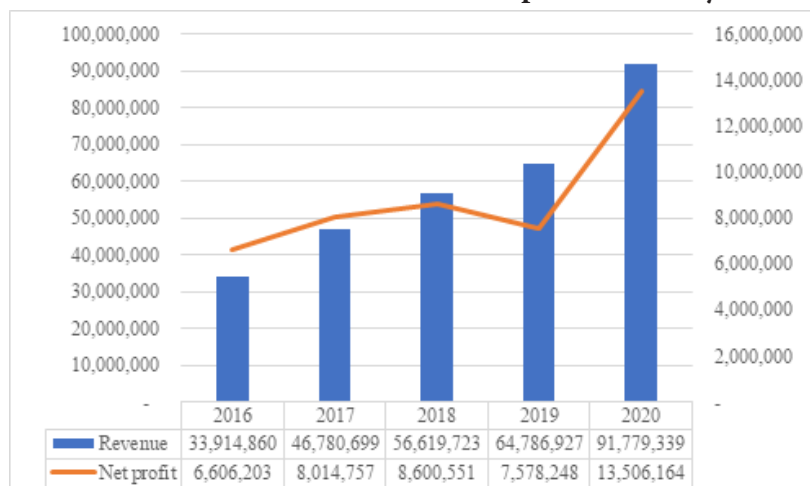
Chart 3. Hoa Phat’s capital structure over the year



Source: Hoa Phat’s financial reporting in the period of 2016 - 2020

*** Operating performance**

Chart 4. Hoa Phat’s revenue and net profit over the year



Source: Hoa Phat’s financial reporting in the period of 2016 - 2020

The revenue and net profit of Hoa Phat Group in general tended to increase during the whole research period, the average growth rate was about 28%/year. Especially, despite many challenges, the revenue in 2020 was exceeded 6% compared to the plan and increased by 41% over 2019. The Group's growth rate increased 6.3 times after 10 years (since 2010). Additionally, the Group's profit exceeded 50% of the year plan and achieved an increase of 78% over the same period in 2019.

Steel production (including construction steel, hot-rolled coil, steel pipe, galvanized steel sheet, prestressed concrete bar, etc.) still played a key role and was the core business line of the Group with a growth rate of 81%, mainly contributed from the increase in output of Hoa Phat Dung Quat Steel Integrated Complex. The steel products obtained more noticeable profit with the increase of 94%.

Revenue and profit after tax of the steel sector respectively accounted for 84% and 82% of the Group's revenue and profit. In 2020, total output of billets, steel pipes and steel sheet gained 6,770,000 tons, increased 1.2 times compared to 2019. Even though output of finished steel products of the whole market reached the negative growth rate of 1.18% over the same period of 2019, Hoa Phat's construction steel still gained 22.53% of the growth rate. Hoa Phat Group's construction steel and steel pipes continued to maintain the No. 1 market share in the market respectively 32.5% and 31.7%. Hot-rolled coil (HRC) was officially launched on the market in November 2020.

The Group's agriculture sector obtained striking developments with an increase of 32% in revenue and contributed 12% to the Group's revenue. Specially, Hoa Phat's profit in agriculture sector is 3 times higher than the same period of 2019 with the strong growth of the livestock and feeds. Hoa Phat's agricultural products such as Australian cow, pigs bred by biosafety technology, clean chicken eggs led the market, showing the high potential for the next year's development.

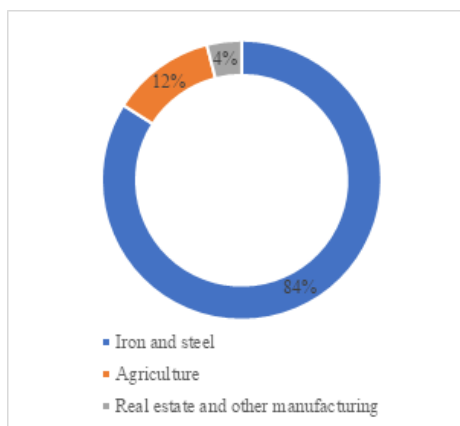


Chart 5. Share of revenue by segments in 2020

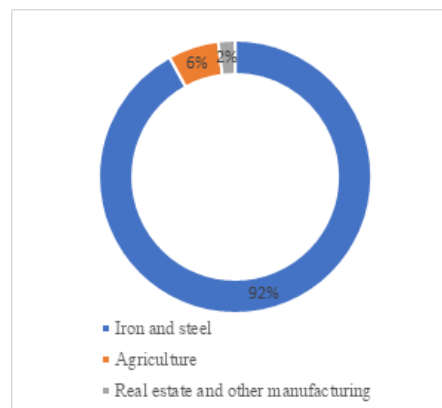
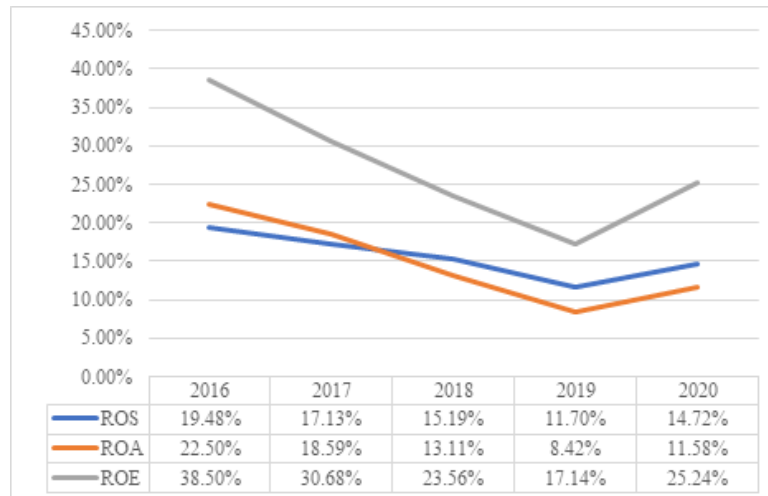


Chart 6. Share of profit by segments in 2020

Source: Hoa Phat's financial reporting in the period of 2016 - 2020

The real estate sector completed the after-tax profit target compared to the assigned plan. During the year, Hoa Phat Industrial Zones leased 23.5 ha of land, filled almost all areas invested in technical infrastructure. Hoa Phat is currently carrying out investment procedures for expansion, site clearance compensation and infrastructure construction to meet the current high demand for industrial land lease.

Chart 7. Hoa Phat's profitability over the year

Source: Hoa Phat's financial reporting in the period of 2016 – 2020

Hoa Phat's profitability in general tended to decrease in the period 2016 - 2019, then rebounded sharply in 2020. Key indicators in evaluating performance are ROE (Return on Equity) and ROA (Return on Assets). In 2020, Hoa Phat's ROE reached 25%, significantly higher than the rate of 17% in 2019. Besides that, the Group's ROA also rebounded from 8% in 2019 to 12% in 2020. While assets increased by 29.2%, ROA improved over the same period in 2019 mainly due to the sharp increase in profit after tax. In the future, it is certain that this index will be better because the investment assets will operate effectively.

3. HOA PHAT'S ACHIEVEMENTS AND LIMITATIONS

3.1. Achievements

Firstly, Hoa Phat's scale expanded, along with an increase in investment in fixed assets. The scale of Hoa Phat in general tends to expand with a relatively fast average growth rate (in the period 2015-2017, it increased by about 40% per year, in the period 2018-2020 it increased by about 17% per year).

Secondly, Hoa Phat has made efforts to expand the output market to increase revenue and maintain profitability. In recent years, although the steel market has many fluctuations, supply exceeds demand, protectionist trend increases, but Group is still trying to improve the output market. During the research period, profitability indicators were always positive.

3.2. Limitations

Firstly, the group's profitability is unstable, decreasing during the period 2016 – 2020.

Secondly, Hoa Phat's business results depend a lot on the price of input materials and the selling price of output products, which Hoa Phat completely depends on the market.

Thirdly, the fact that the production capacity is too large is also a potential risk for Hoa Phat. In the domestic market, there is a risk of oversupply in the short term. Vietnam's domestic construction steel market consumes about 9-10 million tons/year. However, when the Dung Quat project comes into full operation in 2021, Hoa Phat construction steel output can supply to the market up to more than 5.1 million tons/year, an increase of 2.7 million compared to 2019.

Fourthly, another factor that may make Hoa Phat's growth prospects worse is the absence of sudden profits from the agricultural segment. The government is applying a lot of measures to reduce the price of pork such as increasing imports, propagating in the media, forcing large livestock enterprises to reduce prices...

4. CONCLUSION AND RECOMMENDATIONS

In the context of globalization, especially European Union–Vietnam Free Trade Agreement (EVFTA), taking effect on August 01, 2020, has paved the way for growth of the steel export market. Hoa Phat must make careful preparations to welcome opportunities as well as satisfy committed technical standards, understand deeply legal framework of the market and technical barriers to be more proactive in export, and avoid being trapped in the trade defense lawsuits. In addition, Hoa Phat needs to be proactive in accessing, enhancing its competitiveness by cost-saving, improving administration capacity, product quality and expanding the market. The Group has continuously reviewed and re-evaluated its sales policy and distribution system to make proper adjustments, ensure boosting output, and build a stable and sustainable distribution system.

Considering human resources to be the core value of success, Hoa Phat focuses on training knowledge and skills for employees. Subsidiaries regularly hold training courses, closely coordinate with universities, colleges, vocational schools in mechanical engineering to attract skilled workers satisfying requirements for business development. Development policies in terms of both quality and quantity are always implemented equally. Hoa Phat Group has deployed a rating system to standardize the human resource system on a group scale to be applied on a step-by-step basis in calculation and payment of salaries to motivate employees.

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THE GLOBAL REPORTING INITIATIVE STANDARDS FOR SUSTAINABILITY DISCLOSURE

Assoc. Prof. Dr. Ngo Thi Thu Hong¹, MA. Le Thi Yen Oanh²

Abstract: Sustainability reports are important for stakeholders and a corporation itself as the public disclosure of the corporation's activities in relation to its sustainable development could strengthen the trust of stakeholders, improve the corporation's reputation and its brands' recognition. In fact, many businesses are currently preparing sustainability reports these days. One of the most popular reporting standards applied to sustainability reports is the Global Reporting Initiative standards (the GRI standards). This paper will present a set of principles that would be applied to determine whether a specific content should be included in the sustainability report, then discuss on quality requirements of a sustainable report according to the GRI standards before present the role of this report for the users.

Keywords : sustainability reports, the GRI standards

1. INTRODUCTION

In fact, the operations performed by corporations exploit resources to achieve their profit goals, therefore, it is inevitable that businesses' activities are currently causing bad impacts on the environment, such as depleting resources, destroying the ozone layer, etc. Hence, business's sustainable development has become an inevitable development orientation in the world. Sustainable development refers to the development that meets the needs of the present without compromising the ability of future generations to meet their own needs. Sustainable development of business includes many activities. Stakeholders need information about the company's efforts in sustainable development. Sustainability reports are considered as tools to measure, record and publish the goals and responsibilities of enterprises towards their sustainable development actions. In addition to financial information, information on business activities in terms of environment and society is increasingly concerned today. Sustainability reporting is a new tool that helps businesses organize and disclose information about their sustainability activities in a similar way to financial statements.

2. LITERATURE REVIEW

Oliver Boiral (2013) analyzed the content of 23 sustainability reports in the energy and mining industry that are rated A and A+ by the GRI organization. Information presented in the sustainability report include 92 indicators according to GRI standards which arise from 116 important business events related to corporate sustainability. Research results show that 90% of negative events are not mentioned in the sustainability report, which contradicts the completeness and transparency requirement of reporting under GRI standards. The study raises issues to consider about the reliability of the GRI sustainability report ranking.

^{1,2} Academy of Finance.

Agnieszka Leszczynska (2012) analyzed 29 sustainability reports of multinational companies in the period 2005-2010 in order to assess the changing trends in the content of the sustainability report and the extent to which useful to shareholders. The research was carried out by collecting the evaluation opinions of the shareholders. Research showed that there is a great improvement in the content of the sustainability report prepared in 2010 compared to 2005, especially the reports are more detailed on the fundamental issues such as economic, environmental and social sustainability. The study appreciated the progress in terms of reporting clarity and timeliness. However, the gap discovered in the sustainability report is that the comprehensive, reasonable and objective level of the information makes the sustainability report less effective for shareholders.

Petra (2010) studied the characteristics of businesses with good quality of sustainability reporting. At the time of the author's research, the latest version of the GRI sustainability report was G3. The study is based on a sample of 124 businesses across 25 countries. The number of studied enterprises is divided into 2 groups: 74 enterprises prepare sustainability reports according to GRI, 50 enterprises do not prepare sustainability reports according to GRI. Research results have found that the characteristics of the sustainability report are related to the regulations on the Sustainability Report in each country, business industry, profit and growth situation of enterprises. In fact, it has been shown that in countries that do not have regulations on sustainable development reports, enterprises make reports according to G3 standards in a better way than countries that have regulations. The study has explained the research results that, although domestic enterprises have not yet regulated the Sustainable Development Report, they have made efforts in sustainable development activities and want to show their stakeholders. Internal and external stakeholders understand their operations through high standard reporting in accordance with GRI version G3. Meanwhile, in countries that already have regulations on reporting on sustainability, businesses do not want to spend money to prepare a separate report. Regarding the relationship between the industry and G3 sustainability reporting, the research results show that enterprises operating in the energy and manufacturing sectors tend to prepare sustainability reports following GRI version G3 more than other industries.

Dominique Diouf Oliver Boiral (2017) studied the perceptions of stakeholders on the quality of the sustainability reports under the GRI framework. The study carried out 33 interviews with subjects related to the Sustainability Report in Canada. The study sheds light on the flexibility and uncertainty of managers in applying the GRI framework to prepare the Sustainability Report. Managers often tend to emphasize the positive aspects of corporate sustainability, but ignore the negative impacts on sustainability.

Research on sustainable business development in Vietnam has also been really exciting. At the National Conference on Sustainable Business Development in the Context of Integration (2016) and the International Conference on Sustainable Production and Consumption (2017) at the National Economics University, many scholars were attracted. Research papers focus on the nature, role and importance of sustainable business development, international experiences for sustainable business development, current situation and solutions to promote sustainable business development and the sustainability of industries and businesses in the Vietnamese economy. Pham Thi Minh Hong (2016) also gave an overview of the publication of the sustainability reports of enterprises in the VN30 group for the fiscal year 2015.

3. METHODOLOGY

The main methods used in the research are summary, analysis and evaluation research methods. Documentary information and data were used in the research from three basic sources: Firstly, the Annual Report and the Sustainability Reports of listed companies which are exploited from the websites of the companies. Secondly, survey through questionnaires and in-depth interviews with stakeholders about the quality of the sustainability report. Thirdly, events affecting the sustainable development of enterprises are collected on the mass information.

4. SUSTAINABILITY REPORTS AND THE GRI STANDARDS

The GRI standards create a common language for organizations – large or small, private or public – to report on their sustainability impacts in a consistent and credible way. This enhances global comparability and enables organizations to be transparent and accountable.

There is a set of principles that would be applied to determine whether a specific content should be included in the sustainability report as follows:

Principles of stakeholder engagement: these principles require the business to identify its groups of stakeholders and engage their reasonable expectations and interests when preparing sustainability reports. Stakeholders are people or organizations that are affected by the business's activities, such as shareholders, the management of the business, lenders, community, the government, customers, suppliers, etc. The reasonable expectations and interests of stakeholders are the primary reference point for many decisions in the reporting process.

Principles of Sustainability: these principle require reporting to present information about business's performance in the broader context of sustainability. The fundamental question of sustainability reporting is how the business contributes or aims to contribute in the future by improving its economic, environmental, and social responsibility at the local, regional, or global level. Just reporting on business performance (about profit or loss) alone does not answer this fundamental question. Reports must therefore seek to represent performance in relation to broader concepts of sustainable development. This includes discussions and organizational performance in the context of resource, environmental, and social constraints and needs at the industry, local, regional or global level.

Principle of materiality: This principle requires sustainability reporting to include areas that reflect a company's significant economic, environmental and social impacts that could influence its assessments and decisions made by stakeholders.

4.1. Contents of a sustainability report according to the GRI standards

The GRI sustainability reporting standard consists of 4 main parts: Standard 100 - General Standards; Standard 200 - Economic standards; Standard 300 - Environmental standards; Standard 400 - Social Standards. The level of reporting according to each GRI standard, specifically includes 3 levels: request, suggestion, and guidance.

- ***General standards:*** Applicable to all organizations that want to prepare a sustainability report, including 7 parts: (1) Strategy and analysis; (2) Organization profile; (3) Identification of material areas and boundaries; (4) The consultation of the interested parties; (5) Report file; (6) Administration; (7) Ethics and integrity.

- ***Specific standards:*** GRI divides information disclosed according to specific standards into 3 categories: economic, environmental and social. The social category is further subdivided into four sub-categories which are the treatment of workers and decent work, human rights, society and social responsibility for products.

List of reporting areas according to GRI standards as follows:

Category	Fields
Economy	<ul style="list-style-type: none"> - Economic performance - Market presence - Indirect economic impacts - Procurement practices - Anti-corruption - Anti-competitive behavior - Tax
Environment	<ul style="list-style-type: none"> - Materials - Energy - Water and effluents - Biodiversity - Emissions - Waste - Environmental compliance - Supplier environmental assessment
Society	<ul style="list-style-type: none"> - Employment - Management/Labour Relations - Occupational health and safety - Training and education - Diversity and equal opportunity - Non-discrimination - Freedom of association and collective bargaining - Child labor - Forced or compulsory labor - Security practices - Rights of indigenous peoples - Human rights assessment - Local communities - Supplier social assessment - Public policy - Customer health and safety - Marketing and labeling - Customer privacy - Socioeconomic compliance

(Source:<https://www.globalreporting.org/how-to-use-the-gri-standards/gri-standards-english-language/>)

4.2. Process for defining report contents and their boundaries:

According to the GRI, the reporting enterprise needs to present the process of determining the report contents including hypothetical methods and implementation decisions of the reporting enterprise. The process of determining report contents is subjective and separate for each enterprise. Therefore, it is very important for enterprises to transparently disclose their judgments. Senior management of the enterprise should be directly involved in defining contents of the report and should be responsible for approving relevant strategies.

The process of defining report content includes 4 steps:

First step: Identify

Based on principles of sustainability and principles of stakeholder engagement, businesses need to identify areas and boundaries to consider including in the report. Topics should be included in the report if they are considered material to reflect the economic, environmental or social impact that could influence its assessments and decisions made by stakeholders. Businesses need to review all impacts related to all activities and relationships whether occurring inside or outside the business.

Second step: Prioritize

After reviewing the topics that can be included in the report, enterprises should consider the importance of these issues to the economy, environment and society, while also considering the significant impact of issues on stakeholder assessments and decisions. The principle of materiality requires that reporting cover matters that reflect significant economic, environmental, and social impacts and must have a significant influence on the judgments and decisions of stakeholders. To determine whether an issue is material or not requires qualitative analysis, quantitative analysis, and discussion. The problem of priority given to the report should be based on the principle of materiality and principles of stakeholder engagement.

Stakeholder engagement requires businesses to review key stakeholders, surveying their key perspectives and interests. Stakeholder views are gathered for analysis and a decision is made to include them in the report. Stakeholder consultation helps businesses identify issues that are material to their stakeholders and spot differences in their perceptions with stakeholders' perceptions. The consultation process with stakeholders is objective, systematic and two-way. Some separate stakeholder groups such as workers and communities can be consulted without the involvement of management.

The report should prioritize areas that are likely to have a positive or negative impact on the company's ability to implement its vision and strategy. Each area should be considered based on the following aspects: Likelihood of impact, severity of impact, likelihood of risks and opportunities, impact on long-term performance of the business? The enterprise must establish a list of material matters that will be presented in the report.

Third step: Approve

The list of key areas that need to be included in the report is approved by senior management within the enterprise before collecting report information. Material areas need to be disclosed according to standards and indicators for reporting.

Third step: Re-evaluate

Once the report has been issued and continues to prepare for the next reporting period, the enterprise must take the step of reviewing the report. The review process was carried out on the areas included in the report, discovered new material areas arising based on the new development context, and collected feedback from stakeholders. The reassessment process uncovers new factors, areas of change, and contributes to identifying reporting issues for the next reporting cycle.

5. QUALITY REQUIREMENTS OF SUSTAINABILITY REPORTS ACCORDING TO THE GRI STANDARDS

Sustainability reporting quality requirements ensure that stakeholders based on the information provided in the report are able to evaluate sustainability performance appropriately and make optimal decisions. The requirements for quality assurance of sustainability reports include: Balance, comparability, accuracy, timeliness and clarity.

Balance requirement: Sustainability reports are required to reflect both positive and negative impacts of enterprises on sustainable development. The balance requirement helps information users to make a comprehensive assessment of sustainable development activities. An imbalance can occur when enterprises only mention in the report their achievements and ignore events that negatively affect sustainable development. In order to meet the requirements of balance, it is necessary to do the following 3 things: (1) The sustainability report should avoid omitting events that make the reader of the report make an incorrect decision or judgment; (2) The report should include both favorable and unfavorable events that may influence the decisions of the parties concerned; (3) Make a clear distinction between the actual presentation and the firm's interpretation of the information.

Comparable requirement: An essential requirement that allows the reader of the report to evaluate the performance of the enterprise. Implementing this principle first allows the reader of the report to analyze the change in sustainable development activities of enterprises over time, and at the same time can analyze and compare with the sustainable development activities of other enterprises.

Accuracy requirement: The reported information needs to be complete and accurate so that the information users have grounds to evaluate the business's activities. Accuracy refers to both the accuracy and the margin of error. Enterprises need to describe basic and demonstrable measurement and measurement techniques that can be replicated with similar results. The error is not allowed to be too large to influence the decision of the user of the reported information. Businesses need to ensure that the quality of the information reported is valid based on the underlying information and evidence.

Timeliness requirement: The value of information is closely tied to the time of providing information to help stakeholders use integrated analysis to make decisions. Sustainability reports must be released on time and available to stakeholders to make informed decisions.

Clarity requirements: Sustainability reports are required to be presented in a way that is easy to understand, accessible and usable. The transparency of the report allows the user to find and understand the information easily. To ensure clarity, sustainability reports must also present a full level of information, limiting redundant information, scientific terms, slang, abbreviations, and difficult representations.

6. THE ROLE OF SUSTAINABILITY REPORTING

Sustainability reports are considered as tools to measure, record and disclose the goals and responsibilities of enterprises towards sustainable development. Because in addition to financial information, information about business activities in terms of environment and society is increasingly interested. Sustainability reports is a new tool that helps businesses organize and disclose information about their sustainability activities in a similar way to financial statements.

Sustainability reports are important for stakeholders and a corporation itself as the public disclosure of the corporation's activities in relation to its sustainable development could strengthen the trust of stakeholders, improve the corporation's reputation and its brands' recognition.

Today, stakeholders are always interested in how sustainable activities benefit the core business of the enterprise. For enterprises, the process of identifying sustainable development aspects and preparing sustainability reports helps businesses consider the interests of stakeholders, identify risks and business opportunities, thereby prepare for new development trends, decentralize responsibilities and improve the management system to improve operational efficiency.

The world's most popular sustainability reporting standards was developed by the GRI. Sustainability reports under the GRI are considered the most useful because of their widespread use and recognition. The GRI standards addresses the core issues of sustainable development including economic, social and environmental impacts with technical guidance on how to measure and report these issues.

Currently, the publication of sustainability reports is becoming an international practice. Sustainability reporting not only helps businesses strengthen their cooperation with stakeholders, but also helps businesses strengthen business risk management, improve adaptability to a rapidly changing environment and compete more effectively.

In addition, a number of studies show that there are authentic evidences about the correlation between sustainable development and operational efficiency and profitability of enterprises. The lack of information on sustainable development can lead to loss of opportunities for business cooperation, attracting investment capital from investors who are responsible for sustainable development. Sustainability reporting is a necessary condition for enterprises to participate in international economic integration.

According to economic experts, the sustainability report is a useful non-financial reporting product. But it must be acknowledged the fact that the sustainability reporting process is still too new and relatively unfamiliar to many Vietnamese enterprises. To make sustainability reporting become popular and quality, first of all, businesses need to be aware of the important role of sustainability and sustainability reporting.

7. CONCLUSION

Sustainability reporting is a new issue for Vietnamese businesses. Sustainability reporting will benefit not only stakeholders but also the business itself, the economy, the community and the environment. Therefore, in Vietnam, it is very necessary for enterprises to prepare and present sustainability reports. At the same time, the GRI standards are a great source of documents for enterprises to approach.

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VIETNAMESES ACCOUNTING SYSTEM DEVELOPMENT IN THE CONTEXT OF INTERNATIONAL INTEGRATION

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Abstract: *As one of the most effective aspect in management system, accounting plays an important role in both macroeconomy and microeconomy. In the past few years, Vietnamese accounting system has been changing enormously to support the process of managing the national economy as well as managing businesses. In the current context of the global integration and the fourth industrial revolution, it is an requirement for Vietnamese accounting systems to be innovated to be able to handle current issues. This paper will present a brief overview on the foundation and development progress of Vietnamese accounting systems, then give an assessment on past achievements and limitations, as well as current threats and opportunities of Vietnamese accounting systems before proposing several suggestions to improve it in current context..*

Keywords: *Vietnamese accounting system; international integration.*

1. INTRODUCTION

International integration in recent years has created many opportunities for Vietnamese economy, however, at the same time, there are also many challenges that need to be overcome and many opportunity that need to take advantage of them to turn them into reality. Especially, in the context of the fourth industrial revolution, it is an requirement for Vietnamese accounting systems to be innovated to be able to handle current issues.

In order to fully understand the Vietnamese accounting systems, first of all, This paper will review the process of the development of the Vietnamese accounting systems, then assess its achievements and limitations before proposing some solutions for the development of this system in current context.

2. AN OVERVIEW ON THE FOUNDATION AND DEVELOPMENT PROGRESS OF VIETNAMESE ACCOUNTING SYSTEMS

Vietnamese accounting system were found quite early. From the 14th century, Vietnam was a feudal country with poor backward agriculture. Accounting in this period is mainly simple recording, applying the “single entry” method and based on cash accounting principles. From the end of the 16th century to the end of the 18th century, trade activities between Vietnam and Western countries took place strongly. Accordingly, Vietnamese accounting has made a remarkable development, switching to the “double recording” method mainly. When the French colonialists invaded our country (1858) and placed dominion over the whole of Indochina, Vietnamese accounting was greatly influenced by French accountants. At this time, the French government

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built a legal framework on accounting to control the financial system, the budget of Indochina and businesses at that time.

After the successful August Revolution, the Democratic Republic of Vietnam was born. It was very interested in building a legal framework on accounting, ensuring accounting in enterprises, mainly national defense corporations in 1945s. However, during this period, basic accounting was still deeply influenced by French accounting methods and mind sets.

Since the restoration of peace, the Democratic Republic of Vietnam State has taken over the businesses left by France and continued to develop businesses, forming a state-owned economic system. That requires an urgent need to have a complete, synchronous and appropriate accounting system. Therefore, in 1957, “Accounting system for industrial enterprises” and “Accounting system for basic construction” were promulgated by the State. Next, the Ministry of Finance promulgated the Material Accounting System for factories and construction sites [5]. During this period, the State also paid great attention to the training of accountants to meet the accounting needs of enterprises. In 1961, Decree 175/CP dated October 28, 1961 on “Charter of State Accounting Organization” was promulgated. This is the highest legal document on accounting during this time, serving as the foundation for building the organizational system and accounting system. Following that, the Ministry of Finance continuously issued accounting regimes to meet the basic requirements of enterprises in accounting works. From 1971 to 1980, which was the period of accounting unification in the whole country, the accounting regimes of this period were mainly supplemented and modified the accounting system to suit the development requirements of the economy.

From 1981 to 1990, it was the first period of accounting reform in Vietnam to match the operation of the economy under the market mechanism. The Ministry of Finance promulgated the Labor and Salary Accounting System according to Decision No. 217/TC/CDKT dated May 18, 1982); Accounting inspection regime according to Decision No. 33/TC/CDKT dated January 14, 1984), etc. In the last years of the 1990s, the State issued basic regulations on accounting of the renovation period such as: Ordinance on Accounting and Statistics (Order No. 06 LCP/HDNN dated 20/5/1988); Charter of the State Accounting Organization (Decree No. 25HDBT dated 18/3/1989); Periodic accounting reporting regime applied to state-owned industrial enterprises (Decision No. 224 QD/CDKT dated April 18, 1990); Administrative and non-business accounting regime (Decision No. 257 QD/CDKT dated June 1, 1990); Accounting regime for production and business outside the state (Decision No. 598 QD/CDKT dated December 8, 1990), etc. Along with this time, the “Club of Chief Accountants of State-owned Enterprises” and Association of Vietnamese accounting and auditing were established.

From 1991 to 2000, it was the period of continuing to renovate Vietnamese accounting system according to the market mechanism - integration and formation of the audit system, the beginning of international integration, opening up the national economy. In 1995, Vietnamese accounting system was reformed on a pilot basis in 642 enterprises and officially issued Decision No. 1141 TC/QD/CDKT dated November 1, 1995, applied from January 1, 1996. Also during this period, the Internal Audit Regulations were issued and applied according to Decision No. 932 TC/CDKT dated October 28, 1997. At the same time, a number of Vietnamese Accounting Standards (VAS) were issued.

The period from 2000 to present. During this period, the Vietnamese Accounting Standards was established. From 2000 to 2006, there were 26 corporate accounting standards issued. On June

17, 2003, the Vietnamese Accounting Law No. 03/2003/QH11 was passed by the 11th National Assembly, which is the highest legal document during this time. After 10 years of implementation, this law has been revised to meet changes in accounting activities. In 2015, the Vietnamese Accounting Law No. 88/2015/QH13 was promulgated and amended on November 20, 2015, stipulating that the scope of regulation includes the content of accounting works, the organization of the accounting apparatus, accountants, business accounting services, state management of accounting and professional organizations in accounting. The Vietnamese Accounting Law regulates all accounting activities, regardless of economic sectors, contributing to creating an equal environment in business activities, promoting economic activities of enterprises in all fields [5]. The Vietnamese Accounting Law, which was approved by the National Assembly and took effect from January 1, 2017, has made a great step forward compared to its previous document. One of the most important changes is the addition of the concept of “fair value” to form the basis for issuing relevant accounting standards in this area, including those for financial instruments, fixed assets and investment properties.

3. ACHIEVEMENTS AND LIMITATIONS OF VIETNAMESE ACCOUNTING SYSTEM

3.1. Achievements

Firstly, after more than 30 years of reforming, especially after the implementing the “Strategy for development of accounting and auditing to 2020 and vision to 2030”, which was issued together with the Decision No. 480/QD-TTg dated March 18, 2013 of the Prime Minister, Vietnamese accounting system has made a great progress, contributing to the improvement of efficiency and transparency of the economy, initially integrating with the international accountant. Accordingly, many legal documents on accounting have been newly issued and amended in accordance with international practices, creating a legal basis for the accounting field to develop. The role and function of state management in the field of accounting is increasingly enhanced. The apparatus of State management agencies in charge of accounting has been consolidated, creating an important foundation for performing the function of management and supervision of accounting activities in the context of international integration and the Fourth Industrial Revolution. The contingent of cadres doing the state management of accounting in ministries and branches basically have high professional qualifications, basic training in expertise and information technology, and professional qualities and ethics, professional working skills; “The inspection, supervision and compliance with accounting laws are carried out with appropriate, effective, public and transparent solutions” [4]

Secondly, the Vietnamese accounting system, since its establish and development through many different stages, has met the requirements in accordance with the development level of the economy and the management mechanism of the State. Also, this system gradually approach closer to international practices, meet information requirements for the operation and management of financial resources both at macro and micro level. In particular, the Vietnamese Accounting Laws promulgated in 2003 and 2015 were revised together with the Vietnamese Accounting Standards System (VAS) which has been promulgated since 2007, and is currently being revised to be harmonize to International Accounting Standards (IAS) and International Financial Reporting Standards (IFRS). Especially on July 31, 2019, the Minister of Finance signed and promulgated Decision No. 1299/QD-BTC approving the project of public accounting standards of Vietnam. This project has been actively implemented, promulgating 5 standards in the immediate future.

The development and promulgation of Vietnamese public accounting standard system is associated with the implementation of the project on formulating state financial statements. This plays as the base for the system of State financial mechanisms and policies with a system of related legal documents such as the Law on State Budget, Law on management and use of public property; Law on Debt Management, Law on Securities, etc.

Thirdly, the accounting and auditing service market has been formed and gradually developed in terms of quantity, size and quality, creating conditions for improving the transparency and publicity of the economic and financial activities of all enterprises and organizations of all economic sectors. According to statistics of the Ministry of Finance for the period from 2017 to 2019, the number of enterprises eligible to provide accounting services in 2017 was 40 enterprises, this figure was 78 enterprises in 2018 and increased to 118 enterprises in 2019 [4].

Fourthly, in the process of international integration, Vietnam has actively expanded its relations with international accounting organizations, thereby creating conditions for Vietnamese accountants to increasingly integrate with international accounting practices and has affirmed the position of Vietnamese accountants.

3.2. Limitations

Firstly, in terms of the legal framework, especially in the field of public accounting, there are still many shortcomings, slow to be completed, there are no standards that are in accordance with international practices. There are only specific guidelines on accounting works in public entities. The regulations set out in the public accounting regime are mostly specific professional guidelines, but there are no rules that are consistent with international practices.

Secondly, in the context of global integration, economic and financial information needs to comply with international standards. Meanwhile, there are still major differences between Vietnamese Accounting Standards (VAS), International Accounting Standards (IAS) and International Financial Reporting Standards (IFRS). This cause significantly impact on the international integration process of Vietnamese accounting system. This difference is reflected in the preparation of some items in the Financial Statements. Specifically, a number of items as Assets and Liabilities which are evaluated at fair value under IFRS are prepared at historical cost according to VAS. This makes the value of assets and liabilities of the enterprise not reflect the actual movements of the market.

Thirdly, the accounting works in Vietnamese enterprises today is mostly done by manual method, heavy on paperwork. Meanwhile, the Fourth Industrial Revolution has technology to perform data collection and processing tasks through modern accounting software, processing a huge amount of information in a very short time and in different locations around the world.

Fourthly, the professional level and quality of the management staff and accountants have been improved a lot, but compared to the new advancement of technology, there are still many shortcomings. Information technology infrastructure and the level of application of information technology in accounting are still limited. This significantly affects the management, inspection and supervision as well as the implementation of accounting works in the context of the Fourth Industrial Revolution.

Fifthly, the training of high-quality accountants has been raised one step, but compared to the requirements of businesses, there are still many shortcomings. Students who are major in

accounting is still confused by the actual handling of professional works, therefore, enterprises must have time to re-train before they can use them to take on jobs.

Sixthly, the development of the accounting market is still very limited, small in scale, and has not yet created a competitive advantage compared to other countries in the region as well as in the world. The quality of accounting services has not yet met the requirements of society and the economy.

Seventhly, the state management of accounting still faces many difficulties and challenges in diversified business models with new technologies being increasingly applied in practice at enterprises.

Eighthly, the information technology infrastructure of Vietnamese enterprises is still limited. The level of application of information technology in accounting work of the vast majority of enterprises, especially small and medium-sized enterprises of all fields and all economic sectors, although there have been many advances, but have not yet met the practical requirements. This has many reasons, one of the most significant reason is that the financial capacity of Vietnamese enterprises is still limited and the scientific and technological level of the accounting staffs in the enterprise is still low.

4. OPPORTUNITIES FOR VIETNAMESE ACCOUNTING SYSTEM DEVELOPMENT

In the context of the strong development of many new business models and the advanced of science and technology, the State management of accounting faced many difficulties and challenges. The Fourth Industrial Revolution is ushering in a new era - the era of digital technology, connecting globally, bringing development opportunities to all fields and professions, including the accounting field. This is the area that has the most impact, because when applying digital technology, accounting works are not limited by geographical distance. Then, if the necessary conditions are met, the accounting works can be performed at any location on a global scale. Digital technology facilitates the replacement of manual accounting tasks such as collecting, processing and providing information for business administration. However, artificial intelligence cannot replace humans in analyzing and finding causes in specific situations arising in business operations. Even so, the Fourth Industrial Revolution is changing the environment and working conditions of accountants. The explosion of technology and information along with the strong globalization process has a great impact on the development of many different fields, including accounting.

With a new approach, using modern and smart technology will increase the efficiency of accounting many times compared to the traditional way. With a modern and intelligent accounting software system, it facilitates the use of more means of calculating, acquiring and processing information, social media, improving the way of working and the trend of using outsourcing services, improving accounting labor productivity, etc.

The globalization is encouraging the free movement of money in the financial market, increasing international linkage in the use of accounting outsourcing services, transferring professional skills as well as increasing the competitiveness of accounting human resources, creating a change in human resources in the accounting industry, attracting highly qualified human resources and modern information technology.

In the trend of globalization, there will be new regulations on information disclosure, creating conditions for the innovation of thinking of accountants in enterprises in terms of information collection, processing which requires accountants to have high professional qualifications and modern technology related skills.

The advances of the Fourth Industrial Revolution have made businesses, organizations and individuals operating in the field of accounting deeply aware of the need and importance of applying technology. At the same time, it is also required that they constantly study and research to improve their scientific and technological level, and apply them to practice in order to adapt to the conditions of new technology to improve accounting labor productivity and the quality of information collection, processing and provision for management.

The Fourth Industrial Revolution develops with connected applications, storing an extremely large amount of data and processing information quickly, opening up opportunities for the accounting field to access the use of new technologies. Modern accounting software with great advantages and suitable cost. Since then, improving accounting labor productivity, effectively using resources, saving accounting time and human resources, improving the quality of accounting services, etc.

Achievements of the Fourth Industrial Revolution facilitate the expansion of international relations in general and in the accounting field in particular, accountants can perform accounting works anywhere.

5. SUGGESTIONS TO EFFECTIVELY DEVELOP VIETNAMESE ACCOUNTING SYSTEM IN THE CONTEXT OF INTERNATIONAL INTEGRATION

In order to develop the accounting field in the context of international integration and the fourth Industrial Revolution, the following suggestions are proposed.

5.1. Regarding the State

With the function of comprehensive management of the national economy, the State needs to perform the following steps:

Firstly, continue to improve and synchronize the accounting legal system, focus on implementing the application of international financial reporting standards approved by the Ministry of Finance. Also, the improvement of the VAS should be in line with international practices. In addition, a system of public accounting standards should be quickly promulgated.

Secondly, strengthen and improve the effectiveness of monitoring and checking the compliance with the law on accounting of enterprises and units of all economic sectors in order to promptly detect the violation.

Thirdly, there is adequate investment in the development of information technology infrastructure in a synchronous and timely manner, meeting the trend of digital technology development in the era of the Fourth Industrial Revolution, especially paying attention to building a network security system, protecting the safety of information, financial and accounting data.

Fourthly, review preferential policies, support businesses in training and fostering high-quality accounting human resources, especially in training qualified accountants that could work with high information technology, capable of fulfilling the demanding requirements of digital technology.

Fifthly, developing and diversifying types of accounting and auditing services, improving the service quality of accounting and auditing service enterprises, renewing the inspection and examination process for the audit teams, accountants, etc.

Sixthly, promote international cooperation, strengthen the development of the accounting and auditing service market, and develop and diversify accounting and auditing service activities in line with regional and international countries.

5.2. Regarding training institutions

Training institutions in economics, accounting and auditing have made positive changes in the past years in training high-quality accountants. However, in reality, many graduates do not meet the requirements of employers. Therefore, in the coming time, it is necessary to continue to innovate training contents, programs and methods on the basis of close cooperation with enterprises to enhance practical knowledge, enabling students to quickly access the accounting process in the context of modern technology application brought by the Fourth Industrial Revolution.

5.3. Regarding enterprises

Enterprises need to be deeply aware, renew their thinking before the requirements of regional and international integration in the field of accounting; comply with the principles and regulations promulgated by the State in the field of finance and accounting; closely coordinate with professional associations and training institutions in the training and retraining of the accounting staff in order to improve the quality of the accounting team in terms of both professionalism, professional ethics and technological information; mobilize financial resources for investment in information technology infrastructure and high-quality accounting human resources to meet new requirements

6. CONCLUSION

Currently, Vietnamese accounting and auditing has been taking place in the context of international integration. Moreover, the fourth industrial revolution is developing strongly. Therefore, it is necessary to have full awareness and take proactive measures for Vietnamese accounting and auditing to develop effectively, converge and harmonize among countries over the world, and take advantage of positive impact of the fourth industrial revolution on accounting works.

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ACTIVITIES OF CONSTRUCTION INDUSTRY SECTOR IN VIETNAM IN THE CONTEXT OF GLOBALISATION

MSc. Nguyen Thu Thuong¹

Abstract: *In any period, the development history of human society is always associated with architectural works. Therefore, construction enterprises play a particularly important role in the national economy. The paper aims to clarify the process of formation and development as well as the characteristics of the construction industry in Vietnam in the context of globalization.*

Keywords: *construction, activities, Vietnam.*

1. INTRODUCTION

Along with different economic sectors such as agriculture, industry and services, the construction industry is one of the crucial economic sectors of each nation. The construction industry contributes to creating a premise of material and technical foundations for economic development such as roads, ports, airports. Besides, construction industry always accounts for a high proportion in the economic structure of a country, especially in developing countries like Vietnam. It also contributes to creating jobs for a large part of labor, which helps reduce the unemployment rate for the economy.

Construction enterprises are firms whose products usually have high value, complex structure and long construction time. Therefore, they are enterprises with huge capital needs, long payback period and high business risks, and also depending on weather conditions. In the process of market economic development, with the fierce competition of construction between enterprises domestically and internationally, construction enterprises in Vietnam are facing great opportunities and challenges. To develop sustainably in the context of globalisation, it is necessary for enterprises to understand the activities of construction sector in Vietnam.

2. SITUATION OF CONSTRUCTION SECTOR'S ACTIVITIES IN VIETNAM

Construction is one of the world's largest-scale industries, which serves basic human needs such as accomodation, production, tourism, military, trade... In Vietnam, the construction industry is considered to be quite young with a history of just over 60 years, marked by the transition from the state economy to the private economy. In the period from 1954 to 1985, after liberation in 1954, the North achieved independence and developed in the direction of a centrally planned economy (which is, the State took full control of the economy, gradually advocated the abolition of private economy). During this period, the construction industry was mainly managed by government-affiliated units, taking the lead in mobilizing human and material resources and implementing construction projects. The Ministry of Architecture (later became the Ministry of Construction)

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was established in 1958 and is the state management agency for the entire construction industry, in charge of planning and implementing investment and construction for the State.

During the next 20-year period of liberation in the South (1954-1975), the economies of both South and North in Vietnam were greatly dependent on international aid, mainly from the US, Russia, and China. In the North, construction efforts were focused on infrastructure and industry to restore the economy after many years of war. Many projects were initialized and completed during this period, including Lao Cai power station, Thac Ba hydroelectric power plant, Thai Nguyen iron and steel industrial park, Viet Tri industrial park... By 1965, the US war of destruction caused the construction industry to shift to prioritize defense projects, including Hoa Lac airport, Da Phuc airport...

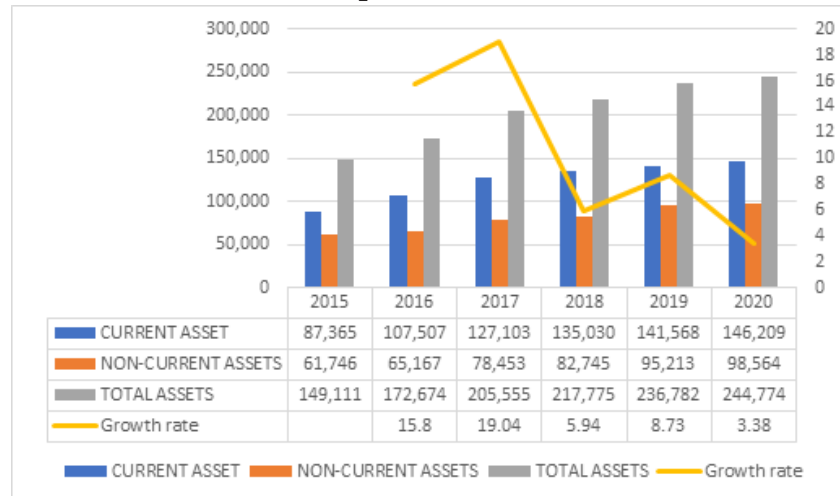
After the South was liberated in 1975, Vietnam entered a 10-year subsidy period (1978-1985). During this period, Vietnam in general and the construction industry in particular encountered many difficulties. After liberation, the South's economy almost collapsed when the flow of money and aid supplies from the US was stopped. Similarly, in the North, aid from the socialist countries also ended. At the same time, the centrally planned economic system also showed many weaknesses, leading to this 10-year stagnation period. However, the construction industry also achieved many important results during this period. Infrastructure and industry were once again focused on overcoming the protracted war's aftermath. Typical achievements of the construction industry during this period include Pha Lai Thermal Power, Hoa Binh Hydroelectricity, Tri An Hydropower, Ha Tien Cement and oil and gas projects in Vung Tau.

The prolonged economic stagnation along with the failure of previous reform efforts (typically the Price - Wage - Money reform in 1985) made the Government of Vietnam realize the need for radical reform. In December 1986, the 6th Congress of the Communist Party of Vietnam approved the Renewal policy. As the name suggests, Renewal is a comprehensive reform policy, with special emphasis on the transition from a planned economy to a social market economy (which is, a multi-sector economy, operating under the market mechanism with State control).

The change in the economic model was the starting point of the Growth phase that continues to this day in Vietnam's construction industry. According to the General Statistics Office, in the more than 30 years since Renewal reform, Vietnam's construction industry has achieved an average real growth of 8.8% per year. After Renewal reform, important activities of the construction industry during this period included: Applying bidding method in civil and industrial construction (1986-1990); increasing transparency and competitiveness of the market; Separation of State management and business management (1996-2000) increased the efficiency of investment capital as well as the competitiveness of the market; Completing the legal framework (Construction Law 2003, 2014, Housing Law 2005, 2014; Bidding Law 2005, 2013...) clearly stipulates the responsibilities and interests of stakeholders to create favorable conditions for the market to develop.

The market economy attracts private and foreign enterprises to participate, making the monopoly of state construction enterprises gradually broken down, increasing competition in the construction industry. According to the General Statistics Office, by 2016, state-owned enterprises only accounted for 8% of the construction market share, leaving room for private and foreign enterprises (accounting for 87% and 5% respectively). To date, there are nearly 74,000 construction enterprises operating in Vietnam, most of which are small businesses. Many participating enterprises make the Vietnamese construction market fragmented with high competitive pressure.

Figure 1: Scale and average growth rate of business capital of listed construction companies in the period 2015-2020



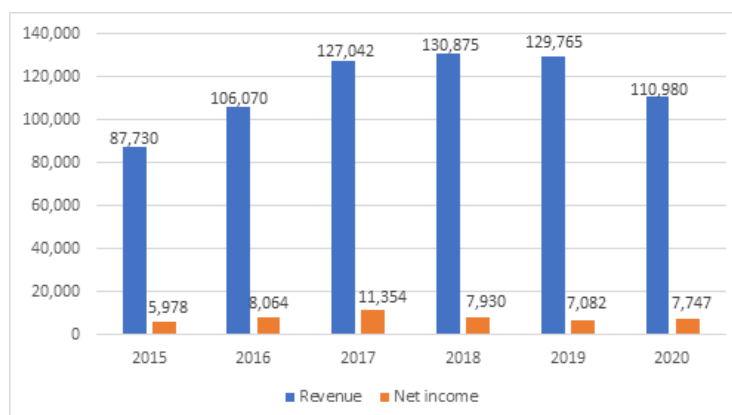
Source: Integrated by the author

In the period from 2015 to 2020 in Vietnam, the scale of business capital of listed construction companies tends to increase, the total assets of the following year are always larger than the previous year, contributing to the increase of total assets of increase in both non-current assets and current assets. However, it can be seen that during this period, the capital growth rate is not the same. Specifically, the period from 2017-2018 witnessed a decrease in the growth rate of total asset from 19.04% to 5.94%. However, although the growth rate of scale has decreased, in terms of absolute number, the average total assets of listed construction companies still increase.

On December 31 of 2019, the total assets of listed construction companies in Vietnam reached VND 236,782 billion. Among the construction companies listed on the Vietnam stock market in 2019, the company with the smallest capital scale is VNECO4 Electricity Construction JSC (stock code VE4) with more than 26 billion VND and the company with the largest scale The largest is Ho Chi Minh City Technical Infrastructure Investment JSC, CII (with more than VND 29,000 billion).

Regarding business results: The business results of listed construction companies in the period 2015-2019 are reflected through the targets of revenue and profit in the figure below:

Figure 2: Net revenue and profit after tax of listed construction joint stock companies in the period of 2015 -2019



Source: Integrated by the author

Construction production is a special type of industrial production made to order. Each construction and installation object is each project item, requiring appropriate experience, structure, form and location of construction, which is specified on each individual object's estimated design. Due to the unique and individual nature, the costs for construction and installation of works and structures are not as heterogeneous as industrial products. Therefore, the capital needs of construction companies are very different according to the time of receiving the project.

Objects of construction enterprises often have large volume, great value, long construction period. Product price calculation period is not monthly like other types of enterprises, but is determined depending on the characteristics of the construction industry. The technical points of each project is reflected in the payment method between the contractor and the customer. Because the production time is long, and often customers only advance a part of the amount of the construction projects, construction enterprises need long-term capital in large volumes. This brings many financial risks to the business. Moreover, being paid only after the projects is completed also reduces the solvency of the enterprise during the product production stage. In addition, the long construction period also has an impact on the risk of capital loss of the enterprise due to the influence of amortization of tangible and intangible fixed assets.

Construction production often takes place outdoors, under the direct impact of environmental factors, so construction and installation are seasonal. These environmental factors affect construction progress and techniques, and contractors must also pay attention to measures to manage construction machines and outdoor materials. The construction took a long time to complete and outdoor construction also created unexpected damages. This is also a risk for construction companies. In addition, construction products are fixed in nature, attached to the construction site, during the construction process, contractors have to change locations frequently, thereby generating a number of necessary costs. These are also typical risks of the construction industry.

Construction companies in Vietnam have their own characteristics compared to other industries. Specifically:

Firstly, construction companies create large and increasing material wealth in gross national product. The production value of construction enterprises contributing to the total value of national product is increasing. Along with other sector such as industry and services, construction is also an industry developed in the period of industrialization and modernization of the country.

Secondly, construction industry sector accounts for a large amount of capital investment of the whole society. In order to create technical infrastructure for economic development, every year the government invests a large amount of capital in the field of construction in which listed construction companies are direct beneficiaries such as railway stations. T1 Noi Bai International Airport, Vinh Tuy Bridge, Nhat Tan Bridge...; Highways Phap Van, Cau Re, Noi Bai - Lao Cai, Hanoi - Hai Phong... large construction projects such as the National Convention Center, the National Assembly house... need a large amount of budget to invest. These are all important and necessary works and are prerequisites for socio-economic development. Besides, in the private sector, the amount of capital invested in construction is also very large. Transport infrastructure enterprises contribute capital with the Government to implement BT, BOT, BTO projects... Civil construction companies invest in many projects in urban areas, apartment buildings, and adjacent villas. ...Companies investing in industrial technical infrastructure build and expand more

projects of industrial parks, processing zones, many large-scale factories...It can be said that in the investment capital of society in the economy, listed construction companies account for a relatively large amount.

Thirdly, construction is an important material production industry for the economy. Construction enterprises play a particularly important role in the national economy. In any period, the development history of human society is always associated with architectural works. Therefore, the demand for construction is a regular demand and is increasing with the economic and social development. Nowadays, the more production develops, the more important the role and position of the construction industry is confirmed. If in the condition that the economy has not yet developed, construction activities only serve small works with simple and rudimentary forms, then in the present conditions, the economy develops, construction becomes an industry. material production important for the economy.

3. CONCLUSION

Construction is one of the key economic sectors of each country. The process of industrialization and modernization of the country is always accompanied by the development of the construction industry in general and construction enterprises in particular. Construction industry is a fast-growing industry with large investment scale. Along with strong development momentum and extensive international integration process, Vietnam's construction industry plays an increasingly important role in ensuring the infrastructure of the economy. Therefore, understanding the process of formation and development as well as the characteristics of the construction industry in Vietnam is necessary to support and facilitate the formation and successful implementation of policies for this industry.

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IMPACTS OF CLIMATE CHANGE ON VIETNAM'S ECONOMY

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Abstract: *The article analyzes the impacts of climate change on Vietnam's economy and focuses on the agricultural sector. By using statistics from surveys and researchs of Vietnam and international organization, the article shows that climate change has had negative impacts on economic development in Vietnam with a annual losse of 15 billion USD per year, equivalent to about 5% of GDP. For agriculture, effect of climate change on agricultural production is its impact on the reduced rice production and productivity, health and productivity of the workforce at the same time. Based on the research results, some solutions to mitigate climate change based on green growth approach have been proposed.*

Keywords: *Climate change, economic development, agriculture, Vietnam*

1. INTRODUCTION

Vietnam is one of the most vulnerable countries to climate change and natural disasters in the world. Between 1990 and 2018, more than 26,000 people died directly from epidemics, floods, landslides or storms. Since 1985, nearly one million people have been affected by natural disasters each year. The biggest disaster risk in Vietnam is flooding, which includes riverside floods, flash floods and coastal floods. Disaster risk is highly concentrated in Vietnam's two largest river deltas, the Red River and the Mekong River, and the urban areas, including the two largest urban areas of the country, Hanoi and Ho Chi Minh City. The increase of extreme climate risks as well as sea level rise, will exacerbate the risks posed by river flooding. Research by Wilner et al (2018) predicts that the number of people affected by extreme river flooding will increase from 3 to 10 million people by 2035 - 2044 as a result of climate change. Vietnam is highly exposed to tropical cyclones, with a very high rate of landfall along the northern coast. A World Bank's study has highlighted that the vulnerability of Vietnam will be higher in the next coming year as results of increasing storms and sea levels (Dasgupta, 2009).

Drought in Vietnam has also become increasingly severe in recent years. Two primary types of drought may affect Vietnam, meteorological (usually associated with a precipitation deficit) and hydrological (usually associated with a deficit in surface and subsurface water flow, potentially originating in the region's larger river basins). At present Vietnam faces an annual median probability of severe meteorological drought of around 4%, as defined by a standardized precipitation evaporation index (SPEI) of less than -2.2 (CCKP, 2019). These risks directly affect national economic security in general and agriculture sector in particular. This article analyzes

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the impacts of climate change on Vietnam's economy with a focus on the agricultural sector. The article uses statistics from surveys and researches of Vietnam and international organizations.

2. IMPACT OF CLIMATE CHANGE ON VIETNAM'S ECONOMY

Impact of climate change on economic development

According to the Global Climate Risk Index (CRI) Report released by the environmental NGO Germanwatch (Germany) in January 2021, Vietnam ranks 13th among the countries which has been most impacted by climate change for the period 2000 - 2019. The Global Climate Risk Index (CRI) developed by Germanwatch analyzes the quantified impacts of extreme weather events - both on the number of deaths as well as the economic damage that has occurred - based on data from Munich RE NatCatSERVICE, one of the most trusted organizations worldwide. The CRI considers both absolute and relative impacts to generate an average ranking of countries according to four criteria: number of deaths, number of deaths per 100,000 inhabitants, and loss in purchasing power parity (PPP) and losses per unit of GDP. The highest-ranked countries are the most affected and should consider the CRI as a warning sign that the country is at risk of frequent events or rare but unusual disasters, or a combination of both. Based on the above criteria, from 2015 to 2017, Vietnam is the country with the climate risk index ranked in the top 10 out of 184 countries and territories in the world. In terms of losses at purchasing power parity, the extent of Vietnam's losses caused by climate change between 2015 and 2017 nearly quadrupled, from US\$822,584 million in 2015 to US\$4072,704 million. USD in 2017 (Table 1).

Table 1. Global Climate Risk Index (CRI) in the period 2015-2017

Year	CRI Rank	Fatalities		Losses in PPP (millions USD)		Losses per unit of GDP (%)	
		Total	Rank	Total	Rank	Total	Rank
2015	29	91	25	822,584	26	0,1486	49
2016	5	161	11	4037,704	5	0,6782	10
2017	6	298	9	4072,31	8	0,625	15

Source: Global Climate Risk Index 2016, 2017,2018.

In particular, 2016 is considered a year of heavy losses for Vietnam due to the impact of climate change. The 2016 extreme drought in Vietnam was recorded as the worst drought in the past 100 years. Water in the Mekong River fell to its lowest level since 1926, leading to severe salinity.¹ Natural disasters in 2016 left more than 160 lives missing and destroyed 370,000 homes. In addition to drought, tropical storm Dianmu hit northern Vietnam in mid-August, causing several deaths and destroying hundreds of houses². A tropical depression and Typhoon Aere caused further damage in November, with heavy flooding across central and southern Vietnam³. Damage caused by Aere amounted to approximately US\$112 million as of October 2016, resulting in 15 deaths. In addition, Vietnam was affected by tropical storm Sarika on October 15, killing 15 others⁴. In Quang Binh and Ha Tinh, damage was caused to about 95,000 houses (Inhabitat, 2016).

¹ Forbes Magazine, 2016a, <https://www.forbes.com/sites/timdaiss/2016/05/25/why-vietnam-is-running-dry-worst-droughtin-nearly-100-years/#3937aaa074b3>

² Flood List, 2016, <http://floodlist.com/asia/floods-vietnam-laos-storm-dianmu-august-2016>

³ Relief Web, 2016, <https://reliefweb.int/disaster/tc-2016-000111-vnm>

⁴ FloodList, 2016, <http://floodlist.com/asia/vietnam-ha-tinh-quang-tri-quang-binh-flood-november-2016>

Among the economic impacts of extreme forms of climate change, storms and floods are the risks with the greatest economic impact in Vietnam. According to an assessment by the Center for Research on Disaster Epidemiology (CRED), between 1900 and 2018, the damage caused by storms to Vietnam was more than 10 billion USD, the damage caused by floods was more than 10 billion USD and by flood was more than 4 billion USD. The research report on vulnerability to climate change by DARA International (2012) indicated that climate change can cost Vietnam about 15 billion USD per year, equivalent to about 5% of GDP. And if Vietnam does not have timely response solutions, the damage caused by climate change is estimated to reach 11% of GDP by 2030. The study by the Central Institute for Management Research in collaboration with the World Development Research Institute and The University of Copenhagen (2012) pointed out that if Vietnam's economy continues to grow at a rate of 5.4% per year in the period 2007 - 2050, the growth rate that will be affected by climate change, specifically storms ranges from 5.32% to 5.39%. If Vietnam's GDP in 2050 reaches over 500 billion USD, the damage caused by climate change could reach about 40 billion USD in 2050 - a relatively large loss in absolute value. This damage can be reduced if Vietnam has appropriate and effective policies to respond to climate change.

Impact of climate change on agriculture

Climate change is a big challenge for agricultural production. Higher temperatures, more pests and diseases, and more severe drought are predicted to reduce rice production in the period 2016 - 2045 by 4.3% compared to production levels in the absence of climate change. Sea level rise and saline intrusion are expected to alter rice production areas. Climate change will likely turn areas that are particularly suitable for multi-crop production into rice-producing areas. Continuous droughts, high temperatures and an increase in intense heat waves caused the increase water evaporation and increase the prevalence of pests and diseases also have a heavy impact on coffee production in the Central Highlands (CIAT and World Bank, 2017).

In Vietnam, about 52% of rice production is from the Mekong Delta: 82% of summer rice production is produced in the Mekong Delta and another 18% in the Red River Delta. Other important rice-growing regions are the Northeast and North Central. In most regions, rice is irrigated for two to three crops per year. Rice production continued to increase mainly due to improved irrigation systems, new rice varieties, new rice technology and increased triple cropping in the Mekong Delta. However, climate change is changing the outlook for agricultural production. According to a study by the World Bank (2010), climate change is expected to reduce the agricultural production area by 12% in the Red River Delta and 24% in the Mekong River Delta. Climate change affects not only agricultural production area but also agricultural productivity. If sea level rises by 1 meter, rice farming productivity in the Mekong Delta is likely to decrease by 40.5%. According to Dinh Vu Thanh and Nguyen Van Viet (2014), the medium climate change scenario predicts that spring rice production may decrease by 716.6 kg/ha by 2050, while summer-autumn rice production may decrease by 795 kg/ha. This will reduce the total rice production by 1,475,000 tons. Maize production could be reduced by 781.9 kg/ha, resulting in a total reduction of 880,000 tons. Furthermore, much of the Mekong Delta and Red River Delta will be submerged under the impact of sea level rise in 2070, causing adverse impacts on the fisheries sector. Aquaculture in ponds and lakes can be completely damaged by sea level rise. Climate change will also reduce the diversity of aquatic species and degrade soil quality (Dinh Vu Thanh and Nguyen Van Viet, 2014)

The International Food Policy Research Institute (IFPRI) has launched a model to analyze the impact of agricultural policy on international trade and agricultural products to examine the impacts of climate change in the period 2020 - 2050 for a number of key agricultural products in Vietnam based on factors including changes in net trade, productivity, area for crops and per head for livestock. The impact of climate change is expressed through the difference (% change) between the scenario with climate change impacts and the production scenario as usual. The analysis results show that the impacts of climate change are not uniform throughout the agricultural production system, which can contribute to increased productivity and production area for some crops, but reduce production efficiency in other crops. On the trade front, the model's results indicate that with or without the effects of climate change, Vietnam will become more dependent on imports of maize and meat products (export value is less than import). However, the impact of climate change makes the level of dependence on imports likely to be lower for meat products (0.2 percentage points) and higher for corn products (1.6 percentage points) when compared with the scenario without climate change impacts. In addition, from being a net exporter of tropical fruits, Vietnam may be transformed into an importer of this product (World Bank, 2014).

In terms of productivity, it is forecasted that by the end of 2050, productivity fluctuations of most product groups will be negatively affected by climate change. Although productivity is expected to increase both with and without climate change impacts, productivity growth will be lower under climate change conditions. For example, by 2050, maize yields are expected to be 16% lower due to climate change impacts. Other product groups are expected to have a yield gap of 3.6% (cassava) to 6.6% (coffee and rice). In general, changes in yield vary widely between crops: For maize and rice, yields tend to decrease in the climate change scenario and increase in the no-effect scenario. For other crops, yields tend to decrease in both scenarios, but the yield reductions will be deeper under the impact of climate change, because the difference in yield change between the two scenarios is 2,8 points %. Although coffee, cassava, and tea yields are expected to improve, the impact of climate change is expected to reduce production growth. The effects of climate change on livestock production are said to be negative and different for each type of livestock. The impact of climate change on pig production is more pronounced than that of other livestock (including cows, poultry, sheep...). Pig production is expected to decrease by 8.2 percent per head if climate shocks are not taken into account, and this reduction will be deeper than 1 percentage point in the case of climate change impacts. The impact of climate change on other livestock species is not significant. It is predicted that the herd size will be relatively stable even in the case of climate change impacts ((CIAT and World Bank, 2017).

Another less appreciated effect of climate change on agricultural production is its impact on the health and productivity of the workforce. Research of Dune et al. (2013) shows that labor productivity during peak months has fallen by 10% due to warming temperatures and is expected to decline by up to 20% by 2050 along the peak emission path. Opitz et al. (2016) in their research focusing on workers in Da Nang shows that it is highly likely that by 2050, temperatures will regularly exceed those set by the Vietnamese Ministry of Health, an issue that will likely affect millions of workers in agriculture and other industries in Vietnam. In combination, it is likely that the above processes will have a significant impact on national food consumption patterns both through direct impact on internal agricultural operations, and through impact on global supply chains.

3. CONCLUSIONS AND RECOMMENDATIONS

Climate change has been impacted negatively on the Vietnamese economy. In terms of losses at purchasing power parity, the extent of Vietnam's losses due to climate change between 2015 and 2017 nearly quadrupled from \$822,584 million in 2015 to \$4072,704 million in 2017. In the agricultural sector, climate change affects not only agricultural production area but also agricultural productivity.

Vietnam is a country with low total emissions globally. In 2013 Vietnam's emissions were about 259 million tons of CO₂e out of a total of 36 billion tons of CO₂e emissions of the world (equivalent to about 0.72 %). Vietnam's emissions per capita are lower than those of China, South Korea and Thailand, but are growing at a faster rate than these countries. Specifically, the level of emissions per capita has increased nearly 6 times, from 0.3 tons of CO₂/person in 1990 to 1.71 tons of CO₂/person in 2010, while China increased 3 times, South Korea increased 2 times, 5 times and Thailand 2 times (Profeta & Daniels, 2005). In addition, it is expected that CO₂ emissions will increase to 300 million tons by 2020. Therefore, the transition to a green economy and green growth will be an orientation to minimize the negative impacts of climate change on the Vietnamese economy. The purpose of green economy - green growth is to move towards a low-carbon economy, enriching natural capital, reducing emissions and increasing the ability to absorb greenhouse gases, effectively using natural resources, increasing the use of renewable energy sources, linking economic growth with sustainable environmental development. Green growth is becoming a new approach to economic development, gradually becoming a mandatory and important indicator in socio-economic development, spreading into a widespread trend, allowing harmonious development between three pillars: economic growth, social development and environmental protection.

Recognizing the challenges posed by climate change, Vietnam ratified the Paris Climate Agreement in 2016 and committed to reduce greenhouse gas emissions by at least 8% by 2030 and achieve United Nations Sustainable Development Goals (SDGs) by 2030. However, in order for Vietnam to be better prepared for the impacts of climate change in the future, its policies need to focus on the following issues.: (i) Reducing the intensity of fossil fuel use in Vietnam's GDP, increasing the use of renewable energy will help break the link between GHG emissions and output; (ii) Encourage households, businesses and the government to pursue green growth; (iii) Investing in climate-resilient infrastructure that will help households and businesses cope with storms; (iv) Promote research and development of other innovation policies that can provide additional incentives to invest in existing clean energy sources and improve clean technology.

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FACTORS THAT INFLUENCE THE QUALITY OF ACCOUNTING INFORMATION SYSTEM IN VIETNAM MANUFACTURING ENTERPRISES

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Abstract: Accounting Information System provides financial information and supports decision tasks in the coordination context organizational activities control and strategic decision – making. The purpose of this study is to investigate factors affecting the quality of accounting information system in Vietnam manufacturing enterprises. This study employed a survey conducted in Vietnam manufacturing enterprises. Validity and reliability tests were carried out on the collected questionnaires. Data analysis was performed using SPSS 22. The main findings indicate that organizational structure, user ability, accounting software, external expertise, internal expertise, corporate culture environment has a positive and significant effect on the quality of accounting information system. The results of the empirical evidence from this study can be used to solve problems that occurs on the quality of accounting information systems.

Keywords: quality, accounting information system, Vietnam manufacturing enterprises.

1. INTRODUCTION

Information system is an integrated part of a company. Every company depends on information systems to compete. The information system presents information needed by users both management and outsiders who need the information. Based on a business perspective, information systems are important instruments for creating value in organizations. In every form of organization there is an accounting that “Companies need an accounting information system that is useful and in accordance with the interests of the company, through a quality information system process or management that is generally flexible, efficient, easily accessible, and timely to assist the decision-making process”.

Guimaraes et al. (2003) stated that the business has a high dependence on information systems developed. However, in spite of influential of accounting information system (AIS) financial fraud which had led to poor performance has continued to be on increase (Hadi, 2012). Poor performance due to poor information systems (Susanto, 2008). Companies use AIS as a medium or tool to generate information that managers can make decisions (Mulyani, 2009). The role of accounting information system is very influential for the organization because of AIS supporting the organization’s business operations, managerial decision making, and is one of the strategies to achieve the organization’s competitive advantage (O’Brien, 2003).

According to Romney and Steinbart (2000), accounting information systems, which consists of human, procedures and information technology has three main functions within the organization,

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namely: (1) to collect and store data and transaction activity so that the organization can see what has happened in the normal course of business; (2) Processing data into information useful for decision-making that enables the management to perform activities of planning, implementation and control; (3) Provide sufficient controls to safeguard assets including the organization of data. This control is needed to ensure that the data available at the time needed and the data is accurate, and reliable.

In recent years, Vietnamese enterprises in general and manufacturing enterprises have contributed to the development and growth of the country's GDP. In particular, the manufacturing industry had a strong growth with the highest growth rate in many years, serving for industrialization and modernization, contributing to promoting growth and contributing much to GDP. According to the General Statistics Office (Ministry of Planning and Investment) in 2019, the gross domestic product (GDP) increased by 7.02%, exceeding the target. In the general growth rate of the whole economy, the agriculture, forestry and fishery sector increased by 2.01%, contributing 4.6% to the overall growth; the industry and construction sector (up 8.9%, contributing 50.4%) and the service sector (up 7.3%, contributing 45%). Based on the master plan for Vietnam's industrial development to 2020, with a vision to 2030, Vietnam's industry continues to be an important area. However, due to the influence of the world economy has not really recovered strongly after the crisis, manufacturing enterprises are facing many difficulties and challenges on the way of development such as competitiveness and utilization resources are not reasonable, supply of raw materials is limited. To achieve efficiency in operations - an important indicator reflecting the quality of business operations, reflecting the ability to use resources, managers need to make optimal decisions, limit the risks can happen.

In view of the above, this study aims to determine the factors affecting the quality of accounting information system in Vietnam manufacturing enterprises in order to confirm the important role of the quality of accounting information systems to help businesses promptly adopt appropriate policies for their business activities.

2. BASIC THEORY AND LITERATURE REVIEW

2.1. Basic Theory

Theories related to the quality accounting information system such as information processing theory, management behavior theory, innovation diffusion theory.

Since mid-1973, information processing theory has been formulated by Galbraith (Raldolph and Richard, 2005). Information processing theory revolves around three concepts including information processing capabilities, information processing requirements and the compatibility between requirements and information processing capabilities to achieve optimal efficiency of the business. Organizations need to regulate information in order to correct environmental uncertainties to help improve their decision-making. Information processing theory states that the appropriateness of information processing ability will have a clear influence on the operational efficiency of enterprises (Galbraith, 1973).

Behavioral management theory was invented by Simon in 1947 - The author received the 1978 Nobel Prize for contributions to science in decision-making in economic organizations through his research (Jesper, 1994). Simon emphasized that the important issues in management are to make

the right decisions that the author calls the decisions in management include: planning the plan, choosing the mode of action, setting up structure. organize, assign responsibilities and authorities, compare actual situation with plan, choose test plan, capture plans, organize and control for all levels of management and all aspects of management process.

Roger's Innovation Diffusion Theory (1995) is classics about the diffusion of new ideas, research on diffusion and the application of innovation. Usually innovation is perceived as a new technology or a new product, however, the theory of innovation can also be applied to the spread of new ideas, methods and concepts. Rogers has synthesized research from more than 508 diffusion studies and came up with new variability theory for the application of innovation between individuals and organizations. This theory explains the process by which an innovation is communicated across certain channels over time between members of the social system. Rogers thinks that innovation is the application of new systems, new policies, programs, processes, can be created by within the organization or outside the organization, each member of the organization must make their own decisions. the acceptance of innovation in 5 steps: (1) Knowledge: is the process of perceiving, learning and absorbing new ideas; (2) Persuasion: is the process of analyzing, considering, considering the advantages and disadvantages of innovation; (3) Decide: clearly accept or choose to refuse to accept the innovation; (4) Implementation: participating in the implementation of new ideas and plans; (5) Acknowledgment: shows commitment.

2.2. Literature Review

Today, the quality of AIS has received a lot of attention from domestic and foreign authors and researchers. The article uses quantitative research methods in small and medium-sized manufacturing enterprises in Malaysia. The article is based on information processing theory of Galbraith (1973). By means of a questionnaire survey by mail carried out from August 2015 to October 2005, testing 50 enterprises and officially 721 enterprises. However, only 214 businesses responded (accounting for 29% of the response rate). Then analyzed by cluster method to test 6 hypotheses. The research results show that the factors of Information Technology, enterprise size, knowledge of managers, employees' commitment to the enterprise, experts outside the enterprise, and experts inside the enterprise all affect positive for AIS alignment.

In order to determine the influence of factors on the quality of AIS with an observed sample size of 33 enterprises in Indonesia, Rapina (2014) concluded that employees' commitment to the enterprise, the corporate cultural environment and the organizational structure. organization (independent variables) has a direct influence on the quality of AIS (dependent variable). The author shows that the independent variables explain only 67% of the variation in AIS quality, 33% of the variation is explained by factors outside the model. Data analysis through LISREL 8.70 software. At the same time, the study shows that all three factors affect the quality of AIS. With the same context and study time in Bandung (Indonesia), author Meiryani (2014) assessed the influence of user participation on the quality of AIS. The study was conducted at 55 universities in Bandung city through questionnaires. Meiryani (2014) used quantitative research method conducted at 55 universities in Bandung city. Data were used in this study by collecting data through questionnaires. Respondents of this study are AIS users. The method used is PLS 2.0. The conclusion of the study indicates that User Participation has a positive influence on the quality of AIS.

In Nigeria – Africa, Ojua (2016) aims to measure the relationship between the use of accounting software and the quality of AIS, ready for business decision making among companies in Nigeria. The study uses survey methods and inherited authors such as Alzoubi (2011); Galani et al (2010); Rodney (2009). The questionnaire was collected from 150 accountants of enterprises in Nigeria. Then analyze the results using the KolmogoroveSmirnov test and statistical tools. The research results are meaningful to managers and accounting staff of the company when they accept accounting software as an integral resource of the organization, but this resource is not fully utilized due to Management attitude and poor training. Thus, the author assumes that most Nigerian companies have not fully explored the potential of accounting software to improve the quality of AIS. The accounting staff in the company should update their skills through training to be able to make the most of the benefits that accounting software brings, and managers should promote the use of accounting software. and periodically upgrade to enjoy its maximum benefits. Although the author has built scales for independent variables in accounting software, testing and drawing conclusions, the new study stops at one factor that affects the quality of AIS.

2.3. Research Hypotheses

The organizational structure is the arrangement of the components within the organization. The organizational structure shows the division of labor and shows how the functions or activities that are different, integrated to achieve the goals that have been set (Robbins, 2003; Nagarajan, 2005; Lussier, 2008). Meanwhile, according to Starling (2008) an organizational structure is the formal framework by which job tasks are divided, grouped, and coordinated. When managers develop or change an organization's structure, they are engaged in organizational design, a process that involves decisions about four key elements: division of labor, hierarchy, span of control, and line and staff. Further dimension to be used in this study is work specialization, departmentalization, chain of command, span of control, centralization & decentralization, and formalization (Robbins & Judge, 2009; Schermerhorn, 2011; McShane and Glinow, 2005). From the above arguments, the hypothesis is given as:

H1: Organizational structure is positively correlated with quality accounting information system.

The success of an information system is highly dependent on the suitability of expectations among systems analysts, users (user) and customer. Tjhai Jen Fung (2002) argues that the higher the ability of accounting information systems engineering personnel will improve the performance of accounting information systems due to the positive relationship between the ability of accounting information systems engineering personnel with the performance of accounting information systems. User ability that exist in the company can produce quality accounting information systems. Quality accounting information system can assist management in carrying out the functions and responsibilities of planning, directing, monitoring and decision-making to achieve corporate goals and reduce financial fraud (Meiryani, 2014). Therefore, the hypothesis is given as:

H2: User ability is positively correlated with quality accounting information system.

Nicolaou and Bhattacherya (2006) examined the financial performances of firms over a long period of time as a result of the adoption of better accounting software, the outcome showed that companies which implemented such improved software showed early improvements in the financial performance more than others. Also Rahahleh and Siam, (2007) tested the effectiveness of use of unique accounting software in the Jordanian commercial banks in terms of the report

quality through issuance of forty five questionnaires they found that the use of such software increases the quality of AIS and enhanced profitability. Galani et al. (2010) aimed to explain the effect of the selected accounting softwares on accounting information system of Greek firms, it showed that the quality increased and decision making faster and more efficient with affirmation from reduced cost of linking customers and suppliers. Therefore, the hypothesis is given as:

H3: Accounting software is positively correlated with quality accounting information system.

Many researchers have highlighted the importance of vendors and consultants to computerization projects in enterprises (Igarria et al. 1997; Thong 1999; 2001; de Guinea et al. 2005). In addition, government assistance has also played a major role in accelerating the adoption of IT among enterprises, particularly in developing economies (Yap & Thong 1997). Accounting firms have also been seen as a potential source of advice for enterprises on the use of accounting and information systems (Davis, 1997). These findings were confirmed by Breen and Sciulli (2002), Hartcher (2003) who found that accountants, the accounting profession, industry associations and IT training professionals have played important roles in encouraging enterprises to computerise their record keeping processes. The assistance offered by these experts enables enterprises to gain a broader perspective of both their information needs and information processing capacity, so that it is expected that enterprises engaging these external experts will achieve higher degrees of AIS alignment. Therefore, the hypothesis is given as:

H4: External Expertise is positively correlated with quality accounting information system.

Enterprises also have a lack of experienced internal accounting and IT experts (for example, Gable and Raman 1992; Mitchell et al. 2000; Ravarini et al. 2002). This often results in a lower level of awareness and understanding of the importance of accounting information and also the capability of IT to generate the information. This in turn inhibits enterprises from adopting strategic accounting information and technologies. Hence, the research model also includes internal expertise as a factor that might influence AIS alignment in enterprises. The existence of accounting staff may help enterprises owners/managers to understand the importance of accounting information in monitoring their financial performance, whilst IT staff may assist them in identifying the right technology to generate the required information. Therefore, the hypothesis is given as:

H5: Internal Expertise is positively correlated with quality accounting information system

For Vietnamese manufacturing enterprises, competitive pressure, corporate culture, construction accounting laws and accounting processes affect the decision to implement AIS. Research by Mahmoud (2009) confirms that there is a relationship between the cultural environment of enterprises, business strategy and AIS. Based on the studies of Schein (2010), Armstrong (2005), Robbins and Judge (2009), Rapina's study (2014) defines the corporate culture environment as a set of common norms and value systems that control the corporate culture environment. interactions between members of the organization and those outside the organization. The corporate culture environment is a system of shared beliefs and values that are built into an organization and guide the behavior of its members. The empirical study of Rapina (2014) has verified the relationship between the corporate cultural environment and the quality of AIS and is measured by 5 observed variables: (1) Value: derived from the needs of members, leaders need to choose an appropriate value orientation that everyone desires and wishes to achieve; (2) Standards: guide how to behave so that people strive to achieve well the goals set by the organization; (3) Expression of the organization: using a system of symbols such as logos, brands, costumes, rituals in communication, communication, language used; (4) Building spiritual conventions such as sharing, solidarity

or respect for values in the business organization; (5) Building a management style such as the relationship between the business owner or the management board and employees, managing in the spirit of fairness or favoritism. Therefore, the author proposes hypothesis as follows:

H6: *Corporate culture environment is positively correlated with quality accounting information system.*

3. METHODOLOGY

3.1. Research Model

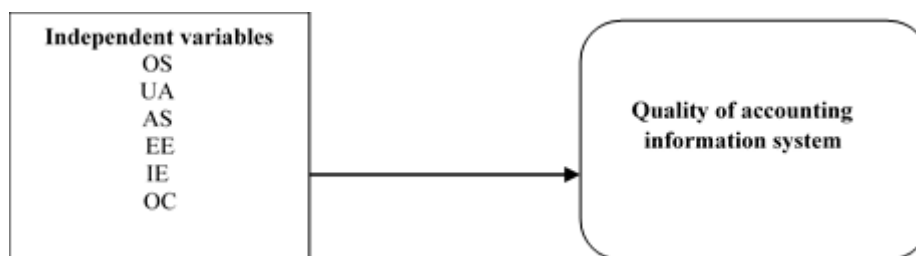


Figure 1: Research Model

The relationship of leverage, liquidity and financial performance is shown in the following two models:

$$QAIS = \alpha_i + \beta_1 OS + \beta_2 UA + \beta_3 AS + \beta_4 EE + \beta_5 IE + \beta_6 OC + \varepsilon_i$$

Variable names and measurements in two models are explained in Table 1.

Table 1. Measurement of variables used in research models

Variables	Codes	Measurement
Quality of accounting information system	QAIS	Susanto et al. (2019)
Organizational structure	OS	Rapina (2014)
User ability	UA	Meiryani (2014)
Accounting software	AS	Ojua (2016)
External Expertise	EE	Ismail and Malcolm (2007)
Internal Expertise	IE	Ismail and Malcolm (2007)
Corporate culture environment	OC	Rapina (2014)

(Source: Compiled by the authors)

3.2. Sample size

The EFA analysis method requires a sample size, which must be at least 4-5 times the number of variables. This study is measured by 26 observed variables, so the sample size is $26 \times 5 = 130$. To ensure representative, logic, correctness and minimization of errors in the process to take convenient samples, this study will be based on over 240 samples.

The subjects of direct interviews with experts are business managers, chief accountants of enterprises with a lot of experience in accounting, managers who are knowledgeable about AIS, giving suggestions and support to arrange each concept related research. Specifically, on issues such as AIS quality standards, general assessment of the actual state of AIS quality in manufacturing enterprises to confirm or make appropriate adjustments to the observed variables in the study.

3.3. Questionnaire design

The questionnaire is designed in three ways: (i) use of the original scale from previous studies; (ii) the same, but with adjustment to be suitable for the study objects; (iii) design and development of a completely new scale (Creswell, 2003). The author applies the second way to design scales for this study. The research questionnaire is based on the study by Susanto et al. (2019) and adjusted to suit the study object. Respondents answer questions related to Organizational structure, User ability, Accounting software, External Expertise, Internal Expertise, Corporate culture environment. Also, age, gender, job, firm size, email, education, and experience are included. In this study, these independent variables are measured by a 5-point Likert scale, from 1 'Strongly disagree' to 5 'Strongly agree'. In this section, each independent variable has several questions.

3.4. Data collection method

The research subjects are business managers, chief accountants of Vietnam manufacturing enterprises. The data was collected from January 2021 to June 2021. This study uses only one method of collecting sample, online survey due to the convenience of information technology, time, geographic proximity and the limitations of COVID-19 pandemic. With the help of Vietnam manufacturing enterprises in Ho Chi Minh City and Hanoi City, the author sent the surveys through Google docs.

3.5. Data Processing Methods

A total of 240 samples were collected. Of these, 34 questionnaires were invalid because respondents omitted answers. Therefore, 206 samples were analyzed, evaluated and synthesized with the support of SPSS software, namely tools such as: analyzing the reliability of the scale via Cronbach's Alpha coefficient, exploratory factor analysis (EFA), and difference analysis (ANOVA) to test the hypotheses.

4. RESEARCH RESULTS

4.1. Testing the reliability of the scale

Table 2 shows Cronbach's Alpha for each variable are greater than 0.6, and since the deleted items make not much difference, all factors and variables are accepted.

Cronbach's Alpha coefficient provides an indication of the average correlation between all items that make up the scale. In order for Cronbach's alpha to be valid, the following criteria are required: testing the reliability of the scale through Cronbach's Alpha coefficient and the scale is accepted if the coefficient is greater than 0.7 (Nunnally, 1978; Hair, 2010). The results show Cronbach's Alpha coefficient > 0.7 and the Corrected Item-Total Correlation > 0.4 . Therefore, the scale of subjective variables is reliable.

Table 2: Testing the reliability of the scale

Variables	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Cronbach's Alpha of QAIS:.908		
QAIS1	.659	.903
QAIS2	.743	.892
QAIS3	.708	.897
QAIS4	.798	.884
QAIS5	.789	.885
QAIS6	.774	.887
Cronbach's Alpha of OS:.781		
OS1	.670	.645
OS2	.614	.708
OS3	.573	.753
Cronbach's Alpha of OC:.872		
OC1	.720	.839
OC2	.745	.829
OC3	.670	.859
OC4	.773	.818
Cronbach's Alpha of UA:.922		
UA1	.749	.915
UA2	.833	.898
UA3	.792	.905
UA4	.792	.905
UA5	.831	.897
Cronbach's Alpha of EE:.922		
EE1	.769	.916
EE2	.827	.897
EE3	.804	.905
EE4	.885	.876
Cronbach's Alpha of IE:.925		
IE1	.809	.908
IE2	.815	.906
IE3	.800	.912
IE4	.882	.884

(Source: Data processing results of authors)

4.2. EFA Factor Analysis

Exploratory factor analysis (EFA) helps examine the convergent value and discriminant value. EFA must satisfy the following requirements: factor loading > 0.5 ; $KMO \leq 0.5 \leq 1$; Bartlett test the statistical significance (Sig. < 0.05); percentage of variance in Extraction Sums of Squared Loadings $> 50\%$.

The results of factor analysis show that the KMO index is $0.862 > 0.5$, which proves that the data used for factor analysis is perfectly appropriate. Bartlett's test result with $\text{Sig} = 0.000 < 0.05$. Therefore, the hypothesis H_0 is rejected; the observed variables have no correlation with each other in the whole. So, variables are correlated with each other and satisfy factor analysis conditions. In addition, the results showed that 26 observed variables were grouped into six groups. The value of the total variance extracted = $75,667 > 50\%$, which is satisfactory; then it can be said that these six factors explain 75,667% of the data variability. Finally, factor loadings are greater than 0.5, and there is no case in which the upload of both factors at the same time has a close load factor. So, factors ensure convergence and differentiation when analyzing EFA. In addition, there is no disturbance of factors, meaning that one question cannot be confused with another. Therefore, after factor analysis, these independent factors remain the same, without being added or reduced.

Table 3: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.862
Bartlett's Test of Sphericity	Approx. Chi-Square	3830.245
	df	325
	Sig.	.000

(Source: Data processing results of authors)

A factor analysis was performed on the 26 survey items. Consequently, all items had a factor loading more than 0.5. In addition, there is no disturbance of factors, meaning that one question cannot be confused with another. Therefore, after factor analysis, these independent factors remain the same, without being added or reduced. Through the implementation of the rotation, a total of 26 observed variables were arranged into 6 groups of factors.

Table 4: Rotated Component Matrix^a

Rotated Component Matrix ^a						
	Component					
	1	2	3	4	5	6
Q_AIS4	.839					
Q_AIS5	.826					
Q_AIS6	.822					
Q_AIS2	.798					
Q_AIS3	.770					
Q_AIS1	.708					
UA5		.877				
UA2		.873				
UA4		.846				
UA3		.842				
UA1		.808				
EE4			.916			
EE1			.881			

EE3			.871			
EE2			.852			
IE4				.859		
IE2				.844		
IE1				.830		
IE3				.819		
OC4					.836	
OC1					.795	
OC2					.765	
OC3					.678	
OS1						.833
OS3						.805
OS2						.768

(Source: Data processing results of authors)

4.3. Regression Analysis

The coefficient of determination (R-squared) is a statistical metric that is used to measure how much of the variation in outcome can be explained by the variation in the independent variables. R² always increases as more predictors are added to the multiple linear regression model even though the predictors may not be related to the outcome variable.

R² by itself cannot, thus, be used to identify which predictors should be included in a model and which should be excluded. R² can only be between 0 and 1, where 0 indicates that the outcome cannot be predicted by any of the independent variables and 1 indicates that the outcome can be predicted without error from the independent variables (see Table 5). The Durbin-Watson statistic shows a value of 2.147 that means there is no autocorrelation in the sample. The result showed that ANOVA refers to the applied regression model's statistical significance. For the sig = 0.000 < 0.005, the result offers evidence that the model used is suitable for forecasting the outcome (see Table 6). The VIF values of these factors are small (lower than two, as shown in Table 7). Therefore, the multiple collinearities do not appear in this case, and the regression model will be indicated. The linear regression equation of the proposed research model after the regression analysis with coefficients described in Table 7 is shown as follows:

$$QAIS = 0.180*OS + 0.262*OC + 0.169*UA + 0.179*EE + 0.184*IE + \varepsilon_i$$

Table 5: Respondent Profile

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.538 ^a	.289	.272	.62809	2.147
a. Predictors: (Constant), IE, EE, OS, UA, OC					
b. Dependent Variable: Q_AIS					

(Source: Data processing results of authors)

Table 6: Anova

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	32.140	5	6.428	16.294	.000 ^b
	Residual	78.899	200	.394		
	Total	111.038	205			
a. Dependent Variable: Q_AIS						
b. Predictors: (Constant), IE, EE, OS, UA, OC						

(Source: Data processing results of authors)

Table 7: Coefficients

Model	B	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		Std. Error	Beta				VIF	
1	(Constant)	-.297	.394		-.755	.451		
	OS	.162	.058	.180	2.818	.005	.870	1.149
	OC	.274	.079	.262	3.447	.001	.613	1.632
	UA	.155	.059	.169	2.607	.010	.843	1.187
	EE	.245	.089	.179	2.751	.006	.840	1.190
	IE	.183	.073	.184	2.514	.013	.666	1.502

(Source: Data processing results of authors)

In correlation with previous studies both domestically and internationally, all the sig coefficients are smaller than 0.05 the study contributes to the empirical evidence on the impact of organizational structure, user ability, accounting software, external expertise, internal expertise, corporate culture environment on the quality of accounting information system.

5. DISCUSSION AND CONCLUSION

The research results show that organizational structure have positive effects on the quality of accounting information system (accepts H1). This result is consistent with previous studies of Rapina (2014) and Gordon and Narayanan (1984). User training influence on the accounting information system implementation significantly (accepts H2), where t valued at 2.607 greater than > t table of 2.0423 with a significance value of less than 0.05. The results of this study are in line with the finding of this study are in line with the finding of Beydokhti (2011) and Zaied (2012). Third, there is correlation between accounting software and the quality of accounting information system (H3 is acceptable). This result is inconsistent with previous studies. Fourth, external expertise has a positive relationship with the quality of accounting information system (accepting H4), with beta coefficient of external expertise variable is 0.179 with accreditation $t = 2.751$, $sig = 0.006 < 0.05$. Fifth, this analysis shows that internal expertise has positive effects on the quality of accounting information system (H5 is acceptable). Sixth, there is positive correlation between sale corporate culture environment on the quality of accounting information system (H6 is accepted). This conclusion is consistent with the results of Salehi et al (2010), Yeganeh (2009), Syler (2003) and Rapina (2014).

Organizational structure, user ability, accounting software, external expertise, internal expertise, corporate culture environment affects the quality of accounting information systems. The

theories that already exist about accounting, management and organization make more emphasized linkages, that the influence of these factors of the quality of accounting information systems. The results of the empirical evidence from this study can be used to solve problems that occurs on the quality of accounting information systems. The quality of accounting information systems can be improved through increased user ability, external expertise, internal expertise, better organizational structure, commitment to better management, and better organizational culture.

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FINANCIAL AUTONOMY IN PUBLIC HIGH SCHOOLS IN CAO BANG PROVINCE – SITUATION AND POLICY RECOMMENDATIONS

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Abstract: *This study takes the typical cases of Cao Bang province, Vietnam to analyze and clarify the difficulties faced by public schools in regions with difficult socio-economic conditions during their implementation of the financial autonomy mechanism. Using qualitative analysis of the data provided by the Department of Finance and the Department of Education and Training of Cao Bang province, the study found that Cao Bang province and other provinces with similar characteristics are facing many difficulties from internal factors of schools, socio-economic characteristics and general provisions of policies in the process of implementing financial autonomy policy in the field of education. The difficulties stem from the internal weakness of public schools in the area in terms of facilities and the number of teachers. The difficulties also stem from socio-economic characteristics such as the lowest per capita income in the country, many ethnic minorities living in the area, far from big cities. The difficulties that the general provisions of the autonomy policy are applicable to all schools without taking into account the contextual factor. This is the basis for the study to propose some recommendations for the appropriate autonomy policy.*

Keywords: *autonomy, self-governing school, financial autonomy*

1. INTRODUCTION

Finance is a very important resource to promote the development of education and training. The reason is that, with financial resources, schools need financial resources as the basis to develop other resources such as people, facilities, etc., which determine the quality of education. Although the Government of Vietnam has made many efforts to fulfill its commitment to ensure that 20% of the budget is spent on education and training, due to the small budget size, financial resources for education and training are limited. Therefore, the implementation of financial autonomy in educational and training institutions from preschool to university is indispensable in order to effectively use resources and mobilize social resources for education and training development.

The granting of autonomy and financial responsibility to education and training institutions has opened up and created opportunities for education and training institutions to improve their positivity, initiative and creativity in management of finances and assets of the unit, using the allocated state budget more economically and efficiently.

Cao Bang is a northern mountainous border province with difficult socio-economic conditions in many localities and a large number of ethnic minorities living in. In recent years, although the education and training sector of Cao Bang province has focused on promoting financial autonomy in schools at different levels depending on the specific conditions of each school, there are still many difficulties and obstacles for educational institutions in Cao Bang to increase their financial autonomy.

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The paper focuses on analyzing the actual situation of the autonomy mechanism implementation in the public education institutions in a difficult province of Vietnam, thereby proposing several recommendations on autonomy policy suitable to the context of disadvantaged areas in Vietnam. In addition to the introduction, the content of the paper will be carried out in the next 4 parts, in which, part 2 is an overview of the research situation, part 3 research methodology, part 4 the results and part 5 some policy recommendations.

2. LITERATURE REVIEW

School autonomy is defined as the freedom and authority of schools to make decisions within a determined framework of goals, policies, standards and accountabilities (Caldwell, 2013). School autonomy refers to the freedom of schools to make decisions on matters related to school strategy and operations (Patrinos, 2015). Accordingly, a school is a self-governing organization that can make its own regulations in the management and administration of school activities (Neeleman, 2019). However, school autonomy is not only related to school authority but also to responsibility in making strategic and operational decisions of the school. The autonomy of a public school does not mean complete freedom but is always within a framework of nationally or locally defined regulations and standards. While enjoying autonomy, schools might be free from control and imposition of external actors in some certain respects (Newton, 2016). However, there is neither complete freedom nor full school autonomy in the public education system (Caldwell BJ, 2014).

School autonomy is a multidimensional concept that deals with various aspects including decision-making authority, decision-making domains and decision-making modalities (Smyth, 2011). Decision-making domains often include academic autonomy (including teaching, assessment, number of students, textbooks, methods), personnel domain (including recruiting and firing of teachers and school staff, determining employee's wages, teacher appraisal and promotion) and financial domain (planning, mobilizing and allocating school budgets) (Amelsvoort, 1997). Among these, financial autonomy is at the key of the issues, as it refers to the right to control and budget allocation in relation to other autonomy (Reezigt, 2005).

A series of studies on school autonomy conducted by many scholars in different countries around the world have addressed issues such as the impact of school autonomy on student learning outcomes, the structure of organization, or culture of the school. Some studies focus on the relationship between school autonomy and accountability. However, there has not been any research focusing deeply on financial autonomy of schools, especially schools in difficult localities such as Cao Bang province of Vietnam. This study focuses on answering the question of how financial autonomy in public schools in a locality with difficult socio-economic conditions like Cao Bang province in Vietnam is being implemented, thus proposes appropriate policy recommendations.

3. METHODOLOGY

This study uses qualitative analysis method through analysis of reports on the implementation of financial autonomy, reports on study results, and reports on the operation of public high schools established in Cao Bang province. These reports are provided by the Department of Finance and the Department of Education and Training of Cao Bang Province.

4. RESULT

4.1. The actual situation of revenue sources, revenue levels of public schools in Cao Bang province

Revenues of public schools in general include funding from the state budget and non-business revenues. The non-business revenue includes tuition fees, service fees and other revenues. In a certain period, the People's Council of Cao Bang province will issue guidelines on the collection rates of public schools in the province.

** Regarding the annual state budget funding*

In Cao Bang province, the allocation of local budget estimates for recurrent expenditures for preschool and general education is carried out in the forms of: salary, specific salary-related expenses distributed according to the regime and norms of state budget expenditure; expenses for teaching and learning activities allocated according to the allocation norm, the proportion of expenditures for teaching and learning activities compared to salaries and other salary-related expenses.

Table 1. Norms of allocation of recurrent local budget expenditure estimates for pre-school education and general education in Cao Bang province

Unit: %

	Period 2013 - 2016		Period 2017 - 2020	
	Salaries and salary-related expenses	Non-salary expenses calculated according to salary structure	Salaries and salary-related expenses	Non-salary expenses calculated according to salary structure
Preschool education	85%	15%	86%	14%
Primary education	85%	15 %	86%	14%
Secondary Education	80%	20%	86%	14%
Tertiary School Education	70%	30%	78%	22%

Source: Resolution 18/2010/NQ-HDND dated 09/07/2010 and Resolution 68/2016/NQ-HDND December 8, 2016 of Cao Bang province on

For ethnic minority boarding schools: salary and other salary-related expenses and other non-salary expenses calculated according to the respective educational level norms. In addition to the above norms, it is also calculated to spend on student scholarships, support for collective canteens and other direct support for students which was 7.8 million VND / 1 student / year in the period 2013 - 2016 and increased to 15 million dong/1 student/year for the period 2017 - 2020.

For specialized high schools: salary and other salary-related expenses and other non-salary expenses calculated according to the respective educational level norms; non-salary expenses other are doubled (including the reward fund for excellent students). The level of scholarships for students according to the 9-month school year /student are calculated as half of the level prescribed by the State for the period 2013 - 2016 and specifically 4,5 million VND/student/school year in the period 2017 - 2020.

The allocation of local budget estimates for regular expenditures on pre-school and general education (salary, salary-related expenses and expenses for the implementation of a number of specific policies in education) is made according to input cost factors such as salary regime, allowances, salary contributions of teachers; lunch allowances for preschool children of 3-5 years

old, regimes and levels of tuition exemption and reduction. Regimes and levels of support for study expenses have the advantage of being easy to determine according to the data of the internal affairs agency on payroll, labor contract, salary scale coefficient; ensuring that the budget is sufficient to cover the minimum actual costs according to the regime and the State's policies on salary expenditures and wages in a locality like Cao Bang - where there is a distributed school network with the number of classes/schools and the number of students/classes lower than the prescribed standards due to the small and scattered number of students.

However, the budget allocation according to such input cost factors has not closely linked the allocated budget with the cost of educational outputs of students; there is an inequality in budget allocation among localities in the province and among public educational institutions, especially in the context of frequent shortage of teachers in upland districts (Bao Lam, Bao Lac). In schools that lack teachers and having insufficient staff, the allocated operating expenses are normally low, which significantly affects the overall activities of the school. In addition, when comparing the norm of regular budget allocation for preschool and general education between the two periods of budget stability, the ratio of recurrent expenditures from the budget to individual payments in the period 2017 - 2020 is found to be higher than in the period 2013 - 2016. As a result, operating expenses of schools are becoming increasingly tight.

** Non-business revenues*

The collection of tuition fees at all levels in Cao Bang province were promulgated by the Provincial People's Council in the Resolutions on promulgation of lists, rates of fees and tuition fees in the province in the period 2013 - 2015 and separate resolutions on tuition fees for the period 2016 - 2020.

In the period of 2013 - 2015, the tuition fees in Cao Bang province are consistent across all levels of education (except for the primary school, the tuition fee is exempted due to the implementation of education universalization) but there are differences between urban and rural areas, between national standard schools and other schools. In the period of 2016 - 2020, there was a distinction of tuition fee rates between preschool and high school levels, but it was still divided by regions, by national standard schools and others. As compared with the tuition fee frame for the period 2013 - 2015, the current fee framework has a more detailed and complex division. Specifically, the schools are divided into 3 areas: urban, rural and mountainous. In urban areas, they are divided into two groups: schools in the wards of the city and schools in the townships of the districts; accordingly, in each of these groups, there are national standard and non-standard schools, schools in Hop Giang ward and schools in the remaining wards (Cao Bang city area); City High School for the Gifted. In the rural area (including the communes of the city, the communes of the districts excluding the communes of zone III), they are divided into 2 groups: the schools in the communes of the city and the others; and further subdivided by national standard and non-standard schools in more details. In mountainous areas (zone III communes, particularly disadvantaged hamlets in communes and wards of zone I and zone II) the same tuition fee is prescribed for both preschool and high school. Tuition fees in Cao Bang province are presented in Appendix 03. During the whole study period 2013 - 2019, Cao Bang province had three increases in tuition fees in 2014, 2016 and 2019 with the rate of 5% each increase.

** Regarding the revenue of public high schools in Cao Bang province*

With the characteristics of a highland border province, there are many areas in extremely difficult socio-economic regions, with low per capita income. Therefore, the operation of public schools in Cao Bang province depends entirely on the allocated budget, thus, the degree of financial autonomy is low. State budget funding for schools accounts for more than 95% of the total revenue of these units.

Unit: thousand dong

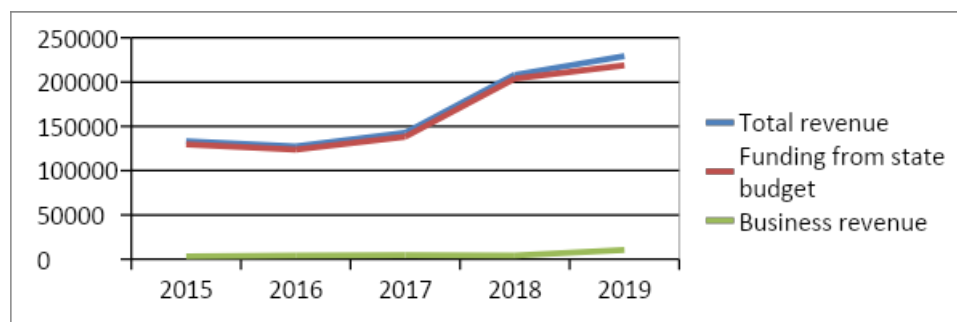


Figure 1. Total revenue of high schools in Cao Bang Province

Source: Report on the implementation of Decree 43/2006/ND-CP and Decree 16/2015/ND-CP in years – by Cao Bang province's Department of education and training

In the period of 2015 - 2019, the total revenue of high schools had a continuous increase (with a slight decrease in 2016), especially sharp in 2018 and 2019. Total revenue of high schools in 2019 increased by 72% compared to 2015, an average increase of 15.9% per year. The amount of recurrent expenditure from the state budget in 2019 increased by 69% compared to 2015, an average annual increase of 15.5%; Non-business revenue in 2019 increased by 205.9% compared to 2015, an average increase of 43.5% each year. The increase in non-business revenue is mainly due to the increase in tuition fees. In the revenue structure, revenue from the state budget still accounts for a large proportion of the total revenue of high schools (more than 95%) but tends to decrease gradually from 97.5% in 2015 to 95.5% in 2019. Correspondingly, there is an increase in non-business revenue from 2.5% in 2015 to 4.5% in 2019. The non-business revenues of high schools in the province mainly come from tuition fees; Service revenue and other revenues account for a very small percentage, almost negligible.

It can be seen that, as a mountainous border province, the implementation of service activities in the field of education and training in the province faces many difficulties. For schools in mountainous districts with special difficulties, due to the fact that encouraging ethnic minority students to attend regular school has been a great effort of teachers, it is impossible to organize educational service activities. However, this task can be done at schools located in Cao Bang City or the town centers of the districts. In fact, the survey at some high schools shows that some schools have organized service activities such as teaching 2 lessons / 1 day or teaching more than 6 sessions / week; teaching associated with experiential activities; extracurricular activities. When implementing these activities, it is observed that the student's learning outcomes have been improved, students are excited to participate in after-school and extra-curricular programs, and parents are highly satisfied with the extracurricular activities organized by the school. However, schools said that they are having difficulty implementing these activities due to lack of legal basis. Currently, the Provincial People's Committee has just issued a list of public non-business services in the field of education and training using the state budget, but it has not yet regulated activities that do not use the state budget, therefore,

schools have no basis for implementation. Regarding the private tutoring, which is temporarily suspended according to the regulations of the Ministry of Education and Training, the Provincial People's Committee has not issued specific instructions on the implementation of tutoring.

** Ethnic minority boarding high schools*

Ethnic minority boarding schools are public schools for children of ethnic minorities and children of ethnic groups who permanently settle in areas with extremely difficult socio-economic conditions, in order to contribute creating a source of training ethnic cadres for the locality. According to the regulations, students studying at ethnic minority boarding schools are exempt from tuition fees, therefore, the revenue of these institutions is 100% from the state budget. Budget funds for the units cover salaries, insurance, basic trade union funding according to the ranks prescribed by the State, ensuring the regular operating expenses at a cost-saving level. State budget funding for ethnic minority boarding schools in Cao Bang province has increased continuously, especially the increase by 161% in 2019 compared to 2015.

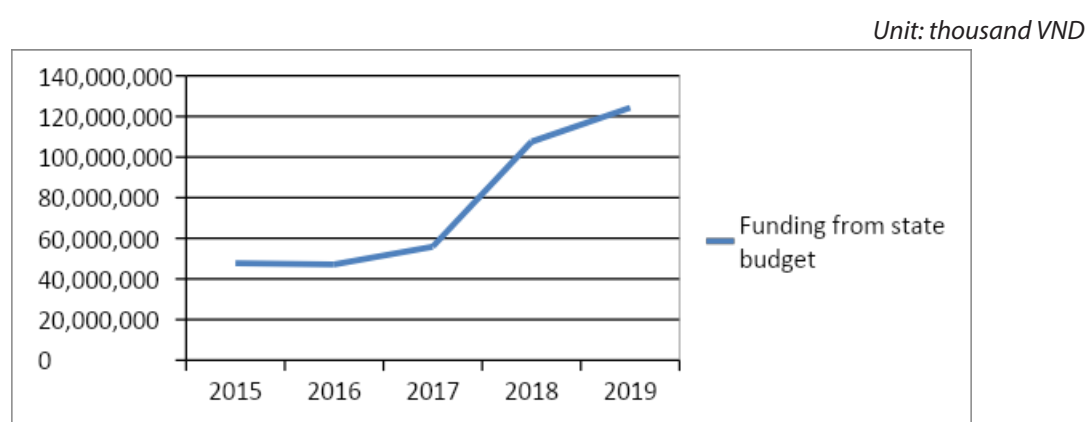


Figure 2. State budget funding for ethnic minority boarding schools in Cao Bang province

Source: Report on the implementation of Decree 43/2006/ND-CP and Decree 16/2015/ND-CP in years - Cao Bang Department of Education and Training

4.2. Autonomy in expenditures and expenses at public schools

A common feature in the spending structure of public schools is that personal payment expenditure account for the largest proportion, in Cao Bang province, the proportion of individual payments/expenses frequency of schools tends to increase.

Table 2. Expenditure structure of the high schools and ethnic minority boarding schools in Cao Bang province

Unit: %

Content	High schools					Ethnic minority boarding schools				
	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019
Personal expenditure	81	80	79	81	81	84	87	81	88	87
Expenditure on goods and services	10	10	15	10	10	11	8	14	8	8
Expenditure on professional expertise	7	8	5	7	7	3	3	3	3	3
Other expenditure	2	2	2	2	2	2	2	2	2	2
Total ¹	100	100	100	100	100	100	100	100	100	100

Source: Cao Bang Department of Education and Training

The expenditure structure of high schools was relatively stable during the study period. Personal payment expenditure accounted for about 80% of total recurrent expenditure, professional and expertise expenditure accounted about 7%, expenditure on goods and services approximately 10%. However, individual payment expenditure at ethnic minority boarding schools are much higher, accounting for more than 86% of total recurrent expenditures. The reason is that the number of staff and teachers under contract 68 is higher in ethnic minority schools than in high schools; which, according to current regulations, employees under contract 68 are not subject to be funded for professional and other activities. However, the institutions still have to make such payment, therefore, the budget expenditure on professional activities is low. In addition, students at ethnic minority boarding schools are often provided with food and accommodation at school, resulting to the fact that school's equipment, property and machinery are damaged. Moreover, the students are ethnic minorities, mostly from poor households, thus, having no money to contribute to buy tools and assets to serve their studies. Therefore, schools also have to spend on goods, services, minor repairs; the remaining expenses for professional expertise are very small, accounting for only about 3% of the total recurrent expenditure.

4.3. DISTRIBUTION OF THE DIFFERENCE BETWEEN REVENUE AND EXPENSES FOR REGULAR OPERATIONS

A major of the high schools in Cao Bang province run by the state budget with low operating costs and low income. The fact that many students are under special exemption policy and employees under contract 68 are not provided with operating expenses, makes the amount of savings by the institutions be insufficient and additional income of employees not being high.

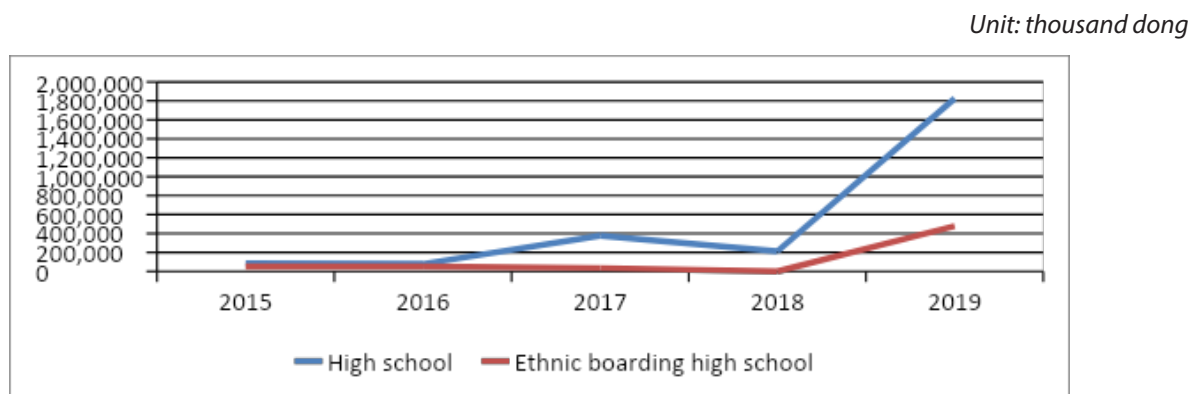


Figure 3. Savings of non-business education and training institutions in Cao Bang province

Source: Cao Bang Department of Education and Training

In the two years 2015 and 2016, the number of high schools and ethnic minority boarding schools having saving funds was little; only 1 or 2 schools managed to have saving funds. In the 2017 - 2019 period, the number of high schools and ethnic minority boarding schools with saving funds increased, in which: in 2017, there were 8 high schools and 9 ethnic minority schools, in 2019 23 high schools and 9 ethnic minority schools having saving funds. However, many schools did not spend the saving funds on additional income or distribute it to the prescribed funds, but rather spent directly on other activities. This resulted in the fact that very few schools paid additional

¹ The total recurrent expenditure form state budget and leftover by non-business expenditure.

income for employees. In each of the two years 2018 and 2019, only one school paid additional income for employees with the rate of 384,098 VND/person/month in 2018 (Be Van Dam High School) and 80,699 VND/person /month in 2019 (City High School).

5. RECOMMENDATIONS

The Decree No. 43/2006 and Decree No. 16/2015 were issued by the Government with the aim of giving greater autonomy to public service providers in Vietnam, including public schools. However, it is regulated that public schools have to achieve financial autonomy first, in order to achieve academic and personnel autonomy. The Decree No. 16/2015 classifies public schools into four types of financial autonomy from high to low, including: autonomy in investment and recurrent expenditures, autonomy in recurrent expenditures, partial self-finance of recurrent expenditures and the full recurrent expenditure by state budget. In order to achieve full autonomy in all three areas of academic, human resources and finance, schools need to ensure their autonomy in recurrent expenditures – which means that they no longer receive recurrent expenditures from the state budget. It is understood that self-financed schools in Vietnam will not be subsidized by the state budget and will have to rely on revenues from tuition fees, income from educational services and other revenues to cover their own expenses on salary, stationery, electricity, water and other expenses. But even when financial autonomy is granted, there remains several difficulties such as: schools are able to determine the tuition fees, but still need to comply with a framework promulgated by the Provincial People's Council; they still have to comply with the regulations on the accounting regime of an administrative and non-business unit and under very close supervision from the financial management agency and the local education management agency.

High schools in Cao Bang province as well as in other disadvantaged areas of Vietnam (mountainous provinces, rural areas, island areas) currently have a very low level of financial autonomy, depending entirely on funding provided by the state budget. The tuition fee rate prescribed by the People's Council is very low, and it is not possible to organize other educational programs besides the general education program. The expenditure structure focuses only on personal payments, with very low spending on teaching and learning activities, and a comparatively low savings rate. These subjective conditions are preventing these public schools from increasing their level of financial autonomy. Moreover, in the situation of localities like Cao Bang with low per capita income (ranked 63/64 provinces) and many regions with extremely difficult socio-economic conditions, the people's ability to pay for their children's education fee as well as other educational activities is limited.

These observations show that, the promulgation of autonomy policies in the field of general education should take into account schools' context. Under Vietnam's current system of autonomy policies, localities like Cao Bang need to quickly issue technical and economic norms in the field of education, which facilitate the calculation of the expense that a school in the locality should spend to teach 1 student. This is the basis for the promulgation of regulations on a more practical tuition fees. In addition, when promulgating a local tuition policy, administrators need to classify tuition rates for each parent based on their ability to pay. Parents who cannot afford to pay the full tuition fee will receive support from the local budget or the central budget. This tuition support will be treated as a payment by the State to the schools and also counted as a service fee. When this is feasible, public schools will be given financial autonomy in terms of the power to decide

the allocation of funds obtained (from parental contributions, payments from budget) for school activities. These allocation decisions will depend on the unique circumstances and characteristics of each school, where improvements in student's academic results are ensured. When financial autonomy is achieved in this way, more academic and personnel autonomy should be given to schools. The role of governing bodies shall be shifted from direct intervention into schools' professional activities to observance, monitor and requiring schools to exercise accountability in all cases and with all related party.

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FINANCIAL AUTONOMY IN PUBLIC HEALTHCARE ENTITIES IN CAO BANG PROVINCE

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Abstract: Public healthcare services as one of the fields of public services have a huge impact to the security of social national and each local. Especially, for specific localities like Cao Bang - one of the northern mountainous provinces with many ethnic minorities, this issue needs to be paid more attention. In the process of implementing the autonomy mechanism, especially the financial autonomy mechanism, the public healthcare has been and will be an area focused on by the People's Committee of Cao Bang province. The article analyzes the actual situation of financial autonomy implementation in public healthcare entities, thereby making some recommendations and policy suggestions to contribute to improving the effectiveness of the autonomy in the public health care entities in Cao Bang province.

Keywords: Public, Cao Bang, healthcare, financial

1. CHARACTERISTICS OF THE HEALTHCARE IN CAO BANG PROVINCE

Although Cao Bang province's state budget revenue accounts for only 30-35% of total state budget revenue, and the province's operating expenditures are largely based on the central budget, Cao Bang province has arranged the state budget expenditure structure in accordance with the current situation of the province, in which state budget expenditure for health care, population accounted for 12.75% of total state budget expenditure in the province. If compared with Hanoi, this rate is 1.2 - 1.5 times higher, but if we calculate the absolute number of state budget expenditures per capital for health, population (1,401,694 VND/person), this expenditure is 3.3 times higher than the figure of 419,097 VND/person in Hanoi.

Before 2019 and implementing Project No. 12, the project on rearrangement and reorganization of public non - profit entities under the state administrative system in Cao Bang province according to Resolution 19-NQ/TW, the total number of public entities are 863 units, of which 54 units are in the field of health care. Since 2019 until now, after the implementation of the project 12 / ĐA-TU and plan number 3831 / KH-UBND, the number of public healthcare entities in Cao Bang province has the markedly changed in the direction of decreasing in number on the basis of merging units in the same field. With 35% of reduction, the number of public healthcare entities is only 19 units. Along with the reorganization and reorganization of units, the province has also focused on improving the quality and efficient provision of public healthcare services.

In these years, The healthcare sector of Cao Bang has constantly strive to improve the quality of service of the care and protection of people's health and has achieved many accomplishments. Up

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to now, the number of healthcare entities in the province in 2019 is 329; including 16 hospitals, 3 regional polyclinics, 199 commune, ward and township health stations and 111 private healthcare entities. Currently, 100% of health stations in communes, wards and townships have doctors working. On average, the province has 15 doctors per ten thousand people. 121/161 communes, wards and townships meet the national criteria for commune health. These results contribute to improving the health care capacity of the entire population, especially ethnic minorities in remote and isolated areas, have conditions to access healthcare services that are quick, safe and affordable, towards patient satisfaction. The results of quality assessment of public healthcare entities tended to increase over the years, from 2.2 in 2016 to 2.5 in 2019. However, this score only reaches 50% of the 5-point scale in the quality assessment criteria set by the Ministry of Health.

2. RESULTS OF FINANCIAL AUTONOMY IMPLEMENTATION IN PUBLIC HEALTHCARE ENTITIES IN CAO BANG PROVINCE

About the status of classification of autonomy type

From 2014 to now, the Healthcare sector of Cao Bang has made great changes not only in the restructuring of the apparatus, but also in the process of implementing the autonomy mechanism. According to the annual report on the implementation of autonomy by the Department of Health in the period from 2014 to 2019, there is no unit that is classified as cover their own recurrent expenses. In the fields of medical examination and treatment, prevention, population and other health fields, only the units in the field of medical examination and treatment are entities that cover a part of their own recurrent expense in the range of 40 - 70%.

Unit:%

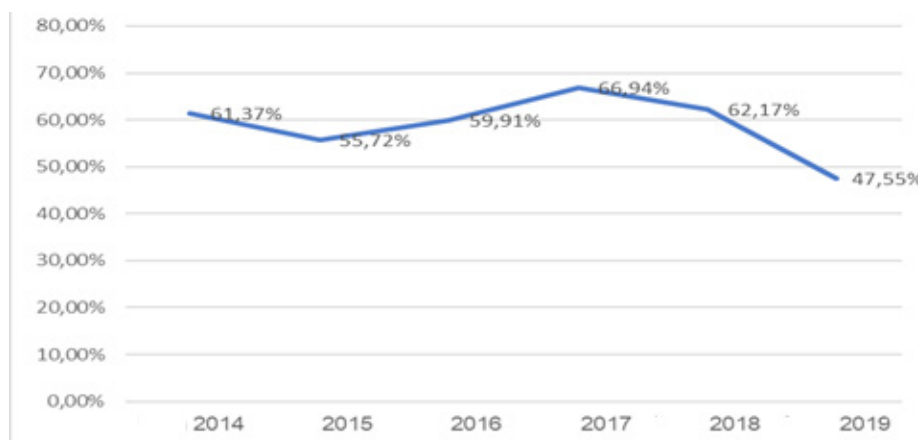


Chart 1 . The average level of financial autonomy of Public healthcare entities in Cao Bang Province

Source: Department of Health, Cao Bang

From chart 1, in the period from 2014 to 2017, the level of financial autonomy of units tends to increase relatively. However, due to the impact of the merger of units (preparation period in 2018, and the merger in 2019), the level of autonomy tends to decrease, especially in 2019. The data in chart 1 of the research team is currently calculated based on the array of activities in each health center after the merger, so, if we calculate the level of financial autonomy in all three areas of operation: medical examination and treatment, prevention and population, the level of financial autonomy of these units will be lower. Besides, based on the data provided by hospitals in Cao

Bang province, in order to evaluate the change in the operational efficiency of these hospitals, we used a computational model of change in capacity composite yield according to the Malmquist coefficient. Accordingly, the variables representing the input include: (1) Human resource representative variable: Assigned personnel payroll; (2) Variables representing facilities: Actual number of hospital beds; (3) Financial representative variable: State budget source. Variables representing output: (1) Variable representing hospital operations: number of medical visits; (2) Variable representing the hospital's revenue: Total hospital revenue from supplying public healthcare services; (3) Variable representing the life of hospital staff: supplementation of income. Malmquist TFPCH indices in each period if the TFPCH' index is greater than 1, it means that the hospitals have increasing efficiency in each period t , whereas the TFPCH that is less than 1 means that the hospital efficiency decreases during the period t .

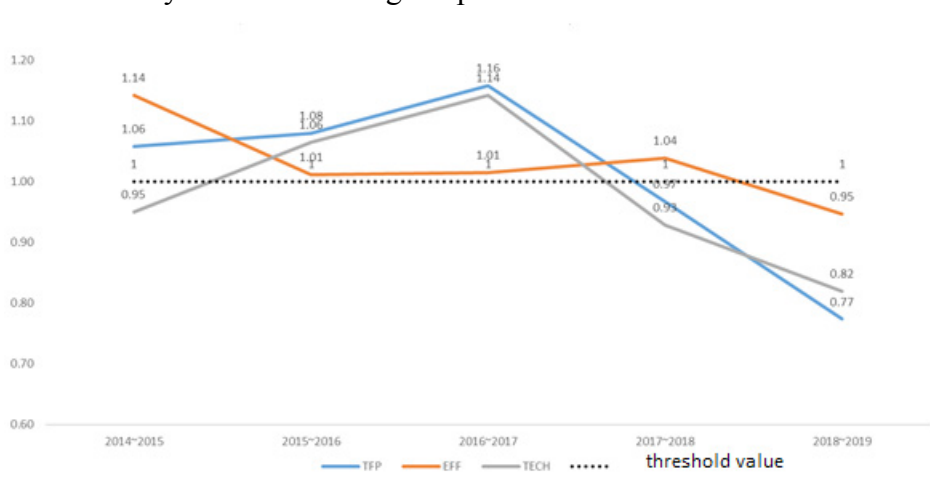


Chart 2 . Table of changes in the total factor productivity of public healthcare entities in Cao Bang Province - Results of the entities average model in the period 2014 - 2019

Source: Results from a quantitative research model

In general, during the survey period, the TFP, EFF, and TECH indexes were all greater than 1, indicating that all of these entities improved in terms of overall productivity, resource efficiency, and technological change. However, in the period of 2018 – 2019, three of these indexes are less than 1, which proves that compared to 2018 in 2019 there is a decrease in operating efficiency. Specifically, compared to before the merger, in 2019, medical examination and treatment activities at these entities only reached about 80% on average, and some entities only reached 44% compared to 2018.

About the status of autonomy in revenue

In addition to the revenue from the state budget, Public healthcare entities that cover a part of their own recurrent expenses in Cao Bang province, there are also main sources of revenue from supplying public healthcare services such as: (1) revenue from medical examination and treatment. Health insurance, (2) revenue from medical examination and treatment without health insurance, (3) medical examination and treatment on demand, (4) collection of preventive medical services, medical quarantine and (5) Methadone examination and consultation fees. With the characteristics of Cao Bang province, most of the hospitals and activities in health centers in the districts generate non-business income, while other areas have no or very little revenue beside

State Budget. From the analysis of volatile sources of revenue and income structure in these entities below, we can see the percentage of two sources. Although there is a slight increase in the proportion of state budget sources and a slight decrease in supplying public healthcare services revenue, revenue from supplying public healthcare services still accounts for a larger proportion (from 60% or more) in these units.

Unit: thousand dong, %

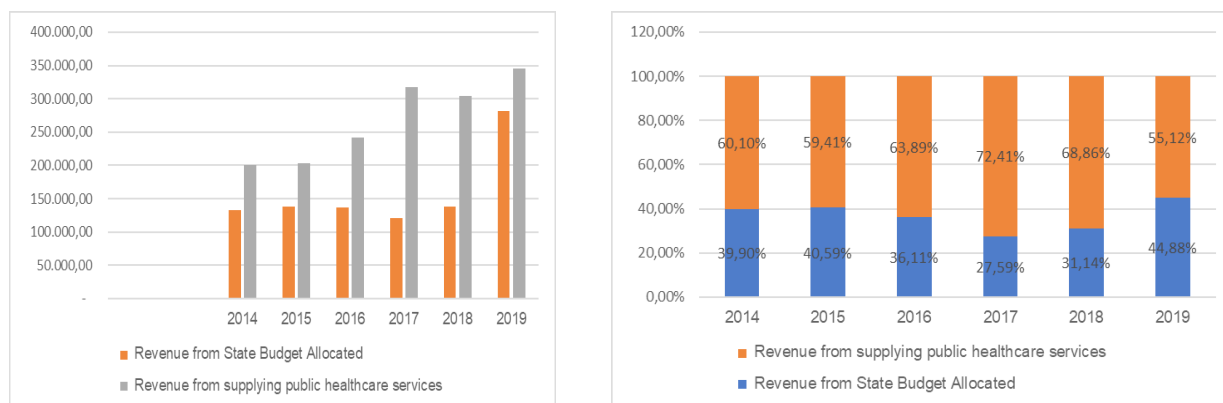


Chart 3. Changes in revenue sources and structure of revenue sources in Public healthcare entities in Cao Bang province in the period 2014 - 2019

Source: Financial Planning Department, Cao Bang Department of Health

About the status of expenditure and expenses autonomy

In the health sector, depending on the specificity of each specific field, the structure of state budget expenditures for the public health care units in these fields is markedly different.

Unit: %

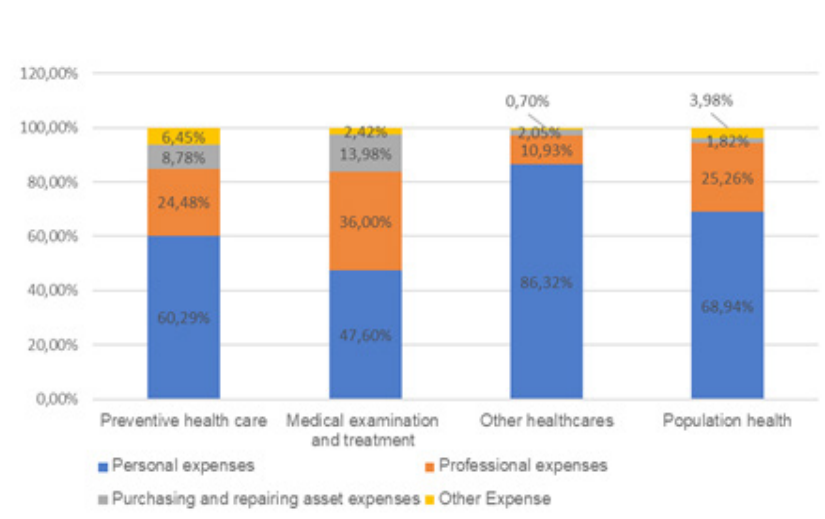


Chart 4. Structure of expenditures from the state budget in the fields of healthcare in Cao Bang province in 2019

Source: Financial Planning Department, Department of Health

* For fields with low or no revenue sources beside State Budget such as preventive medicine, population and other health sectors, the expenditure structure of these entities is as follows:

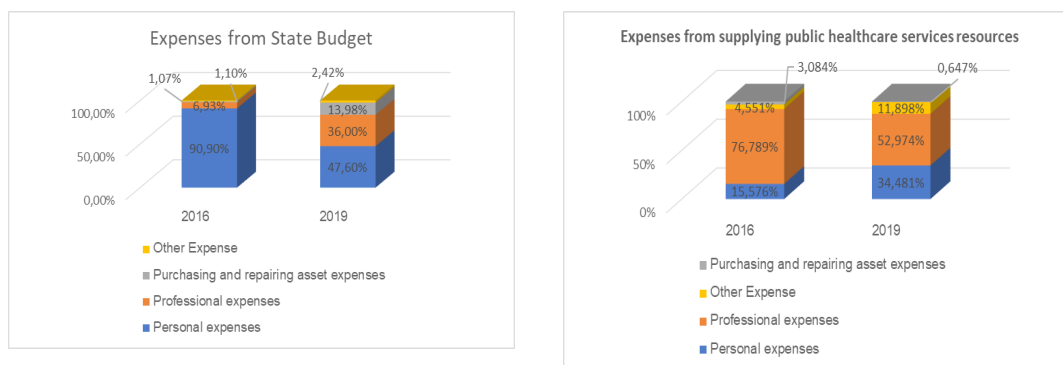
+ Spending on personal expenses for over 60%, of which other medical fields account for 86.3%.

+ Spending on professional expenses for around 25%, other medical fields only account for approximately 11%.

+ Expenses on purchasing and repairing assets of these units in these fields for a small proportion, of which the field of preventive medicine accounts for the highest proportion (accounting for 8.78% of the total expenses), the remaining fields only 2 to 4%.

* For the field of medical examination and treatment - the field capable of supplying healthcare services revenue from hospital fees, health insurance, services and other revenue sources. Therefore, if we compare the structure of expenses from two sources, the difference can be clearly seen. Specifically:

Unit: %



**Chart 5 . Structure of expenses in Public Healthcare Entities
(For the medical examination and treatment field)**

Source: Financial Planning Department, Department of Health

- For the content of personal expenses, it can be seen that this expenses is mainly from the state budget (accounting for 90.9% in 2016), supplying healthcare services resources accounted for only 15.7% (in 2016). However, in the process of implementing the autonomy mechanism, this proportion also tends to decrease when the proportion of state budget spending on personal expenses in 2019 accounted for only 47.6% of total amount; and the proportion of expense from supplying healthcare services resources for this content in the same year tended to increase to 32.8%.

- As for the content of professional expenses that plays an important role in the health sector. In this content, supplying healthcare services revenue is the main source of funding (accounting for 60% - over 70% of total expenses from this source), but State budget funding for this content tends to increase, when the proportion of professional expense from the state budget in 2016 only accounted for 6.93%, increased to 36% in 2019 (increased 6 times).

- For the content of spending on purchasing and repairing assets that is the key to improving the quality of medical examination and treatment services. Although there is a strong upward trend (from 1.1% in 2016 to 13.98% in 2019 of total expense from the State budget), it tends to decrease from supplying healthcare services source (decreased from 3.2% in 2016 to 3.2% in 2016). 1.3% in 2019). This rate is still very low compared to the current needs of the public health care entities in Cao Bang province.

On the status of autonomy in the distribution of financial results

One of the goals of the autonomy mechanism is to increase the income of officials and employees in Public healthcare entities. In the period from 2014 to 2019, it can be seen that the absolute results of the average supplementation of income in these entities that cover a part of their own recurrent expenses are much higher than that of the units due to State budget is fully guaranteed (about 5 times). However, due to the merger and reorganization of units in the period of 2018 - 2019, the average supplementation of income in these units that cover a part of their own recurrent expenses tended to decrease slightly. However, considering the whole period, this number still has a significant increase, in 2019 nearly twice as much as in 2014.

Unit: million dong

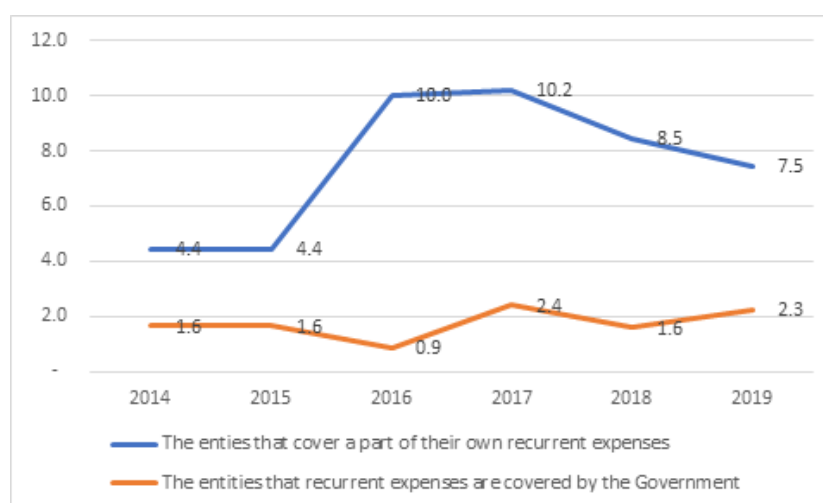


Chart 6 . Supplementation income of public healthcare entities in Cao Bang Province

Source: Financial Planning Department, Department of Health

Besides, the result of funds appropriation also showed marked differences between the entities that cover a part of their own recurrent expenses (type 3) and the entities that recurrent expenses are covered by the Government (type 4). Funds that set aside from savings amount in both types of 2019 increased compared to 2018. In 2019, the number of funds set up at the entities of type 4 increased, shortening about the way compared with the results of fund deduction of the entities of type 3; from 9.3 times higher than in 2018 to only 3.4 times in 2019.

Unit: million dong

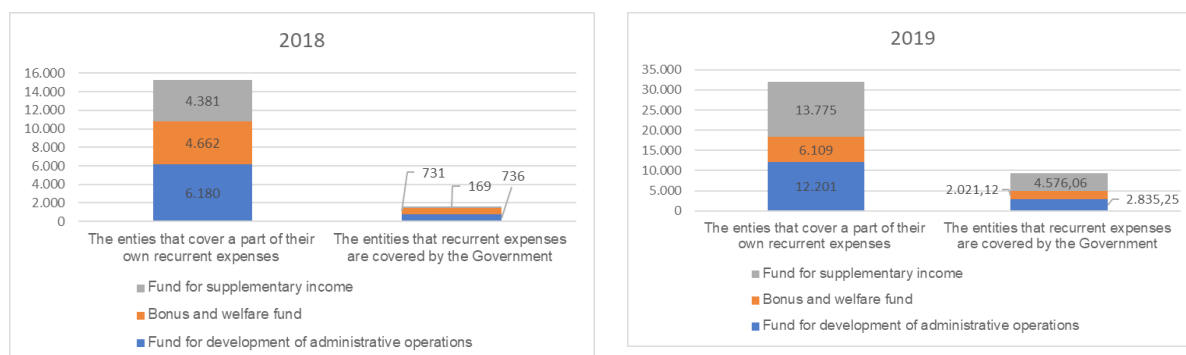


Chart 7 . The situation of setting up funds at Public healthcare entities from 2018 to 2019

Source: Financial Planning Department, Department of Health

In the process of implementing the autonomy mechanism, the fund for development of administrative operations is a relatively important source of finance for the entities to be proactive in investing in equipment and facilities, improving the quality of human resources through training and retraining. In the period of 2014 - 2019, the amount for setting aside of this fund has increased over the years; especially for the entities of type 3, in 2019 increased by 2-3 times compared to the beginning of 2014.

Unit: million VND

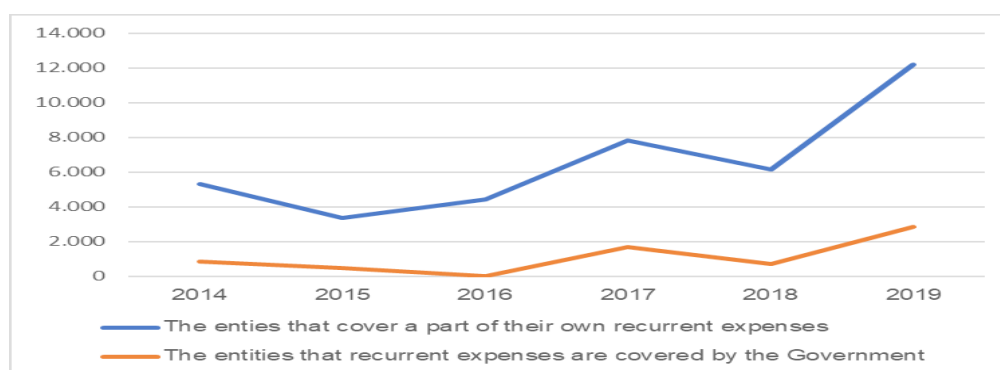


Chart 8 . Situation of setting up fund for development of administrative operations at public health-care entities in Cao Bang province

Source: Financial Planning Department, Department of Health

In terms of the proportion of setting aside funds at the units, compared with the provisions of Decree 43/2006/ND-CP and Circular 71/2006/TT-BTC, the proportion of fund for development of administrative operations at the entities that covered a part of their own recurrent expenses in only 2019 met the requirement of the minimum 25%. The remaining years have not met this regulation, especially in 2016. Meanwhile, with the units that recurrent expenses are covered by the Government, although there is no regulation on the rate of setting aside for this fund, these units also take a relative proportion. In 2017, the amount of setting up for this fund at these entities (type 4) reached approximately 25%.

Table 9 . Proportion of setting aside funds for for development of administrative operations

Unit:%

	2014	2015	2016	2017	2018	2019
The entities that cover a part of their own recurrent expenses	24.31	24.86	19.61	24.67	21.32	26.92
The entities that recurrent expenses are covered by the Government	16.58	12.54	4.06	24.64	19.27	22.09

Source: Financial Planning Department, Department of Health

3. ABOUT THE ACHIEVEMENTS, LIMITATIONS, CAUSES

The implementation of the financial autonomy mechanism has initially changed the thinking and perception of managers and employees at public healthcare entities in Cao Bang province. It has motivated many entities to stand up for themselves by their own strength, step by step expanding service activities without using the state budget. However, objectively it shows that the number of entities implemented by the state budget is fully guaranteed. Most of the units have

difficulty in developing non-business activities, have not been proactive and develop non-business revenue. Therefore, they still depend a lot on the state budget, revenue from supplying healthcare services is still very low. In addition, the structure of expenses has been slow to change, and the management of expenses in these entities has not been focused. Personal expenses account for a large proportion, professional and professional expenses, expenses for purchasing and repairing asset are low. This limb structure is maintained for a long time, the change of limb structure is very small. With such a heavy spending structure on personal expenses, it will affect the quality of public healthcare services that these entities provide.

It can be clearly seen that one of the major limitations hindering the implementation of the autonomy mechanism in Public healthcare entities is the development of the public service market in Cao Bang province. Supply - demand and the balance in the supply - demand relationship of public services in the public service market in areas in Cao Bang province are really limited. With the characteristics of the locality with the highest per capita income 62/63 provinces and cities and with the population density is about 97 people/km², it has been the reason why the public service market in Cao Bang can't develop yet. In the health sector, with remote districts, most people only need to see a doctor when they have a serious illness. However, there is also a segment of the population using services from private healthcare entities, and they aren't "afraid" to go to medical facilities in Hanoi on long distances.

4. SOME RECOMMENDATIONS AND SOLUTIONS

In order to improve the efficiency of implementing the autonomy mechanism of public healthcare entities in Cao Bang province, it is necessary to consider both perspectives: state management and the units themselves.

On the side of the state

Firstly, it is necessary to improve mechanisms and policies towards enhancing financial autonomy of units. Specifically:

+ It is necessary to issue more detailed and specific guidance documents on the contents of the autonomy mechanism, creating conditions for units to actively implement. In particular, it is necessary to clearly specify the contents that the unit is allowed to decide on its own, based on reference to the provisions in the relevant documents, avoiding overlaps and contradictions between the documents.

+ It is necessary to improve the mechanism of decentralization and decentralization to create conditions for units to exercise autonomy in the right sense, in the direction of empowering with more responsibility for the units.

+ Innovating and perfecting the method of allocating and allocating state budget funds, thereby transforming from allocation of recurrent expenditures (reducing recurrent expenditures) and increasing investment expenditures, facilities, technical infrastructure and systems. equipment to enhance the quality of service and support units for the first time when the new autonomy under new forms. In addition, reform the state budget investment method with appropriate forms such as ordering, bidding or assigning tasks.

+ It is necessary to have solutions so that the merger, dissolution and transformation of the operating model of the units are not merely accumulation, but consolidation, in order to soon bring the newly merged units back to normal operation.

+ Renovate the state management method in the health sector in the direction of giving autonomy to the units such as: building a framework to evaluate the performance of both economic and social activities; establish a mechanism to monitor the implementation of the financial autonomy mechanism at the units, thereby giving warnings about the level of financial safety, as well as monitoring the implementation of political tasks of the units. .

On the side of public non-business units in the health sector in Cao Bang province

+ It is necessary to develop an autonomy plan associated with the conditions, capabilities and development strategy of the unit.

+ Improve financial management within the unit in the direction of good financial planning, expansion, development and good management of revenue sources, proactively determining the cost of forming service prices, good control over expenses and expenses of the unit.

+ Develop operating regulations of the unit to strengthen financial and operational management at the unit .

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HUMAN RESOURCE RISK MANAGEMENT IN PRINTING ENTERPRISES

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Abstract: *The article mentions 3 aspects of human resource risk management in Vietnamese printing enterprises, including risk recognition, risk analysis and identification of risk level; from there, offering solutions to enhance this activity in the coming time. The proposed solutions include: integrating risk management into the human resource recruitment process; integrating risk management into training and developing human resources; building and enforcing corporate culture; integrating risk management into corporate personnel assessment, regimes and policies; integrating risk management into job descriptions.*

Keywords: *human resources, risk, risk management, enterprises of the printing industry, Vietnam*

1. INTRODUCTION

For businesses and the whole economy, human resources play a very important role. However, in the course of operation, businesses will encounter some human-resource-related loss such as when the employee has an accident (death, injury...), loss of working capacity before the deadline. Retiring, or quitting jobs due to many different reasons not only directly affects the individual employees and their families but also directly affects labor productivity, causing long-term economic consequences for the business. Therefore, to minimize and limit risks to human resources, it is necessary to implement human resource risk management.

The printing industry is a service industry; Print products are related to socio-economic industries. Not only the concept of printing books and newspapers but the printing industry has become popularized, socialized into the industry in the field of packaging production and attaching the goal of guiding consumers, promoting the brand.

According to business registration data, the country has more than 25,000 registered printing enterprises, of which only 2,073 printing establishments have operating licenses. In which, Vietnamese enterprises account for 77.3%, enterprises with 100% foreign capital are 13.7%, and the rest are associated enterprises. In 2019, the output of the printing industry is about 300 billion A4 pages, up 5.4% compared to 2018, ranking sixth in Southeast Asia. Revenue of the entire printing industry in 2019 reached over 96,000 billion VND (about 4.2 billion USD, up 5.9% compared to 2018). Profits reached more than 8,000 billion, up 10.7%, paid to the State budget of 2,313 billion (up 10.4%). In 2019, the industry produces over 4 million tons of paper, consumes over 5 million tons of paper. High-quality printing paper must be imported from China, Korea, Japan... (Ministry of Information and Communication, 2020).

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In terms of technology, there are technologies of offset printing, gravure printing, and flexo printing. Offset printing technology accounts for a high proportion in the field of printing cultural products and packaging. In addition to using gravure printing technology, flexo printing technology is affirming its competitive position, replacing gravure printing and offset printing in many fields, especially in the trend of environmentally friendly packaging and printing products. Currently, direct printing and inkjet printing technology are being invested by many businesses, from advertising printing products to specialized printing lines for high-quality vouchers and labels. The 3D printing industry has been invested by many global-connected businesses in Vietnam and is operating on a small scale. In addition, printing products are diverse in designs and types, sizes as well as on many materials... The printing industry now basically switches to modern technology in all production stages. The master-making process is 100% digitized.

Although printing products meet the needs of domestic production, the quality and cost competitiveness are still low compared with Thailand and Singapore. Many reasons are leading to the above situation such as investment in the printing industry is still low and spreading, lack of in-depth and proactive investment projects; most printing enterprises are small and medium enterprises, with outdated technology, the investment is often complementary to and replaces existing old lines; human resources are not qualified... For those reasons, the problem posed for businesses in the printing industry in Vietnam is the need to have an effective human resource risk management system in the coming time.

The research objective of the article is to systematize the types of human risks that may arise in enterprises, analyze the current situation of human resource risk management in enterprises in the printing industry in Vietnam, find out the causes of risks, thereby proposing solutions to prevent and manage human resource risks for enterprises in the printing industry in Vietnam. The research questions that the study answers include: (i) What is the risk? What is human resource risk? What types of human resource risks arise in manufacturing enterprises? How to identify, measure and assess human resource risks in the enterprise? (ii) What kinds of human resource risks exist in Vietnam's printing enterprises? How to identify and evaluate? (iii) What are the solutions that the managers can use to minimize human resource risks in Vietnamese printing enterprises in the coming time? To answer the above questions, the author uses the method of reviewing documents from works done both nationally and internationally. In addition, to identify human resource risks in Vietnamese printing enterprises, the author also surveyed some subjects in 150 Vietnamese printing enterprises. Specific methods are presented later in the article.

2. LITERATURE REVIEW

A research "*Risk Management in Enterprises*" (2008) by the group of authors Do Hoang Toan, Phan Kim Chien, Vu Trong Lam. The book has raised the theory of risks of enterprises in the process of international economic integration; the current situation of risks and handling of risks of enterprises in Hanoi during the period from 2000 to 2008; solutions are mainly to limit the risks of enterprises.

The book "*Corporate risk management: approach according to the integrated framework of COSO*" (2016) by the author group Nguyen Thi Lien Diep, Vo Tan Phong presents the following contents: Overview of enterprise risk management; corporate internal environment; define goals; event identification; risk assessment; deal with risks; inspection activities; monitor; information

and communication; strategic risk management; operational risk management; compliance risk management; risk management on financial statements; some risk assessment techniques; derivatives are used to manage risk.

The article “*Some issues of risk management in enterprises*” by Nguyen Quang Cuc Hoa published in Financial Journal (May 2, 2019). The article focuses on analyzing the concept of risk management, explaining the basic concept to show the nature of enterprise risk management. At the same time, the analysis of the theoretical basis combined with examples to guide specific work steps from risk identification, risk assessment, risk quantification and risk monitoring, serves as a basis for businesses. refer to building a risk management model in their business.

The article “*A risk on human resource management: A review and directions for future research*” (2017), Karen Becker, Michelle Smidt (QUT Business School, Queensland University of Technology, Brisbane, QLD, Australia). The article focuses on analyzing the necessity of risk management, introducing the corporate risk management model according to good practices being applied in the world today.

In addition, there are many master thesis in small-scale for this topic. However, there has not been any research from the perspective of an industry to identify and classify human resource risk management in enterprises in the printing industry in Vietnam.

3. METHODOLOGY AND PROPOSED MODEL

Corporate risk management is a process, carried out by an organization’s management, management, and employees, applied in specific contexts and across the enterprise scale, designed to identify potential events that could affect the firm and risk management in risk appetite, to provide reasonable assurance of the achievement of firm’s goals (COSO, 2004).

Human resource risk management is a process established, built by managers, business leaders, and personnel related to human resources applied in the process of building business strategies, to identify potential events that affect and damage the human resources of the enterprise, and at the same time, risk management of human resources within the permitted scope to provide a degree of ensuring the achievement of the objectives of the business set out (Ha, 2016).

In modern corporate governance, risk management plays an increasingly important role because it helps enterprises anticipate and take measures to respond to risks that may arise in all aspects of their operations, thereby enabling them to damage can be limited/excluded.

The concept of risk management is defined as the process of enterprises identifying, analyzing, measuring, assessing risks, to find measures to control and overcome the consequences of risks for their business activities. business and operation of enterprises to make optimal use of resources.

Risk management, like other management activities, is classified in detail according to the specialized functions of each activity in the enterprise such as risk management in business, operation, production... In operational risk management HR risk management practices.

How risk management in HR is done: Includes the following main steps:

- Risk identification: Potential risks in human resource activities often include:
 - The risk of compliance violations (including violations of labor laws and violations of regulations, standards, conditions of customers and partners) puts enterprises at risk of legal, financial, reputation.

- Risk of violations of standards, procedures of occupational safety and health, leading to loss of life, property and reputation of the enterprise.

- The risks occur due to violations, improper implementation of professional activities on human resource management, causing financial losses (for example, wrong salary calculation), other resources (for example, unfair performance evaluation can lead to loss of good employees, reduced motivation and performance), reputation (a business with a bad reputation of the human resources department can affect the image of a business in the corner). employer level in the market)...

- Risks in the performance of the human resource management function inefficiently (of all levels of management) leading to a decrease in the motivation and performance of employees, even causing heavy financial losses to enterprises. (Example: strike).

- Exogenous risks leading to loss, affecting human resources: The continuous operation of enterprises are affected by risks in the external environment such as natural disasters, epidemics (Covid19 is a typical example), socio-political events, or within the enterprise such as system failure, loss of property, safety risks when conducting activities with a large number of employees take a plane to a place to hold a conference, and of course, there is a risk of the plane crashing, a new competitor opens and sucks up all the good people of the business in a short time ... These risks will affect human resources, requiring identification and measures to protect human resources of enterprises.

3.1. Risk identification

This is a process of continuously and systematically determining risks and uncertainties about the human resources of an organization. Identification activities aim to develop information about risks, risk factors, hazards, and risks that may occur to the organization's human resources.

Different organizations and different fields of activity have different risks and their impacts are also different. According to Becker & Smidt's research on human resources risks, there are 8 risks identified, illustrated, and described as follows:

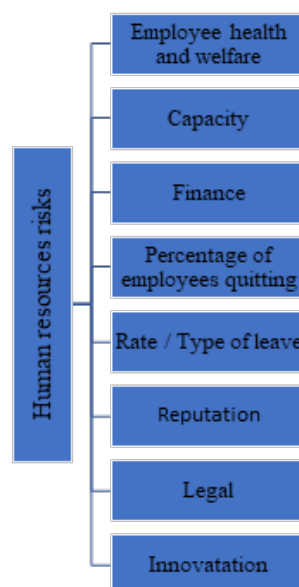


Figure 1. Risk of human resources

Source: Becker, K., & Smidt, M., Human Resource Management Review (2015).

3.2. Risk analysis

Human resource risk analysis provides inputs to determine the level of risk and decide whether risk treatment is necessary, deciding on the most appropriate human resource risk treatment strategy and method. Human resource risk analysis requires consideration of causes and sources of risks, their positive and negative consequences, and the likelihood that these consequences can occur. Factors that influence consequences and likelihood should be identified.

Consequences and probabilities can be determined by modeling the results of an event or a kind of event, or by extrapolating from empirical studies or available data.

Human resource risk analysis techniques: Analyzing the probability of the risk happening; Risk impact analysis; Analyze when the risk occurs; Risk estimation and rating.

3.3. Determine the level of risk

The purpose of this activity is to assist in deciding which risks should be prioritized for treatment and in the order in which they should be treated based on the results of the risk analysis. Determining the level of human resources risks requires comparing the level of risks seen in the analyzed reality with the established risk criteria when considering the context. Determining the level of human resources risk should take into account a broader context and decisions must be made by legal, regulatory, and other requirements.

To study the current situation of human resources risk management in enterprises in Vietnam, the author uses specific research methods associated with data collection and analysis as follows:

- *Method of collecting secondary data:*

To systematize risk management theory, the author studies domestic and international textbooks and documents, books, newspapers, magazines, scientific publications, doctoral dissertations, and master's thesis on risk management of human resources.

- *Methods of collecting primary data:*

To analyze and evaluate the situation of human resources risk management in enterprises in the printing industry in Vietnam, the author conducted a questionnaire survey at 150 printing enterprises, the number of respondents was 450 people. The subjects participating in the survey are the leaders and managers of the enterprise including the Board of Directors, heads of departments of some departments, units, and production workshops.

Content of the survey: The author focuses on building survey questions with the following contents: the probability of occurrence of extracurricular risks and the degree of impact of that risk on the operation of the business.

The Likert scale from 1 to 5 will be used for the questions on the quantitative questionnaire with 5 corresponding to the "highest" level and 1 for the "lowest" level.

The average score of each criterion will be used to evaluate the effectiveness of the surveyed subjects.

The average value of the Likert scale for each question is calculated by the formula:

$$X_i = (\sum X_i * f_i) / (\sum f_i)$$

In there:

X_i : variables observed on the Likert scale

f_i : number of respondents for X_i value

- Methods of data analysis:

The author uses statistical, analyzing, and synthesizing methods to process primary and secondary data. A correlation coefficient matrix is also used to classify risks based on the correlation between the probability of occurrence of the risk and the degree of its impact.

4. RESEARCH RESULTS

4.1. The fact of human resource risk identification

The fact of human resources risk identification in the printing industry in Vietnam, although it has not been done in a standardized order, has not been documented in documents for the units and employees to refer to and take measures to prevent and limit. institutional; But more or less in departments, departments, or in specific jobs, employees have recognized many possible risks and often recorded, discussed in briefings or when risks. If it happens, direction and handling opinions are also from the company's leaders. This approach is relatively fragmented, can show the risks that are close to reality but do not have an overview, it is easy to make the risk repeat or not know how to handle when there is a risk. out.

By interviewing leaders and managers at all levels of 150 printing enterprises, the author noted that printing enterprises have divided human resources risks into 5 groups:

- Group of risks on employee's health and welfare;
- Risk group in human resource management at the company;
- Group of risks related to labor productivity;
- Group of risks related to types of resignation and quitting;
- Risk groups related to corporate culture and technological innovation.

After studying HR data for the past 3 years and synthesizing interview opinions of company leaders and consulting with experts, the author has identified in more detail the human resources risks in enterprises. Vietnam's printing industry is as follows:

Table 1. Human resources risks in enterprises in the printing industry in Vietnam

No.	Content	Code
1	Labor accident and occupational disease	R1
2	Recruitment of human resources does not meet job needs	R2
3	Lack of jobs for employees	R3
4	Training and developing human resources	R4
5	Lack of motivation to work	R5
6	The company's human resources violate the law	R6
7	Loss of key human resources	R7
8	No human resources nearby	RR8
9	Not attracting high-quality human resources	R9
10	Strikes and collective leave	R10
11	Internal conflict	R11
12	Risk of human resources due to technology innovation	R12

Source: Authors compiled, 2020.

4.2. The fact of human resources risk analysis

With 12 identified risks, the author focuses on analyzing to source risks, causes, and consequences of such risks.

- *R1: Labor accident and occupational disease*

Most Vietnamese printing companies are operating two printing technologies, namely Offset printing and Flexo printing. Both of these printing technologies use UV inks, which are very dangerous to humans. According to the process, the ink after going through the machine's roller will be dried by an ultra-fast, ultra-strong UV projection system, making the liquid ink solidify immediately, ensuring the print quality. Although the ink does not contain solvents, the optical radiation system that makes the ink dry is a major factor affecting human health. It can be understood as a form of ultraviolet rays, depending on the type of ink used by the printing worker, the temperature of the lamp will be properly dried, if accidentally during the printing process, the employee does not wear protective gear, but the heat The high degree of light being used can cause burns to the eyes, followed by skin diseases. More severe is the risk of male infertility when working with this ink.

- *R2: Recruitment of human resources does not meet job needs*

In our country, the quality of training has not kept pace with the level of innovation in science, technology, and technology that is taking place at a dizzying speed as today. The domestic training environment still focuses too much on theory while the facilities, equipment, and means of practice are seriously lacking. Our country's training system is too lagging, failing to catch up with the world, this is a serious gap that needs to be solved almost immediately. In addition, the shortage of faculty staff in the industry is also a big challenge for the printing industry in our country.

In parallel with the above issues, another weakness in the education and training industry in our country is that most of the textbooks and lesson plans of the current specialized subjects are written and taught by each teacher. Lecturers have experience but old experience due to changing technology era, lack of foreign language skills..., management and training of human resources in the printing industry is still spontaneous and fragmented. Printing enterprises have not focused on training and renovating the professional qualifications of workers. If any, they are only old knowledge training to serve the needs of enterprises.

- *R3: Lack of jobs for employees.*

The number of employees in the printing industry is currently about 50,000 people. But due to the lack of income, workers in the printing industry often fluctuate and move to other industries with better working conditions and income.

Currently, there are 1,200 printing businesses (an average increase of 10 to 15% per year). In particular, the human resources of the printing industry are about 50,000 people and only 80% of them are direct workers, the rest work in management and indirect labor, each year the number of people reaching retirement age accounts for 5%. Thus, every year the printing industry needs to add at least 2000 new people to meet the actual needs. But each year the number of training only stops at 1,213 people (UK, H. 2019).

- *R4: Training and developing human resources*

According to a report at the Online Conference on Building development orientations for the printing industry in Vietnam in 2020, recently many printing enterprises have had the

correct orientation on training and developing human resources. A lot of training courses have been organized for subjects from senior administrator, mid-level administrator team, office staff corresponding to the work in charge. However, risks related to the training and development of human resources of Vietnamese printing enterprises mainly come from the group of workers who produce directly at factories when the company has not had a policy of training and retraining. maintain both the professional expertise and the skills needed to be effective at work. The reason is identified as the funding source for the company's training cannot meet the training needs of this target group (Ministry of Information and Communication. 2020).

According to the fact, the trained engineers are still heavy in theory, lack of cheap printing equipment for the workers to practice because modern printing equipment has to spend a large amount of money. Therefore, the trainers cannot avoid being outdated compared to current printing technology. There are also several printing graduate students who can study abroad, but that is a very small number, the shortage of teaching staff and training equipment is still a big problem for trainers today.

- *R5: Lack of motivation to work.*

Many factors contribute to motivating employees, such as salary and bonus policy, working environment, leadership style, promotion opportunities, corporate culture... Printing enterprises are paying the average wage for a worker is 8 million/month (in big cities like Hanoi, Ho Chi Minh City), in localities just over 6 million VND, at an average level compared to the social equality. Besides, this target group's promotion opportunities are not much.

- *R6: Human resource violates the discipline and the law.*

Employees who do not violate the law will help businesses not suffer from loss of human resources, uninterrupted production labor, and will not affect the company's reputation brand.

However, any business is facing the risk of violating employee discipline and laws. This risk exists in all groups of human resources, but in printing enterprises, it is concentrated in the group of technical workers and men. The main reason is that the qualifications of this group of people are limited, and there are also a few other reasons such as the employee's violation of the labor discipline, the law violation while the condition is not good, due to the work poor management, due to being dragged...

- *R7: Loss of key labor force.*

Enterprises in the Vietnamese printing industry have had many positive changes in improving remuneration for key employees such as raising salaries, completing regulations on emulation and commendation, training and development, study and research... However, in the face of increasing competition from the labor market, businesses still face the risk of losing their key labor force easily. This risk focuses on the target group of skilled workers, factory managers with many years of experience. The identified reasons can be mentioned as businesses that do not have effective policies to retain talented people. The consequence of this risk is that it will greatly affect the company's production and business activities, disturb stability, reduce development, and create a gap in the human resource structure of each enterprise.

- *R8: No adjacent human resources.*

For the business to be stable and develop sustainably, it is required that the enterprise have a long-term human resource development strategy with inheritance, ensuring continuity in the

management of business operations. In particular, the development of on-site personnel not only creates motivation for enterprises, when employees have many opportunities for promotion, but in the future, the company's managers are senior and knowledgeable people. Characteristic and supportive of junior staff, it is easier to gather the consensus of the employees in the company to achieve the goals than to recruit new level staff to fill the gap on strategic level personnel.

For this type of risk, the source of risk is the target group of middle and senior managers of the company. The reason is due to long-term human resources development and training policies. The consequence of the risk is the staffing gap, which does not guarantee continuity and inheritance in production and business activities.

- *R9: Cannot attract high-quality human resources.*

The risk of shortage of high-quality human resources is identified can occur in all groups of workers, in all job positions from workers to managers. The consequences of the risk will lead to the company's underdevelopment, loss in integration, competition, missing opportunities from the industrial revolution 4.0 and it is difficult to make a breakthrough, even with a good and many apparatus. Good business idea.

- *R10: Strikes and collective leave.*

For enterprises in the printing industry in Vietnam, with a large proportion of direct workers (80%), the rest working in management and indirect labor, the risk of workers' strike is inevitable work and collective leave. If this happens, it will lead to the production system stall and the consequences are huge.

- *R11: Internal conflict.*

The cause of this risk in businesses in Vietnam today is the lack of clarity in the internal organization of the business, the lack of internal methods of conduct, the lack of career development roadmap for employees, lack of salary, bonus, and transparent employee assessment. The consequence of this risk is reduced productivity, employees are often angry, stressed, always in a state of anticipation, mutual distrust, and, more importantly, can lead to quitting jobs and litigation.

- *R12: Risk of human resources due to technology innovation.*

Technological innovation creates human resources risks that Vietnamese printing enterprises certainly face. That is, employees themselves are not qualified and are not equipped or trained with creative knowledge and skills to grasp and operate new technology equipment, leading to not optimizing all sources. force in the process of economic production, causing waste and waste.

In addition, the inevitable trend forces Vietnamese printing businesses to apply new technologies, automation systems, and smart robots to production activities. These systems will gradually replace manual labor in the entire production process, a significant part of the human resources of printing enterprises at risk of losing jobs, especially stereotyped jobs. Simple repetition that the majority of untrained employees of businesses are undertaking will gradually be replaced by machines in the future.

4.3. The fact of human resource risk determination

The level of human resources risk at the enterprise is determined depending on two factors, the probability of occurrence of the risk and the level of impact of that risk.

Regarding the possibility of risk, the author divided 5 assessment levels to conduct the survey:

Likable	Not Happened	Rarely	Could Happen	Very Likely	Probably Happened
Corresponding score	1	2	3	4	5

After surveying 450 employees of enterprises in the printing industry in Vietnam, the results have 375 valid answers. Summing up the average score of the likelihood of the risks as follows:

Table 2. Summary of average scores of probabilities of all types of risks

No	Content	Code	Possibility of risks
1	Labor accident and occupational disease	R12	4.05
2	Recruitment of human resources does not meet job needs	R9	3.80
3	Lack of jobs for employees	R8	3.30
4	Training and developing human resources	R6	3.18
5	Lack of motivation to work	R4	3.12
6	The company's human resources violate the law	R7	2.91
7	Loss of key human resources	R2	2.82
8	No human resources nearby	R3	2.69
9	Not attracting high-quality human resources	R11	2.40
10	Strikes and collective leave	R5	2.32
11	Internal conflict	R1	2.12
12	Risk of human resources due to technology innovation	R10	1.28

Source: Authors' synthesis.

Regarding the level of impact of the risk, the author builds a rating scale divided into 5 levels to conduct the survey:

Impact level	General description	Corresponding score
Very small	The risk that can cause a loss is negligible and is under control	1
Small	Risk of small losses, controlled to minimize the impact	2
Average	Risk of loss but can be managed in conventional ways	3
Large	The risk of serious but tolerable loss with proper management	4
Very large	Risks can lead to disasters, failure in one or more of the company's core areas	5

Survey results are aggregated and determined the average score of the impact level of risks as follows:

No	Content	Code	The impact level of the risk
1	Strikes and collective leave	R10	4.5
2	Labor accident and occupational disease	R1	4.32
3	Recruitment of human resources does not meet job needs	R2	4.05
4	Lack of jobs for employees	R3	3.96
5	Internal conflict	R11	3.95

6	The company's human resources violate discipline and law	R6	3.86
7	Loss of key human resources	R7	3.82
8	Risk of human resources due to technology innovation	R12	3.8
9	Not attracting high-quality human resources	R9	3.6
10	Lack of motivation to work	R5	3.3.4
11	Training and developing human resources	R4	2.95
12	No human resources nearby	R8	2.58

Source: Authors' synthesis.

The index to classify the level of risk is calculated by the average point of likelihood multiplied by the average point of the impact level of that risk.

Calculation formula: $I = * *$

In there:

I: index of risk classification

: average score of the likelihood of a risk

: average score of the impact level of a risk

After collecting and synthesizing, the partner has a table of data on the classification index of risks as follows:

Table 3: Table of data on indexes to classify risks

No	Content	Code	Likelihood	Impact Level	Risk Classification
			of Risk	of Risk	Index
1	Risk of human resources due to technology innovation	R12	4.05	3.8	15.39
2	Not attracting high-quality human resources	R9	3.80	3.6	13.68
3	The company's human resources violate discipline and law	R6	3.18	3.86	12.27
4	Recruitment of human resources does not meet job needs	R2	2.82	4.05	11.42
5	Loss of key human resources	R7	2.91	3.82	11.12
6	Lack of jobs for employees	R3	2.69	3.96	10.65
7	Internal conflict	R11	2.40	3.95	9.48
8	Training and developing human resources	R4	3.12	2.95	9.20
9	Labor accident and occupational disease	R1	2.12	4.32	9.16
10	No human resources nearby	R8	3.30	2.58	8.51
11	Lack of motivation to work	R5	2.32	3.34	7.75
12	Strikes and collective leave	R10	1.28	4.5	5.76

Source: Authors synthesized and calculated.

Based on research data in Vietnamese printing enterprises, refer to the consequence/probability matrix according to the national standard TCVN IEC/ISO 31010: 2013 and how to classify risks according to university research. Adelaide (Australia) and calculated data, the risk rating matrix can be formulated as follows:

	1	2	3	4	5
5	Low risk	Low risk	High risk	Critical risk	Critical risk
4	Low risk	Low risk	High risk	High risk (R9, R12)	Critical risk
3	Low risk	Medium risk (R8)	Medium risk (R4)	High risk (R2, R3, R6, R7)	High risk
2	Low risk	Low risk	Medium risk (R5)	Medium risk (R11)	High risk (R1)
1	Low risk	Low risk	Low risk	Low risk	Medium risk (R10)

Note:

Low risk	Medium risk	High risk	Critical risk
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Based on the risk classification matrix, we can see that the human resources risks of Vietnamese printing enterprises are divided into 2 categories: medium risk and high risk, no serious risks.

- High Risk: R1, R2, R3, R6, R7, R9, R12.
- Medium Risk: R4, R5, R8, R10, R11.

Thus, although the printing industry in Vietnam does not appear to have serious risks, the situation of risk handling does not have a methodical strategy, dealing with emotions and passively, mainly handled by avoidance measures. or take risks. At the same time, the risk review and monitoring work has not been recognized the correct role and importance, so it is not paid attention to implement, does not clearly define the responsibilities of each management level, leading to the consequences of risks if repeated. New re-appearances will be difficult to identify and process.

Based on the theory of sustainable competitiveness (Phi, 2015) and the value chain model (Michael Porter, 1985), it can be seen, although Vietnamese printing enterprises have not had any human resources risks, leaving consequences. However, the work of ensuring the security of the human resource of these enterprises is not good, affecting the security of businesses in the future if there are no timely and effective solutions to overcome.

5. SOLUTIONS TO ENHANCING HUMAN RESOURCE RISK MANAGEMENT FOR BUSINESSES IN THE PRINTING INDUSTRY IN VIETNAM

First, integrate risk management into the human resource recruitment process.

A risk that is assessed as a high risk to human resources that the printing industry is facing is R2, R9, R7. From there, it is necessary to change the process and integrate risk management into the recruitment process of enterprises. Each job position will be suitable for different recruitment sources. Printers can consider and choose the right recruitment form for each job position according to the following table of recommendations:

Factors to consider	Internal recruitment	External recruitment
Human resource development	No	Yes
Organizational culture suitability	Yes	No

Factors to consider	Internal recruitment	External recruitment
Initial work performance	Yes	No
Lower recruitment costs	Yes	No
Shorter recruitment time	Yes	No
Lower wages	Yes	No
The variety of personalities, working styles, and new ideas in candidates' work	No	Yes
Increase technical expertise	No	Yes
Gain new industry or competitor skills	No	Yes

Source: Authors' synthesis

Second, integrating risk management into training and developing human resources.

The printing industry enterprises are facing the risks of human resources training and development (R4), no adjacent human resources (R8), and especially the risks of human resources due to technological innovation (R12). Of these risks, it is identified that enterprises do not have an appropriate strategy, plan, and process of training and developing human resources. The integration of risk management and human resource training and development is a measure to reduce risks, at the same time improving the quality of human resources of enterprises, increasing adaptability to environmental changes, especially the change of industrial revolution 4.0.

Third, building and implementing corporate culture.

To reduce the likelihood and to limit the effects of these risks: lack of motivation (R5), violation of discipline and law (R6), occupational accident and disease (R1), strike and collective leave (R10), internal conflict (R11), business leaders should promote the construction and enforcement of corporate culture. The aspects of corporate culture that need to be focused on building and implementing include building mission and vision, core values; business philosophy; cultural identity and characteristics; standards of behavior, communication and especially ethics, professional responsibility.

Fourth, integrate risk management into corporate personnel assessment, regimes, and policies.

It is necessary to build separate evaluation criteria for workers directly engaged in production and indirectly serving production; the optional evaluation method is a 360-degree evaluation; Evaluation criteria and cycles should also be clearly defined and clearly distinguished between different locations. The assessment should be open and fair. For personnel policy, it is necessary to have an appropriate salary, bonus, and benefits regime. For example, increasing bonuses for employees with work initiatives, or material-saving ideas; buy life insurance for key employees.

Fifth, integrate risk management into job descriptions.

To attach the responsibility of human resource risk management to each managerial level, department, department, or detail for each employee, businesses need to integrate risk management into the job description for each position. Chairman and Board of Directors are part of building human resources risk management strategy and establishing the desired level of risk (i.e the level of risk that the business is willing to accept) for the company's human.

In conclusion, human resources are one of the important resources for each business but are facing many risks, but the risk of human resources in businesses in general, in Vietnam printing businesses, in particular, has not yet. with proper attention, can lead to business insecurity in

the future if comprehensive and timely solutions are not available. The above solutions will be suggestions for businesses in the Vietnam printing industry to consider and apply shortly.

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ATTRACTING FOREIGN INVESTMENT CAPITAL INTO VIETNAM IN THE CURRENT CONTEXT OF INTERNATIONAL INTEGRATION AND THE COVID-19 PANDEMIC

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Abstract: As one of the rare countries with positive growth in the region amid the Covid-19 pandemic, Vietnam has the opportunity to welcome the shift of foreign direct investment (FDI) flows. However, in order to receive these capital flows in the near future, Vietnam needs to proactively choose the appropriate capital flows instead of waiting for them to arrive. Vietnam has become an attractive investment destination for foreign investors; however, in July 2021, realized capital of FDI decreased by 14.3% from the same period last year and 39.7% from the previous month. Therefore, it is necessary to come up with appropriate solutions to attract foreign investment capital into Vietnam in the current context of international integration and the Covid-19 pandemic.

Keywords: Foreign direct investment, economic development.

1. INTRODUCTION

Since the introduction of doi moi (renovation) economic reforms in 1986, Viet Nam's economy has been among the fastest growing economies in the region. Its economic structure reflected an increasing share of industry and services while the share of agriculture declined. Viet Nam has been successful in poverty reduction strategies and has been able to ensure rapid growth with relative equity. Among the factors that led to this success, foreign direct investment (FDI) has played a crucial role, providing Viet Nam's economy with its relatively scarce factor, capital, and representing an extremely important instrument for integration in the world economy, especially at the regional level.

This paper attempts to analyze the recent developments in FDI flows to Viet Nam, particularly Attracting foreign investment capital into VietNam in the current context of international integration and the COVID-19 pandemic.

Must be faced in order to ensure a future capacity to receive more foreign capital and to build a system able to realize more of the potential benefits of foreign direct investment.

This paper is organized as follows:

Section 2 Current status of FDI in Vietnam

Section 3 Solutions to attract foreign investment capital into Vietnam in the current context of international integration and the covid-19 pandemic

2. CURRENT STATUS OF FDI IN VIETNAM

Between 2010 and 2019 a total of 21732 FDI projects were recorded. These projects represent a total capital investment of USD 143,327 million, which is an average investment of USD 6.6 million per project.

¹ Construction rural development joint stock company.

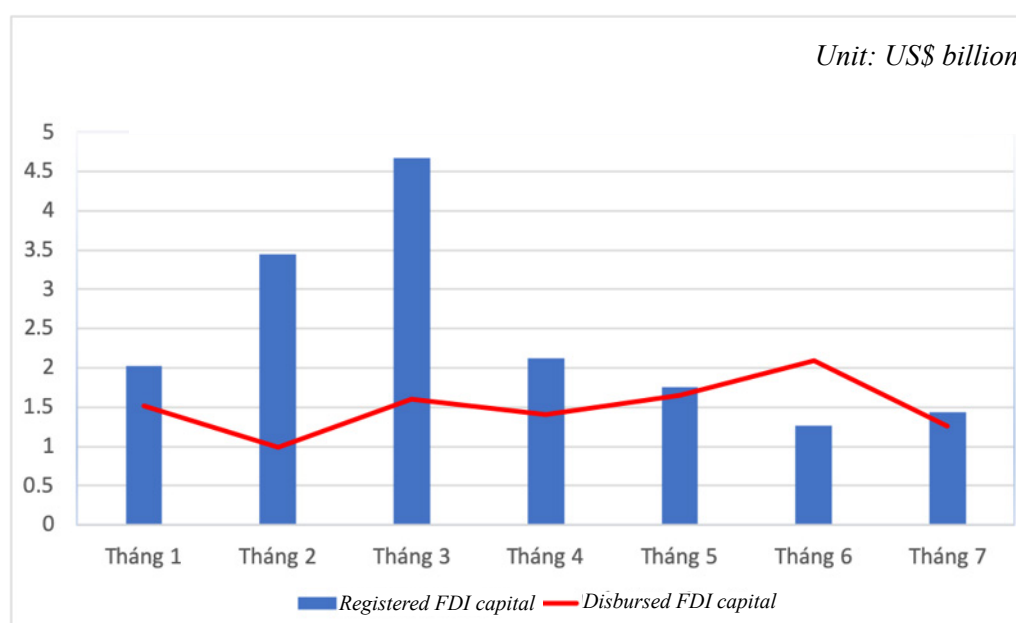
Vietnam is becoming an attractive FDI investment with an increasing number of projects and capital. The largest number of projects was announced in 2019, with 4,028 projects that year. Average project size peaked in 2019 for both registered capital and implementation capital. However, there was a trend in the number of smaller deals (mainly < USD 6 million).

According to data from the Ministry of Planning and Investment, as of July 20, 2021, the total newly registered capital, adjusted and contributed capital, purchased shares, purchased capital contributions from foreign investors (FDI) reached US\$ 16.7 billion, equaling 88.9% over the same period in 2020. It is estimated that foreign direct investment projects have disbursed US\$ 10.5 billion, up 3.8% over the same period in 2020.

According to the Ministry of Planning and Investment, there were 1,006 new projects granted investment registration certificates, down 37.9% over the same period last year; however, the total registered capital reached US\$ 10.13 billion, up 7% over the same period.

Regarding investment, FDI has been poured into 18 sectors, in which the processing and manufacturing sector took the lead with a total investment of over US\$ 7.9 billion, accounting for 47.2% of the total registered investment capital. The electricity production and distribution sector ranked second with a total investment of US\$ 5.49 billion, accounting for 32.8% of the total registered investment capital, followed by the real estate business, wholesale, retail...

In the first 7 months of 2021, Singapore is Vietnam's largest investment partner, with a total investment capital of US\$ 5.92 billion. Japan ranked second with the total investment capital of US\$ 2.54 billion, accounting for nearly 15.2% of the total investment capital. The third place belonged to South Korea, with the total registered investment capital of nearly US\$ 2.2 billion.



Situation of FDI attraction in the first months of 2021

However, due to the complicated developments of the Covid-19 pandemic in July 2021, leading to a number of factories being suspended or reduced in capacity, the realized capital in July decreased by 14.3% and 39.7% compared to that in July 2020 and the previous month, respectively.

The greatest concern is that the Covid-19 pandemic is still complicated and unpredictable in some localities, such as Ho Chi Minh City and some Southeast provinces while these localities are considered as one of the FDI “capitals” of Vietnam.

The fourth wave of the pandemic and social distancing extension have wreaked havoc on manufacturing and business activities, especially in the southern region. Around 24,000 businesses have closed shops during the first eight months of the year in the virus-hit Ho Chi Minh City, accounting for 28.1 per cent of total closures in the city. The number was 6.6 per cent higher than the corresponding period last year.

Economists believed that the COVID-19 pandemic is taking toll on Vietnam’s FDI attraction. The fourth coronavirus wave has knocked the confidence of European businesses, with the EuroCham Business Climate Index (BCI) falling almost 30 points to 45.8 in the second quarter of this year.

Some reasons in decreasing the number of newly registered, adjusted projects and paid-in capital for share purchase

- Objective: The global FDI decreases; The Covid-19 in some partner countries (Japan, South Korea, Taiwan, etc.) is still complicated; Countries around the world still limits travelling; and investors in the new investment wave require to immediately qualify on lands, human resources, supply of materials, fast procedures, competitive incentives, but in some cases we haven’t meet needs of investors.

- Subjective: The selective investment attraction policies of Vietnam (reducing the quantity and increasing the quality); Commerce flights between Vietnam and partner countries are suspended, or if there are, the procedures are also complicated, thus it limits new investors to Vietnam to survey and make investment decisions; Business investment procedures are still barriers; Investment promotion activities are not proactive and ineffective in the traditional competition to attract foreign investment.

3. SOLUTIONS TO ATTRACT FOREIGN INVESTMENT CAPITAL INTO VIETNAM IN THE CURRENT CONTEXT OF INTERNATIONAL INTEGRATION AND THE COVID-19 PANDEMIC

3.1. Realize dual goals

Pandemic prevention and economic development. To mitigate the negative impacts of the COVID 19.

Initially, strictly follow the instructions on prevention and control of the COVID-19 pandemic. Absolutely not be subjective, raise vigilance and responsibility; promote adequate propaganda on pandemic prevention and control measures. Expediently issue guidelines and uniform procedures on production and circulation of goods and vehicles between pandemic-affected and non-pandemic areas; take measures to support the distribution and consumption of disease-free goods, especially for agricultural products with short preservation time. Promote cooperation and negotiation on vaccine purchase and vaccine research in the country; accelerate the implementation of vaccination, especially for priority areas and subjects. Minimize COVID19 in the community.

Implement expansionary monetary and fiscal policies; improve the coordination efficiency between monetary, fiscal and pricing policies in order to control inflation, and support production

and business activities. Ministries, branches and localities actively monitor the situation, analyze and propose support policies for those who are still facing difficulties due to the impact of the pandemic, especially in the service, tourism, and transportation industries...

Focus on supporting production and business as well as developing the domestic market. Focus on developing and applying high technology and digital transformation in activities of social life; develop e-commerce, and strengthen support for enterprises to distribute goods on e-commerce platforms, e-payment applications in the online environment.

3.2. Increase confidence of investors

After more than 30 years of opening up and attracting foreign investment, Vietnam has reaped encouraging results. Accordingly, with open-door policies, incentives, and an attractive business environment, over the years, Vietnam has attracted a large number of projects and FDI capital.

Vietnam has many strong points in attracting FDI such as: security, political stability, geographical position favorable to trade with the world, being both a regional connection center and a gateway to penetrate the economies in the Western region of the Indochinese Peninsula with preferential and favorable policies for investors.

Not only that, Vietnam has a large population, a young and highly mobile workforce. Labor costs are lower, and the average rental price in industrial parks is also 45-50% lower than that in regional countries such as Thailand, Malaysia, and Indonesia.

Along with that, Vietnam's institutions, laws and transparency are gradually improved, associated with integration, not only creating favorable conditions for investors to operate in the long term, but also helping enterprises participate in the global supply chains and value chains smoothly.

Mr. Do Nhat Hoang, Director General of the Foreign Investment Agency, said that FDI has made a great contribution to increasing Vietnam's production and export capacity. So far, the FDI sector accounts for about 25% of the total investment capital of the whole society, over 70% of the total export turnover of the country. In addition, the FDI sector has also contributed to increasing budget revenue, creating jobs for people, and stabilizing the social situation. This sector creates about 3.5 million direct jobs and nearly 5 million indirect jobs, in which, there are many workers who have been trained and have access to the world's advanced technology and management.

3.3. Continue to hold advantages, take advantage of opportunities

With the above advantages, despite the complicated developments of the COVID-19 pandemic in the world and in the country, Vietnam's achievements in attracting FDI in the first months of 2021 are remarkable.

According to Ms. Nguyen Thi Huong, Director General of the General Statistics Office, in the coming time, in order to attract investment from transnational corporations, especially from developed countries such as the US and EU, in addition to the issues related to investment environment in general, Vietnam needs to pay attention to the requirements of investors in a number of aspects such as: openness, transparency, stability, and predictability of institutions, policies and laws, strictly and uniformly enforce the laws, protect the legitimate rights and interests of investors; simplify administrative procedures, and ensure the prescribed time. "Along with that, domestic enterprises must strive to improve their capacity in all aspects, from technology to the capacity

and qualifications of staff and managers. Only then will FDI enterprises come to order and assist in completing the production process to meet their requirements” said Ms. Huong.

Facing the “golden opportunities” of Vietnam, many people think that Vietnam still has a lot of work to do to meet the requirements of investors.

Accordingly, Professor and Doctor of Science Nguyen Mai said that Vietnam needs to put more efforts in improving the investment and business environment, facilitating and supporting enterprises to overcome the impacts of the COVID-19 pandemic.

Next, it is necessary to actively promote and invite multinational corporations, well-known companies and brands to invest in Vietnam, especially from regions with strengths in technology, capital, and management skills such as the US, EU, and Japan.

Along with that, to support technology transfer, Vietnam needs a long-term strategy, involving both enterprises and the Government; at the same time, build mechanisms to support domestic enterprises in connecting with FDI enterprises, including mechanisms and policies to support interest rates, finance, access to investment resources to upgrade domestic supporting industry enterprises to be able to participate in the global supply chains.

In particular, it is necessary to formulate an industrial development program to support priority industries from time to time, to avoid spreading and inefficient investment.

Professor, Doctor of Science Nguyen Mai said that Vietnam should focus on preparing well the conditions satisfying the requirements of investors in order to enhance cooperation efficiency, and exploiting opportunities from the Fourth Industrial Revolution to proactively welcome the shift of capital flows.

In addition, Mr. Nguyen Chi Dung, the Minister of Planning and Investment, has just issued a decision to abolish dozens of procedures in the investment field, in order to remove obstacles to the investment process in Vietnam; at the same time, promulgated 65 sets of new administrative procedures in the investment field in Vietnam from the central and provincial levels and procedures implemented by the management boards of industrial parks and export processing zones.

“These administrative procedures are aimed at creating favorable conditions for investment activities of people, enterprises and investors” - Minister Nguyen Chi Dung emphasized./.

3.4. Continue to improve investment environment

The complicated developments of the Covid-19 pandemic have become a factor that causes international corporations and companies to quickly find ways to adapt to maintain production. This is an opportunity to attract more foreign investment in the near future. According to Mr. Nguyen Chi Dung, the Minister of Planning and Investment, high-tech projects in a number of important fields such as energy, electronics, semiconductors, pharmaceutical chemistry, logistics... are top priorities. Continuing to improve the investment and business environment, and creating favorable conditions in terms of infrastructure, policies, and human resources for investors are important solutions, besides controlling the spread of the pandemic.

Mr. Tran Viet Truong, Chairman of the People’s Committee of Can Tho City, the third-ranked locality in attracting foreign capital in the country, shared his experience. The city has actively reformed administration, established an integrated and smart public administration center, and created favourable conditions for investors to find out information and implement projects in the locality.

According to Mr. Tran Dinh Thien, economic expert, besides exploiting the remaining space in reform to attract external resources, all levels and sectors should also have a “filter” to detect and reject unsatisfactory projects. Another solution is to overcome weaknesses such as the lack of ancillary industrial facilities, limited availability of supply chains, and scarcity of high-quality human resources. These are long-recognized shortcomings.

Sharing the same view, Mr. Phan Huu Thang, Former General Director of Foreign Investment Agency, proposed the establishment of a specialized agency, which can quickly react to opportunities to receive foreign investment and respond to investors’ requests to actively welcome large-scale projects.

3.5. Improve training quality and focus on human resource training.

Vietnam needs solutions to continue to improve the quality of training, meet the demand and replace foreign workers as well as ensure lower labor prices compared to other countries in the region; encourage and support foreign investors to participate in education and training cooperation activities aimed at equipping workers with scientific and technical knowledge and qualifications. The State needs to invest in developing human resources, better meet the requirements of enterprises, maintain friendly relations with the investing countries, and especially create a unified legal corridor, ensuring effective management for all business components... The training and retraining of staff undertaking investment promotion in particular and investment management in general should be enhanced through forms such as mobilizing and cooperating with international organizations to open training courses on foreign investment promotion and management; continue to promote Vietnam’s investment environment; urgently deploy the establishment of investment promotion departments in key areas.

3.6. Deal with FDI enterprises having “thin capital” to limit tax losses through transfer pricing.

Currently, Vietnam has no regulations on “thin capitalization” while in some countries there are specific regulations. In New Zealand, Australia, Japan, the Netherlands,... enterprises with a debt/equity ratio exceeding 3/1 are considered “thin capital” ones. These countries also have specific regulations on control of interest payable on borrowed capital, if the ratio exceeds 3/1, it will not be considered a deductible expense for corporate income tax (CIT). In the coming time, thin capitalization needs to be specifically regulated, even included in the law of Vietnam. Thus, it means that enterprises with a debt/equity ratio of 3/1 or more will be considered “thin capital” ones; the portion of interest expenses exceeding this ratio will not be considered as a deductible expense for CIT. This will limit transfer pricing.

3.7. Some other policies

The policy of attracting foreign investors is the first step and the foundation for FDI flows to follow the Government’s direction. Therefore, Vietnam needs to implement a proactive policy to attract foreign investment selectively, taking quality, technology efficiency and environmental protection as the main evaluation criteria; prioritize projects with advanced technology, new technology, high technology, clean technology, high added value, spillover effects, linking production chains with human resource training. Therefore, on the basis of FDI attraction orientation, FDI policy orientation in the coming time should focus on the following groups:

a. Legal framework

- Review and supplement regulations and conditions to attract, maintain and screen effective investments aimed at maximizing economic growth. In addition, in order to support domestic enterprises to participate in the linkage chains, the Government needs to build a quality certification system that meets the standards of foreign companies participating in the supply chains.

- Continue to create a legal framework for diversifying forms of investment, business cooperation, joint venture, association, transfer of intellectual property rights, technical labor exchange...; focus on a number of new investment methods in recent times such as non-equity modes (NEM) and new forms of investment (NFI) with specific forms such as outsourcing, agricultural contracting, franchising, licensing and contract-based management.

- Complete regulations related to mergers and acquisitions (M&A); foreign ownership ratio in equitized state-owned enterprises as well as in key sectors; State management agencies are responsible for specifically reviewing large M&A deals..., thereby minimizing the situation of foreign investors controlling and acquiring key sectors and fields of the economy.

(iv) Formulate regulations and standards as a new filter to select foreign investors with advanced, environmentally friendly and capable technologies; and at the same time, promulgate regulations to protect the reputation and investment efficiency of serious investors who always comply with Vietnamese laws and international practices.

- Review and complete the system of policies on technology transfer, research and development; promote linkage with domestic enterprises towards exploiting opportunities and advantages; minimize the undesirable effects of FDI attraction.

b. Investment incentive policies

Incentive policies should target industries, trades and sectors capable of creating “positive externalities for the economy”, and focus on priority industries and sectors such as high and advanced technology, environmentally friendly technology, clean energy, renewable energy; investment in people (medical, healthcare, education - training); logistics; high-tech agricultural production, smart agriculture; development of modern technical infrastructure, especially new industries on the basis of industry 4.0...

Existing incentive policies need to be adjusted in the direction of selecting incentives based on investment locations, gradually shifting incentives based on locations, incentives by size to incentives based on industries, sectors as well as incentives based on economic - social - environmental efficiency. The adjustment of incentive policies should be made soon to ensure consistency in investment attraction planning as well as to minimize competition among localities for investment attraction.

c. Policies to attract eagles

The escalation of the US-China war and the outbreak of Covid-19 are the driving forces behind the faster process of supply chain shifting and investment restructuring of multinational corporations in two trends: (i) Withdrawal of investment capital; (ii) Expansion of investment to other countries with competitive advantages, in line with the new development trend of global supply and production chain value allocation. Therefore, many countries, especially those in the ASEAN region, have offered many incentives and support to attract FDI flows from China, especially large-scale projects and multinational companies. Some important policies are implemented by countries such as direct negotiation; preparation of land funds and introduction of great incentives for land; reduced corpo-

rate income tax, increased tax subsidies for investment-friendly industries, multinational companies in Fortune 500 list, and global companies engaging in high-tech industries.

In addition to the attraction of a stable political environment and good control of the Covid-19 pandemic, Vietnam has made many moves such as: (i) Establish a task force to promote foreign investment cooperation with the task of proactively taking flexible and appropriate measures to approach and negotiate with large, high-tech corporations leading or operating value chains in order to mobilize and promote, in accordance with the purposes and requirements of investment cooperation for mutual benefit; (ii) Provide special investment incentives and support for newly formulated investment projects (including the expansion of such newly formulated projects), innovation centers, research and development centers with a total investment capital of VND 3 trillion or more, disbursed at least VND 1 trillion within 3 years from the date of issue of investment registration certificates or approval of investment policies; national innovation center established under the Prime Minister's decision; investment projects in industries and trades enjoying special investment incentives with an investment capital of VND 30 trillion or more, disbursed at least VND 10 trillion within 3 years... aiming to encourage the development of a number of investment projects that have great impacts on socio-economic development. However, in order not to miss the opportunity to attract large corporations and quality investment capital flows, the Government of Vietnam needs to take actions and adjust policies in a more timely and powerful manner. In which, it is necessary to soon issue decrees guiding the Law on Investment 2020, the Law on Enterprises 2020 to ensure that the contents of these laws are ready to be implemented in 2021; accelerate the preparation of conditions such as reviewing the land funds, factory premises and other essential infrastructure, and at the same time, create favorable conditions for foreign experts and technical staff to explore investment and working opportunities in Vietnam; move from designing "ready-made" policies for all investors to "tailoring" for specific investors.

Reform administrative procedures, business environment

According to studies by the Organization for Economic Cooperation and Development (OECD), tax incentives or low tax burden are not as attractive as a favorable business environment. Therefore, in 2021, as well as the following years, the Government needs to continue to issue and effectively implement the Resolution No. 02/NQ-CP on improving the business environment and enhancing national competitiveness with the emphasis on reducing administrative procedures, business conditions; simplifying business registration procedures, specialized inspection... Along with that, the Government of Vietnam also needs to implement solutions aimed at improving infrastructure (traffic, information); improving the quality and ensuring the supply of qualified labor...

4. CONCLUSIONS

Currently, Vietnam is considered a "goodly land" for high-quality FDI flows. After the Covid-19 pandemic, many large international corporations and enterprises are looking for investment opportunities to diversify their supply chains and limit over-dependence on the Chinese market. Vietnam has become one of the best candidates to welcome these capital flows thanks to its success in preventing and controlling the pandemic. Above all, foreign investors highly appreciate the socio-political stability as one of the important contributing factors for the implementation of economic development policies. The socio-political stability in Vietnam has created strong confidence for domestic and foreign investors. Although the impacts of the Covid-19 pandemic are inevitable, Vietnam is still considered a "goodly land" to attract high-quality FDI capital after the pandemic.

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SOLUTIONS TO PROMOTE THE NIGHT-TIME ECONOMY IN VIETNAM

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Abstract: *Night-time economy is the commercial and service activities that take place from 6 p.m. before to 6 a.m. after to serve the material and spiritual life of people. Not only creating work opportunities for millions of workers, the development of the night economy is also valuable for many industries and makes a great contribution to the overall economic development of each country. Vietnam is a country with many favorable conditions to promote the night economy. Updating the article to the development potential of the night-time economy in Vietnam and implementing the current situation, and offering solutions to promote the night-time economy in Vietnam in the coming time.*

Keywords: *Night-time economy, economy, economic development.*

1. INTRODUCTION

The concept of night-time economy has appeared since the 1970s in the UK and began to develop in the 1990s. Night-time economy is most commonly defined as commercial and service activities that take place from 6 p.m. to 6 a.m. the next morning to serve the material and spiritual life of people. Therefore, the night-time economy activities often take place in crowded areas such as urban areas and tourist areas.

The night-time economy is not an integral part of the economy, but rather a focus on developing service activities that take place from 6 p.m. to 6 a.m. the next morning, specifically: office services, goods, entertainment, sports, entertainment, food services, shopping services, tourism, festivals, family events. Normally, the night-time economy is divided into the “evening economy” (from 6:00 p.m. to 0:00 a.m. the next day) and the “late night economy” (from 0:00 a.m. to 6:00 a.m.).

In big cities in many famous tourist countries, the night economy is developed through the implementation of programs to exploit the potential of the night economy, associated with cultural characteristics and strengths, cuisine, art and many things else of that country.

In Vietnam, some night-time economy activities have been formed for many years and developed in various forms such as: pedestrian streets, shopping malls, food courts, convenience stores, night markets, bars, restaurants, some art activities and street entertainment as well. Meanwhile, there are some conditions in Vietnam that can help promote the development of the night-time economy, such as tourism activities are growing strongly, especially international tourism; the process of urbanization is quite rapid; abundant young population and growing middle class. However, the night-time economy activities have only been exploited on a small scale, with individual spontaneous and scattered activities in some big cities and tourist centers, so they have

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not been recognized as an economic model that has an important contribution to the economic growth of the country. In the initial context of the legal framework and developing policies of the night-time economy in Vietnam and in the context that many countries have been promoting policies to promote the economic development, in the coming time, Viet Nam needs a solution orientation in order to develop the night-time economy to make significant contributions to the country's economic growth.

2. LITERATURE REVIEW AND PREVIOUS RESEARCH STUDIES

Recently, the issue of night - time economy development is a topic that has received great attention from regulators, investors and the social community.

In the process of researching and understanding topics related to the development of the night - time economy, there are many topics that go into this field. Studies have confirmed the great role of the night-time economy development, contributing to socio-economic development. On the basis of inheriting the research works of the previous authors, in this article, the authors have systematized the theoretical basis of the night-time economy in their research, assessing the possibility of developing of the night-time economy in Vietnam. At the same time, it points out the functions of night-time economy development in Vietnam and shows specific solutions to develop night-time economy.

3. RESEARCH METHODS

The authors used theoretical and practical research methods to form this article.

- Regarding theoretical research methods: On the database, information is available in documents and documents by logical thinking manipulations to draw necessary scientific conclusions for the research problem. Specific methods such as: Analytical method and theoretical synthesis; theoretical classification and systematization methods; Hypothetical methods and historical methods.

- Regarding practical research methods: Using methods directly applied to research problems in practice to understand the nature and law of the problem, including: scientific observation method; methods of investigation, interview, survey; analytical method to summarize experience and consultation with experts.

To obtain this article, the authors used documents such as textbooks, article to provide conceptual and theoretical content as a basis for research. At the same time, based on research results that have been published in journals, topics and reviews, the authors have made assessments about the current status of night-time economy. Since then, the authors have applied theoretical studies, examined the situation to suggestions solutions to promote the night-time economy in Vietnam in the current context.

4. RESEARCH RESULTS

4.1. The development potential of the night-time economy in Vietnam

With unique advantages of cultural identity and unique art forms, Vietnam has had advantages to develop the night-time economy. During the past time, the development of this in Viet Nam shows that Viet Nam has the development potential of the night-time economy in the coming time, which is reflected in a number of criteria:

Firstly, in terms of geographical location and natural resources: Viet Nam is considered as a country with natural tourism resources and humanistic tourism resources that are very convenient for tourism development, and is increasingly becoming a favorite destination of international tourists,...; along with factors such as art and culture, unique cuisine, a high degree of integration and globalization, relatively pleasant night weather,... and a large number of young population prefer to live in cities,... will create a lot of potential to develop the night-time economy.

Secondly, the political background: Viet Nam has a stable political background, there is no danger of terrorism, which is very favorable for the development of the night-time economy. Global Finance magazine has announced the ranking of the safest and most dangerous countries in the world in 2019, according to which, Vietnam ranked 83rd out of 128 countries, above Thailand. Vietnam has a stable political background, rarely occurs violence, territorial disputes and human security indicators are increasingly improving.

Thirdly, the potential objective for the night-time economy: this economy is aimed at young people, foreign tourists and people with high spending ability. Vietnam is considered as a country in the period of “golden population structure”, the population aged 15-24 years old accounts for the majority up to 70% of the population (UNFPA, 2016). million people are of working age in 2019 (GSO, 2019) and 48.3 million people in 2020 (GSO, 2020). This is a group of subjects who have special interest in the night-time economy activities.

Moreover, Vietnam’s GDP per capita has significantly improved, with an average growth rate of over 8% per year in the period 2008-2020. In 2020, GDP per capita will reach 3,521 USD, ranking 6th in ASEAN. In terms of purchasing power parity, the size of our economy will reach 1.05 trillion USD and GDP per capita will reach over 10 thousand USD in 2020 (Government Newspaper, 2021). The middle class in society is also growing rapidly, in the period 2014 - 2016, every year, 1.5 million Vietnamese people join the middle class, have a living standard of 15 USD/day or more, tend to spend much money and time to enjoy traveling (Q2/2020, 35% of Vietnamese consumer’s idle money is spent on tourism and 30% spent on entertainment - The Conference Board, 2020). These are the groups of people with high spending demand and are more likely to participate in the night-time activities.

In addition, international tourists traveling to Vietnam are increasing. The number of international visitors to Vietnam has doubled in 3 years (from 7.9 million arrivals in 2015 to 15.5 million arrivals in 2018). In 2019, the number of international visitors to Vietnam is estimated to reach 18 million and earn VND 726,000 billion (VNAT, 2020). In 2020, the number of international visitors will only reach 3.8 million due to the impact of the Covid-19 epidemic. According to the travel and tourism industry competitiveness report (World Economic Forum, 2019), Vietnam’s tourism is ranked 6th out of 10 countries with the highest tourist growth rate. The average daily expenditure of a foreign tourist tends to increase (in 2019 increased by 122.7 % compared to 2017), but still lower than the average expenditure of tourists in Thailand. This shows that there is a huge potential for exploiting tourists in Vietnam and developing the economic landscape. The development of the night-time economy in the coming time will maximize the benefits from tourism.

Table 1. Performance of passenger transport in 2019

Passenger transport industry	Number of passengers (million turns)		Increase and decrease compared to 2018 (%)		Number of passengerskm (billion turns)	Proportion (%)
	Total number of visitors	Number of international visitors	Total number of visitors	Number of international visitors		
Road	4.871,6	3,37	+11,5	+20,4	162,9	+11,3%
Domestic waterway	200,6		+5,6%		4	+7%
Airway	55,3	11,377	+11,3	+15,2	77,9	+11,4
Seaway	7,6	264,1 thousand	+5,6	+22,7	464,9 million	+7
Railway	8		-6,9		3,2	-9,9

Source: Compiled from GSO

Fourthly, human resources for the key economic sector: the labor force in the economy continues to increase, contributing to additional resources for the country's socio-economic development. Labor structure shift towards increasing in industry and service sector and reached the highest level in the past 5 years since 2015. The number of employees in the accommodation and food service industry has tended to increase in the last 2 years. In 2019, the labor growth rate in the accommodation and catering services industry increased by 111.28% compared to 2015, an increase of 101.27% compared to 2018. The labor productivity growth rate in the key service industries of the night-time economy also followed an increasing trend. Accordingly, the accommodation and food service industry in 2019 increased by 132.59% compared to 2015; entertainment and consumption services in 2019 increased by 145.52% compared to 2015. However, the rate of increase in the percentage of trained workers in key service industries changed only quite little.

Table 2. Proportion of core service industry in the financial accounting period 2015-2019

	Proportion of revenue / Total revenue of economic sectors					Labor rate / Total number of employees			
	2015	2016	2017	2018	2019	2015	2016	2017	2018
Accommodation and food services	3,71	3,80	3,83	3,78	3,80	2,31	2,41	2,48	2,50
Entertainment services, consumption	0,60	0,60	0,60	0,58	0,58	0,41	0,41	0,42	0,45
Travel and tourism	10,01	10,16	10,00	9,95	9,96	0,27	0,26	0,28	0,31
Total (%)	14,31	14,57	14,43	14,31	14,35	3,00	3,08	3,18	3,26

Source: Compiled from GSO

4.2. Implement the quality of the night-time economy activities in Vietnam

In Viet Nam, despite converging many development potentials, the night-time economy activities in Viet Nam are still poor and has not brought high economic efficiency. According to a survey of foreign experts, day-time tourism revenue in Vietnam accounts for only 30%, while the remaining 70% is in the night-time frame. When the sun goes down in big cities like Ha Noi, Da Nang, Ho Chi Minh, it is also the time to light up the pedestrian streets, cultural, art and cuisine services begin to operate attracting a large number of tourists. big client tourism as well as residential address. These activities are considered the best example of the model operation of the night economy - businesses that only really explode after sunset.

However, our night services are currently limited and sketchy. At the same time, the quality of services is still determined to be average with some limitations. Even in two big cities, Hanoi and Ho Chi Minh City, at night, it is difficult to bring guests to see art and culture programs. Water puppet shows or singing and dancing shows, but at the City Theater, they only operate for 2 days a week.

The specific constraints that are affecting the development of the night-time economy in Vietnam include:

Firstly, the level of satisfaction with the service quality of the night-time economy: According to the quality survey's result of the Hanoi National University research team when surveying the service quality of Hanoi in 3 districts of Hoan Kiem, Ba Dinh and Tay Ho. The survey results showed that 62.5% of people rated the quality of the service as normal, the number of people who rated the service quality as good accounted for 31.2%, while the very good level accounted for only 0.5%, and the poor level accounted for only 0.5%. 3.8% and the rest is very poor. More than 5% of respondents feel that service quality is poor and very poor, indicating that the service status needs to be improved a lot, not only in terms of structure but also in quality.

Secondly, the level of safety: The security situation, safety at night is an important issue, which is considered as the "dark corner" of the night-time economy that needs to be limited and controlled as much as possible. Although Viet Nam is considered a safe destination, the security and order situation is relatively stable and guaranteed, but evils lurking in the dark, especially when all conditions are more open. The development of the night-time economy will be an opportunity for the evils to develop more strongly and openly. Along with enhanced measures to patrol at night and legal regulations on prevention of harmful effects of alcohol, regulations on opening hours of night services partly contribute to ensuring security and safety. all at night. However, through the survey results, nearly 23% of survey participants said that they feel unsafe at night, only 14.5% think that the level of security is good and very good, the remaining 62% think that the level of security is good and very good. that the security level is normal. The low security satisfaction rate and high complaint rate reflect the reality of the night-time economic zones in Hanoi when the budget for security is too low and the human resources for security are not enough. The city's security department does not operate continuously after 0 a.m, leading to unexpected situations of theft, robbery, violence, etc.

Thirdly, the quality of the ecological environment: Air quality is being heavily polluted due to smog (especially in Hanoi and Ho Chi Minh City), the problem of plastic waste in tourist areas is not an issue yet. solved, the water source is seriously polluted. "Due to a lack of proper water treatment, waste management and recycling solutions, Vietnam's rivers, lakes and beaches are all being polluted. In addition to the environmental impacts, the discharge of toxic chemicals into the sea has a negative effect on Vietnam's image as a tourist destination. In addition, concerns about the natural environment in Ha Long Bay are becoming more and more urgent, so it needs to be preserved to stay attractive to international tourists"

From the survey results in Hanoi, only 12.5% of the respondents said that the ecological environment quality of the night-time economy in Ha Noi is good, while 71.5% of the respondents said that the ecological environment quality is at normal level and up to 17% think that the ecological environment quality is bad. This proves that Hanoi is building the night-time economy without the awareness of the importance of environmental factors.

Fourthly, the application of science and technology in the development of the night-time economy: The development of the night-time economy can become a favorable environment to increase crimes and lead to common social evils such as prostitution., drugs, gambling cause difficulties for social managers. A common method in the developed countries is to install security camera systems everywhere in the area of operation of the night-time economy. However, in Vietnam currently, the problem of the overall security camera system has not been installed and focused on ensuring security and safety, only stopping at night patrol groups mainly. Only a few tourist cities and big cities have installed security camera systems, but they are not required to serve the night-time economy activities.

Finally, the infrastructure of the night-time economy development: The situation of infrastructure in cities with the night-time economy activities in Vietnam is implementing on the basis of using existing infrastructure to organize activities night. Information infrastructure, newly stopped at providing, organizing a number of active trams serving tourists.

4.3. Some existences and limitations

Firstly, the night-time economy activities are poor and monotonous. Overall, Viet Nam does not have regional navigation and regional entertainment combinations; lack of identity, synchronization and repertoires;

Secondly, business activities are “jerking”. Status at many tourist attractions, several facilities/ individuals in night business, especially providing catering and transportation services also works lack of professional and in many cases also raise high prices to tourists. The standards of food safety and hygiene and hygiene, at the same time, urban hygiene standards have not been strictly followed, plus the style of service of lack of professional tourists.

Thirdly, the night-time economy activities only appear fragmented in some urban areas and major tourist centers. Night entertainment and shopping areas in localities located far from a large tourist center that operate mainly with small and spontaneous people rather than from the local government’s development planning

Fourthly, infrastructure is missing and has not reached advanced levels, the night-time economy development space is often located near residential and narrow areas. Night economic activity will increase the speed of lower levels of infrastructure; Increases the demand for electricity, gasoline and consumption of alcohol, senior drinks, cigarettes... is expected to be more

Fifthly, the night-time economy development has potentially risks and challenges. Existing challenges in the night-time economy development in Vietnam are mainly related to local social security and safety, such as: Noise, light and garbage pollution; Fire protection, illegal occupancy of public space for business activities (encroaching sidewalks, roads) and social evils (such as crimes, racing, prostitution,...)

4.4. Solution to promote night economy in Vietnam next time

It can be seen that night economy brings a great contribution to socio-economic development. Can’t deny the contributions of night economy and the potential of night economic development in Vietnam. At the end of July 2020, the Prime Minister approved the project to exploit the potential of night economic development to make the most of the opportunities for economic development, creating jobs for workers in the context of Covid-19 disease causes many difficulties for the whole

society. In order to facilitate night economy, Vietnam needs specific solutions to take advantage of existing advantages. Specifically, it is necessary to synchronize the following solutions:

Firstly, promote the completion of the night-time economy institutions to improve the transparency and the ability to predict the business environment, creating favorable conditions for participating subjects to develop conditions for the night-time economy. Promote the completion of economic institutions, including financial institutions - Budget on the basis of validating the market principles in the process of encouraging, allocating and using financial resources in the economy. Vietnam needs to form legal framework to ensure competition, respect for business freedom, minimizing barriers, costs due to law enforcement; Ensure property ownership to protect the participating subjects in the production and business process, creating material wealth for the economy. Along with that, promoting the completion of institutions in competition, market management, preventing commercial frauds. Completing the mechanism and policies for the night-time economy development, are no exceptions.

Secondly, effectively implement the leverage role of the financial policy to create, support and create the motivation system to arouse the development potentials of the country through effective exploitation of mobilized channels capital for enterprises such as credit channels, capital market channels; Delete barriers to starting businesses, encourage business households to operate in industries and service sectors at night to convert into enterprises, reduce the size of the informal economic sector in the Overseas activities.

Thirdly, ensuring that the intervention and support measures of the State must be based on market principles (competition, publicity, transparency), using tools suitable to the market as well as operating characteristics. Of each group of objects. Appreciate to build a healthy, transparent and stable and safe and secure night business environment more than focus on building financial preferential policies for a group of objects but lack of analyzing about benefits and costs appropriately.

Fourthly, financial support mechanisms (if implemented) for subjects involved in the night-time economy activities need to be built on the principle of “rewarding for good people” with implementation mechanisms and supervisors suitable, there is no difference compared to the day-time economic activity, which are treated equally, fairly, regardless. The eligible subjects will receive support. Only financial support for businesses, business households, employees participate in the night-time economy activities in special cases, or when it is not found to create an initial financial leverage to promote the night-time economy development.

Fifthly, focus on perfecting the mechanisms and policies on management for the night-time economy activities to ensure a safe and secure business environment and strong decentralization for the locality in the management and development of the night-time economy. It is necessary to have an organizational model for the management of the night-time economy separate from the current local government agency. The model of organization and management of the night-time economy activities should be the Night City Council or the Commission model. Accordingly, the organizational structure includes the Chairman (night city), leaders in charge of the night city’s offices (office in charge of culture and entertainment; office in charge of communication; sub-office. in charge of economic development; Office in charge of security, public order, urban design, etc), in charge of activities including public services, business, communication, traffic and security; coordinated under the direction of the head of the Council.

The personnel structure is according to the selection mechanism, with the participation of management representatives of local authorities, associations (enterprises, industries, residents,...) and security and protection forces. In particular, encouraging the participation of the private sector in the management and development of the night-time economy....

Sixthly, it is necessary to promote the application of information technology in management, ensuring science and synchronization. Universalize surveillance camera system to each house and public places; building management software, reporting incidents, hotspots on smart mobile devices. Set up a quick response force connected to the region's general information network for overall control and emergency response.

Seventhly, at the central level, it is necessary to include the content of the night-time economy development in the national master plan, regional planning and sectoral planning. The content of the development of the night-time economy (especially the planning of areas and locations for the development of the night-time economy) should be closely linked with the planning for tourism development and service, dining and shopping activities. Develop a network of service establishments associated with tourist zones and spots. Focusing on linking the planning and development of the night-time economy with the protection of natural resources and the environment. There are framework regulations on the planning of subdivisions for the development of the night-time economic zones into separate zones, associated with architectural planning, infrastructure construction, traffic organization, urban security and safety, electricity supply, water, waste collection and treatment systems, etc. The development of night services cannot be confused with areas near schools and houses.

Eighthly, at the local level, it is necessary to include the content of the night-time economy development in the master plan for socio-economic development of the province/city. On the basis of strategies and plans of each locality, it is necessary to clearly plan the areas, areas, routes to be focused on the night-time economy development, central areas and satellite areas, support policies, Local incentives to attract strategic investors, businesses and people to invest in activities and services of entertainment, entertainment, and shopping at night.

Ninthly, focus on reviewing and perfecting financial mechanisms and policies for the development of the night-time economy. On the basis of the Prime Minister's Decision No. 1129/QĐ-TTg approving the Master Plan for the night-time economy development in Vietnam, localities balance their financial and budgetary resources to make investment policies, encourage investment in a methodical and synchronous manner to attract investors from the private sector to participate in building infrastructure for the night-time economy and training quality human resources for the night-time economy.

Amend current regulations that are still inappropriate, inadequacies, overlaps, and inconsistencies and supplement regulations in the financial sector for the night-time economy activities, including: amending regulations related to the land finance system (land valuation and land tax) towards ensuring independence and objectivity, close to market prices and comparable. Completing the land tax system to ensure adequate and reasonable collection, offset the budget expenditures for investment in infrastructure development and public services, as well as develop strict sanctions. deterrence and assign responsibility to each individual when violating the financial law on land. Completing financial policies to promote socialization in the fields of education, health care, culture, etc. to participate in the night-time economy, including policies on education spending, tuition fee policies, and management mechanisms. financial management, credit policy,... for units and organizations participating in the night-time economy. Pay more attention to credit support policies, review the conditions for businesses and business households to participate in the night-time economy activities, especially during the Covid-19 outbreak.

Keep to perfect the legal framework for the development of the corporate bond market, to remove difficulties and promote the development of the corporate bond market, and to create conditions for businesses participating in the night-time economy to have the opportunity to access with potential capital mobilization channel in the period of 2021-2030. Therefore, it is necessary to soon promulgate the Strategy for Development of the Stock Market in the 2021-2030 period, complete the legal basis to form a stock exchange dedicated to start-ups in general, and create favorable conditions for start-up businesses in the night-time economy having the opportunity to access new capital mobilization channels.

In the context of the complicated place of the Covid epidemic, commercial and tourism activities are facing unprecedented difficulties, the development of the night economy may not be possible immediately. However, we can turn the immediate difficulties to perfect solutions as well as carefully prepare the necessary conditions to be ready for development as soon as the pandemic is under control.

5. CONCLUSION

The night-time economy increasingly occupies a large proportion in many economies around the world. With the available potentials, Viet Nam is a country with many favorable conditions for developing the night-time economy. In the current context, the development of the night-time economy still faces many difficulties due to the impact of the pandemic. With the attraction and great potential of tourism and favorable conditions, we need to carefully prepare for the development of the night-time economy in the coming time

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MANAGEMENT FOR ACTIVITY-BASED COSTING FOR MANUFACTURING ENTERPRISES

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Abstract: Cost management is important to all manufacturing enterprises. It ensures efficiency is always a problem for all businesses. By method of synthesis and analysis, the article aims to propose some suggestions in cost management. Accordingly, manufacturing enterprises need to organize management accounting models as well as improve human resources to meet cost management. It contributes to improving economic efficiency for manufacturing enterprises in the context of global competition.

Keywords: Activity-based costing, management, manufacturing enterprises

JED codes: M11, M41

1. INTRODUCTION

In the global trend, manufacturing enterprises are facing increasingly fierce competition in the market. Therefore, manufacturing enterprises must adapt quickly, control, and save production costs in order to lower product costs. In fact, the activity-based costing (ABC) method helps to provide accurate product cost information, control costs of activities, and timely serve decision-making of managers. corresponding to the product structure and business strategy of the enterprise (Armitage & Russell, 1993). Therefore, the management implementation of the ABC method for manufacturing enterprises needs to be controlled to ensure efficiency.

Currently, many manufacturing enterprises are calculating costs according to the traditional method with the allocation of general production costs based on a certain criterion and it leads to bad business decisions (Damito, Hayes, & Kintzele, 2000). Therefore, the implementation of control using the ABC method is considered an urgent issue for manufacturing enterprises to ensure the provision of fast and accurate information, serving the decision-making process of all levels. manage.

2. LITERATURE REVIEW

The traditional costing system is widely applied to the allocation of indirect costs is often based on a simple criterion such as the number of products produced, the number of labor hours, etc. with information that is not useful when making business decisions (Player & Kramer, 1995). In order to make accurate decisions, managers must have complete, accurate, and timely cost information. Manufacturing enterprises begin to implement a new approach to cost information according to the ABC activity-based pricing method (Anderson, 1993).

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Gupta & Galloway (2003) argued that ABC is a method of measuring the cost, performance of activities, and charge objects. To control activity for ABC, it is necessary to allocate costs to activities based on the resource consumption of those activities and then to allocate costs to chargeable objects based on activity usage. their movements. Player & Kramer (1995) considered ABC to indicate which activities are used to produce products and services. ABC is used as a measure of a company's activities, the resources consumed by the activities, products, and services that result from those activities.

Turney (1993) said that ABC is a management accounting system that focuses on measuring costs, activities, products, customers, and cost objects. This method allocates costs to cost objects based on the number of activities used by that cost object. Player & Kramer (1995) argued that ABC is an improvement of traditional pricing methods by focusing on specific activities as basic cost objects.

The production of products and the provision of services involve many activities. To carry out these activities, it is necessary to consume the resources of the enterprise. Management for ABC represents consumable resources that generate costs, activities that consume resources, and products and services that consume activities (Garrison, Noreen, & Brewer, 2012).

Based on observations at production workshops, businesses need to identify the main activities that generate costs. Identify resources used by activities including direct material costs, direct labor costs, and manufacturing overhead. For enterprises producing products with a variety of different types and specifications as well as technological processes and stages of operation. The source of costs must reflect the level of consumption of the activities of each product (Anderson, 1993). ABC brings many benefits not only in providing more accurate product cost information but also in supporting managers in business management. To achieve the highest efficiency, parallel with the application of ABC method in cost accounting and product costing (Gupta & Galloway, 2003).

3. IMPLEMENT MANAGEMENT OF ABC METHOD FOR MANUFACTURING ENTERPRISES

Management is a discipline that focuses on activities aimed at improving the value of products and services. ABC is only a tool to determine the cost of activities and the products that activities produce, whereas governance is a management philosophy, focusing on planning, operating, measuring measure activities, and help the company survive in a competitive business environment (Turney, 1993). Management uses information obtained from the ABC system to reduce or eliminate activities that do not add value and, as a result, improve operational processes.

When implementing activity-based management, managers must analyze activities, cost sources, and effectiveness of activities to come up with solutions to enhance operational efficiency and save resources. Moreover, this management will analyze the effectiveness of activities, and help the company identify value-added activities, thereby cutting inefficient activities and promoting profitable activities. Management not only provides data to be able to determine effective activities but also assists management in estimating resource allocation for activities correctly (Gupta & Galloway, 2003).

This management will help production enterprises is not simple and can be done quickly because it needs many conditions in terms of both financial resources and human resources. In addition, it helps to make the selling price more reasonable, increasing the competitiveness of

products in the market (Armitage & Russell, 1993). It helps to achieve operational efficiency in order to maintain and develop your business in the period of integration and development.

To implement this governance, it is necessary to ensure that the governance process consists of five steps. as follows: identify resource-consuming activities; allocate costs for each activity; determine criteria for allocating operating costs to each product; calculate the cost allocation ratio; allocate costs for each product (Damito, Hayes, & Kintzele, 2000).

The production of products and the provision of services involve many activities. To carry out these activities, it is necessary to consume the resources of the enterprise. Management shows that resources consume costs, activities consume resources, products and services consume activities (Garrison, Noreen, & Brewer, 2012), specifically, the resource is an economic element that is applied or used to perform an activity, for example, people, tools, equipment, workshops... Activity is an event or a business that generates costs in the business. The process of producing products and providing services of an enterprise is essentially a systematic and organized combination of many different activities. Cost objective is determined depending on the information needs of the manager, which can be: products, services, jobs, customers, customer groups... A resource cost driver is a criterion that measures the level of resource consumption by activities. An activity cost driver is a criterion that measures the level of activity performed by the cost object. The operating cost allocation criterion is considered an improvement of the ABC system, but it is also very expensive to measure accurately, especially in the case of the number of criteria used to allocate costs to each individual. product is too much.

4. RECOMMENDATIONS TO IMPLEMENT EFFECTIVE MANAGEMENT OF ABC METHOD FOR MANUFACTURING ENTERPRISES

Directors of enterprises set up a management accounting department. Corresponding to each part of financial accounting will be the part of management accounting. Management accounting staff will base on the management requirements of the business to develop plans and norms to achieve targets from a financial perspective.

The management accounting department will carry out tasks such as activity-based costing, activity-based pricing, product costing and selling price planning, etc., thereby, controlling costs. costs and costs to provide timely information for managers in decision-making.

To successfully apply the ABC method requires a lot of support from departmental leaders, from the board of directors. When the company's leaders are aware that this management information system meets the information requirements for managers, they should boldly and proactively change the new pricing method.

For professional organizations, these organizations should provide training to accessible practitioners when applying this method. Professional organizations need to pay attention and support in organizing management accounting in business management and administration as a good tool to help managers run businesses. In addition, professional organizations also need to strengthen to guide businesses to organize management accounting work accordingly.

5. CONCLUSION

In the trend of economic integration, businesses are always looking for ways to have the best method to control costs related to activities, especially manufacturing enterprises. It helps

businesses promote their internal resources to enhance their competitive advantage. Cost management and related activities control are one of useful and meaningful tools. The flexible application depending on the size and promotion characteristics of the business will contribute to increasing economic efficiency.

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PUBLIC INVESTMENT TOWARDS GREEN GROWTH AND SUSTAINABLE DEVELOPMENT

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Abstract: *Public investment has a significant importance for the economic development, especially in developing countries, in special regards of ensuring infrastructure for sustainable development. Public investment is associated with economic growth and development in the long term, specifically: (i) Public investment makes a great contribution to growth and promotion of industrialization, modernization, economic development and social security insurance; (ii) Public investment increases the aggregate demand of society, as well as the aggregate supply and economic capacity. As a result, public investment contributes to orienting, creating momentum and maintaining the driving force for economic growth. Especially, public investment aiming at green growth and sustainable development is nowadays an appropriate and positive direction for developing countries like Vietnam. This study will delve into the relationship between public investment and green growth and sustainable development, as well as the current situation of public investment in Vietnam associated with green growth and sustainable development, for which several reform recommendations will be provided.*

Keywords: *Public investment, sustainable development, green growth, financial policy...*

1. CONCEPT OF PUBLIC INVESTMENT

Public investment is the expenditure of the public sector, using part of resources in the state budget fund to invest in the construction of socio-economic infrastructure (roads, bridges, schools, hospital, etc.). According to the Encyclopedia Britannica, public investment is investment by the state in particular assets, whether through central or local governments or through publicly owned industries or corporations.²

According to Vietnam's Law on Public Investment: "Public investment is the investment of the State in programs, projects and other public investment plans. Capital budget for public investment include funds derived from: the state budget capital; capital from lawful revenues of state agencies and public non-business units for investment in accordance with law, portfolio of public investment programs and projects; public investment capital balance, capital allocation plans, resource mobilization solutions and implementation".³

According to economics, public investment is an important component of aggregate demand, which promotes aggregate demand through the financial multiplier, and therefore, public investment plays an important role in promoting economic growth.

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² <https://www.britannica.com/topic/public-investment>.

³ Article 4 Law on Public Investment No 39/2019/QH14 dated June 13th, 2019.

2. THE RELATIONSHIP BETWEEN PUBLIC INVESTMENT AND GREEN GROWTH AND SUSTAINABLE DEVELOPMENT

Sustainable development includes the harmony in the development of economics, society and environment that “meets the needs of the present without compromising the ability of future generations to meet their own needs”¹.

The United Nations defines “sustainable development as stable economic growth in relation to good progress and social justice; rational exploitation and economical use of natural resources; protection and improvement of living environment quality”.² Sustainability in growth is based on the selection of industries with low energy consumption, relying on high technology, emphasizing growth quality, growth that causes less ecological pollution, and the growth process being associated with the improvement of resource use productivity and the efficient use of resources.

In particular, economic growth does not cause social risks or degradation, not leading to division or discrimination between people, nor leading to violations of human rights; All subjects in society are allowed to participate in the economic growth process and enjoy the achievements of growth. The three key components of sustainable development have an intimate and dialectical relationship.

Regarding economic development, sustainable development is based on the quality of growth with a green and environmentally friendly production and consumption model; development of clean industry and reduction of environmental pollution.

Regarding social equity, sustainable development aims at hunger eradication and poverty alleviation, narrowing the development gap between regions, ensuring social justice, especially in terms of access to and enjoyment of essential public services as well as equal access to development opportunities.

Regarding environmental protection, sustainable development implies exploitation, rational use and saving of natural resources, minimizing emissions harmful to the environment as well as minimizing negative impacts of economic activities to the environment; prevents, controls and promptly overcomes pollution and environmental degradation, and ensures biodiversity conservation.

Public investment has a significant importance for the economic development, especially in developing countries, in special regards of ensuring infrastructure for sustainable development. Public investment is associated with economic growth and development in the long term, specifically: (i) Public investment makes a great contribution to growth and promotion of industrialization, modernization, economic development and social security insurance; (ii) Public investment increases the aggregate demand of society, as well as the aggregate supply and economic capacity. As a result, public investment contributes to orienting, creating momentum and maintaining the driving force for economic growth.

To achieve the goals of sustainable development, public investment must create a foundation for long-term development, clean industry development; it also aims at rational exploitation, use and saving of natural resources, minimizing emissions harmful to the environment as well as

¹ The Report “Our Common Future” by the World Commission on Environment and Development – WCED, Oxford University Press, 1987 P.43.

² http://www.un.org/wcm/webdav/site/climatechange/shared/gsp/docs/GSP16_Background%20on%20Sustainable%20Dev.pdf.

minimizing negative impacts of economic activities to the environment; helps prevent, control and promptly overcome pollution and environmental degradation, and ensure biodiversity conservation; contributes to narrow the development gap between regions, ensuring social justice, especially in terms of access to and enjoyment of essential public services as well as equal access to development opportunities.

To successfully implement the green growth and sustainable development strategy, the Government needs to integrate the goals of green growth and sustainable development in the strategy, socio-economic development plan, budget financial plan and annual and medium-term public investment plans, in order to strengthen the coordination of resources of government and development partners. The Government determines the direction of annual and medium-term budget allocation for green growth and sustainable development at central and local levels; Develop criteria, principles and principled guidelines on resource allocation for green growth in the overall budget plan. In the process of appraising the annual socio-economic development plan, ministries, sectors and localities need to provide clearer evidence to obtain expenditures for green growth and sustainable development in the region when allocating budget in the budget plan including ODA. At the same time, it is necessary to strengthen coordination in planning and budgeting, and strengthen coordination among sectors, regions and localities. Provide timely and highly reliable information to all parties involved in decision-making process on allocation of public investment capital for green growth and sustainable development. The Ministry of Planning and Investment and the Ministry of Natural Resources and Environment should lead efforts to prioritize investment capital for green growth and sustainable development.

3. STATUS OF PUBLIC INVESTMENT IN VIETNAM ASSOCIATED WITH GREEN GROWTH AND SUSTAINABLE DEVELOPMENT GOALS

3.1. The right policies guidelines:

The awareness and views of the Party and State on the importance of socio-economic development in association with the protection and improvement of the natural environment were formed quite early and clearly.

On June 12th, 1991, the Chairman of the Council of Ministers (now known as the Prime Minister) issued the Decision No. 187/CT approving the *National Plan on Environment and Sustainable Development for the Period 1991-2000*.

On June 25th, 1998, the Politburo issued Directive No. 36-CT/TW on strengthening environmental protection in the period of industrialization and modernization of the country, and especially emphasized “*The environmental protection must be associated with and be an important basis for ensuring the country’s sustainable development*”.

The 9th Party Congress affirmed that Vietnam’s socio-economic development path is: “*Fast, effective and sustainable development, economic growth goes along with realizing social progress and justice and environment protection*” and, at the same time, emphasizing “*Socio-economic development is closely linked with environmental protection and improvement, ensuring the harmony between the artificial environment and the natural environment, preserving biodiversity*”¹.

¹ Communist Party of Vietnam, Document of the National Congress of Deputies in the reform period (VI, VII, VIII, IX, X), National Politics Publisher, Hanoi, 2010, P.II, p. 126, 128..

The third plenum of the 11th Central Committee continued to emphasize on renewal of the growth model, restructuring the economy towards improving quality, social welfare and security ensurance, natural resources and environment protection. Accordingly, the 3rd Plenum of the 11th Central Committee identified the main solutions as: *“During the development process, it is crucial to pay continuous attention to the implementation of policy directions and measures to ensure food security associated with the ecological environment protection as well as ensuring energy security...; strengthen policies and measures to protect natural resources and the environment, especially policies on planting and protecting forests, exploiting and using water resources. Stop over-exploiting, depleting resources and harming the environment. Strictly control the treatment of industrial waste, meeting environmental protection standards; strengthen power-saving measures in association with the roadmap to switch to market prices for electricity, coal and petrol”*.¹

The Party’s cross-cutting point of view is the strategic orientation for restructuring the growth model associated with green economic development. Vietnam’s national strategy on green growth has been approved by the Prime Minister in Decision No. 1393/QD-TTg dated September 25th, 2012, which clearly defined green growth objectives as: (i) Restructuring and perfecting economic institutions towards greening existing industries and encouraging the development of economic sectors that efficiently use energy and resources with higher added value; (ii) Conducting research and enhancing application of appropriate advanced technologies to more efficiently use natural resources, reduce greenhouse gas emissions intensity and to contribute to an effective response to climate change; (iii) Improve living standards of the people, creating an environment friendly lifestyle through employment generation from green industry, agriculture and services; investment in natural capital; and development of green infrastructure.

The Fourth Plenum of the 12th Party Central Committee issued Resolution No. 05-NQ/TW dated November 1st, 2016 on a number of major undertakings and policies in order to continue renewing the growth model, improving growth quality, labor productivity, and the competitiveness of the economy. Accordingly, the point of view and orientation for innovation is *“Innovating the growth model is to improve the growth quality, labor productivity and competitiveness of the economy, develop rapidly and sustainably in all aspects in terms of economics, society and environment. It is not advisable to promote growth at all costs, which may cause adverse impacts on macroeconomic stability, national defense and security, social progress and justice ensurance, as well as the ecological environment preservation”*.

At the same time, the Resolution set out a number of major undertakings and policies, which are: *“Improving the socialist-oriented market economy institution, with the focus on: (i) Perfecting policies and laws, improving high capacity to enforce law on environment; basically overcoming environmental pollution, paying special attention to key areas; monitoring transboundary pollution problems; effectively responding to climate change; (ii) Promoting agricultural restructuring associated with new rural construction; (iii) Conducting research, transferring and applying science - technology and advanced production processes to production, towards clean, high-tech*

¹ Conclusion of the Third Conference of the Central Executive Committee, term XI, No. 10-KL/TW dated October 18th, 2011, on the socio-economic, finance and state budget situation for 5 years 2006 - 2010 and 2011; socio-economic development, finance - state budget plan for 5 years 2011 - 2015 and 2012. Source: <http://dangcongsan.vn/tu-lieu-van-kien/tu-lieu-ve-dang/sach-chinh-tri/books-11520162411956/index-5152016301255655.html>.

and environmentally friendly agriculture; strongly shifting from production with quantity as the goal to production with improved quality, efficiency, high added value, suitable for the conditions of climate change and sea level rise to choose and develop products which help fostering the comparative advantages of each locality, each region and the whole country; (iv) Continuing to invest in development and modernization of agricultural and rural infrastructure; strengthening capacity for natural disaster prevention, control and mitigation, response to climate change, cooperation in effective and sustainable use of transnational water resources; environmental protection; (v) Focusing on fundamental industries that have competitive advantages and are strategically important for fast and sustainable growth.

3.2. The current state of public investment (PI)

Over the past 30 years, public investment in Vietnam has gained significant achievements.

- Regarding economic growth, there have been 12 years of economic growth of 7% or more, of which 6 years with more than 8%, 2 years higher than 9%. The average of the period from 1991 to 2000 reached 7.6%; and the period from 2001 to 2010 7.3%; and the period 2011 - 2020 about 6.3%.

- In terms of public investment allocation, most of the public investment capital was spent on the development of socio-economic infrastructure (roads, airports, ports, water supply and drainage systems, electricity, telecommunications, healthcare, education, environment, etc.). As a result, many infrastructure investment works and projects (especially in traffic, power supply) have been implemented, and the capacity of the infrastructure system has been significantly improved. A number of important and large-scale traffic works such as highways, airports, seaports, etc., have been invested in, upgraded, which helped improve the connectivity capacity between regions in the country and international trade. At the same time, a series of other large-scale key transport infrastructure projects were also constructed, especially, traffic infrastructure in key economic regions and large urban areas were decisively prioritized with investment in order to complete the project soonest and put it into use and promote its effectiveness. Energy infrastructure was also focused on to be invested in to increase capacity, meeting development requirements and ensuring national energy security.

However, Vietnam's growth model remained inadequate in some aspects and unsustainable. The economy still mainly grew in breadth, heavily dependent on factors of capital, resources, and low-skilled labor. In the period 2011 - 2015, the increase in inputs (capital and labor) contributed about 71% to growth. Human capital, technology, and management efficiency of the state (expressed in TFP index) only contribute about 29%. Therefore, the increase in labor productivity was mainly thanks to the contribution of capital. The Sustainable Development Index in 2018 published by the United Nations Secretariat showed that Vietnam ranked 57 out of 156 countries and territories, and ranked in the third place in the ASEAN region (after Singapore and Malaysia).

In recent years, Vietnam has advocated promoting the restructuring overall of economic sectors and fields across the country and each locality and enterprise with a long-term vision and a specific roadmap; closely link the overall restructuring of the economy with the restructuring of key industries and fields, associated with the renewal of the growth model.

Accordingly, one of the priorities is investment restructuring, with a focus on public investment. In order to implement this policy, many legal documents creating a legal framework for the process

of restructuring public investment have been issued and modified¹. The promulgation of the Law on Public Investment by the National Assembly affirms the Party and State's correct policy and direction for state management of public investment, creating a synchronous legal system to manage the entire state's public investment process including investment policy, capital appraisal for programs and projects using public investment capital, formulation, appraisal and approval of investment plans, implementation of plans, monitoring, evaluation, examination and inspection of public investment plans.

Since 2011, a series of policies, documents and legal systems related to investment, especially public investment, have been developed and promulgated, improving the effectiveness and efficiency of public capital investment management and use; contributing to the prevention of loss, waste and dispersion of resources and ensuring the publicity and transparency in public investment management.

In order to implement the Law on Public Investment, the National Assembly Standing Committee issued the Resolution No. 1023/NQ-UBTVQH13 dated August 28th, 2015 promulgating principles, criteria and quotas for the allocation of investment capital for development of state budget in the period 2016-2020; The Prime Minister issued Decision No. 40/2015/QĐ-TTg dated September 14th, 2015 promulgating regulations, criteria and quotas on allocation of investment and development capital for state budget in the period of 2016 –2020. The Government has also issued Decrees guiding the implementation of the Law on Public Investment.

At the same time, the Government has issued a number of mechanisms and policies to attract non-state investment capital, investment in the form of public-private partnership (PPP) and promote socialization in public investment, especially in the fields of health, education, environment and key transport infrastructure construction, etc., contributing to supplementing and diversifying investment resources for public services, meeting the requirements of economic development and social security of the country. The legal framework on PPP has been continuously supplemented and gradually improved, notably by Decree No. 15/2015/NĐ-CP and Decree No. 30/2015/NĐ-CP stipulating the order, procedures and regulations on implementation of PPP projects. The current regulations on PPP are assessed to be basically meeting market principles and initially creating a unified legal framework for implementation.

Along with that, the information system on supervision and evaluation of public investment programs and projects using State capital was put into operation, contributing to improving discipline in public investment activities, reducing the spread of investment and capital construction debt.

During the implementation period of the policy of investment restructuring with a focus on public investment, from 2016 up to now, the scale of public investment to GDP has been narrowed, in line with the objectives of investment restructuring (the objective of state investment is about 31-34% of total social investment² and about 10-11% of GDP on average³).

The proportion of state investment in total social investment gradually decreased, from an average of 39.4% in the 2011-2014 period (39.9% in 2014) to an average of 36.8% in the period 2015-2017 (in 2017, the rate decreased by 2.8 percentage compared to 2016, to 34.8%).

¹ Law on Public Investment; Law on Management and Use of Public Property

² Resolution 24/2016/QH14 dated 08/11/2016 by the National Assembly on Economic Restructuring Plan in the period 2016-2020

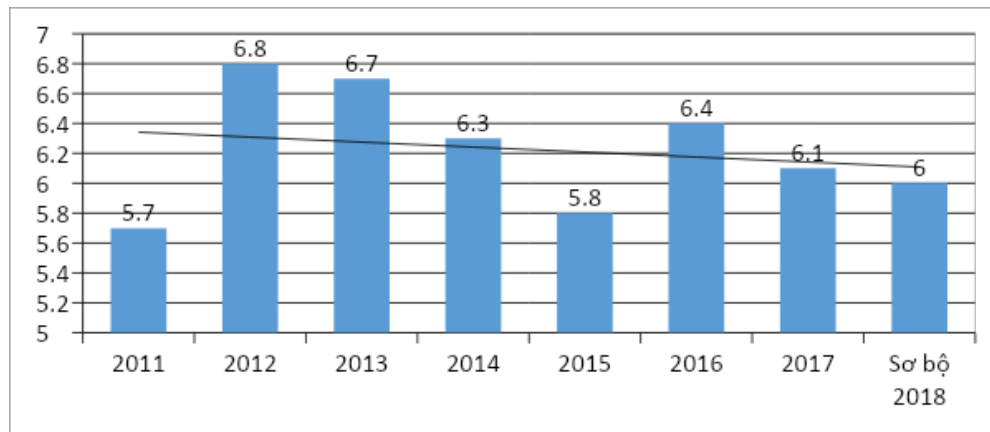
³ Decision No. 68/QĐ-TTg dated 12/1/2018 by the Prime Minister approving the Public Investment Restructuring Plan in the period 2017-2020 and towards 2025.

The ratio of state investment capital to GDP decreased from an average of 12.4% in the period 2011-2014 (12.3% in 2014) to 12.1% in the period 2015-2017 (11,6% in 2017).

The structure of public investment capital has positively shifted towards more consistent with investment orientations in the 2016-2020 period. In managerial level, the structure of state investment capital has shifted in the direction of gradually increasing the proportion of capital managed by the central government, contributing to the concentration of resources to implement important, inter-regional and inter-provincial projects. The proportion of realized state capital managed by the central government increased from an average of 43.25% in the period 2011-2014 to 47.8% in the period 2015-2017 (47.3% in 2017).

The Government's Report on the mid-term assessment of the implementation of Resolution No. 24/2016/QH14 on the economic restructuring plan for the period 2016-2020 has shown that: investment efficiency has improved; The ICOR coefficient of the economy decreased to 6.4 in 2016 and 6.1 in 2017.

Figure 2. ICOR coefficient at compared prices in 2010



Source: General Statistics Office

To accelerate disbursement and effective implementation of public investment plan in the medium-term for the 2016-2020 period, the Prime Minister has approved targeted programs to facilitate the effective implementation of the medium-term public investment plan for the 2016-2020 period as well as the 2017 plan; at the same time, the Government has also asked 19 ministries, branches and 63 localities to independently review and evaluate the law on public investment, clarify difficulties and obstacles in disbursement of public investment capital, and propose solutions to overcome. As a result, the efficiency of public investment has improved, limiting the dispersion and spreading in public investment, improving discipline in public investment. Public investment has made an important contribution to the construction and completion of the socio-economic infrastructure system, creating conditions to promote sustainable economic growth.

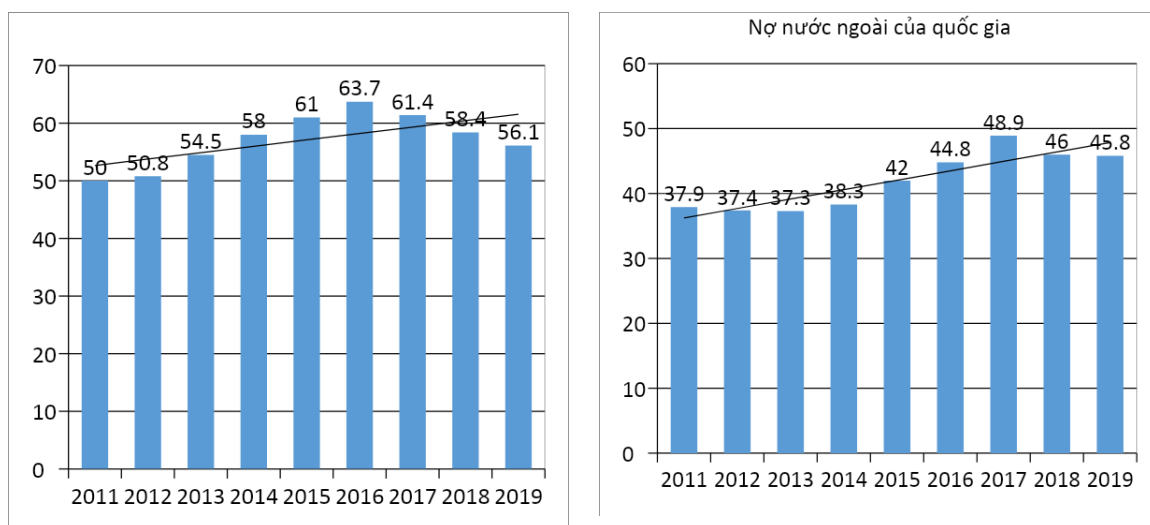
However, public investment currently has some limitations and weaknesses that need to be overcome, especially from the perspective of the requirements of sustainable development.

- *Unreasonable structure of public investment:* In the general investment structure of the whole society, investment capital in the state sector still accounts for a high proportion (about 39%) and has not shown tendency for decrease. In some industries, state investment still accounts for a large proportion of total social investment, such as the education -training and the health sector.

Investment restructuring has not been associated with budgetary financial restructuring and public debt safety insurance. Investment structure change has been moving in a slow pace, mechanisms and policies are not strong enough to attract resources from the private sector and foreign investors to invest in the public sector with profit. The situation of spreading investment, slow progress and that the increase in total investment not being thoroughly handled, etc., has affected the investment efficiency. The monitoring and evaluation of projects using public investment capital is not synchronized and not taken seriously. On the other hand, the restructuring of public investment has not been closely linked with the orientation of restructuring economic sectors and State budget.

Public investment with state budget capital remains mainly basing on domestic and foreign debt, which is the reason for the rapid increase in public debt in the period 2011-2016, although the level of public debt is still within the ceiling limit as the National Assembly decided and has tended to decrease from 2017 until now.

Figure 3. National public debt and foreign debt in the period 2011-2019 (% of GDP)



Source: Ministry of Finance's data

- *The state of waste and loss in public investment has not been completely handled.* The situation of expenditure not in accordance with regulations and policies, un sufficient capital sources allocation, and low quality works in construction investment still occur in many places. Some ministries, central agencies and localities still propose to start new projects while capital sources have not been balanced to pay back debts for capital construction or the allocated capital is too low to ensure project completion on time and according to the approved schedule. The situation of scattered and low-efficiency investment has not yet been overcome. The fact that many unfinished projects with lengthened construction duration and slow progress increased the total investment, causing waste and loss of state financial resources has not been thoroughly handled.

- *The quality of public investment management institutions is still limited, and the efficiency of public investment has been slow to improve.* There is also a gap between the quality of Vietnam's public investment management institutions and international good practices, especially in the formulation, appraisal, selection and prioritization of investment projects.

- *Investment projects in the form of PPP have not yet attracted foreign capital* and are still heavily dependent on credit sources, which are not suitable with the orientation of infrastructure

development, especially in the field of transport and business costs reduction for businesses (logistics costs). The rate of attracting foreign capital in PPP projects is still limited, mainly in the electricity sector. The management of BOT, BT projects... still has many limitations and weaknesses, causing many economic and social consequences.

There are both objective and subjective reasons for the above situation. The main objective reasons are underdeveloped economy and small scale of capital sources for public investment while the demand is very large. However, the subjective cause of inadequate public investment management is the biggest to claim, which consists of issues such as: legal documents quality; decentralization of powers between the central and local governments; project management and implementation; problem solving of outstanding capital construction debt for many years; the weak management capacity of the investor and the project management board which does not meet the requirements; shortcomings in policies and regulations on investment management in the form of PPP.

4. SEVERAL REFORM RECOMMENDATIONS FOR PUBLIC INVESTMENT ASSOCIATED WITH GREEN GROWTH AND SUSTAINABLE DEVELOPMENT IN VIETNAM

Public investment plays an important role for economic development, especially from the perspective of basic assurance for sustainable development. Reforms for public investment associated with green growth and sustainable development in Vietnam should first focus on perfecting institutions and policies related to public investment. On the other hand, the organization and implementation of policies related to public investment should be focused in order to thoroughly overcome the situation of scattered, spreading and low-efficiency investment, waste and loss in public investment.

Firstly, it is necessary to improve the public investment management institution to ensure efficiency and be in line with international practices, in which priority is given to innovating the method of appraisal, evaluation and selection of investment projects according to their level of estimated economic efficiency in the spirit of Resolution No. 05-NQ/TW. At the same time, the restructuring of public investment is closely linked with the restructuring of the state budget and public debt. Restructuring public investment should be implemented synchronously with other policy tools, especially policies on land, site clearance, administrative reform, state-owned enterprise reform, financial and capital market development.... Conduct research, review and perfect the system of regulations, standards, economic-technical quotas, construction unit prices, work construction investment rates in service of economic sectors. Ensure consistency among public investment management laws, especially between the Law on Public Investment and the Law on State Budget and the Law on Planning, between the Law on Public Investment and the Law on Construction, the Law on Environmental Protection and the Law on Land.

Secondly, it is crucial to further accelerate the process of restructuring public investment in order to transform and form a reasonable investment structure, improve the socio-economic efficiency of public investment and the quality of investment management institutions in accordance with Decision No. 63/QĐ-TTg dated January 12th, 2018 of the Prime Minister on Restructuring Public Investment Plan for the period 2017-2020 and in orientation to 2025.

Thirdly, review and minimize unnecessary investment procedures, shorten the time for administrative procedures, creating favorable conditions for ministries, branches, localities, enterprises, investors and donors to quickly deploy the investment projects, avoiding any delay in disbursement of public investment capital. Promote decentralization in the management of public investment

activities: decentralize project adjustment, investment policy approval, investment decisions associated with the responsibilities of each level in order to improve the effectiveness and efficiency of management and use of state capital for the entire investment process.

Fourthly, maximize and effectively use development investment resources, invest in essential economic and social infrastructure systems to serve the implementation of goals and targets of annual and 5-year socio-economic development. Complete investment institutions in the form of PPP in the direction of transparency, stability, equality, strict control of investment efficiency, shorten investment procedures, creating preferential policies and favorable conditions to increase transparency and attractiveness in order to attract investors.

Fifthly, it is necessary to study and promulgate economic and financial mechanisms and policies on the restoration and development of “natural capital”; prioritize and allocate adequate funds from central and local budgets to implement green growth strategies, especially for improving energy efficiency and renewable energy. Promulgate mechanisms and policies to encourage financial institutions and businesses, especially small and medium-sized enterprises, to deploy production and business activities according to green growth criteria. Using a system of financial, credit and market tools to encourage and support the development of green economy and green products. Work towards building a management and transaction system for greenhouse gas emissions, taxes, and carbon fees. Encourage and focus on attracting loans, ODA, technical assistance from other countries, international organizations and Vietnamese intellectuals living abroad to participate in the implementation of the green growth strategy.

Sixthly, it is urgent to complete and soon issue a set of indicators for measuring green growth at the national level of Vietnam. Add a number of green growth indicators to the system of socio-economic development indicators. Get ready to complete and apply the set of green growth indicators in the development of the 5-year socio-economic development plan 2021-2025. Complete the financial policy framework for green growth. Develop a policy framework for national budget allocation and management for the implementation of the Green Growth Strategy. At the same time, complete the construction of a financial policy framework (including: taxes, fees, subsidies, funds, sanctions, green criteria, sustainable development for listed companies on the stock market) related to promoting the implementation of the Green Growth Strategy. Develop a mechanism to support the private sector in the preparation and implementation of green growth projects.

5. CONCLUSION

In order to accomplish the above-mentioned recommendations, central and local ministries, branches need to urgently direct the implementation of medium-term and annual public investment plans, improve the quality of monitoring, supervision, evaluation and inspection of the implementation of public investment plans, programs and projects; Report and provide all necessary information and data for the monitoring and evaluation of the implementation of public investment restructuring, ensuring accuracy and time frame. At the same time, organize training and retraining of knowledge and skills in management and administration in the green economy and green manufacturing industry for public and business administration staff, firstly for the leaders, policy and strategies makers, socio-economic development planners. Develop human resources for green growth on the basis of research, choosing and integrating contents on green growth, green technology, sustainable resource exploitation... into all studying levels. Develop guidelines for businesses on how to approach financial and technological options to greening industry and agriculture./.

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ENHANCING LINKAGES AND COLLABORATIONS BETWEEN LOCALITIES IN THE RED RIVER DELTA IN ORDER TO ATTRACT FOREIGN DIRECT INVESTMENT

MSc. Trieu Van Huan¹, MSc. Tran Thi Phuong Thao²

Abstract: Localities are still competing for foreign direct investment (FDI) flows, which is the present trend. However, reality indicates that the flow of foreign direct investment (FDI) into an area at the provincial level is influenced not just by local factors, but also by factors in the surrounding areas. This study uses a quantitative way to show that there is a mutual influence between communities in the Red River Delta when it comes to recruiting FDI. The research results show that: labor quality, road infrastructure, enterprise convergence level of a locality also affect neighboring localities in attracting FDI. Thereby, Following that, the authors recommend a variety of options for improving links and collaboration among Red River Delta communities in order to attract FDI.

Key words: the Red River Delta, foreign direct investment.

1. INTRODUCTION

1.1. The research problem's necessity

Hanoi, Vinh Phuc, Bac Ninh, Hai Phong, Hung Yen, Hai Duong, Nam Dinh, Thai Binh, Quang Ninh, Ha Nam, and Ninh Binh are the 11 provinces and centrally-run cities that make up the Red River Delta region. The Red River Delta region holds a significant place and function in the country's politics, economy, culture, science, and technology. This is the country's second-largest FDI-attracting region, behind the Southeast. By December 31, 2019, the Red River Delta region had attracted 10,308 FDI projects, accounting for 33.32% of the total number of FDI projects in the country. The total amount of registered FDI capital reached 106,601.06 billion dollars, accounting for 29.27 percent of the total amount of registered FDI capital in the country. Furthermore, foreign investors' investment forms in the Red River Delta are various, ranging from 100 percent foreign investment capital to joint venture firms in the form of BOT, BTO, and BT and BCC. Between 1988 and 2019, 95 countries and territories made investments in the Red River Delta (Foreign Investment Department - Ministry of Planning and Investment). This demonstrates the region's attractiveness in drawing FDI inflows.

Although a number of municipalities in the region, such as Quang Ninh and Hai Phong, Hanoi and Bac Ninh, have linked and collaborated with one another to increase FDI attraction, the extent and scope of the linkage is currently limited, owing mostly to the Conference on local connectivity, cooperation, and development. The reason for this is because communities have not yet developed a cooperative cooperation program for recruiting FDI among localities in the region; instead, collaboration is relied solely on the goodwill and voluntariness of a few nearby

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localities. The general trend in the Red River Delta is that localities are still competing for FDI. For the reasons stated above, the authors have chosen to investigate the issue of “Enhancing linkages and collaborations between localities in the Red River Delta in order to attract Foreign Direct Investment”.

1.2. Objectives of the study

The mutual impact of localities in the Red River Delta on each other’s ability to attract FDI is being investigated. Based on the research findings, the authors propose several solutions to promote links and collaborations among areas in the Red River Delta in order to attract FDI.

2. RESEARCH OVERVIEW AND RESEARCH METHODS

2.1. Study overview

The previous studies when conducting the research on FDI attraction can be divided into two main research directions:

- *First research direction:* research investment environment or factors affecting FDI attraction of the country, of a region or of a province. In these studies, the authors assume that countries or localities do not affect each other in the process of attracting FDI. The studies of Asiedu (2006) and Moreira (2008) have shown that the factors affecting the attraction of Foreign Direct Investment (FDI) into Africa include: market size, political instability, natural resources and public service quality. Research by Shapiro (1988), Khachoo and Khan (2012) shows that market size, labor costs, and infrastructure have influences to attract FDI inflows. Abdul and partner (2014), Boateng and partner (2015) recommended many factors affecting FDI attraction in a specific country be different from the studies of Asiedu (2006), Moreira (2008), Shapiro (1988) and Khachoo and Khan (2012). Research by Abdul and partner (2014) shows that factors such as asset accumulation, exports, total national income have a positive effect on attracting FDI into Pakistan. Boateng and partner (2015) in the study of factors affecting FDI inflows into Norway stated that foreign direct investment is affected by the following groups of factors: GDP, inflation, exchange rate, cash flow, unemployment rate, interest rate, trade openness.

For domestic studies, two different studies by two authors Nguyen Viet Bang and partner (2016) and Nguyen Duc Nhuan (2017) have both shown that FDI capital flows are influenced by 8 factors, These are: investment infrastructure, investment policy, quality of public services, human resources, living and working environment, competitive input costs, investment advantages, local brands. Studies such as: Pham (2002), Meyer and Nguyen (2005), Anwar and Nguyen (2010), Nguyen Minh Tien (2015) have shown that FDI inflows to localities in Vietnam are affected by key factors such as size or volume of the market, quality of labor and quality of infrastructure. The studies of Le Hoang Ba Huyen (2015), Phan Thi Quoc Huong (2015), Le Tuan Loc and Nguyen Thi Tuyet (2013) have divided the factors affecting FDI attraction into groups of factors, in which there are main groups of factors such as: groups of factors in policy frameworks, groups of economic factors, groups of factors of resources, groups of factors of infrastructure. Studies by Cao Tan Huy (2019) and Phan Huy Hoang (2019) stated that FDI inflows are influenced by factors: investment policies, quality of public services, local brands, and human resources. The studies of Dinh Phi Ho (2011), Nguyen Thi Lien Hoa and Bui Thi Bich Phuong (2014) have suggested a number of other factors that affect FDI attraction, such as: competitive costs, living environment,

investment advantages, local labor advantages, local leadership, total foreign exchange reserves, trade openness of a country.

- *The second direction of research:* research on the effects of neighboring localities in FDI attraction. Coughlin and Segev (2000) are pioneers in using spatial econometrics to analyze the factors affecting FDI. The study focuses on the geographical distribution of FDI in China, with most of the capital concentrated in the area along the coast. With the data collected in the period 1990-1997 and applying the SEM model with the spatial binary matrix, the study shows that the neighboring provinces have an effect on the FDI attraction of a province. Blonigen and partner (2007) conduct a study on spatial self-regression relationships in US foreign direct investment. Blonigen and partner (2007) stated that there are many theoretical reasons why FDI in a host country may depend on FDI in neighboring countries. Research used data on FDI activity of the USA in the period 1983-1998, through the SAR model, the research team has shown that: the FDI source of the USA to a country within the Organization of Economic Cooperation and Development (OECD) will help increase the attraction of FDI to the rest of OECD countries. Garretsen and Peeters (2009) used two models, space delay model (SLM) and space error model (SEM), to study the Dutch FDI in 18 OECD countries in the period 1984-2004. Research results have found that the market size, the openness of the economy, and taxes have an impact on FDI. In addition, the authors have estimated the spatial delay model (SLM) for FDI from the Netherlands to 18 OECD countries. After controlling fixed effects, the authors found that the impact of a third country is important for Dutch FDI in countries. FDI dependence among these 18 countries differs according to the sample. Nwaogu (2012) used both SAR and SEM models in the spatial interaction analysis of FDI. The study provides empirical evidence of spatial interdependence, or the influence of third countries on US outward direct investment in Africa, Latin America and the Caribbean. Gamboa (2012) also used the spatial model to study the spatial impact of FDI from the US to Mexico. Before applying the spatial model, Gamboa (2012) used Moran's I and Geary's C tests to prove that FDI capital in Mexico is not randomly distributed, but has a certain concentration and the author has find out that FDI inflows into Mexico States will increase when FDI to neighboring states increases.

In Vietnam, there have been some studies on the influence of space on FDI attraction. These are the research of Hoang and Gujion (2014), Esiyok and Ugur (2015); Le and Nguyen (2017). Hoang and Gujon (2014) used spatial econometric model to explore the determinants of FDI flow distribution among provinces in Vietnam in the post-Asian crisis period. According to the research team, there is a spatial interdependence in FDI attraction. Esiyok and Ugur (2015) believe that FDI inflows into Vietnam have increased significantly in recent years and have been unevenly distributed among provinces. The research results show that per capita income in a particular province, number of high school students, labor costs, trade openness and domestic investment have a direct effect on FDI in that province and have an indirect effect on FDI of neighboring provinces. These direct and indirect effects also coexist with spillovers and with spatial dependencies among provinces. Le and Nguyen (2017) use the SDM model to analyze the direct and indirect impacts of factors affecting FDI in Vietnam's provinces. According to the research results, there is evidence that FDI not only depends on the locality itself but also depends on other localities. The size of the market, the quality of the labor force, and the enterprise convergence level have an impact on FDI and are pervasive beyond local boundaries. With this research result, localities can coordinate with

each other to take advantage of the attractiveness of market size and quality of labor to attract FDI for the whole region.

Through the process of reviewing the research document, the authors found that: the research field on the interaction in FDI attraction among neighboring localities should be further studied to complete both the research content research and research methods. The authors' research both inherits and overcomes limitations of previous researches in studying the mutual effects of localities in FDI attraction. In this study, the authors use the SDM model to analyze the indirect and direct impacts of factors affecting FDI of the provinces in the Red River Delta. In addition, the authors employ the Pooled Mean Group (PMG) analytic method to evaluate the independent variable's short- and long-term impact on the dependent variable, highlighting the disparities between the independent variables' short- and long-term impacts on the dependent variable. At the same time, the author limits the scope of research space in one region, particularly the Red River Delta, to see more clearly the interaction of localities in a region in FDI attraction.

2.2. Theoretical basis and research model

a) Theoretical basis

- The theory of motives of the multinational corporation

The motives of the multinational corporations include “horizontal motives “ and “vertical motives”. “Horizontal motives” was developed by Markusen (1984). Accordingly, before investing, multinational corporations will have to consider the trade-off between manufacturing in the original country (first market) and then exporting to a second country (second market) and investment in setting up manufacturing base in this country. Unlike Markusen's “horizontal motives” (1984), “vertical motives” applies to multinational corporations that want to invest in a second country to take advantage of low production costs here (Helpman, 1984). In cases where trade barriers of second country exports are low, multinational corporations are motivated to invest in building production facilities here to export to third countries (Ekholm and partner 2005; Helpman and partner., 2003). In this case, the multinational corporations have “regional commercial incentives”. Countries with lower input costs and investment costs to build production and business facilities will receive FDI. Since the motive for multinational corporations is to export, the market size of other neighboring countries will have an impact on attracting FDI in a particular country.

- Theory of economic efficiency due to convergence

The interplay between FDI of neighboring provinces can also be explained by using the theory of economic efficiency due to convergence (Brueckner, 2011; Oatullivan, 2012). Businesses operating in the same area can compete with each other, but businesses still tend to stay close together to benefit from the concentration of businesses, which economists called economic convergence. When the production and business establishments are located close together, businesses in the same or different industries receive a kind of economic efficiency. The reason for this effective existence is that enterprises share the labor force, which reduces the cost of finding suitable skilled and skilled workers. Another reason for the existence of the economic efficiency of convergence is that firms cut down on the cost of transporting inputs and other intermediaries in the production process, while suppliers need only ship to the point of convergence. And the final reason is because businesses benefit from the spillover of knowledge as the social interaction of a highly qualified

workforce fosters innovation and entrepreneurship in research and development (Le and Nguyen, 2017). The impact of the convergence of enterprises as above could be beyond administrative boundaries between provinces. At the same time, businesses can assess the benefit they receive by investing in a location near or in a gathering area to benefit. In other words, when a province receives foreign investment, FDI inflows to neighboring provinces may also increase because the following investment firms want to benefit from positive externalities.

b) Research model

Inheriting previous studies and practical application of factors affecting FDI attraction, the authors propose the research model as follows:

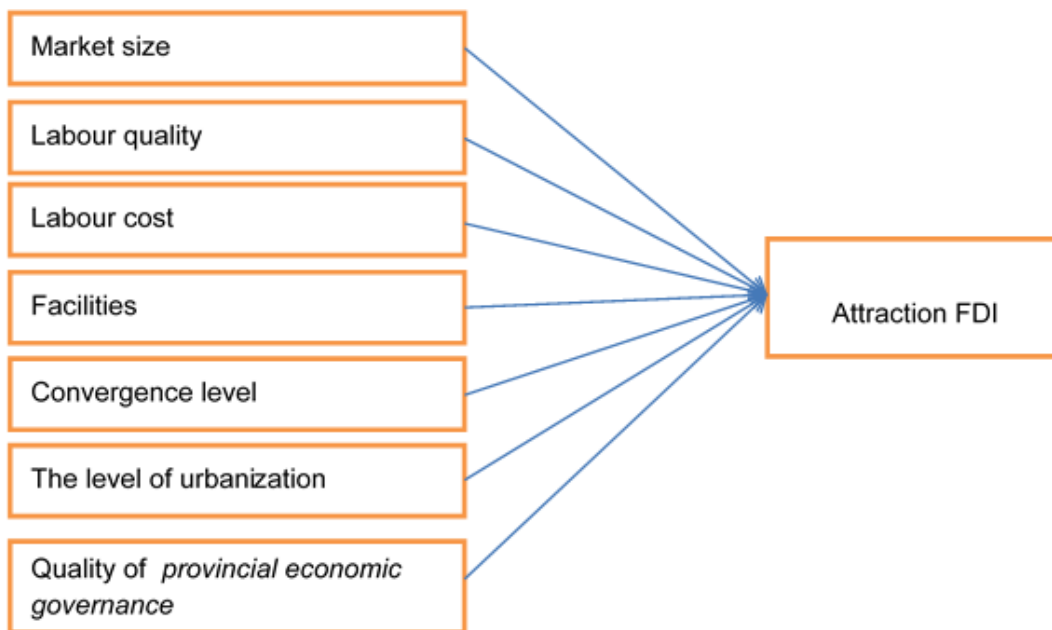


Figure 1: Research model

(Source: According to the authors' recommendation)

In this study, the constituent variables of the factors in the research model are based on the theoretical basis of the authors Le and Nguyen (2017), Hoang and Goujon (2013), Behname (2013):

- *Market size*: is measured by 01 observed variable, the total product in the area (GRDP).
- *Labor quality*: is measured by 01 observed variable, which is the rate of trained workers aged 15 and over.
- *Labor cost*: is measured by 01 observed variable, which is the average monthly income of employees aged 15 and over.
- *Infrastructure*: measured by 02 observed variables, including:
 - + Infrastructure (road) is measured by the volume of goods transported by road.
 - + IT infrastructure (telephone) is measured by the number of telephone subscribers per 1,000 people.
- *The level of convergence*: is measured by 02 observed variables, including:
 - + The level of convergence of FDI enterprises is measured by the proportion of employees working in FDI enterprises over the total number of employees.

+ The level of convergence of private enterprises is measured by the proportion of employees working in the non-state private sector over the total number of employees.

- *Urbanization level*: is measured by 01 observed variable, which is the ratio of the urban population to the total population of the province/city.

- *The quality of the provincial economic governance level*: is measured by one observed variable, the provincial competitiveness index (PCI).

2.3. Research Methods

The authors show that there is a mutual influence between places in the Red River Delta in attracting FDI using a quantitative method called the Durbin spatial econometric model (SDM). In addition, the authors employ the Pooled Mean Group (PMG) analytic method to evaluate the independent variable's short- and long-term impact on the dependent variable, highlighting the disparities between the independent variables' short- and long-term impacts on the dependent variable. In terms of data for quantitative analysis, the authors collect data from 2010 to 2018. The Vietnam Chamber of Commerce and Industry (VCCI), as well as the General Statistics Office and the Statistical Yearbooks of the provinces in the Red River Delta, were used to compile the information.

3. RESEARCH RESULTS

3.1. Results of attracting FDI into the Red River Delta in the period 1988-2019

Over the past time, the Red River Delta has always been an appealing destination for foreign investors, thanks to the efforts of communities. Immediately after the Law on Foreign Investment was promulgated in 1987 and took effect in 1988, the Red River Delta region began to draw FDI inflows. In 1988, the Red River Delta had 02 localities attracting FDI: Hanoi (02 projects totaling 1.5 million USD) and Thai Binh (01 project totaling 0.3 million USD). In 1989, three cities in the region attracted FDI: Hanoi (09 projects worth 70.6 million USD), Hai Phong (03 projects worth 11.5 million USD), and Quang Ninh (04 projects with USD 8.1 million). In 1990, the region's total number of FDI-attracting locations was five (Hanoi, Bac Ninh, Hai Phong, Hai Duong, and Quang Ninh), with 24 projects totaling 185 million USD. Generally, because this is the first stage of recruiting FDI, the amount of FDI drawn to the region is still limited.

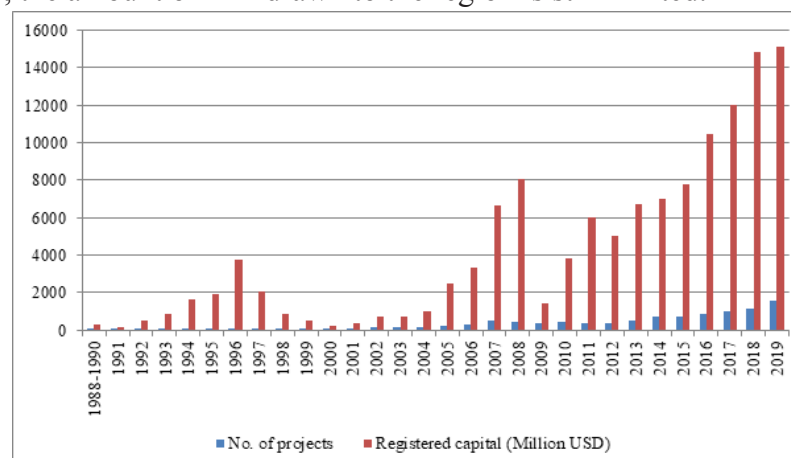


Chart 01: Registered FDI in the Red River Delta in the period 1988-2019

(Source: Department of Foreign Investment and the authors' calculations)

FDI inflows into the Red River Delta experienced several positive improvements between 1991 and 1996, with the quantity of FDI increasing steadily over time. It grew from a registered capital of 140.9 million dollars in 1991 to 3,744.7 million dollars in 1996. The United States withdrew its embargo against Vietnam at this time, and the investment climate in Vietnam altered dramatically. However, in the period 1997-2000, FDI dropped due to the impact of the Asian financial crisis in 1997. The registered FDI capital reached 2,030.1 million USD in 1997, with an average project scale of 20.5 million USD, by 2000, the registered FDI capital had dropped to 250.1 million USD, with an average project scale of 4.2 million USD.

In the years 2001-2005, FDI inflows into the Red River Delta began to revive, but at a moderate pace. During this time, the Red River Delta region attracted 820 FDI projects totaling \$5,260.2 million in registered capital. FDI into the Red River Delta region fluctuated between 2006 and 2010, with a sporadic increase and reduction. In 2006 and 2007, total registered capital was USD 3,312.4 million and USD 6,685.8 million, respectively. In 2008, the amount of FDI capital registered in the Red River Delta hit a new high of \$8,051.3 million. This is also the year that foreign direct investment (FDI) into our country set a new high of 71,726.8 million USD. In 2009 and 2010, FDI inflows into the Red River Delta declined dramatically as a result of the global economic crisis. In 2009 and 2010, total registered capital was USD 1,421.3 million and USD 3,830.5 million, respectively.

Inflows of foreign direct investment into the Red River Delta region have been recovering since 2012. The quantity of FDI in the Red River Delta has increased for the past eight years. The year 2017 celebrates the 30th anniversary of foreign direct investment (FDI) into Vietnam and the Red River Delta region. In 2017, FDI capital into the Red River Delta set a new high in the first 30 years of FDI attraction, with 12,006.6 USD million in registered FDI capital. The years 2018 and 2019 are two consecutive years that FDI inflows into the Red River Delta, including notable milestones when FDI inflows steadily increased over this time. In 2018, the Red River Delta region attracted 1,155 FDI projects totaling 14,883.5 million USD in registered capital. This figure in 2019 is 1,542 projects with a total value of 15,095.6 million USD. This is also the year in which the Red River Delta region attracted the most projects and registered FDI capital, from 1988 to the present.

Regarding localities, Hanoi, with 5,965 projects and a total registered capital of 34,778.93 million USD, leads the region in terms of FDI attraction, accounting for 57.9% of projects and 32.6 percent of FDI inflows into the Red River Delta region. The second most FDI-attractive province in the Red River Delta is Bac Ninh, with 1,521 projects and a total registered capital of 19,054.67 million USD, accounting for 14.8 percent of projects and 17.9 percent of FDI capital. The third most FDI-attractive province in the Red River Delta is Hai Phong with 776 projects and a total registered capital of 18,849.67 million USD, accounting for 7.5 percent of projects and 17.7% of FDI inflows into the Red River Delta region. Thus, the three cities in the Red River Delta that draw the most FDI, Hanoi, Bac Ninh, and Hai Phong, account for 80.2 percent of projects and 68.2 percent of total registered FDI in the region.

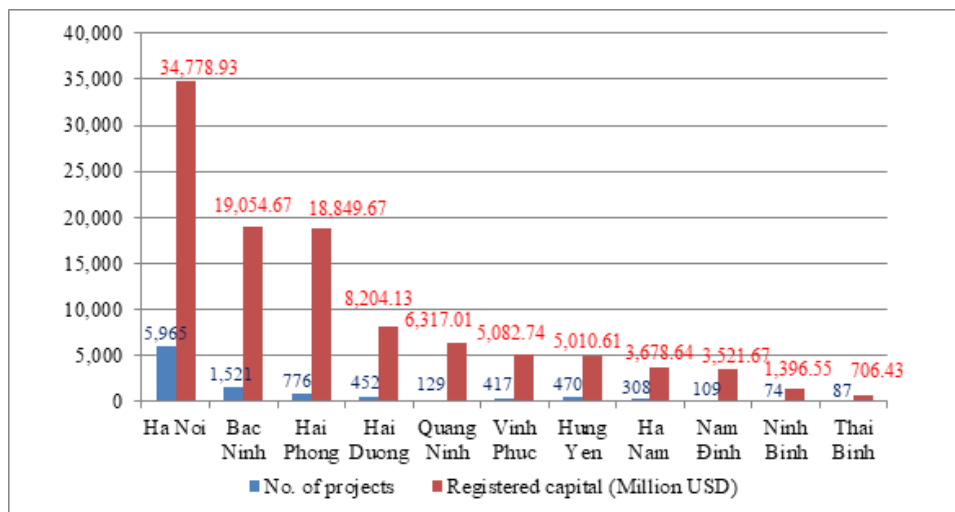


Chart 02: Registered FDI in the Red River Delta by locality, accumulating valid projects until 31/12/2019

(Source: Department of Foreign Investment and the authors' calculations)

In terms of FDI attraction, Hai Duong and Quang Ninh are the fourth and fifth provinces in the Red River Delta, respectively. Hai Duong received 452 projects totaling \$8,204.13 million in registered capital, representing for 4.4 percent of total projects and 7.7% of total FDI capital into the Red River Delta. Ninh Binh and Thai Binh are the two cities in the last group. Ninh Binh is the locality with the lowest number of FDI projects attracted, with 74 projects, total registered capital of \$1,396.55 million USD, accounting for 0.7 percent of projects and 1.3 percent of FDI capital inflows into the region. In terms of registered FDI, Thai Binh has the lowest amount of registered FDI capital in the region, with only \$706.43 million USD, accounting for only 0.7 percent of total FDI capital in the Red River Delta.

A number of localities in the region are cooperating and linking together in order to improve FDI attraction, such as, Quang Ninh and Hai Phong, Hanoi and Bac Ninh. Quang Ninh and Hai Phong have signed a number of cooperation and development programs in a variety of fields, including tourism development, infrastructure construction, planning (including inter-regional planning) and cooperation for attracting investment. Quang Ninh and Hai Phong have joined together to invest in a variety of traffic-related projects, including: A road project connecting Ha Long City and the Bach Dang Bridge; Project Bach Dang bridge, path, and crossroads at the end of the route; a road connecting Ha Long - Hai Phong highway with Nam Tien Phong Industrial Park. Typically, the Ha Long-Hai Phong Expressway is a critical project for connecting the North's bustling economic zone (Quang Ninh - Hai Phong - Hanoi). In addition, Quang Ninh and Hai Phong collaborate closely in managing the seaport system and related services, as well as modernizing road transportation routes to enable infrastructure connections in the Red River Delta region. With their close proximity and mutual influence, Hanoi and Bac Ninh have actively supported and assisted each other in participating in forums and seminars, conferences, annual investment promotion programs, they also regularly conduct promotion activities, share and exchange information on policies to support businesses. In terms of transportation, the two cities have prioritized investing in the development of the transportation system, collaborating to overcome obstacles and accelerate the implementation of traffic projects connecting Hanoi - Bac

Ninh and Hanoi and connecting to other communities in the Red River Delta. Local cooperation has aided in boosting economic and social growth, safeguarding national defense and security, and attracting international investment, all while taking advantage of each locality's unique assets. According to the evidence shown above, a number of communities in the region have collaborated in planning and investment promotion, particularly in infrastructure construction, in order to assist each other in attracting FDI.

Although a number of localities in the region have begun to link and collaborate with one another in order to increase FDI attraction, the size and scope of linkage remains restricted, primarily through conferences on locality connection and cooperation. Localities have not yet developed a cooperative cooperation program among localities in the region to attract FDI; instead, this cooperation is based solely on the voluntariness and goodwill of a few close neighbors, resulting in a restricted link and scope. The general trend in the Red River Delta is that localities are still competing for FDI. This is shown in a number of ways, including: the spatial distribution of industrial development in the region is still insufficient, and there is still overlapping investment; The region's industrial development orientation is unclear; all towns have plans to attract foreign direct investment (FDI) in the electronics industry, but only a few can really do so. Furthermore, in addition to Vietnam's overall policies to attract FDI, localities also offer a variety of preferential policies to entice international investors to invest in their areas. If a region's communities do not connect with one another, it will face difficulties in attracting FDI inflows and retaining foreign investors in the long run. As a result, in order to attract FDI into the region, it is vital to establish a foundation for regional collaboration and connection.

3.2. Results of quantitative research

3.2.1. Regression findings using the Durbin spatial econometric model (SDM)

a) Moran's I test

Theoretically, it is entirely possible that interactions between localities in space, especially localities sharing border. If mutual interaction occurs, then it is necessary to examine and analyze the spatial interactions between localities to make an accurate, not biased estimate. One of the most popular and effective methods is Moran's I test.

Table 01: Checking Global Moran's I of FDI

Variable	Moran's coefficient I	Value p
FDI_2010	0.203	0,014
FDI_2011	0.266	0.006
FDI_2012	0.247	0.002
FDI_2013	0.397	0.000
FDI_2014	0.492	0.000
FDI_2015	0.380	0.000
FDI_2016	0.329	0.001
FDI_2017	0.261	0.020
FDI_2018	0.339	0.001

(Source: Authors' calculations, 2020)

Table 01 shows that all years show a very strong spatial correlation with a significance level less than 5%. On the other hand, the test coefficients with such high significance also imply that, the normal estimation methods ignore the spatial interaction between localities will lead to biased and inaccurate estimates, thereby does not reflect exactly the nature of factors affecting FDI. Moran's coefficient calculation results show that, spatial model is suitable for analyzing factors affecting FDI.

b) Choice of spatial matrix and spatial model

The selection of spatial matrix, especially the suitable distance to calculate the interaction between FDI flows of localities, as well as independent variables based on Akaike's statistical test (Akaike Information Criterion - AIC). In addition, the binary weight matrix is also tested based on the assumption that provinces with the same border have a very strong influence on each other's FDI flows. AIC test results for FDI flows in the Red River Delta are as follows:

Table 02: AIC results of spatial matrices

Parameters	CW_150	CW_250	CW	IDW_3	IDW_5
AIC	0.208	0.469	0.480	0.558	0.534

(Source: Authors' calculations, 2020)

The results of AIC statistical analysis in Table 02 show that the matrix with the most appropriate result is the one with a blocking coefficient of 150 km. This means that at a distance of 150km, the interaction between localities is very strong and reflected in the estimates. In addition, localities having the same administrative boundaries also have a very strong interaction with each other.

Regarding the research model, the spatial model has many different variations, but the most common are 03 models: spatial correlation model (SAR), spatial error model (SEM), and Durbin space economics model (SDM). In this study, the authors use the Durbin spatial econometric model (SDM) because the SAR model and the SEM model are a special case of SDM, namely:

- If the coefficient $\theta = 0$, the SDM model becomes the SAR model.
- If the coefficient $\theta = -\beta\lambda$, then the SDM model will become the SEM model.

Therefore, the Durbin spatial econometric model will have many advantages and is more comprehensive than the SAR and SEM model in spatial regression analysis. On the other hand, in order to make the selection more rigorous and scientific, the author calculates the Hausman test and the space lag coefficient Rho.

Table 03: The results of the Hausman test and the spatial lag coefficient Rho

Test	Binary model	150km model
Rho	-0,152***	-0,278***
Kiểm định Hausman	p= 0,022	p= 0,0047

*Note: *, **, *** denote significance levels at the 10%, 5%, and 1% levels, respectively.*

(Source: Analysis and synthesis by the authors, 2020)

According to regression results with two spatial matrices, the Rho coefficient in both models is smaller than 0 and has statistical significance at 1%. This regression results demonstrate that

when provinces are close to one another, they are more likely to compete for FDI. The Hausman test has a p-value of less than 0.05, indicating that the spatial model with fixed temporal effects is more appropriate and superior than the random effect space model. Table 03 additionally shows that the binary space model and the spatial model with intercept 150km are both consistent with the Red River Delta data structure. In particular, the spatial model with a 150km intercept coefficient proved to be the most appropriate and best because it included the common administrative boundary of the two countries. In fact, proximity is far more important than administrative boundaries for attracting FDI because economic and business activity are extremely mobile.

c) Regression results

The SDM regression result yields three impact results: direct, indirect, and overall impact. The direct impact, in particular, suggests that FDI inflows into a locality would be influenced by what factors of that locality; the indirect impact suggests that FDI inflows into a locality would be influenced by what factors of the nearby locality; the overall impact is based on the sum of direct and indirect impacts.

Table 04: Results of Spatial Durbin Model (SDM)

Variables	Direct impact	Indirect impact	Overall impact
Market size GRDP	1.198***	0.308	1.507***
Labour quality	0.075***	0.041**	0.116***
Labour cost	-1.984**	-0.051	-1.933***
Infrastructure for roads	0.954**	0.450**	1.404**
Infrastructure for IT	-0.183	-0.763	-0.947
Concentration of FDI labour	0.050***	0.055***	0.105***
Concentration of private labour	-0.060***	-0.062***	-0.122***
Degree of urbanization	0.043**	0.070	0.114**
Quality of economic management	0.070*	0.075	0.146***

Note: *, **, *** denote significance levels at the 10%, 5%, and 1% levels, respectively

(Source: Authors' calculations, 2020)

- *Results of direct impact:* Regression results indicate that the seven variables, namely market size, labour quality, labour cost, infrastructure for roads, concentration of enterprises, degree of urbanization, quality of economic management exert a direct impact on attracting FDI inflows into a region. Only IT infrastructure is not the component in attracting FDI to a location.

- *Results of indirect impact:* Regression results show that the three variables including labour quality, infrastructure for roads, concentration of enterprises of a locality have an impact on nearby localities. The remaining factors such as market size, labor costs, information technology infrastructure, degree of urbanization or quality of economic management have no indirect influence on neighboring localities. This means that the impact of these factors is concentrated within the locality rather than extending over the region.

- *Results of overall impact:* Regression results show that, factors such as labour quality, infrastructure for roads, has a significant impact on the whole Red River Delta region's ability to attract FDI. Meanwhile, factors such as market size, labor cost, degree of urbanization or quality of local economic management only affect specific local FDI flows. On the other hand, the factor

of IT infrastructure has no effect on FDI attraction. The two factors including labour cost and the degree of private labour concentration has a “reverse” effect, negatively affecting FDI attraction.

3.2.2. Regression results using the Pooled Mean Group method (PMG)

Table 05: Results of Pooled Mean Group Regression

Variables	Short term impact	Long term impact
Market size GRDP	-1.324	0.927***
Labour quality	-0.112***	0.077***
Labour cost	-1.833	-1.280***
Infrastructure for roads	-2.352	0.799**
Infrastructure for IT	2.127	-0.750
Concentration of FDI labour	0.023	0.056***
Concentration of private labour	0.043	-0.064***
Degree of urbanization	-0.820	0.189***
Quality of economic management	-0.076***	0.128***

Note: *, **, *** denote significance levels at the 10%, 5%, and 1% levels, respectively

(Source: Authors' calculations, 2020)

The findings of PMG regression and the results of Durbin spatial econometric regression (SDM) have many similarities especially the impact in the long run of the two results is quite similar. Furthermore, the PMG regression results reveal the following unique features: In the long run, labor quality and economic management quality have a beneficial impact on FDI attraction, but in the short term, they have a negative impact. Other factors have no specific impact in the short term, but they all have a strong influence in the long term as expected.

4. CONCLUSION AND POLICY IMPLICATIONS

With the research results above, provinces can coordinate with each other to take advantage of the attractiveness of the quality of labor, road infrastructure, and the level of FDI business convergence in order to attract FDI to the whole region, in following detail:

- *First*, it is necessary to strengthen training links and improve the quality of human resources. Training institutions and provinces in the region must be aware of the importance and significance of training linkages in order for all parties to benefit from and even support one another in overcoming deficiencies and shortcomings. Training connections must strive to increase quality and assist one another in industries where training is needed but not yet available. Cooperation and training activities must be well investigated and analyzed in light of the locality's strengths and shortcomings, with the goal of assisting each other in improving the quality of human resources.

- *Second*, localities should increase linkages, particularly for projects that are pervasive and connect regionally to complete the transportation infrastructure system. Local governments must also prioritize the construction of widespread traffic infrastructure that is connected to major traffic hubs and vital economic centers linked to the Region's transportation infrastructure network. Localities must research and collaborate to ensure the synchronous growth of each local's structural system as well as mutual infrastructure support in attracting FDI.

- *Third*, local governments need to improve ties in order to establish a favorable investment climate for attracting and growing FDI businesses. It is vital to execute links in enhancing the environment, investment attraction policies, and especially investment promotion activities in order to boost FDI

attractiveness in the entire region and towns in particular. Furthermore, provinces in the Red River Delta must focus on policies that promote the formation and development of industrial clusters in order to construct production networks and value chains, as well as increase supporting industry capacity and competitiveness of domestic businesses. It is because the close relationship between FDI and domestic firms is a very effective strategy for the FDI sector to invest in Vietnam for the long run.

- *Fourth*, local governments should develop a scheme to connect provinces in the Red River Delta in order to attract FDI. Localities in the Region must agree on common rules and regulations on the effective use of resources in the region in order to avoid competing with one another. The regional cooperation and linkage system must ensure that unfair competition among localities is overcome, as well as increase support and linkage between localities, in order to optimize localities' strengths while also offsetting the region's difficulties and constraints in attracting FDI. The Chairman of the People's Committees of the provinces must sign the linkage program between the provinces in the Red River Delta in order for it to be implemented successfully and efficiently. As a result, each year the Chairman of a province's People's Committee will take the lead in implementing the signed linkage program. Leaders of the People's Committees of provinces and cities agreed to direct relevant departments, branches, and units of each locality to implement particular connecting contents based on the signed association program. Every year, the provinces and cities of the Red River Delta will convene to assess the results of cooperation and association content, as well as define the mission orientation for the following year, assuring practical efficiency and consistency with previous years' practice.

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FACTORS AFFECTING THE APPLICATION OF MANAGERIAL ACCOUNTING IN VIETNAMESE SMALL AND MEDIUM SIZED ENTERPRISES

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Abstract: *Management accounting is a system that provides effective information in the internal management of enterprises in general and SMEs in particular. The application of managerial accounting is influenced by many factors both inside and outside the business. In this article, Exploratory Factor Analysis (EFA) were used to identify and measure the impact of seven factors affecting the ability to apply management accounting in Vietnamese small and medium enterprises (SMEs). The study ends with recommended solutions to improve the ability to apply management accounting, increasing efficiency of management accounting in corporate governance.*

Keywords: *EFA, Exploratory Factor Analysis, factor analysis, managerial accounting, management accounting, SMEs*

1. INTRODUCTION

Promoting international cooperation and integration to global economy have been the critical features of Vietnam. After joining the World Trade Organization (WTO), Vietnam signed and gradually implemented new free trade agreements (FTAs) which have posed both opportunities and challenges for SMEs. According to the Economic Census 2017 by General Statistics Office of Vietnam, Vietnam had nearly 517,900 operating enterprises, increased by 51.6% from 2012, of which SMEs accounted for 98.1%. SMEs are indeed the back-bone of any country and these businesses need to be nourished and supported in order to bring equilibrium towards the sustainability of the economy (Valaei et al., 2017). In order to help Vietnamese SMEs to be confronted with transformation in businesses, managerial accounting practices should contribute significantly to the timely and accurate manner for decision-making process. According to literature review, there seems to be growing concerns in term of application of management accounting in management activities in SMEs globally. The study aims to identify internal and external factors affecting the application of management accounting in Vietnamese SMEs by quantitative approach. The study recommend it is crucial to adopt the most appropriate managerial accounting practices in their business to improve performance and sustainability.

2. LITERATURE REVIEW

Managerial accounting practices (MAPs) has increasingly becoming an important part to serve the business management and administration of enterprises. However, MAPs in SMES has got less attention from researchers compared to large corporation due to the broad notion that management accounting is a well-organized management tool that could be more effectively used in large firms. In addition, there is a great deal of research of how management

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accounting can be applied in large enterprises. Since 2000s, however, there has been a number of studies assessing the need for management accounting information in SMEs. These studies stem from the fact that SMEs have higher rate of failure or bankruptcy than large enterprises due to their inadequate attention to MAPs (Nadan, 2010). On the other hand, SMEs were the largest sectors in most economies, contributing significantly to national GDP and employing a significant portion of employers (Nadan, 2010).

Based on empirical findings, there are both internal and external factors affecting application of MAPs in SMEs (Klaus Flacke and Klaus Segbers (2005), Ismail and King (2007)...). Klaus Flacke and Klaus Segbers (2005) studied internal factors and their influence on management accounting in Germany SMEs. Their survey showed the widespread adoption of management accounting in SMEs, but there was no significant interrelation of management accounting and company size, with significant positive correlation between management accounting and the stake of owners in company. According to study of Ismail and King (2007) with SMEs in Malaysia, there was a significant role of technology and IT in accounting information systems. In which, technology complexity, firm's knowledge level, owner participation in the entity, external experts and firm size had been studied.

Tuan Mat (2010) stated that changes in both external and internal organizational factors have affected MAPs. In competitive environments, SMEs have to change management manners, technology and structure which affected managerial accounting and management of the business in return (Tuan Mat, 2010). According to Msomi et al. (2019) pointed out the systematic limitations with developing countries affecting the accounting and governance of SMEs, in which technical factors, technology is limited and has not caught up with the world.

Tran Anh Hoa (2003); Nguyen Ngoc Huyen Tram (2007), Pham Ngoc Toan (2010), Doan Ngoc Phi Anh (2012) ... mentioned that Vietnamese SMEs had not paid sufficient attention to the practices of MAPs and fully exploit the functions of the accounting system in management. Doan Ngoc Phi Anh (2012) studied that the most significant factors affecting management accounting in SMEs were competition and leadership. Pham Ngoc Toan (2010) also identified lessons in applying management accounting in SMEs in other countries to draw a conclusion and recommendations to apply management accounting for SMEs in Vietnam.

In general, these studies and surveys believed that SMEs in Vietnam had been gradually improving the structure and increasingly using more financial solutions (Phung Thanh Loan (2019), Ngoc Toan Nguyen et al (2019), Pham Ngoc Toan (2010) ...). However, most SMEs only applied part of management accounting in the information system, focusing on exploiting the function of cost management and planning for short-term decision. Tran Ngoc Hung (2016) through a survey of SMEs that already applied management accounting, pointed out some factors affecting the application of management accounting, including the external market, perceptions of the owners to MAPs, business strategy, corporate culture. Ngoc Toan Nguyen, et al (2019) examined the factors that affect management accounting in SMEs in Hanoi, in which CEO's perception of management accounting was the most important factors.

Given the important role of the SMEs sector for the Vietnam economy and limited research focusing on this sector, this study aims to observe the extent of MAPs implementation in SMEs in Vietnam and the contingent factors that affect the adoption of MAPs.

3. RESEARCH MODEL

3.1 Objectives

Given widely acknowledged in the literature, several studies have revealed that some factors affecting the application of management accounting in SMEs, including external and internal factors (Tuan Mat (2010), Alper Erserim (2012), Ahmad et al (2012) and Lucas, Prowle and Lowth (2013), Doan Ngoc Phi Anh (2012), Tran Ngoc Hung (2016), Thai Anh Tuan (2019)). Tran Ngoc Hung (2016) listed 8 factors affecting the application of management accounting in Vietnamese SMEs, including: enterprise size, management accounting organization cost, corporate culture, qualification of accounting staffs, business strategy, level of state ownership, market competition and executive perceptions to MAPs. Thai Anh Tuan (2019) studied and analyzed 5 factors affecting the application of management accounting, focusing on market competition, decentralization in enterprises, IT application, the manager's interest in the management accounting and the qualifications of the accounting staffs.

Based on literature review, this research aim to apply quantities model to investigate the factors in application of MAPs in Vietnamese. There are 7 factors potential affecting the application of MAPs in Vietnamese SMEs will be measured, including enterprise size, cost of managerial accounting, corporate culture, qualification of accounting staffs, business strategy, market competition, perceptions of business owner/administrator.

3.2 Research Methodology

3.2.1 Sampling methods

The data analysis method used for the research is exploratory factor analysis (EFA analysis). To be able to use the EFA analysis tool the sample size must be large. However, determining a suitable sample size is very complicated, so it is often based on experience. According to Hair et al (2006) quoted in Le Dinh Hai (2018), with a minimum of 5 observations for one estimated parameter (observed variable). For this study with 27 parameters to be estimated (observed variable), the minimum sample size is needed: $n \geq 5 \times 27 = 135$. Therefore, this study with the selected sample size of 150 observations meets the requirements. The collected data are processed on SPSS 20 software. The results will be used for analysis, statistics, data processing and linear regression analysis.

3.2.2 Methods of data collection

Primary information is collected through questionnaires. The questionnaire is prepared in advance to conduct expert interviews and consult experts on factors affecting the application of management accounting in SMEs. Then, after synthesizing expert opinions, comparing with previous research results to choose factors that will affect the appropriate management accounting application with the research sample. The questionnaire was then completed with each content, each component as well as the scale of each factor. All observed variables in the questionnaire use a Likert scale including: (1) strongly disagree; (2) disagree; (3) puzzled; (4) agree; (5) strongly agree. The analytical model includes 7 factors affecting the application of management accounting in SMEs with a total of 27 observed variables; and 1 scale representing the ability to apply management accounting in SMEs with 5 observed variables (See Table 1).

Table 1: Scales of factors affecting the application of management accounting in SMEs

No	Variables	Scaling	
1	Enterprise size - QM	+ Revenue + Number of staffs + Number of departments, branches	QM1 QM2 QM3
2	Qualification of accounting staffs - TDNV	+ Accounting staffs with intermediate and college degrees + Accounting staffs with bachelors + Certified accounts + Accounting staffs with international certifications	TDNV 1 TDNV2 TDNV 3 TDNV 4
3	Corporate culture – VHDN	+ The support of administrators for employees + The mutual support between employees + Contents on the common goals of the business	VHDN1 VHDN2 VHDN3
4	Cost of managerial accounting - YCCP	+ Costs for technology investment serving the accounting and management organization (machines, equipment, Internet ...) + Consulting costs from units, organizations, and experts on accounting and management organization	YCCP1 YCCP2
5	Business strategy - CLKD	+ Provide high quality products + Variety and availability of goods + Flexible in design changes + After-sale service + Production according to delivery requirements + Production of specialized goods and services	CLKD1 CLKD2 CLKD3 CLKD4 CLKD5 CLKD6
6	Market competition - ALCT	+ The level of competitors + The level of competition in distribution channels + The level of competition in market share + Number of competitors in the same segment + The level of price competition	ALCT1 ALCT2 ALCT3 ALCT4 ALCT5
7	perceptions of business owner/administrator NTC	+ The owner / administrator highly appreciated the usefulness of technical management accounting tools + The owner / administrator is knowledgeable about technical management accounting tools + The owner / manager has a high demand for the application of management accounting + The owner / administrator accepts high costs in applying management accounting	NTC1 NTC2 NTC3 NTC4
8	Application of MAPs in SMEs	+ Ability to apply cost management accounting techniques + Ability to apply accounting techniques for management and estimation + Ability to apply accounting techniques for performance evaluation + Ability to apply management accounting techniques to support decision making + Ability to apply strategic management accounting techniques	KNVD1 KNVD2 KNVD3 KNVD4 KNVD5

(Sources: Authors)

2.2.3. Methods of data synthesis, processing and analysis

The study used SPSS 2.0 for exploratory factor analysis to identify the factors that affect the application of management accounting in SMEs. The results of the EFA analysis will be the basis for proposing a number of solutions to improve the ability to apply management accounting in Vietnamese SMEs.

Step 1: Verify the quality of the scale with Cronbach's Alpha coefficients

Testing the reliability of the scale is to measure the reliability of a set of observed variables, whether they are reliable when expressing the properties of that factor and there is a close correlation between them. or not. According to Dinh Phi Ho (2018), the scale is considered good if it meets two criteria: (1) Cronbach Alpha coefficient from 0.6 or more and (2) observed variables have a correlation coefficient with the total variable (item -total correlation) greater than 0.3. The higher the Cronbach Alpha coefficient, the more reliable the scale is.

Step 2: Factor analysis to discover EFA

Exploratory factor analysis EFA is used to determine convergent values, discriminant values and collapses estimated parameters for groups of variables (According to Le Dinh Hai, 2018). The study using the Barlett test is used to examine the observed variables in the factors correlated with each other or not. Barlett test is statistically significant when Sig. <0.05, proving that the observed variables are correlated with each other in the population.

This method is only effective when the coefficient KMO (Kaiser-Meyer-Olkin) must be 0.5 or more. If KMO <0.5, factor analysis is not suitable for the data (Hoang Trong and Chu Nguyen Mong Ngoc, 2005). In this step, the variables with factor load factors less than 0.5 will continue to be rejected. Next, the study analyzes the eigenvalue and the total variance extracted to determine the number of factors in the EFA analysis and shows that the EFA model is appropriate. After removing the unsuitable variables, to check the suitability of the variables after being adjusted, the study used the Cronbach Alpha test to confirm once again the reliability of the scale.

Step 3: Regression analysis and hypothesis testing

According to Cooper and Schindler (2006), linear regression is often used to test and explain causality theory. Therefore, the satisfactory evaluation scales are included for correlation analysis and regression analysis to test hypotheses. To ensure the appropriate regression model, the hypothesis will be tested: there is no multicollinearity phenomenon through the VIF coefficient, the residual variance is constant.

4. RESULTS AND DISCUSSION

4.1 Test the quality of the scale with Cronbach's Alpha coefficients

Through testing the reliability of 8 scales by Cronbach Alpha test in Table 2, we see that Cronbach Alpha coefficients of all scales are greater than 0.6. Therefore, all scales are statistically significant and have the necessary reliability, these 8 factors are eligible to continue to be used in the next analysis.

More about this source text

Table 2: Summary of the results of analyzing the quality of the scale by Cronbach Alpha coefficients

No.	Scale	Variables	No. of Variables	Cronbach Alpha coefficients
1	Enterprise size - QM	QM1,QM2,QM3	3	0,775
2	Qualification of accounting staffs - TDNV	TDNV 1,TDNV2,TDNV 3,TDNV 4	4	0,828
3	Corporate culture – VHDN	VHDN1, VHDN2, VHDN3	3	0,836
4	Cost of managerial accounting - YCCP	YCCP1,YCCP2	2	0,751
5	Business strategy - CLKD	CLKD1,CLKD2,CLKD3,CLKD4,CLKD5,CLKD6	6	0,789
6	Market competition - ALCT	ALCT1, ALCT2, ALCT3, ALCT4, ALCT5	5	0,826
7	Perceptions of business owner/administrator NTC	NTC1,NTC2,NTC3,NTC4	4	0,820
8	Application of MAPs in SMEs	KNVD1,KNVD2,KNVD3,KNVD4,KNVD5	5	0,832

(Source: Authors)

4.2 The results of the EFA

4.2.1 Testing the appropriateness of exploratory factor analysis

In Table 3, coefficient KMO is 0.815 (> 0.5), so exploratory factor analysis is appropriate for actual data.

Table 3: KMO and Bartlett test results

KMO (Kaiser-Meyer-Olkin Measure of Sampling Adequacy)		.815
Bartlett's Test of Sphericity	(Approx. Chi-Square)	3982.212
	df	351
	Sig.	.000

(Source: Authors)

4.2.2 Test the correlation of observed variables in a representative measure

In Table 3, and Bartlett test, Sig. is 0.000 (< 0.05) which showed that the observed variables have a linear correlation with the representative factors.

4.2.3 Test the explanatory level of the observed variables for the factors

In Table 4, the explained total variance has 7 factors with Eigenvalue > 1 and the total variance extracted is 65.621%, satisfying the condition ($> 50\%$). This means that 65,621% change in these factors is explained by the observed variables. From the above analysis, it can be seen that exploratory factor analysis EFA is consistent with the overall data.

Table 4: Total explanatory variance of factors

Components	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	% of Variance	Total	% of Variance	% of Variance	Total	% of Variance	% of Variance
1	5.659	20.960	20.960	5.659	20.960	20.960	3.421	12.671	12.671
2	4.204	15.571	36.532	4.204	15.571	36.532	3.234	11.978	24.649
3	2.249	8.329	44.860	2.249	8.329	44.860	2.875	10.647	35.297

4	2.120	7.851	52.711	2.120	7.851	52.711	2.358	8.733	44.029
5	1.342	4.970	57.681	1.342	4.970	57.681	2.280	8.445	52.474
6	1.080	4.002	61.683	1.080	4.002	61.683	2.218	8.215	60.689
7	1.063	3.937	65.621	1.063	3.937	65.621	1.331	4.931	65.621
...									
27	.119	.440	100.000						

(Source: Authors)

4.2.4 Results of exploratory factor analysis

From the results of the rotation factor matrix analysis, the study removes the low-level observable variables of the factors:

+ Business strategy: We remove the observed variable QD5 because there is a load factor for both factors.

+ Market competition: We remove the observed variable ALCT1 because the factor load factor is less than 0.5.

+ The owner/administrator's awareness factor on management accounting: We removes the observed variable NTC4 because the load factor is less than 0.5.

+ The remaining factors have observed variables whose load coefficients are all greater than 0.5, so they are all statistically satisfied.

After analyzing the EFA, we still extract 7 factors as originally expected model. However, there are 3 factors that have changes in observed variables, so it is necessary to check the scale of those 3 factors. After adjusting the scale, through the Cronbach Alpha test of 3 factors, the results showed that all factors have Cronbach Alpha value which are greater than 0.6 and the correlation coefficient with the total variable is greater than 0.3. . Therefore, after adjusting the observed variables, the new scales are reliable.

4.2.5 Regression analysis

The consideration of the factors affecting the application of management accounting in Vietnamese SMEs is set up by a linear regression model: $KNVD = \beta_1 + \beta_2 \text{Quality of Business} + \beta_3 \text{TDNV} + \beta_4 \text{VHDN} + \beta_5 \text{ALCT} + \beta_6 \text{NTC} + \beta_7 \text{QM} + \beta_8 \text{YCCP} + u$. In which, the variables included in the regression analysis are determined by calculating the scores of the factors.

Table 5: Results of regression analysis

Independent variable	B	t	Sig.	VIF	Beta	Round Beta	Cumulative (%)	rank
(Constant)	1.122E-016	.000	1.000					
CLKD	.268	6.233	.000	1.000	.268	.268	16,3%	4
TDDN	.322	7.488	.000	1.000	.322	.322	19,6%	2
VHDN	.121	2.814	.003	1.001	.121	.121	7,4%	6
ALCT	.128	2.977	.002	1.000	.128	.128	7,8%	5
NTC	.115	2.674	.004	1.002	.115	.115	7%	7
QM	.298	6.930	.000	1.000	.298	.298	18,1%	3
YCCP	.391	9.093	.000	1.000	.391	.391	23,8%	1

(Source: Authors)

According to table 5, the regression coefficients have the value of Sig. smaller than 0.05, so the regression coefficients are statistically significant, i.e. independent variables in the model fully explain the change of the dependent variable. The VIF coefficients of the independent variables are all less than 2, so the model does not have the phenomenon of multicollinearity between the independent variables. From the model summary table, we have the coefficient of determination R^2 is 0.612, this shows that 61.2% of the change in the application of management accounting is explained by 7 independent variables in the model. From the analysis of variance, we see the value of Sig. of the F-test is Sig. is 0.00 (<0.05), so the regression function is appropriate.

4.2.6 Discussion

The results of regression analysis test showed that the independent variables in the model all explain the change of the dependent variable, the model has no multicollinearity phenomenon between the independent variables and 61.2% of the change in the application of management accounting is explained by 7 independent variables in the model, in addition, 38.8% is lost by other factors that have not been discovered. Looking at table 5 above can be seen, the order of impact of factors affecting the application of management accounting in Vietnamese SMEs is arranged in order from YCCP, TDNV, QM, ALCT, Corporate Culture, NTC with contribution levels of 23.8%, 19.6%, 18.1%, 16.3%, 7.8%, 7.4% and 7% respectively.

4.3. Conclusion and recommendation

4.3.1 Organize the management accounting system in the SMEs with reasonable costs

In Vietnamese SMEs, when considering the organization of corporate governance accounting, there is always a need to pay attention to issues such as equipment costs, manpower costs to perform the accounting management. treatment and consultation costs. (1) Regarding management accounting human resources: To be able to utilize and promote in the existing capacity of SMEs, at the same time to be able to limit costs incurred, research and propose tissue the organizational structure of the accounting apparatus of enterprises is a combination of financial accounting and management accounting, however, at least one person will be assigned to undertake the management of accounting. (2) Equipment: Vietnamese SMEs need to increase the application of information technology to data processing. Enterprises can choose pre-designed commercial software, or hire software design according to their needs in combination with other tools such as Excel, ... to be able to design management accounting reports. treatment is more flexible and effective.

4.3.2 Improve the level of management accounting staff

Human resources always play an important role in the success or failure of an enterprise, if the staff's qualifications in management accounting do not meet the requirements, the application of management accounting will not be done. implemented or implemented but ineffective. Therefore, to be able to utilize the existing human resources of the business, it is necessary to create conditions for management accountants to participate in management accounting courses to improve their qualifications, or can base themselves on The unit's financial situation to invite experts to train, guide and implement the first step in corporate governance accounting.

4.3.3 Improve the scale of the business

When participating in a market with too many competitors while businesses are not able to make a big difference, SMEs, instead of struggling to compete, can create a competitive advantage by connection. This appropriate association helps businesses create an effective value chain for customers, helping to improve the value of the business. Small and medium businesses need to develop strategies to engage communities or create a healthy ecological environment. Linking with other businesses helps businesses diversify operations, promote strengths and limit weaknesses of their own businesses.

4.3.4 Develop a flexible business strategy

SMEs with advantages of small scale and greater flexibility, so these businesses have the ability to quickly create and seize opportunities, especially exploiting and taking advantage of niche markets. The niche for large enterprises that have not been exploited or difficult to penetrate is an opportunity for SMEs, bringing many competitive advantages for SMEs. SMEs must find ways to grasp consumer trends of customers and meet customers' needs in order to improve their advantages and competitiveness in the market. Business managers must consider from the first activities such as introducing products to customers to diversifying the design, quality, and price of the product to be able to take full advantage of market segments that business existing businesses, expanding the market share for their products. Therefore, the business strategies of SMEs must be very flexible and suitable for each stage of the business, each market segment, each type of product ... in order to create differences and advantages. competition of the business in the long term compared to other competitors in the market.

4.3.5 Improve the competitive ability

Competitive pressure is a factor outside the enterprise, but it ranks 5th in the factors affecting the ability to successfully apply management accounting. In order to limit the pressures as well as take advantage of opportunities for growth, administrators can use communication channels to propagate to all employees of the business, on that basis, building a culture. strong and unanimous business. On the other hand, as analyzed above, Vietnamese SMEs can link together to create a reasonable value chain, in order to reduce competition pressure and promote the advantage of enterprises in trade. School

4.3.6 Building a strong corporate culture

Due to the characteristics of SMEs, especially micro enterprises, mainly formed from small business households, so the family culture model is still the mainstay. As for small or medium enterprises, it is necessary to study and pay attention to the following issues: business members must be aware of the importance and necessity of building corporate culture; the members of the business have consensus, sharing and doing work together towards the common goal of the business, which is the right and effective direction; members of the enterprise, especially the management team and human resources, must promote an active and active role when participating in the formation and development of corporate culture.

4.3.7 Raising awareness of the owner/enterprise administrator about management accounting

In SMEs, the owner / manager must be aware of the importance and role of management accounting information, so that the organization and implementation of management accounting can be implemented and effective. fruit. On the other hand, the management accounting information

will directly serve the owner / manager of the business to make business strategy planning and decision-making on production and business activities in the business. Therefore, in Vietnamese SMEs, managers should prioritize improving management skills and making positive changes in the usefulness of management accounting techniques, management accounting information. From there, the business owner or the business administrator can advise the owner on the investment to apply management accounting, and at the same time encourage and direct the employees in the unit in the process of implementing management practices

5. CONCLUSION

It is very urgent to study the factors affecting the application of management accounting in Vietnamese SMEs. With the exploratory factor analysis method, this study build and test a qualitative model to measure the relationship between the factors that affect the ability to apply management accounting in SMEs. Based on the survey of 150 SMEs, the study have identified 7 factors affecting the ability to apply management accounting in firms. At the same time, the study also measures the impact of each factor, based on ranking the importance of the factors. The study ends with recommended solutions to improve applicability MAPs in Vietnamese SMEs.

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ENHANCING RETAIL INDUSTRY PERFORMANCE TO MEET DIGITAL TRANSFORMATION REQUIREMENTS

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Abstract: *One can say that no industry has experienced as many changes as a result of digital transformation happening like the retail market. As an industry that relies heavily on the habits and purchasing power of mass consumers, retail has been subject to constant changes in recent times due to changing consumer habits. Now a day modern customers have more and more choices. The experience of new technologies causes them to generate new needs and demand more from the supplier. Not just buy an item, they buy the whole experience. The research focuses on clarifying the digital transformation model in the retail industry and the current situation of digital transformation retail in Vietnam. Thereby, proposing several solutions to improve the efficiency of the retail industry to meet the requirements of digital transformation.*

Keywords: *digital transformation, enhancing retail performance, retail industry*

1. INTRODUCTION

Industrial revolution 4.0 opens up many opportunities as well as challenges for the economy. Many occupations may disappear and the remaining professions will require adaptation and change in the technology race. It can be said that the retail industry is the area that is most affected by the digital transformation process. According to the national master plan on e-commerce development in the period of 2021 – 2025, by 2025, 55% of the population will participate in online shopping. This is a transformative opportunity for retail businesses to thrive, but it can also push businesses into the abyss if businesses do not have the flexibility to adapt and change or are not prepared for innovation at this breakneck speed.

In the context of the Covid-19 pandemic, it created more momentum for the shift from traditional commerce to e-commerce. Contrary to the gloomy picture of shopping centers under the influence of the pandemic, the online shopping business has a positive growth rate. Vietnam is a dynamic e-commerce market, with the number of Internet and smartphone users growing rapidly over the years. However, in 80 percent of the electronic trading transactions still follow the COD form (cash payment), the number of active units in the electronic payment sector has risen sharply during recent times along with the “ventilation” of the legal environment that signals the potential of this activity. One thing that doesn’t have to argue: The retail market is extremely competitive; and regardless of the scale of the business, the speed of digital transformation is also measuring the role of retail sales in the future.

2. THEORETICAL BACKGROUND AND THE PREVIOUS RESEARCH FACILITY

Retail: to any activity aimed at selling goods or services directly to an end-consumers for their personal use, not commercial purposes (Philip Kotler, 1994). Any organization doing this work is also a retail organization, whether goods or services are sold in person or by mail, by

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telephone, by a vending machine, or anywhere else. In addition, based on the Decree No. 23/2007/ND-CP issued on 12/02/2007 detailing the Commercial Law: Retail is the activity of selling goods directly to an end-consumers.

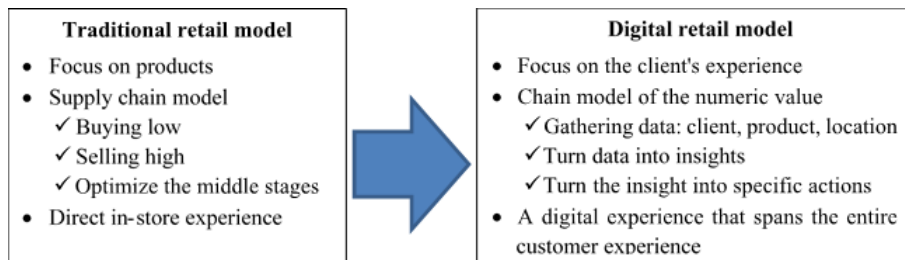
Digital Transformation: According to Gartner - the world’s leading information technology research and consulting company, the definition of digital transformation is as follows: “Digital transformation is the use of digital technologies to change business models, creating new opportunities, revenue and value.”

Digital transformation in retail is the shifting from a product-focused business model based on the supply chain to a customer-centric one, following a digital value chain modeled and based on data (Nikki Baird of Aptos)

Around the world, there are quite a lot of foreign studies conducted to study digital transformation in the modern retail sector such as: “The impact of digital transformation on the retail value chain” by Reinartz et al (2019); “Digital transformation in fashion retail” by Hauser et al (2019); “Digital transformation in food retail” by Syaglova (2019), etc. The research mainly focuses on analyzing the buying behavior of customers through technology platforms or the influence of technology and digital tools on retailers’ retail activities in the era of the digital explosion. In Vietnam, there are not many studies focusing on analyzing the development trend of the retail industry under the impact of the Covid-19 epidemic at present, which mainly goes into studying that influence on some specific fields such as real estate, tourism. Research by Nguyen Hoang Tien (2020) indicates development opportunities for digital marketing businesses in production and business activities.

3. DIGITAL TRANSFORMATION MODEL IN RETAIL

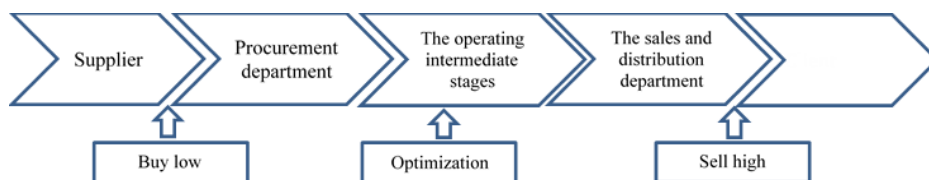
Digitals trend shaping the future of retail include artificial intelligence (AI), Internet of Things (IoT), Shopping via a chat / virtual assistant, E-payment and Digital payment, smart logistics, etc.,



Source: Compiled by the author from an article of Forbes magazine

3.1. Traditional retail

Traditional retail focuses on products and follows the supply chain model to buy cheap and sell dear to optimizing the middle stage.



Infographic 1: Traditional Supply chain

Source: Compiled by the author from an article of Forbes magazine

Buying low: Except if it reaches a massive scale and amount like Walmart help to bring advantages when negotiating, the rest are buying national or worldwide brands with much cheaper price than the competitors is a huge challenge. Some retailers have chosen to design and manufacture their own branded products, and this way also works in the short term, but are still knocked out by other goods with more competitive prices.

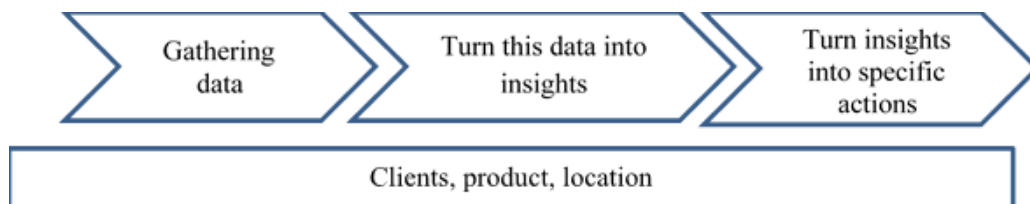
Selling high: This high-priced sale hasn't happened since the Great Recession in 2007. Retailers to get better prices often offer better customer service, but it's also challenging because customers are price-sensitive and quickly attracted to promotions and immediate benefits.

Optimize the middle stages: it's hard to compete on optimization because now your competitors are the tycoon like Amazon, Alibaba, etc. let's take a look at how Amazon Prime Now manage their warehouse by randomizing and optimizing it so it can ship in 27 US cities (and still rising) within an hour, it even faster than the time that ices can melt. Not to mention the retail and e-commerce segments that have funding from other businesses. It also means that no matter how hard you try, perhaps the savings from optimizing the process are just like a drop in the ocean, so it would be hard to beat a tycoon like Amazon.

Thus, the way retailers have operated in the past will have focused on the actual customer experience in the stores. They design in a way that makes customers stay in the stores for as long as possible so that while they are looking for the things they need, they will look around and buy more, together with other items and bringing more revenue.

3.2 Modern retail or digital retail

Modern retail or digital retail will focus on the customer and based on digital value chain data, divided into 3 stages: 1) Gathering data: client, product, location, then 2) Turn these data into insights and 3) Turn those insights into specific actions. The difference and value of innovation projects are that the speed and efficiency of collecting data and turning that data into useful insights, and then into appropriate actions. By those actions will bring value and efficiency of investment, like creating new service products, bringing new benefits, changing the way of interacting with customers, or take advantage of those insights to come closer to satisfying customer needs.



Infographic 2: Digital value chain

Source: Compiled by the author from an article of Forbes magazine

4. THE ACTUAL STATE OF THE RETAIL INDUSTRY IN VIETNAM AND THE DIGITAL TRANSFORMATION STORY

4.1 The potential of Vietnam's retail market facilitates digital transformation

Retail industry in Vietnam in recent years has always been considered as a potential retail market with a remarkable growth rate for the following reasons:

To begin with, the high urbanization rate has facilitated the modern retail market. In addition, Vietnam's urbanization rate is growing rapidly and is forecast to reach 55% by 2030 (McKinsey, 2019).

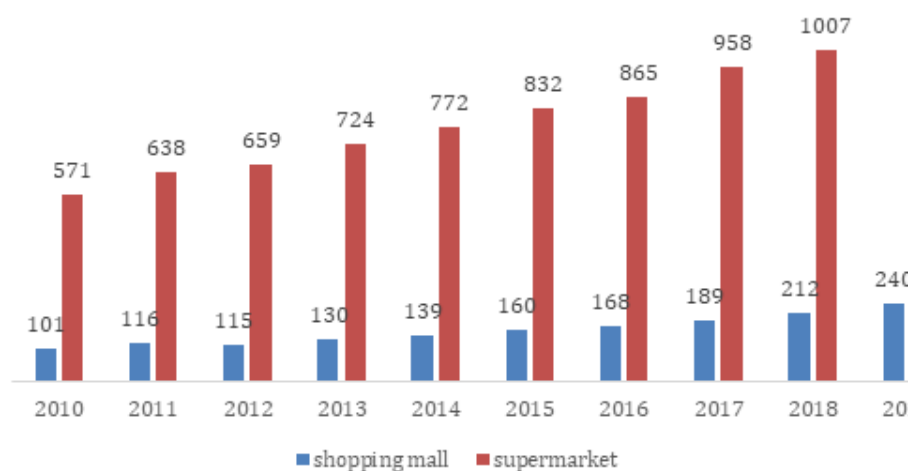
Secondly, Since January 1, 2015, the government has officially allowed 100% of foreign-invested enterprises to enter the domestic retail market, this change in government policy has also made it easier for many foreign retailers to enter the market. Within just a few years, many mergers and acquisitions occurred continuously such as Berlin Jucker (BJC) acquiring Metro Vietnam, Central Group owning Big C Vietnam. At the same time, there are many convenience store chains such as GS25 of Korea, 7 Eleven, etc.

Thirdly, the development of many industries that support consumption promotes the development of the industry. The first is the shipping sector with cash on delivery (COD) which is also one of the reasons promoting the development of e-commerce in Vietnam. Next is in the financial sector when consumer credit develops, enabling people to spend more. According to statistics from the State Bank of Vietnam, individuals have tripled in the recent period from 8.46% in 2014 to 23.72% in 2018.

In addition, the population is large, with a large market for the development of the retail industry. Vietnam had more than 95 million people, with a young population represents 58,5% of its inhabitants are from 15 to 54 years old (according to the data of the General Statistics Office in 2019). On the other hand, household spending increases and the rise of the middle class, etc. Vietnam is still a potential land for the development of the retail industry and a promised land that needs to be explored.

Last but not least, many opportunities for the modern retail market to develop. In contrast to some developed countries, Vietnam's retail market is still a traditional market with more than 75% of markets and grocery stores, etc. is the lowest rate in Southeast Asia compared to countries such as Singapore, Thailand, Malaysia, etc.

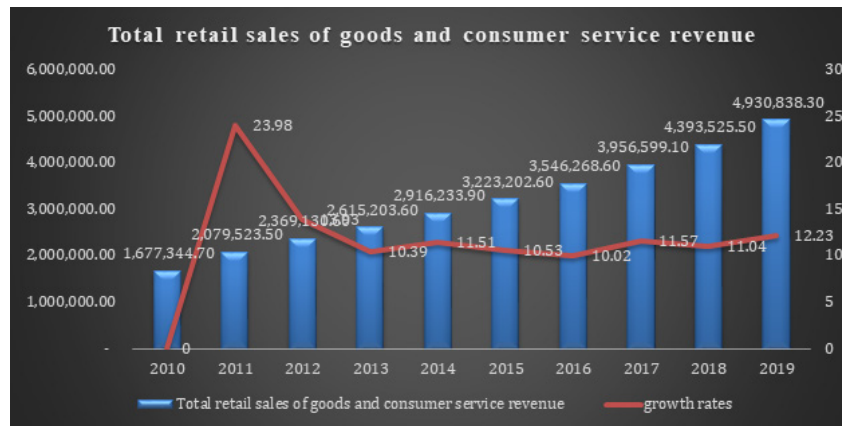
According to the General Statistics Office, the number of supermarkets and shopping centers in the country has continuously increased over the years.



Infographic 3: Number of supermarkets and shopping malls in Vietnam over the years

Source: Compiled by the author from the data of the General statistics office

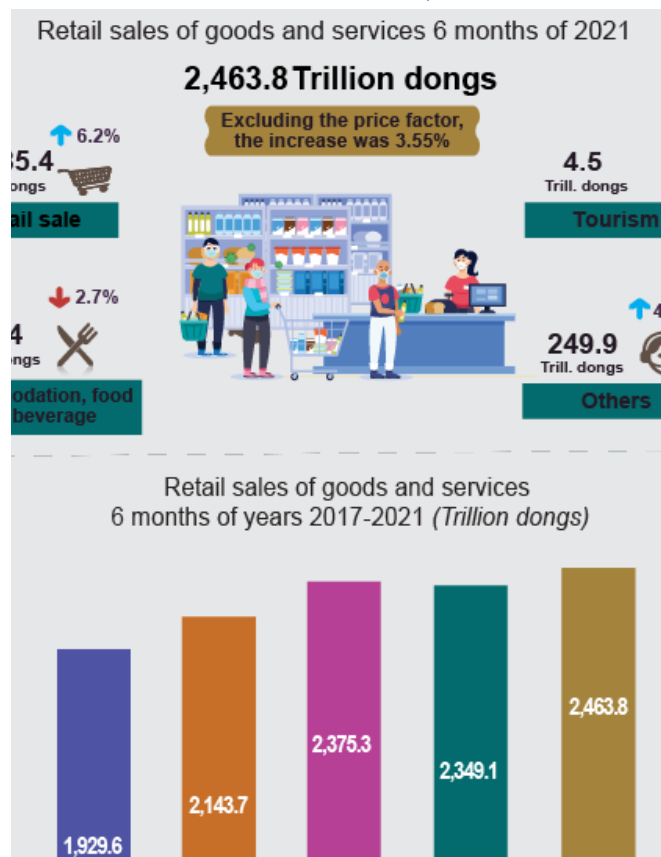
Besides the increase in the number of supermarkets and shopping centers, the total value of goods and services over the years has also increased. If in 2010 the total retail sales of consumer goods and services were at 1,677,344.7 billion VND, by 2019 these figures will be 4,930,838.3 billion VND; an increase of 3,253,493.6 billion VND; corresponding to an increase of 193.97%



Infographic 4: Total retail sales of consumer goods and services nationwide in the period 2010-2019

Source: Compiled by the author from the data of the General statistics office

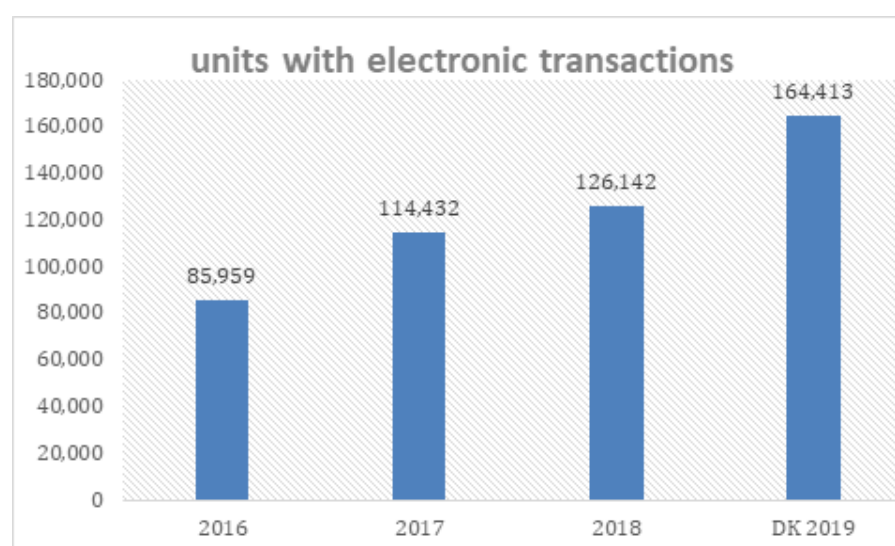
In 2021, although affected by the Covid-19 pandemic, with the drastic direction of the Government, Prime Minister, the initiative and creative ways of localities, with the support of the people and businesses in realizing the “dual goal”, the total retail sales of consumer goods and services in the first 6 months reached 2,463.8 trillion VND, increase 4,9% compared to the same period last year. In terms of sector activity, retail sales of goods in 6 months reached 1,985.4 trillion VND, comprise 80,6% of the total and increased by 6,2% over the same period last year (based on information from the General statistics office).



Infographic 5: Domestic trade in June and 6 months of 2021

Source: General statistics office

It can be said that, despite the impact of the epidemic, Vietnam's retail market still has positive growth thanks to a series of policies to support stimulus from the central to local levels and the rapid change and adaptation of businesses to new consumption trends. In particular, the Covid-19 tends to promote the online economy. According to the survey results of the Ministry of Industry and Trade in 2019, for the wholesale and retail industry, the number of units having e-commerce transactions is increasing, 2016 the number of units conducting e-commerce transactions was 85,959, by 2019 this number is expected to be 164,413; nearly doubled in four years.



Infographic 6: Number of units with e-commerce transactions in the wholesale and retail industry in the period 2016 -2019

Source: compiled by the author from the data of the Ministry of Industry and Trade

According to Google, Temasek and Bain & Company, Vietnam's online economy is booming with revenue growing 38% per year between 2015-2019 to reach a value of 12 billion USD, accounting for over 5% of the country's GDP, mainly driven by the thriving e-commerce segment. According to WeAreSocial's statistical report, as of January 2020, Vietnam has more than 68 million Internet service users, equivalent to more than two-thirds of the population, and more than 146 million mobile data network connections. Thus, the online channel will become more important in the next phase of the retail economy. In 2020, in addition to retailers such as Saigon Co.op, Vinmart & Vinmart+, which quickly grasped the online trend by promoting the sales app model on mobile phones, many manufacturing enterprises also "encroach" through this form. VISSAN Joint Stock Company has also joined the online business by launching this website: <http://vissanmart.com>.

According to Nielsen survey in February 2020, People's spending on essential items such as dry food, health care, and sanitation increased sharply, on average by about 35%-70%. Online retailers such as Tiki, SpeedLotte, etc. recorded an average number of orders in a day that increased at least 2-4 times compared to before the Covid-19 epidemic. Co.opmart's online shopping service increased 4-5 times in the same period. The transport unit Grab quickly launched Grabmart service to go to the supermarket on behalf of consumers. These are very quick adaptations to the market from retailers. The online retail market grew by an average of 39% in 5 years, higher than the growth of the traditional retail market by 10% in 5 years.

However, the domestic retail market is facing great challenges from the wave of foreign brands continuously pouring into the retail market. Some illustrious names in the retail industry like Lotte, Central Group, Aeon, Circle K, K Mart, Auchan, Family Mart, etc. have continuously promoted their strategy to penetrate and expand the retail market in Vietnam. This shows that the potential of Vietnam's retail market is great, but the race to market share in this field is also increasingly fierce, requiring businesses to have drastic innovation to be able to adapt and develop.

4.2 Some obstacles of domestic retailers to digital transformation requirements

First, the old business model

Domestic retail enterprises mainly maintain the old business model focusing on products and following the supply chain model, making it difficult to compete with the big names in the retail industry in the world. Traditional retail mainly focuses on suppliers selling goods to consumers through main distribution channels such as agents, shopping centers, wholesalers, retailers, etc. Retail distribution channels mainly sell goods at the point of sale, customers buy directly at the point of sale, so sellers can only reach customers in a certain geographical area. Although in recent years, many retailers have shifted from selling at stores with fixed addresses, and have switched to online sales via Zalo, Facebook, that was just changing "sales location" only and about the customer's experience (Online buyers are not supported applications to perceive the quality of products and services like going to the store to buy directly); The support for online payment applications has not been improved much, mostly as a form of payment by cash on delivery (COD) or if there is a transfer payment, the buyer after placing an order on the web must manually open another website or open a banking application to transfer money to the seller's account without a direct link between websites and automatic clearing house system (ACH). This is a waste of time for buyers.

Second, the restriction on "digital" human resources

Employees are not fully comprehended about technology, applications slow, or not know how to apply digital devices to work. They've been used in the manual or traditional way. In addition, lack of leaders with deep expertise, such as key positions determining successful digital transformation such as chief digital officer (CDO), Chief Analytics Officer, etc. From these restrictions, most businesses do not know how to collect and analyze and take advantage of available data to assess customer needs, consumption habits, and customer preferences.

5. SOME SOLUTIONS TO IMPROVE RETAIL PERFORMANCE TO MEET DIGITAL TRANSFORMATION REQUIREMENTS

Digital transformation is the change in culture, organization, and operations of a business, industry, or ecosystem through the intelligent integration of digital technologies, processes, and capabilities across all levels and functions in a staged manner.

Businesses need to change their mindset and approach. The era of differentiated product strategy is slowly passing. Improvements and differences in technological capabilities between enterprises are increasingly blurred. Maintaining product superiority in the long term is increasingly difficult. Businesses will not be able to compete sustainably if they only stick to promotions, dumping, etc. Instead, the race will lie in optimizing operating costs as well as optimizing the value chain, constantly improving the customer experience. Data becomes the fundamental element.

Some specific solutions:

Firstly, develop a “digital” human resource team

The important thing when digital transformation is to “convert” people, change the perception of employees in the unit. Improve skills and qualifications, especially the ability to adapt and apply “digital technology” to daily work processes.

Developing data analytics team

These teams will be responsible for collecting data about products, customers, and locations by digitizing transactions with customers (online consulting, selling on the website, online payments, storing customer data with CRM - Customer Relationship Management, etc. For example, information about age, gender, dwell time at each product shelf, customer and salesperson interaction will be recorded through image analysis. The information is processed to give the conversion rate, I.e. the number of shoppers to the total number of visitors to the store, etc. From this information, businesses can make recommendations on how to arrange products in the store, recognize which items are attracting customers, and measure the effectiveness of marketing campaigns, reflected in attracting more customers to the store.

Act on data

In 2019, Boskovic. Et al. argue that the important thing is not to collect data but to use data and make decisions. The collected data will convert data into insights.

Optimizing stages based on insights from data such as order processing, shipping and receiving processes, warehousing-export processes, etc. For example, applying artificial intelligence (AI) to customer services, automating some business processes, especially customer support. Using intelligent virtual assistants to answer customer common questions helps retail businesses reduce manpower while improving business efficiency and customer satisfaction.

Redesigning value chains and business models: expanding new services to add value, combining with other business models to form an ecosystem, etc.

Improve collaboration capacity between departments

Optimize the stages to save operating costs and shorten the response time to the market. For example, the process of purchasing raw materials from suppliers will have to go through many stages from making an application, approving the contract, making an advance, payment, receiving raw materials, etc. relating to the responsibility of many departments and different personnel. When digitizing these processes, instead of having to go to dozens of human resources to find information and control work, everything is displayed visually on the system. The departmental staff understands their duties; Managers can grasp the progress of the implementation and thereby evaluate the bottlenecks as well as the efficiency of the process and offer immediate solutions to help the business operations of the enterprise go clockwork.

Secondly, change the business model

Shifting from a product-focused business model following the supply chain model to make customers a priority of a data-driven digital value chain. As mentioned above, digital transformation is a change of business model, businesses in the retail industry need to change their business models towards digital value chains. In a digital transformation future, data is at the heart of development. With the shift to a digital value chain model with a focus on customer data, businesses will compete

in speed and efficiency in collecting data, turning it into useful insights, then into specific actions to better meet customer needs.

Business model innovation based on digital technology or in other words advanced technologies such as social networks and big data is considered playing a core role in business model innovation. When changing business models, businesses need to focus on improving the following 3 contents:

1. Improved multi-channel experience

In 2016, Blitz argues that successful omnichannel retailers focus first on maximizing consumer value and only second on short-term shareholder value.

Not only stop at reaching customers online and offline but the application of software, technology, updating information about products, promotions, inventory status is also extremely necessary. Customers will actively grasp the product problem, which they are interested in making the best choice. Synchronization in management, helping businesses operate more efficiently.

Selling via mobile apps and websites has become very popular in the modern retail industry. Apart from these two popular channels, retail businesses are creating many other online sales channels such as opening stores on e-commerce platforms and social networks.

2. Enhance customer experience with virtual reality (VR) and augmented reality (AR)

Selling online has the disadvantage that customers cannot have as good an experience as going to the store directly. To improve these disadvantages it is necessary to bring virtual reality (VR) technology to give customers the experience as if they were going to buy a real thing.

While VR technology makes it possible for customers to have the experience of “going to the supermarket” while sitting in the living room, AR technology can help customers navigate as well as quickly access a lot of information about products right in the store. For example, automated robots can be used in supermarkets to help customers find products faster. Customers can use a mobile device to scan the barcode on the label to find the necessary information about the product. In addition, electronic devices in the store can be used as a guide on how to arrange booths, self-checkout devices, distribution boards for promotions, automated customer feedback collection devices, etc. to capture customer attention and enhance customer experience.

3. Develop the utility payment system

Retail businesses can be participating in the automatic clearing house (ACH) system, and then connected to the payment system of Napas (National Payment Corporation of Vietnam – provides domestic and international financial switching services, cooperates with most banks in Vietnam to make payments instantly, and safely). This will create a smooth, fast checkout experience that will help businesses win the trust of their customers. Some convenient forms of payment as payment via international card, via e-wallet, wire transfer, code scanning, using point card, etc.

6. CONCLUSIONS

The industrial revolution 4.0 with artificial intelligence, big data, Internet of things connection, etc. is being applied a lot in people’s socio-economic life. And especially in the retail industry, we are no stranger to the image of a beautiful robot that brings coffee to customers, or a virtual assistant that helps businesses take care, interact, and answer questions for customers, etc...Indeed, it has

opened up a great opportunity for the retail industry, but it is also a big challenge for businesses in the retail industry to change, first in terms of thinking and about a new data-centric business model with customers will take top priority. Retailers find ways to collect information and analyze data to understand better customer behavior and preferences. Data of customers enables retailers to optimize the purchase journey and personalize the customer experience.

Digital transformation in the retail industry is not only about model transformation, using technology, but above all, it's changing the way people look and work. Business models change, processes change, and people also change in corporate culture, creating a digitized working environment towards freedom and quality.

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IMPROVING THE EFFICIENCY OF FINANCIAL MANAGEMENT OF LOCAL PUBLIC UNIVERSITIES

PhD.Student. Le Duc Dat¹

Abstract: *In the system of Vietnam public universities, local public universities play an important role, contributing to the training of high-quality human resources to serve the needs of economic development - local society, and at the same time contribute to the cause of industrialization and modernization of the country. In recent years, the application of financial autonomy has created many development steps for local universities. However, in the face of the continuous development of society, the requirements for training quality are increasing, so these universities are forced to have a breakthrough in order to survive. This requires the autonomy mechanism from the management agency to improve, and at the same time the universities innovate the way of applying, focusing on improving the efficiency of financial management.*

Keywords: *local public university, efficiency, financial management*

1. INTRODUCTION

The system of public universities in our country has rapidly developed in both quantity and quality, annually providing a huge number of highly qualified labor that made significant contribution to development of country. The Government has issued various documents and legal framework for public universities to organize their activities more autonomously, this leading to meeting their goals and fulfilling their missions. The application of financial autonomy is considered as a breakthrough to improve training quality in association with practice, develop scientific research works, invest in upgrading facilities and raise the income of labor in educational institutions.

There are about 26 local public universities in our country. These universities are developed to train a synchronous and skilled workforce for locals. This model has new features, as a public, multidisciplinary university, under the direct management of the provincial government and the State management of the Ministry of Education and Training. Besides the development steps, local public universities are facing lots of obstacles in enrollment, renovating operating mechanism, mobilizing financial resources, improving training quality, enhancing teaching staff, especially in self-financing for development.

Implementation of Government's Decree No 43/2005/ND-CP dated April 25, 2006 stipulating the right to autonomy and self-responsibility for the performance of tasks, organizational apparatus, payroll and finance for public non-business units, replaced by Decree No. 16/2015/ND-CP dated February 14, 2015 stipulating the autonomy mechanism of public non-business units, local public universities are initially applied the financial autonomy mechanism to improve its operational efficiency. Financial management is highly focused among other activities. Those universities

¹ Hong Duc University.

are gradually completing financial management mechanism in the direction of diversifying and increasing revenue resources, proactively managing, saving source of expenditures, managing and using assets more effectively. However, there are still lots of inadequacies in awareness, in forming and completing the financial management mechanism at local universities; leading to lower financial performance as expected. The level of financial autonomy at local universities is not high, therefore, it needs to be studied to have solutions.

2. LITERATURE REVIEW

Financial autonomy and financial management is an important issue in the world, that have been mentioned and studied in huge number of reports and works.

According Aderson & Johnson (1998), the components of university autonomy include: Human resource autonomy, autonomy in academic activities and educational programs, teaching methods, testing and evaluation of student learning outcomes, program content and course materials; autonomy in enrollment and student management; autonomy in academic standards, autonomy in research and publication, teaching and mentoring graduate students, priorities in research and freedom of publication; autonomy in administrative and financial management, management and use of budgets as well as financial resources of the universities.

Financial management in public universities must be enterprise –style, with the control of beneficiaries. Universities need to develop transparent information systems in aggregating and determining costs in regular operations and development investment activities (Robert S. Kaplan, 2000). According to Jamil Salmi and Hauptman (2006), increasing tuition is the best option to meet the needs of universities. The most important issue is transparency in the use of financial resources to ensure the quality of education.

In Vietnam, there are various studies of financial autonomy and financial management of public universities. Vu Thi Thanh Thuy (2012) in the thesis “ Financial management of public universities in Vietnam”, presented the basic issues of financial management, introduced influencing factors, pointing out the criteria evaluating and factors affecting financial management in public universities: legal policy and national economic situation, development strategy, scale and field. On the basis of analyzing revenue and expenditure activities from the State budget to offer solutions completing financial management policies at public universities in VietNam.

Dam Dac Tien (2017) in the thesis “Improving financial management mechanism of local universities in Vietnam” systematized the theoretical issues of financial management at public universities in general and at local universities in particular; analyzed the current situation of financial management at local universities in Vietnam, pointed out the achieved results, limitations and causes of them in the application of financial management mechanism at local universities. Since, proposing solutions to improve financial management mechanism at local universities in the coming time.

Nguyen Thi Mai Lan (2019) in the thesis “Financial management at universities under the Ministry of Industry and Trade in the condition of autonomy”, the author analyzed the main contents in financial management at public universities, analyzed the current situation of financial management at public universities under the Ministry of Industry and Trade as well as pointing out the achieved results and limitations. Since, offering several solutions to enhance financial management at those universities.

3. RESEARCH METHODS

From overviews of domestic and foreign studies related to the research topic, the author conducts a research matching with the context, subject and object. Thence, collecting, analyzing and evaluating relevant actual data. Solutions and recommendations are also given based on actual data analysis results. The paper studies the basic contents of financial management in the context of autonomy at local public universities in Vietnam, including revenue management, cost management; in which in-depth study of 5 universities with long history and training depth: Hung Vuong University, Hai Phong University, Hong Duc University, Quang Binh University, Tra Vinh University, thence generalizing the system of local public universities in Vietnam.

Method of information collection: secondary data are collected such as the State's legal documents related to financial management, financial autonomy mechanism of public non-business units, local public universities; documents and reports related to financial situation, financial management status, internal spending regulations, financial statements of public universities in Vietnam.

Methods of synthesizing and analyzing information: Synthesizing and analyzing information collected by statistics, absolute numerical comparison method and relative numerical comparison method, data analysis, chart and form evaluation.

4. RESULT

** The concepts*

Regarding the concept of local public universities, according to Tran Quoc Hoan et al. (2020), these are public universities proposed by the locality to establish, invest in construction, budget and affiliated with local government; is a multi-disciplinary and multi-field higher education institution, that are training mainly career-application-oriented, meeting the needs of local human resources, serving the local economic and social development and neighborhoods; under the Provincial People's Committee and the state management of the Ministry of Education and Training. Students at these universities are local people, accounting for a high percentage.

Financial management in public universities is the process of financial planning, deciding on financial policies, organizing implementation and controlling the implementation process to help universities achieve their goals. Financial management activities aim at ensuring the compliance of financial activities, mobilizing and effectively using financial resources of the school.

** Develop a financial management plan*

To ensure that funds are used for the right purposes, economically and effectively in financial management, the universities have issued regulations and plans such as annual budget allocation plans, regulations on working mode for lecturers, internal spending regulations. At the same time, develop solutions and plans for financial autonomy on the principle of gradually reducing the state budget, increasing non-business and other revenue sources, thereby increasing the level of financial autonomy, maintaining business activities and maintaining financial independence. and develop the University.

The development of financial management plans of local public universities is carried out according to the following steps.

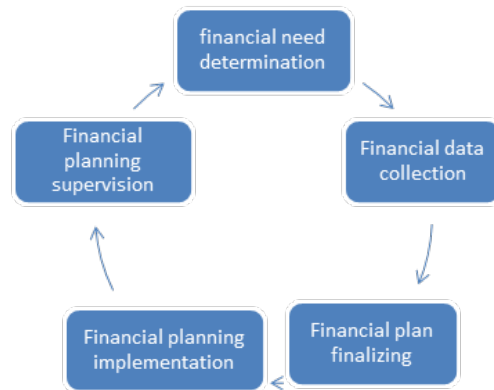


Figure 1: Developing a financial management plan

(Source: Collected based on reports of universities)

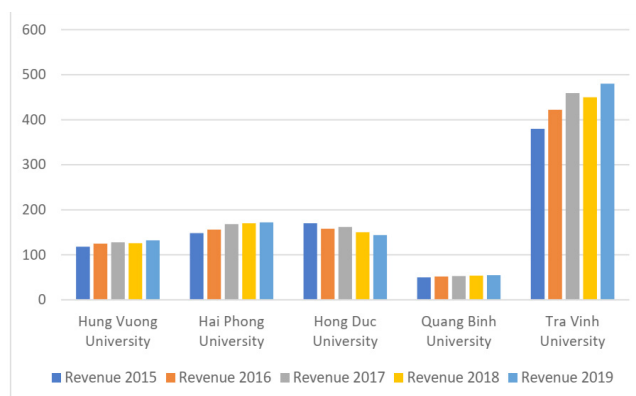
The financial targets and plans are developed by the universities under the guidance of the local Departments of Finance and the Ministry of Finance, based on data and documents such as the university’s development strategy, the university ‘s enrollment targets. approved, the tuition rate in the academic year, the number of lecturers, the implementation of each work plan such as education, scientific research, other activities of the previous year and the requirements of the year’s activities.

*** Revenue management**

The local public universities currently have the main sources of revenue including: revenue from the state budget; non-business revenue sources include tuition fees, service fees and other non-business revenues; other revenue sources such as aid, grants.... Total revenue of local universities in the period 2015-2019 tends to increase slowly (except for Tra Vinh University), the revenue is still relatively limited, in which the revenue from the budget tends to decrease.

Among the local public research universities, Tra Vinh University is the one with the largest and most stable revenue, averaging VND 420 billion per year in the period 2015-2019. Quang Binh University has a relatively small income, an average of about 50 billion VND per year in the period 2015-2019. This largely depends on the training scale of the universities with over 12,000 students (Tra Vinh University), over 10,000 students (Hong Duc University, Hai Phong University), over 6,000 students (Hung Vuong University), over 3,000 students (Quang Binh University). The total revenue of several universities is shown in Figure 2.

Figure 2: Total revenue of some local public universities in the period 2015-2019 (Unit: billion VND)

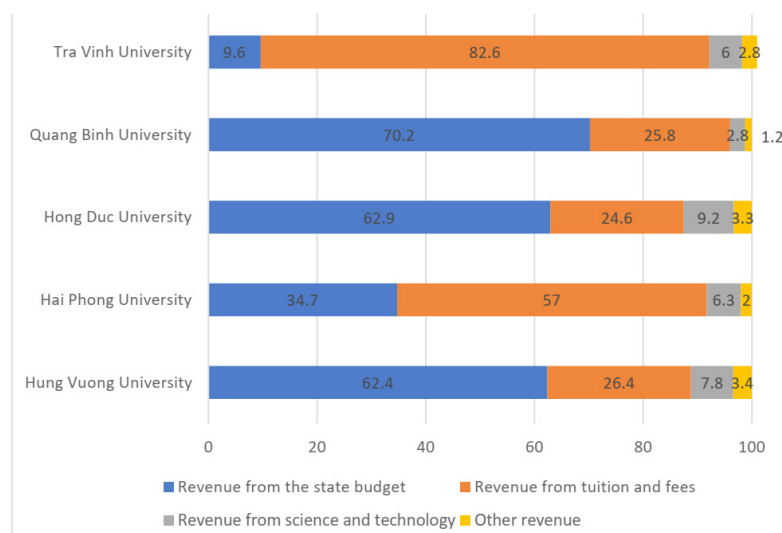


(Source: Collected based on reports of universities)

Regarding the structure of revenue sources, revenue from the state budget and revenue from tuition and fees are still the two main sources of revenue for universities. The proportion of budget revenue in some universities in the period 2015-2019 accounts for a very high proportion, such as Quang Binh University over 70%, Hong Duc University, and Hung Vuong University over 60%. While for public universities under the Ministry of Education and Training, the revenue from the budget only accounts for about 30-40% of the total revenue, showing that the revenue of local universities is still heavily dependent on the state budget. Only a few universities have a low proportion of budget revenue such as Hai Phong University with 34.7%, Tra Vinh University with 9.6%.

The revenue from tuition and fees accounts for a high proportion, over 80% for Tra Vinh University, over 57% for Hai Phong University, over 24% for Quang Binh University, Hong Duc University, University of Science and Technology. Hung Vuong. Tuition rates of local universities are adjusted to increase according to the roadmap, but are still low compared to public universities that are piloted by themselves according to Resolution 77/NQ-CP dated October 24, 2014. Revenue from scientific research and technology transfer of local universities remained low in the period 2015-2019, accounting for less than 10% of the total revenue of universities. Other sources of income, including grants and aid, account for a very small proportion. This is shown in figure 3.

Figure 3: Proportion of revenue sources of some local public universities in the period 2015-2019 (Unit: %)



(Source: Collected based on reports of universities)

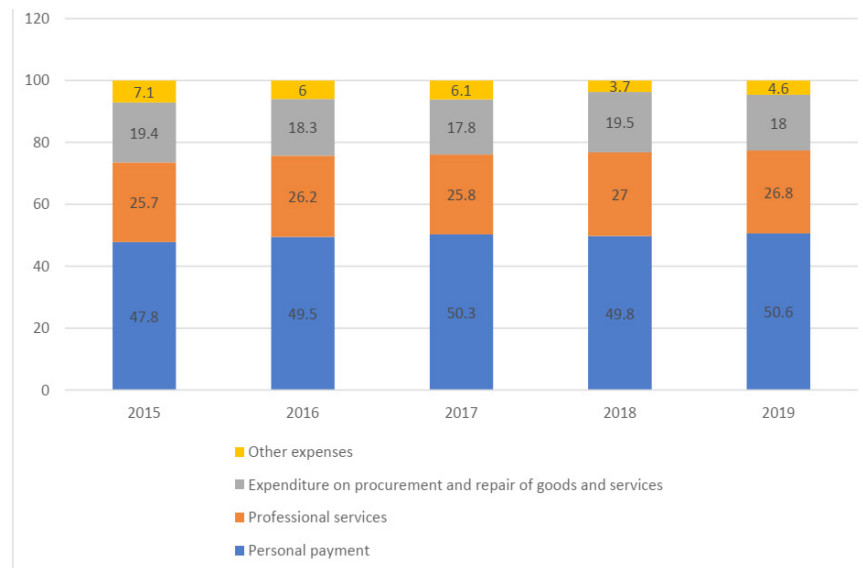
In the current autonomy, the revenue from the state budget allocated to local universities tends to decrease, while in order to increase tuition fees, universities are forced by the tuition ceiling regulations as well as the regulations from the local Government. This forces local universities to have solutions to increase revenue from scientific research, technology transfer and other revenue to ensure the school's operations.

*** Expense management**

All local public universities are assigned the autonomy, self-responsibility for staffing, organizational structure and finance according to Decree 43/2006/ND-CP, replaced by Decree No. 43/2006/ND-CP. Decree 16/2015/ND-CP. Universities concretize expenditure management content by developing internal spending regulations. In order to develop internal spending regulations, universities based on legal documents and prescribed spending norms to build spending norms

for each professional activity of the school, meeting the needs of the universities. Local public universities take the initiative in allocating funding on the basis of the state's current financial spending norms and regulations of the unit to ensure the performance of teaching, learning and research tasks. scientific research and other activities of the universities.

Figure 4: Structure of expenditures of some local public universities period 2015-2019 (Unit: %)



(Source: Collected based on reports of universities)

From Figure 4, it can be seen that the largest expenditure of local universities is personal payment and human expenditure, which accounts for 50% of the total expenditure in the period 2015-2019 of universities. Personal payments are used to pay salaries, wages for employees, scholarships for learners, welfare, bonuses and other personal payments. The next largest expenditure is those for professional services, which account for about 26% of the total expenditures of universities in the period 2015-2019. Expenditure on procurement and repair of goods and services accounted for about 18% of total expenditure. Finally, other expenses account for a small proportion of less than 7% of the total expenditures of universities in the period 2015-2019.

However, currently, universities are mainly managing expenditures based on input factors, providing funding to perform tasks without detailed and specific evaluation of achieved results. Some expenditures are not flexible, leading to many times spending is disbursed, not practical and effective, and cannot effectively meet the needs of universities. This requires universities to change the management of expenditures according to outputs instead of inputs to improve the efficiency of the unit's funding.

5. CONCLUSIONS AND RECOMMENDATIONS

University autonomy, especially financial autonomy, has been an important trend of the Vietnamese public university system in the coming time. All universities must adapt, change and improve in order to thrive. In recent years, local public universities have performed well their role as training places for high-quality human resources for the economic development of the locality and the whole country. However, the activities of the universities still have many limitations that need to be improved in the near future, especially in financial management activities to increase revenue sources, and more effectively manage expenses to keep them developed.

To achieve the above goals, some recommendations that local public universities can apply are as follows:

Firstly, reforming the financial management model from input-based management to output-based management. Previously, universities operated according to tasks, targets and budgets provided by the state. However, at present, along with implementing the autonomy mechanism, universities need to operate like businesses and manage according to output results in order to survive and develop. At the same time, focus on financial planning in the direction of prioritizing resource allocation in association with the school's development strategy.

Second, local public universities need to diversify their sources of revenue. As for revenue from the state budget, this is still the main source of revenue for universities, so it is advisable to develop an appropriate autonomy roadmap to maintain stable operation of universities. For revenue from tuition fees, it is necessary to develop a roadmap for correct and sufficient collection of tuition fees to ensure Government regulations. At the same time, it is proposed to build a number of high-quality majors, capable of socialization to increase revenue.

In addition, it is necessary to increase service revenues, especially research and technology transfer services. Take advantage of aid and funding sources through bilateral and multilateral cooperation programs with domestic and foreign organizations.

Third, effectively control expenses. Convert the mindset of spending management to cost management. Implement well the identification of activities that generate costs, analyze and control costs to achieve the highest efficiency. At the same time, it is necessary to perfect the internal spending regulations in line with the autonomy roadmap to serve as a basis for cost control in the universities.

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EXPANDING TAX BASE IN VIETNAM

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Abstract: *This paper aims to analyse the current status and the solutions of expanding tax base in Vietnam in the coming years. Tax revenue depends on many factors, of which the tax base is one of the most important ones. Tax base is a factor reflecting the income, property value or value of goods and services used to determine the taxpayer's payable amount. The tax base is wide or narrow, tight or not, which will directly affect the payable tax amount of taxpayers and state budget revenue. Vietnam and other countries are very interested in expanding the tax base and preventing tax base erosion in order to create conditions for lowering tax rates while ensuring revenue for the state budget. Expanding the tax base may include expanding the scope of application of taxes; narrowing of non-taxable subjects and cases of tax exemption and reduction; promulgating tax laws in accordance with new activities arising in the economy. In this paper, by using some proper scientific methods, author analyses and assesses the current status of tax base in Vietnam. The author's working results show that Vietnam's tax base are now developed wider than two decades ago. However, to meet the requirements of sustainable economic development, tax base in Vietnam should be reconsidered to expand properly. After the results and discussion in the research, the author would like to point out some major solutions and facts that Vietnam should face while expanding the tax base.*

Keywords: *tax policy, tax base, tax base erosion, state budget revenue, sustainable economic development, Vietnam.*

1. INTRODUCTION

Tax base is a factor reflecting the income, property value or value of goods and services used to determine the amount of tax payable that the taxpayers have to pay. For example, taxable income is the personal income tax base, the value of property is the property tax base, etc. Except where the payable tax amount is determined on the basis of the absolute tax rate, the tax amount to be paid is determined on the basis of multiplying tax base by tax rate. In the case of an absolute tax rate, the tax base is determined according to the quantity, volume and other physical factors of the subject to be taxed. For example, based on the number of liters of alcohol sold and the alcohol content, based on the number of imported cars and the engine capacity of the imported vehicles, etc. This shows that the correct determination of the tax base plays a very important role. important to the State [1].

Nowaday, in the developing countries, the issue of tax base erosion and profit shifting (BEPS) has been interested in much more to ensure the effective state budget revenue for investment in sustainable development with lower tax rates. There are many tax policies are considered and of which the tax base tax base expansion has been chosen. Expanding tax base against BEPS is necessary if Vietnam want to attain revenue sustainability. Domestic development in Vietnam is essential to move towards that goal. On the other hand, Vietnam now could approach the offer

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from international community in terms of identifying issues and suggesting possible techniques to deal with the aim of tax base expansion. But it is important to keep in mind the special needs and perspectives of inside country regarding these issues: among others, the state of development of the tax system, the administrative resources available to deal with these matters, the nature of the trade and commercial relations with trading partners, and regional considerations. Vietnam must evaluate its own situation in order to identify its particular issues and determine the most appropriate techniques to expand and ensure a good tax base.

The author's research goal is to propose some major solutions to improve the tax base in Vietnam in the coming years to ensure the state budget revenue and to meet the requirements of sustainable economic development.

2. LITERATURE REVIEW AND PREVIOUS RESEARCH

2.1. Tax base expansion

Follow the Tax Foundation, tax base expansion is the broadening of the amount of economic activity subject to tax, usually by eliminating exemptions, exclusions, deductions, credits, and other preferences. Narrow tax bases are non-neutral, favoring one product or industry over another, and can undermine revenue stability. By Andrew Fieldhouse, expanding the tax base simply means subjecting more gross income to taxation by eliminating or curbing tax expenditures such as deductions, exclusions, credits, exemptions, and preferential treatment of capital income over labor income [2]. Expanding the tax base isn't a fancy way of saying "increasing taxes." On the contrary, expanding the tax base is about creating more assets on the tax rolls (e.g., new or improved business properties, homes, and rental properties) to spread the cost of operations across more entities. Supporting for state expenditures has two main sources: tax collection and debt. In Vietnam, when the government debt increases with gradually higher interest rates and persistent budget deficit, increasing tax revenue on the basis of expanding the tax base is a more appropriate fiscal solution than having to raise tax rates. The tax base is a function of many variables, which varies from country to country and even within a country through different stages of development [3].

2.2. Previous research

The tax base can be expanded in two ways. First, the government can target the sectors that are currently untaxed especially the informal sector. This can be implemented for example, by introducing presumptive taxes based on the activities of these sectors. To the extent that the informal sector is where the bulk of the poor are employed, this choice has to be implemented while minimizing the regressive and distortionary effects on the sector. The second alternative is to minimize tax evasion [4].

According to 'A Study on Widening of Tax Base and Tackling Black Money' published by FICCI in February 2015, expanding the tax base helps in achieving higher tax to GDP ratio and fiscal consolidation, meets the targeted tax collection and reduces the shortfall in tax collection with budget estimates. Further, it helps the government to undertake planned investments in infrastructure and other important areas for growth and development.

There are a number of ways in which the corporate tax base should be expanded. A substantial expanding of the tax base, in particular through better-targeted tax incentives and the introduction of corporate tax base protection measures would contribute to raising additional corporate tax

revenues, but also ensure greater fairness in the distribution of the corporate tax burden. The tax base could be expanded by strengthening the tax administration's verification and enforcement capacity, as this would increase the number of companies that operate within the formal economy. A broader corporate tax base could then enable the alignment of corporate tax rates across sectors as well as a decrease in corporate tax rates [5].

Above all, it will shift the revenue pressures from honest taxpayers. If everybody started paying their fair share of taxes, there is a strong possibility to reduce the direct and indirect tax rates in the future. If the opposite happens, even the honest persons will be forced to resort to tax evasion.

3. METHODOLOGY AND MATERIALS

Some of the scientific methods such as observation, analysis, synthesis, generalisation were used in this research. Observation and analysis methods are used to assess the status of tax base in Vietnam for a long period. Synthesis and generalisation methods help the author to show the results of the research with the relative discussions and solutions. And the experts assessments is also used with the speech that published on the verifiable magazines, newspaper. This research based on the hypothesis for harming the sustainability of the economic development in Vietnam if the current tax base are not be assessed to show the limitations and to improve more properly. The materials were collected from the data of General Department of Taxation of Vietnam, Ministry of Finance and other government bodies' information. Materials from Foreign Investment Agency of Vietnam, some International Institutions and NGO's reports were used.

4. RESEARCH RESULTS

4.1. Current status of the tax base in Vietnam

In recent years, the tax policy system in Vietnam has a wide regulatory scope, contributing to ensuring the mobilization of the main source of revenue for the state budget. Tax base gradually has been being operated in the direction of transparency, in line with reality and revenue management, supplemented and perfected to be in line with international practices and prevent erosion of state budget revenues. However, the tax base specified in the tax policy system in Vietnam still has some limitations:

Firstly, the provisions on taxable objects in tax policies are still narrow

The provisions of the law on value-added tax, corporate income tax, and personal income tax have not been promptly amended and supplemented to ensure coverage of newly arising digital economic activities. Currently, there is confusion in identifying: parties to buy and sell goods and services, payment transactions, payment parties; the issue of division of taxing rights between the source country and the country of residence; the method used to determine where transactions are of a true economic nature and value is created based on an analysis of the execution function, the assets used and the risks incurred; the problem of non-taxation in both the country of residence and the source country (because the country of residence has a zero tax rate, or no tax on foreign-sourced income, and because the source country lacks a basis for determining the presence permanent establishment of foreign enterprises for taxation)...

The list of goods and services subject to Special Consumption Tax (SCT) is not much. Under the current law, the SCT subjects are 11 kinds of good and 6 services. From 2016 to 2020, the SCT is about

8,41% of total amount that collected by the tax authority (Annex 1). and The scope of application of Environmental Protection Tax (EPT) is still narrow. In fact, there are a number of goods that also cause adverse effects to the environment such as chemical fertilizers, pesticides, batteries... but have not yet been subject to EPT. In the Annex 1, we also see the small amount of EPT in total collection under the administration of Vietnam General Department of Taxation, it is not more than 5% over the 5 years (2016-2020). The scope of application of Corporate Income Tax (CIT) has not yet covered all taxpayers and all incomes. A number of new industries and fields have arisen but have not yet been specified in the CIT Law and guiding documents such as multi-level sales, e-commerce, etc., leading to businesses operating in these fields confused in the implementation.

The scope of application of environmental protection tax is still narrow. The list of goods subject to environmental protection tax according to current regulations includes 8 goods that have negative effects on the environment such as gasoline, oil, grease; Coal; Hydro-chloro-fluoro-carbon (HCFC) solution; Plastic bags are subject to tax; Herbicides of restricted use; Termite insecticides are of limited use; Preservatives for forest products are restricted from use; Warehouse disinfectants are of the restricted use category. In fact, there are a number of goods that also cause adverse effects to the environment such as chemical fertilizers, pesticides, batteries... but have not yet been subject to environmental protection tax.

Income received from the benefit of trusts: Investing through a trust is a popular form of investment in developed countries, often established on the basis of a deceased or deceased person's will. established among living people. The appearance of a trust will reveal the trustee, the trustee (which can be an individual or a company), and the beneficiaries. The current Personal Income Tax Law does not have specific provisions on taxpayers and the income an individual receives when he or she is a beneficiary from trusts. According to the provisions of Article 3, Law on Personal Income Tax, the beneficiary's income can be classified as income from capital investment or income from inheritance. Thus, income received from the benefit of trusts and mutual funds will be deducted at source at the tax rate of 5% (if it is a capital investment) or 10% on income over 10 years. million VND (if it is income from inheritance). On the other hand, in the current Personal Income Tax Law, there is no specific regulation in case the investor and the beneficiary are different (In case the grandparents/parents invest in the trust but the beneficiaries can be grandchildren/children). Taxpayers can take advantage of this to reduce their tax liability by designating a low-tax beneficiary or transferring a portion of their income to trusts as an inheritance. Another issue should also be considered in case the beneficiary can be a child, a person with a mental illness or even a person still in prison.

Secondly, there are many non-taxable objects specified in the tax policies

According to the Law on Value Added Tax (VAT), there are currently 25 groups of goods and services that are not subject to tax. The list of non-taxable goods and services is still large and in some cases difficult to distinguish from taxable, has led to a number of fraud cases, the tax base is narrowed, adversely affecting State budget revenue. And the current SCT policy stipulates cases that are not subject to tax, so it also narrows the subject to tax.

Thirdly, too many tax exempt provisions

The current Law on Import and Export Tax stipulates many tax exemption cases. The regulation of many groups of tax-free goods makes tax policy complicated. It can be exploited and fraudulent

by taxpayers. So that, it weakens the tax base and creates challenges for tax administration and cause loss of state budget revenue.

The level of CIT incentives is high, the incentives are still wide and spread. They narrow the tax base and reduce state budget revenues. Under the current regulations, the CIT incentives for subjects including high preferential tax rates and exemption and reduction.

The provision of many incomes to be exempt from PIT may create certain inequities by excluding some income - a measure to assess the taxpayer's ability to pay taxes and reduce the tax base.

Fourthly, the tax policy does not cover all new activities arising in the economy, causing the erosion of the tax base

Not enough clear regulations on determining taxable objects, tax deduction responsibilities of the companies, business individuals and consumers in the sharing economy (Grab, Bee, Agoda, Booking...), cross-border softwares and games online, running business via social networks (Facebook, Youtube...).

The type of foreign enterprises in the digital economy has not been covered. Currently, we can see the confusion in identifying the parties of buying and selling goods and services, payment transactions, payment parties, the division of taxing rights between source and residence; the method used to determine the places of transactions with a true economic nature and the created value base on an analysis of the execution function, used assets and incurred risk; non-taxation in both source and residence (the country of residence has a tax rate of zero or no tax on income derived from abroad and because the source country lacks a basis to determine the presence of a permanent establishment of a foreign enterprise for taxation...).

Newly arisen digital operations are not included. Under the impact of the digital economy, the tax administration environment in Vietnam is now much more complicated than the traditional past. Because it is a virtual environment, transactions are carried out through the telecommunications network or the internet. So buyers and sellers do not necessarily meet each other. Transactions are recorded, processed on the server of the enterprise, or of a third party. Meanwhile, the database system is not integrated and has not been connected to other inland and abroad information sources. Therefore, Vietnamese tax authorities face many difficulties in determining the correct revenue and costs, expenditure of the parties because there is no basis for data reconciliation, especially data of transactions recorded and processed on servers located abroad. The provisions of the Laws on VAT, CIT and PIT have not been promptly amended and supplemented to ensure coverage of arising digital economic activities.

Taxes on greenhouse gas emissions: Developed and developing countries have used emission taxes on vehicles with emissions. In which, taxes and fees on emissions for vehicles such as cars and motorbikes, as well as factories that use materials and fuels that cause emissions. Meanwhile, Vietnam has extensive economic integration with the region and the world, so it is necessary to apply taxes similar to other countries.

Social Security Tax (SST) has not been applied. In the other countries, the SST is normally levied on the income of self-employed workers and business individuals. Employers typically withhold this tax from their employees' wages and pass it on to the state budget. Funds collected

from employees for social security are not entrusted to each currently paying employee, but are used to pay current retirees in a “pay as you go pension” system [6].

4.2. Expanding tax base in Vietnam in the coming time

Firstly, expanding taxable objects

Clearer definition of taxable objects in the digital economy:

(i) Define the transaction of providing to consumers in Vietnam. In case of services which not provided through a dedicated device, the foreign suppliers shall be required two different proofs of the client’s domicile.

(ii) Foreign suppliers who provide digital products and services to consumers in Vietnam are subject to registration for VAT declaration and payment. And the performance of these obligations is carried out according to the online method of level 4 (highest level of online public services in Vietnam under current regulations of the Government).

(iii) Determine the status of a customer as an enterprise or individual consumer in a cross-border digital service transaction by some of the following indicators: Identification number, such as: Value Added Tax registration number or corporate tax code that indicate the business identity and registration of the customer. By defaultly, if the business status cannot be determined, the transactions between the suppliers and the customers are subjects to VAT.

Expanding taxable objects to SCT. Currently, in Vietnam, many luxury goods and services have not been taxed, such as: sugary soft drinks, smartphones, cameras, perfumes, cosmetics, games online services, aesthetics services. ... Therefore, a necessary research need to be conducted to gradually tax on these goods and services. Because these are high-class goods and services and the majority of users are high-income people in society.

Adding more items to the list of taxable subject of the EPT. In the coming time, it is advisable to research to tax on chemical fertilizers, pesticides, batteries, plant preservatives.... Because these are goods of which production and use cause environmental pollution. It is necessary to regulate on the EPT to guide rational production and consumption.

Incomes from the transfer or licensing of internet resources according to the provisions of the Telecommunications Law and pensions should be subjects to PIT.

Supplementing the provisions on tax obligations for incomes received from the trust, especially in the cases that the beneficiaries are individuals under the age of 18 and the incomes received is an inheritance through the trusts. If the individual beneficiaries are unable to pay taxes themselves, the trustee will be the taxpayer instead.

The Law on Property Tax should be built in accordance with Vietnam’s socio-economic development and international practices. It’s direction is increasing regulations of land taxes and supplementing tax collection for houses and other valuable assets. By such policy, the tax could encourage efficient use, limit speculation on land and housing, promote healthy development of the real estate market, ensure a reasonable and stable revenue source for the state budget [7].

Expanding the subjects of Natural Resource Tax with a number of mineral exploiters with super-profitable quotas such as open-pit mining with large profits. It also achieves the goals of (i) controlling the exploitation of natural resources effectively, (ii) avoiding the waste of natural

resources, (iii) maintaining the state budget revenue (iv) ensuring the policy of this tax shall be in accordance with the international standards. Guiding more clearly, more specific on criteria for resource products that could be considered industrial or other products before deducting the proper expenditure.

Secondly, narrowing the non taxable subjects

Some current VAT-free goods and services should be changed to be taxable subjects. By this way, the continuity and neutrality of VAT shall be ensured. The tax calculation and deduction also become more simple and clear and continuous in process of doing business. In the immediate future, the following groups of goods and services should be taxed: (i) Fertilizers, specialized machinery and equipment for agricultural production; offshore fishing vessels; fodder, poultry and other pet food; (ii) Machinery, equipment, spare parts and supplies that cannot be produced domestically and need to be imported for direct use in scientific research and technological development; (iii) Imported gold in bars and pieces that have not been processed into fine art products, jewelry or other products; (iv) Cultivation, livestock and aquaculture products that have not been processed into other products, or are only preliminarily processed by enterprises or individuals who self-produce, self-fishing in selling out or importing [8].

Some exempted subsidizes and allowances should be removed from PIT. The allowances which are the general wages and are not incomes of a cost-compensating in nature should be reviewed and removed from the list of non taxable subject.

Thirdly, shortening the list of tax exemption and reduction

Consider removing the Import Tax exemption for (i) specialized imported goods that cannot be produced domestically and serve directly for educating; imported goods for ensuring social security, overcoming disasters and epidemics. Because in fact these goods are difficult to determine the actual use purpose even at import declaration. Therefore, it can be used by taxpayers to commit tax fraud. Instead of providing import tax exemption, the State can use make budget expenditures to support the above activities [8].

The CIT incentives should be refined carefully and eliminated the ineffective cases in order to expand the tax base.

In order to reduce the negative impacts of tax incentives, promote investment attractiveness in the special encouraged fields and areas and improve the competitiveness of Vietnam's investment attraction in comparison with the other regional countries, we should:

- Publish the tax preferential policies that adhere to the strategy of socio-economic developments that the Communist Party's and the State set out in each period: The tax preferential policies that serve to attract investment objectives effectively should adhere to the strategy of socio-economic developments that the Communist Party's and the State set out in each period. Implement selective tax incentives, review the fields and areas to attract investment effectively, and at the same time minimize the issuance of new policies which reduce state budget revenues.

- Review priority areas and areas; eliminate tax incentives for industrial parks and economic zones: Tax incentives for fields that have developed in width and depth should to be reduced under the roadmap. Tax incentives to attract investment for areas in economic and industrial zones but belongs to the list of areas with favorable socio-economic conditions should be abrogated. These

are necessary because according to current regulations, tax incentives for economic and industrial zones are similar to those in socio-economic difficult areas, leading to investors often investing in economic zones with favorable locations than investing in difficult socio-economic areas.

- Tax incentives should focus on key fields and areas that need to be attracted investment with attractive incentives: It is necessary to review the List of industries and fields that need to attract investment capital, evaluate the effectiveness as well as the downsides of attracting investment capital in the past time. Then focus on investment incentives only in industries that have a great impact on the economy's balance, or strategic areas that need to be especially attractive to investment. Tax incentives are only applied selectively to: (i) investment high technology projects which are also new technologies with high added value products; (ii) investment projects in the high technology fields of agriculture and fishery with application of new scientific and technological producing and processing; (iii) investment projects in areas with special difficulties in remote, border and island areas in order to promote investment restructuring towards efficiency. Therefore, it is possible to increase some deductible expenses related to research, application of new science and technology, costs related to environmental protection...

- Reduce beneficiaries of tax incentives by term: Replace the tax exemption with a term of investment tax deduction - that is, allow a certain percentage of the total value of the new property to be deducted direct investment in the payable CIT amount in the tax year. This form of incentive has the same effect as the State directly supporting a part of capital for enterprises, corresponding to the ability to generate capital and generate income on the basis of profitable business and fulfillment of tax obligations for enterprises. Limit incentives through regulations on rapid depreciation of fixed assets: For rapid depreciation, it is necessary to stipulate that a group of assets with specific characteristics can be quickly depreciated instead of generally applied to all "high economic efficiency" enterprises as at present. Narrow the subjects eligible for family circumstance-based deduction by stipulating that dependents who are sons or daughters of taxpayers must satisfy the conditions of not being married. Narrow regulations on the group of "other helpless individuals" who are considered dependents [9].

Fourthly, expanding the tax base from the new Tax Laws

Digital Tax Law which is suitable for the digital economy should be developed:

(i) Expand the concept and definition of tax policy (permanent establishment) according to new Laws and Agreements in order to supplement cross-border trading business in to taxable subject. Previously, the concept of permanent establishment referred not only to a physical presence in the concerned country, but also to locations where a non-resident carries on business activities in the concerned country through a dependent agent. Today, it may be more relevant to the economic life of another country without a fixed place of business or a dependent agent there. Problems arise with regard to the current definition of permanent establishment that is whether or not still relevant in principle. Therefore, it is necessary to study to expand or supplement provisions on new relationships in the Agreements for the concept of "electronic/virtual permanent establishment". The concept of "electronic/virtual permanent establishment" is an alternative relationship proposition that would apply to e-commerce activities. That can be done in many ways such as expanding the definition to include the names "virtual permanent place of business", "virtual agents" or "on-site business presence".

(ii) Research and clarify the nature of the provision of digital products such as cryptocurrencies, virtual currencies, digital assets, codes, scratch cards, other digital assets or the other activities of the sharing economy (Grab, Agoda, AirBnB...) in order to include in the provisions of the VAT Law. In the case of bringing the above products into the subject of VAT, it is necessary to study and clearly define the scope of application of the 0% tax rate for exported digital products and services (for example, codes, scratch cards, games are provided for free on the Apple, Google app stores but are exploited by Apple and Google for advertising business....) . On the other hand, make sure to tighten administration to avoid taking advantage of export activities of these products to evade taxes.

(iii) Amend and supplement regulations on taxable income to ensure coverage/clarification of the scope of provision of CIT Law for e-commerce activities. For example, taxable incomes arising from business activities of providing trading platforms, exchanging virtual currencies, cryptocurrencies or digital assets.

(iv) Research and clarify the nature of providing digital products and services such as cryptocurrencies, virtual currencies, digital assets. Thereby, supplement regulations on percentage of CIT calculated on taxable turnover for business activities of foreign enterprises and individuals in Vietnam.

(v) Research and supplement regulations on taxable income including income from mining, trading in cryptocurrencies, virtual currencies, digital assets and from other digital products and resources .

Law on Emissions Tax should be applied: Unlike the Environmental Protection Tax (indirect tax), the Emission Tax is a direct tax levied on businesses that emit carbon emissions that affect the atmosphere, such as coal-fired power plants, mining companies, heavy metal manufacturers... This is not only a new source of State budget revenue, but also a means which the State use to control carbon emissions without resorting to the levers of the command economy. Thereby, the State can control the manufacturers and limit carbon emissions. The current solution that has been being applied by many countries around the world is a carbon tax. The Carbon Tax is an environmental tax, levied on the CO₂ emissions of a fuel, which is a form of carbon pricing. The Carbon Tax is an instrument applied to the burning of fossil fuels, products that use coal and fuels such as gasoline, aviation fuel and natural gas, in proportion to their carbon content. Accordingly, by pushing up fossil fuel prices as an inevitable consequence, the Carbon Tax inadvertently increased the competitiveness of the carbon-free technology industry with traditional fossil fuel burning industries. Carbon tax is considered an important market-based solution to reduce emissions and combat climate change in addition to a mechanism for storing and trading emissions.

Social Security Tax should be considered applying: The Social Security Tax is a tax levied on both employers and employees to fund the Social Security Program. Social Security taxes are also levied to assist individuals in receiving survivor benefits – for example, benefits paid to a widow or widower after the death of one's spouse or to a dependent child after the death of a parent.

5. DISCUSSION AND CONCLUSION

Proceeding the above research results, we could find out the facts that Vietnam should face while expanding the tax base.

Firstly, all countries tend to expand the tax base to increase state budget revenue in the context of international economic integration. Various forms of tax base expansion including taxable expansion; narrowing the cases eligible for tax exemption or reduction and non-taxable cases. And the tax base expansion must be considered in policies of consumption, income taxes and property taxes.

Secondly, the expansion of the consumption tax base is often given more attention in developing countries. And the developed countries are interested in expanding the income tax base.

Thirdly, tax incentives should be applied to encourage investment in technology development, they should ensure transparency, efficiency and should be suitable for tax administration in each country. For incentives on consumption, property tax and other forms of incentives, it is advisable to consider narrowing and eliminating in order to expand the tax base and increase state budget revenue.

Fourthly, in order to ensure the feasibility of tax policies, the tax base expansion is often accompanied by measures to reduce tax rates or keep tax rates unchanged. That could ensure an increase in state budget revenue without causing harm to the state budget. reactions of the different classes of society.

Fifthly, the tax administration system and model have a decisive influence on the effectiveness of the tax policy reform process in general and the tax base expansion in particular. Determining the tax base and tax rate will help calculate potential property tax revenue. The actual property tax revenue depends on the effectiveness of the management system and implementation of the tax model that has been designed above in every step of tax law practice. Most tax regulations target this stage of tax law administration and enforcement. Thus, a significant scope of tax policy reform is to improve the efficiency of tax administration and enforcement. This can be divided into two main stages:

- Improving the comprehensiveness and accuracy of the tax base through measures to enhance the quality of basic data management, assessment and valuation.

- Improving the success rate of actual tax collection by enhancing effective practice in the stage from tax collection deciding to violation handling .

Most developing countries focus on the first step, which is to expand the tax base, manage and develop this data source, but forget the importance of improving the quality of tax policy implementation. This often leads to relatively rapid failure in reforming the system, as it requires a great concentration of financial and political resources to implement, but the effect is slow to spread in the future.

Sixthly, in the context of international economic integration and development of digital economic activities, the review of tax policies to cover newly arising economic activities is necessary for countries in general and Vietnam in particular in order to expand the tax base and prevent the erosion of state budget revenues. Taxation of digital services should aim to reach an international agreement with satisfactory, synchronous and long-term solutions that both create favorable conditions for businesses and aim at the goal of taxing digital services in sustainable development and avoid increasing tensions in international trade.

Seventhly, referring to the experiences of other countries to issue and apply a greenhouse gas tax is an effective measure in the current period in Vietnam, both contributing to the expansion of the tax base, increasing state budget revenue and preventing greenhouse effect.

In order to expand the tax base, it is necessary to study to amend and supplement comprehensively the content of taxes in the tax system. In which, expanding taxable objects on the basis of cutting the list of goods and services not subject to VAT; adding a number of goods and services to the excise tax, environmental protection tax and narrowing the tax incentives of various taxes are important contents affecting the ability to expand the tax base. Along with the expansion of the tax base, it is necessary to study and adjust other socio-economic policies to fill the gaps left by the tax policy when adjusting to expand the tax base and need to strengthen tax base erosion.

Expanding tax base is an essential element in establishing domestic revenue sustainability. Identifying the features of their tax systems that facilitate tax base expansion will allow countries to assess the impact that such provisions have and to develop the appropriate measures to take in response. Once the problem has been identified, the next step is the implementation and administration of those solutions that are best suited to the particular circumstances of each period.

ANNEX 1 - STATE BUDGET REVENUES COLLECTED BY VIETNAM GENERAL DEPARTMENT OF TAXATION 2016 - 2020

Unit: VND billion

No.	Revenues	2016		2017		2018		2019		2020		2016-2020	
1	Value Added Tax	192,704	21.48%	208,402	20.26%	228,840	19.79%	247,182	19.37%	241,249	18.86%	1,118,378	19.84%
2	Corporate Income Tax	158,618	17.68%	175,642	17.07%	197,656	17.10%	228,668	17.91%	231,295	18.09%	991,880	17.60%
3	Special Consumption Tax	85,854	9.57%	85,086	8.27%	96,025	8.31%	106,753	8.36%	100,097	7.83%	473,815	8.41%
4	Personal Income Tax	65,235	7.27%	78,775	7.66%	94,364	8.16%	109,401	8.57%	115,267	9.01%	463,043	8.21%
5	Environment Protection Tax	43,142	4.81%	44,665	4.34%	47,050	4.07%	63,075	4.94%	60,631	4.74%	258,562	4.59%
6	Natural Resource Tax	14,755	1.64%	18,963	1.84%	21,439	1.85%	22,416	1.76%	21,251	1.66%	98,823	1.75%
7	Other taxes and revenues	336,668	37.53%	417,241	40.56%	470,799	40.72%	498,938	39.09%	509,073	39.81%	2,232,721	39.61%
	Total	896,977	100%	1,028,775	100%	1,156,174	100%	1,276,434	100%	1,278,863	100%	5,637,223	100%

Source: Report of Vietnam General Department of Taxation

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ADVANTAGES AND DIFFICULTIES IN APPLYING PERFORMANCE MEASUREMENT SYSTEM IN ENTERPRISES IN VIETNAM

MA. Hoang Thi Kim Ung¹

Abstract: Apparently, performance measurement system (PMS) is considered a modern management tool. Although enterprises in Vietnam have many innovations in the management and measurement of their operating results, in fact, they also have many difficulties in applying PMS. The article focuses on researching and analyzing the current situation of using PMS in some sampling enterprises in Vietnam, pointing out the advantages and disadvantages, thereby proposing some recommendations.

Keywords: Measurement, Performance result, management accounting

1. INTRODUCTION

Under the trend of globalization, world economic integration and trade liberalization and increasingly fierce competition, enterprises must find the right motivation for sustainable growth in order to improve their competitiveness. In order to strengthen and improve competitiveness, in addition to formulating strategies, investing in marketing activities, researching and developing new products, investing in modern technology, the management capacity of enterprises and the application of modern enterprise management tools are being focused and prioritized. In fact, the performance measurement system is a basic content of modern management accounting that has been applied effectively in developed countries. However, in Vietnam, the application level is still limited. In the nation, there have been many research works on the performance measurement system such as: Dang Thi Huong (2010); Nguyen Thi Thanh Hai (2013); Nguyen Thi Anh Thu (2018); etc. Nevertheless, these studies have only shown the factors affecting PMS or built a system of indicators to measure business performance applied at a specific type of enterprise, but have not indicated difficulties and advantages when applying PMS in Vietnamese enterprises. Therefore, the author has collected information from documents, articles, scientific research topics, etc, and distributed survey questionnaires to point out the advantages and disadvantages in the application of PMS in Vietnamese enterprises and make some recommendations to enhance the effectiveness of PMS application in various enterprises).

2. THEORETICAL FRAMEWORK OF PERFORMANCE MEASUREMENT SYSTEMS

Currently, there are many views about the measurement system illustrated by scholars of different schools. Bourne et al. (2003) said that: Measurement of business performance refers to the use of a set of multidimensional measures for the planning and management process of the organization. According to Ittner et al. (2003): Strategic performance measurement systems provide information that allows an organization to determine how to most effectively achieve its

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goals and arrange management processes such as setting goals, making decisions, and evaluating performance in association with strategic objectives. According to Neely et al (1995): PMS is an information system used by managers to track the execution of business strategy by comparing performance with strategic objectives. PMS includes systematic methods for setting business goals and periodic reports. It refers to a system of multi-dimensional measures, including financial and non-financial measures, internal and external measures, measures that quantify the achievements achieved by the organization and also the measure used to predict the future [7]. In the research on the development process of PMS, Suwit Srimai et al (2011) have summarized a number of PMS models: Balanced Scorecard, Knowledge-based Measurement Model, Comparative Business Scorecard Comparison, Prism Performance Model, Dynamic Multi-Dimensional Performance Model, etc. Each PMS model is studied and put into use with different metrics and aspects.

PMS can be described through three basic components and is most mentioned in the definitions of PMS below (See Figure 1)

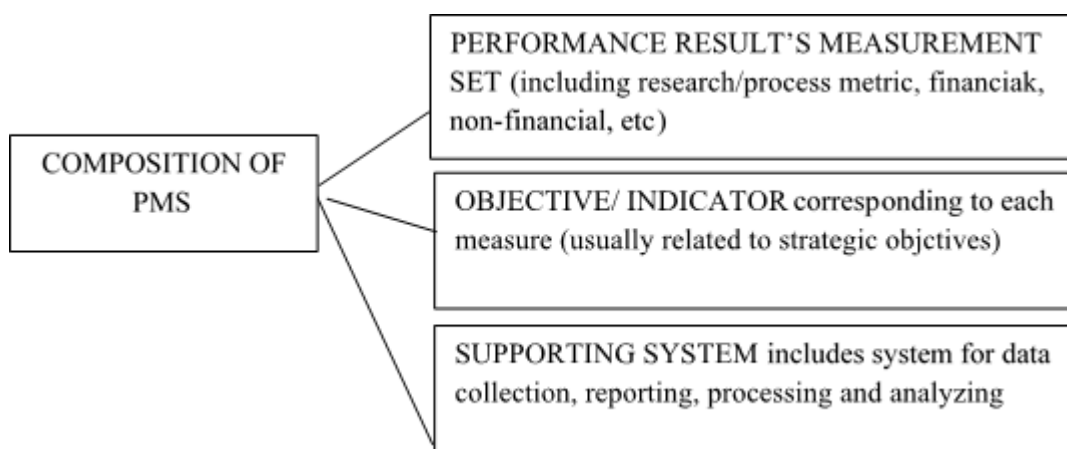


Figure 1: Composition of PMS

Source: Franco – Santos et. al (2007)

3. RESEARCH METHODS AND DATA COLLECTION

To achieve the research objectives, the article uses basic qualitative research methods mainly such as collecting information from specialized books, published data, and related scientific works, topics, etc., and combines some traditional research methods such as: surveys, and interviews, etc. The questionnaires and surveys are broadcast live or conducted through the design of questionnaires on the tool via google (google docs) and sent to the respondents through online email tool. In reality, all of these answer sheets are included in the data processing by the google docs tool.

With a survey sample size of 245 enterprises operating for profit in the territory of Vietnam, according to the convenient sampling method, the author conducted a testing survey with 10 enterprises under the research object. Thereby, completing the questionnaire is more suitable to reality. After that, the author will conduct an official mass investigation. The author distributed 245 survey questionnaires to managers and accountants at enterprises during the period from April 2020 to June 2020 in which 225 responses were made via the Internet, 20 were answered directly.

4. ACTUAL SITUATION OF APPLYING PERFORMANCE MEASUREMENT SYSTEM IN ENTERPRISES IN VIETNAM

In Vietnam, PMS is known through two popular tools, KPI (Key performance indicator) and BSC (Balanced Scorecard). In recent years, a series of consulting firms on KPI - BSC have been born, including names such as OCD Management Consulting Company, Institute of International Economics and Trade (iEIT), Balanced Scorecard VN (BSV). A series of seminars and training courses on BSC and KPI were held partly to show the needs and concerns of Vietnamese enterprises in the management of their business results. Furthermore, in order to support the implementation of BSC and KPI easily, many software have also been developed to support the process of synthesizing and track KPI implementation results more conveniently. Although there are no specific statistics on the number of Vietnamese enterprises applying business performance measurement tools such as KPI and BSC, many large corporations such as Vietnam Electricity, Traphaco Joint Stock Company, Post and Telecommunications Group information, and so on, have applied this tool [3].

Out of the total 245 answers, 81 commercial enterprises accounted for the highest rate of 33.1%, 80 service enterprises accounted for 32.7%, 52 manufacturing enterprises accounted for 21.2% and 32 enterprises belonged to the category of enterprises, and others accounted for 13%. According to the form of ownership of enterprises, surveyed enterprises belong to different forms of ownership. Among 245 answer sheets, there were 132 joint stock companies, accounting for 53.9%, 52 limited liability companies, making up 21.2%, 26 state-owned enterprises accounting for 10.6%, 11 private enterprises making up 4.5%, 3 joint venture companies and 3 companies with 100% foreign capital together accounting for 1.2% and the rest belong to the other group with 18 enterprises being equivalent to 7.3%. If we classify enterprises subject to the survey by number of employees, out of 245 answer sheets, there were 158 enterprises with less than 100 employees, accounting for 64.5%, 63 enterprises with 100 to 500 employees and 24 enterprises with less than 100 employees. The ratio of enterprises with 500 or more employees was 9.7%.

Table 1: Quantity and structure of enterprises surveyed

Enterprise	Quantity (enterprises)	Ratio (%)
I. Based on field of activity	245	100
1. Commercial enterprises	81	33,1
2. Service enterprises	80	32,7
3. Manufacturing enterprises	52	21,2
4. Others	32	13
II. Based on the form of ownership	245	100
1. Joint stock company	132	53,9
2. Limited liability company	52	21,2
3. State-owned enterprise	26	10,6
4. Private enterprise	11	4,5
5. Joint venture company	3	1,2
6. Company with 100% foreign capital	3	1,2
7. Others	18	7,3
III. Based on the number of employees	245	100
1. Less than 100 employees	158	64,5
2. From 100 to 500 employees	63	25,7
3. From 500 employees or more	24	9,8

Source: Author's statistics

In addition to the basic information for statistics and sample description as described above, the author has included in the survey questionnaire's questions about extended information for the purpose of collecting some more relevant information. This information indicates some important points for business managers and some directions for further research for researchers. One of the important statistical results as well as the biggest difficulty and obstacle that enterprises face when applying the PMS model in their enterprises was illustrated in the Figure 2).

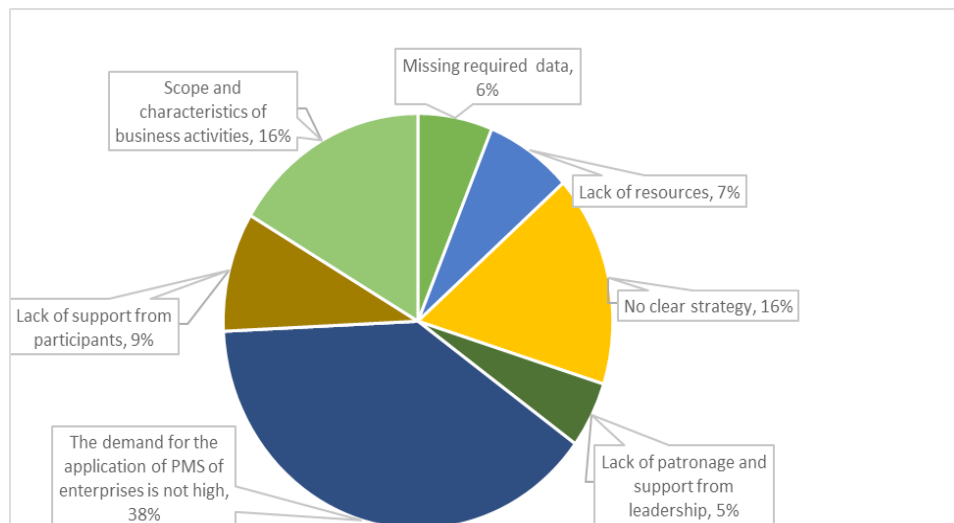


Figure 2: Difficulties and obstacles when applying PMS

Source: Summarization of author from the survey

Advantages

Initially, Resources to implement PMS application are not lacking. Vietnam's workforce is considered to be quite agile, smart, and diligent, so this can also be considered an advantage for Vietnamese enterprises when applying performance measurement methods. With dynamism, curiosity, passion for creation and improvement, employees will easily understand their nature, responsibilities and benefits when there is a change in the management system of the enterprise.

Secondly, Data sources to apply PMS are relatively abundant. Since in the present time, with the development and support of science, technology and information technology, businesses can build a complete and abundant data set to respond to the business performance measurement systems.

Thirdly, Enterprise managers have been proactive in innovation, approaching modern business performance measurement and management models. In addition, enterprises have taken the initiative in standardizing and basically modernizing the corporate governance process, quickly seizing opportunities in the context that the global economy is falling into difficult times. The initiative in innovation thinking and quick access to modern management tools in measuring business performance are regarded as strong points and will become the driving force behind the research and application of PMS in enterprises.

Difficulties

Firstly, the demand for PMS system application is not high. Although managers have actively approached modern management models, the real need to apply PMS model is still not adequate. This may stem from the core reason that the leader's determination is not high.

Secondly, the scope and characteristics of businesses also create challenges for Vietnamese enterprises when applying PMS. The application of PMS in commercial and service enterprises will be easier to implement than in manufacturing enterprises because they have direct contact with customers.

Thirdly, enterprises do not have a clear strategy. This reveals the difficulty in applying the PMS implementation process in enterprises. In reality, PMS is built on a solid foundation that is enterprise strategy. Therefore, the strategic planning ability of enterprises will directly affect the operation and development of PMS. Besides the success in strategic planning of large-scale enterprises, for small and medium-sized enterprises, the planning and operation strategy are still limited. Some enterprises only make short-term operation plans, mainly monthly and quarterly production and business plans. They build the next year's plan and strategy by analyzing the previous year's strengths - weaknesses and taking the previous year's business results in addition to a certain percentage, without having built a coherent, clear and long-term business strategy, leading to many difficulties in the development and application of PMS.

5. SUGGESTIONS

Stemming from the difficulties when applying PMS analyzed above. The author proposes some recommendations to improve the effectiveness of PMS application in Vietnamese enterprises as follows:

Firstly, on the side of enterprises, business leaders need to show their determination in a practical way to apply PMS. Building and applying PMS requires determination from leaders to employees. Leaders must motivate and help members understand PMS, have a clear management perspective, understand the organization, show determination and be consistent with the set implementation plan, always take the motion "doing the right thing" as the role model, and encourage employees in the implementation process.

Secondly, enterprises need to create conditions for employees to participate in the design, implementation and application of PMS. The role of staff is actually critical in the PMS adoption process, increasing the level of support and alignment of the participants.

Thirdly, on the part of State management agencies, it is necessary to promote specific programs to support enterprises for raising PMS awareness and supporting effective application methods.

Fourthly, business associations need to enhance their role to support and develop enterprises. The role of these organizations can be implemented through organizing seminars on PMS experience in real enterprises in Vietnam, organizing training courses, visiting and learning experiences between domestic and foreign enterprises. Developing human resources, especially management capacity for key officials of enterprises. In addition, there should be research and consulting projects to enhance the effectiveness of PMS application for businesses, thereby shortening the difference between industries and fields in the application of PMS.

Fifthly, universities, research institutes and other training institutions should actively participate to carry out research, training and development projects to replicate effective governance models like PMS.

6. CONCLUSION

In order to apply and promote the effectiveness of PMS, in addition to the efforts of enterprises, it is necessary to have the simultaneous participation of state management agencies, associations, business support institutions, training units through concrete and practical solutions. Besides corporations, large enterprises that have been applying, many Vietnamese enterprises do not understand and are aware of PMS properly. The basic theories about PMS and some recommendations given by the article are suggestions to help Vietnamese enterprises research, learn, and apply PMS widely.

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REVIEWING THE ROAD OF INNOVATION IN ECONOMIC GROWTH MODEL IN VIETNAM

Dr. Hoang Thi Bich Loan¹

Abstract: *Transforming the model of economic growth, from growth in width to growth in depth, has been a great and accurate policy of the Party and State since 2011. This was the decisive factor for Vietnam to achieve the rapid and sustainable development goal, striving to turn our country into a modern industrialized country soon. The transforming model of economic growth naturally is reforming the way of growth mainly based on capital, cheap labor, developing resource-intensive economic sectors, etc... to growth based mainly on labor productivity. In other words, it is mainly based on the effective use of resources, scientific and technological progress, innovation and creativity to ensure rapid, sustainable, quality and efficient development. This article mentioned the process of reforming the economic growth model in Vietnam from 2000 up to now in order to provide readers with an overview of the whole process of transforming the economic growth model in Vietnam, point out the shortcomings at each stage and provide some initial suggestions to improve the economic growth model in Vietnam.*

Keywords: *economic growth, economic growth model, innovation, public investment*

1. INTRODUCTION

Economic growth is the increase in Gross Domestic Product (GDP) or Gross National Product (GNP) or the size of national output per capita (PCI) over a given period of time. Normally, economic growth is usually measured by the GDP growth rate index. There is an important difference between growth volatility (cyclical volatility) and long-term growth (long-term trends). Economic growth depends on two processes: the accumulation of assets (such as capital, labor and land) and the more productive investment of these assets, focusing on saving and investment, but investment must be efficient to promote growth. Government policies, institutions, political and economic stability, geographical features, natural resources, health and education levels... all play a certain role in influencing economic growth.

The economic growth model is approached from many different perspectives. It can be understood as the way of expressing the basic problems of economic growth through economic variables and the relationship between those variables. The economic growth model identifies and quantifies the role of factors leading to economic growth. Or the model can be understood as the way to mobilizes and uses resources to ensure economic growth over the years at a reasonable rate. According to this approach, the economic growth model includes following factors (i) Growth motivations: There are different motivations to promote economic growth. Based on factors affecting GDP, consumption, investment, public spending and exports are considered as driving forces for economic development; (ii) Input factors: For economic growth, economic motivations need

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the support of basic input factors including capital, labor, resources and technology. From the perspective of each country, increasing the number of inputs to promote economic development is called growth in breadth. The broad-based economic growth model is essentially characterized by an increase in the volume of production driven by the growth of capital, labor, and natural resources. At the same time, it is the most simple way to expand production, create jobs, increase income... When economic growth is based on rationalization and productivity increasing is called growth in depth. The basic characteristics of the model of economic growth in depth is to rely on modern science and technology, improving the efficiency and quality of growth, such as: Improving the efficiency of capital use, increasing labor productivity, increasing the contribution of total factor productivity (TFP), orienting the economy's activities to industries and fields with high added value, reducing production costs, actively produce and export goods with high technology, on the basis of fully exploiting the country's advantages, synchronizing the exploitation and processing of products. Growth in depth not only improves quality, economic efficiency, but also associated with ecological environment protection, social welfare improvement...; (iii) Management mechanism: The state plays a very important role in promoting economic development. This has been proven by the economic theories of John Maynard Keynes (1883-1946) and Paul Samuelson (1915-2009) and in the practice on the process of movement and development of economies around the world. The State plays the role of regulating macro-management policies such as fiscal policy, monetary policy, policy of integration, policy on development of economic sectors... at the same time, building a legal framework to help economic actors operate well in the market.

Recently, the economic growth model is more widely studied and popularized. According to Tran Tho Dat (2010), the growth model (of an economy or country) is a set of factors which determine or explain the economic growth of an economy or a country. It shows what factors determine or lead to the growth of a given economy. Each country, depending on its own conditions, has a set of factors that explain its growth. Thus, the economic growth model is a general reflection of the main characteristics of the mode of economic growth showing growth factors and their interrelationships in each certain period. Tran Tho Dat stated the concept: "The economic growth model is the most basic expression of economic growth and the factors affecting growth (economic and non-economic factors). Since the beginning of the twentieth century, economic growth models have become useful tools, helping economists to describe and quantify the sources of economic growth in a specific and accurate way"[8]. From the above analysis, it can be generalized that: economic growth model is a basic expression of economic growth theory, the determinants of growth of an economy or a country and factors affecting economic growth in relation to political, cultural, social and environmental conditions. The countries with different characteristics should have different economic growth models. For example, it is often said that Vietnam's growth model being based on raw resource exports, outsourcing, cheap labor and the overwhelming role of state-owned enterprises. Or it is often said that Singapore's growth model seems similar to the growth model of Japan, Korea, and Taiwan, being based at first on the export of labor-intensive processed goods and then moved up the ladder of high value-added technology when its relative comparative advantage changed. Nevertheless, unlike Japan, Korea, and Taiwan, but like Hong Kong, Singapore's growth has relied heavily on free trade and capital flows..

In the growth model theory, the factors such as labor, capital, and technology are included in the calculation to find out how those factors contribute to economic growth. However, in

fact, when talking about the economic growth model of a certain country, people also refer to other factors such as: institutions, macro policies, even geographical factors, politics. Since then, it shows that the concept of economic growth model used in practice is broader than those in theory. In the process of economic development, the perspective on the influencing factors and the origin of economic growth has also changed over time with the trends becoming more and more complete and clear about growth driving forces. According to Tran Chi Trung (2013), the components of the economic growth model can be generalized as follows: Growth motivations: Growth of the economy can be promoted from many different motivations. According to the calculation, $GDP = C + I + G + NX$ (i.e. consumption, investment, public spending, net exports), the growth motivations include: consumption, investment, public spending, exports. These growth motivations are characterized by: mutually complementary and destructive, phased and finite. To identify the key growth motivations, the following two factors need to be considered: national specificity and international trends. The input factors of economic growth include: financial capital, labor, resources, technology. Prioritizing and focusing resources on these factors are like “fueling the engine”, allowing the motivations to unleash their power. From the perspective of each country, when simply increasing the number of inputs, it is called growth in breadth; when growth relies heavily on rationalization and increasing productivity and efficiency (improvement of capital use efficiency, human resource training, technology development...) is called in-depth growth. The management mechanism is reflected in the state’s institutions and roles. The role of the state in the operation of the economy is mainly reflected in the regulation of the economy, including macro management policies, policies on opening up and integration, economic policies of sectors and state-owned enterprises... and creating a legal framework for economic activities to take place effectively as well as sanctions to ensure compliance.

In fact, each economic growth model has its own characteristics, depending on the actual situation of each country, as well as the relationship between that country and the world and depends greatly on the will of the leadership of each state. Each country can choose a growth model that is suitable to its circumstances in each development stage. In Viet Nam, since the implementation of “Doi moi”, the economic growth model has changed significantly, shifting “from mainly development in width to reasonable development between width and depth” and in-depth development being an important orientation of our Party and State in the country’s socio-economic development in the new period.

2. LITERATURE REVIEW AND PREVIOUS RESEARCH STUDIES

There have been many authors, many scientific works, topics, projects... researching on the economic growth model in Vietnam. These studies have analyzed and evaluated the following main issues:

Firstly, analyzing and evaluating the current situation of Vietnam’s growth model, the quality of economic growth in the period of 2001-2020. Despite of many achievements, Vietnam’s economic growth still reveals many limitations. Tran Tho Dat commented that: Vietnam’s economic growth model in the past relied more on asset and labor capital than human capital... growth tended to rely more and more on capital increase [8]. Tran Tho Dat, Vu Van Phuc et al also pointed out the limitations of the economic growth model in our country: (1) Economic growth was mainly based on increasing traditional inputs; (2) Growth was mainly based on resource exploitation; (3) The

industry structure changed slowly; (4) Unreasonable investment structure, relied too much on the state economic sector, inefficient use of foreign investment capital; (5) the growth model was underperforming; (6) Weak economy's competitiveness; (7) The linkage between economic growth and social progress and justice was not sustainable; (8) Economic growth was associated with serious environmental degradation; (9) The institutional environment and administrative reform were inadequate [8], [11]. Nguyen Dinh Huong in his research article of "Innovating Vietnam's economic growth model towards improving quality, efficiency, fast and sustainable development" at the Scientific Seminar of "Vietnam economic growth model: Status quos and choices for the 2011-2020 period" [11] stated that: Growth model develops in breadth, used cheap labor, sold raw resources, used technology with low gray matter content, large and spread, inefficient and low quality capital investment, low level of production force development was no longer suitable when our country integrates into the world in the context of globalization and fierce competition...

Secondly, assessing the actual situation of labor (human resources) as an input factor of the growth model as a driving force for development. The studies on this issue all had the general comment that: Vietnam had the advantage of abundant and low-cost labor force (compared to China), but the low quality of human resources affected the growth quality and competitiveness of the economy, hindering the application of scientific and technological advances, labor productivity and innovation capacity's increasing of the country. However, there were differences in specific aspects. Nguyen Ke Tuan said: The contribution of the labor factor to economic growth had been small but tended to decrease, which is unreasonable for a country with lots of labor potential. This situation reflected the following shortcomings: (i) The labor force had not been fully utilized in economic activities. As a result, the urban unemployment rate and the rural labor time utilization rate had not improved; (ii) Low quality of labor compared to development requirements; (iii) low labor productivity [24].

Thirdly, studies on the necessity to renew the growth model when the old economic development models were no longer appropriate due to the impact of internal and external factors. The research works on this issue in the form of reference books include: "Economic growth in the "Doi moi" period in Vietnam"[8] by Tran Tho Dat; "Innovating the growth model, restructuring the economy"[16] by Nguyen Ke Tuan [24] and Vu Van Phuc; "Vietnam's economic growth model in the post-crisis period and global economic recession" [10] by Ha Van Hien, Pham Hong Chuong; a number of studies published in the form of scientific articles, such as: "Changing the socio-economic development model and restructuring the Vietnamese economy"[22] by Tran Chi Trung; "Innovation of the growth model: Core issues"[21] by Luu Ngoc Trinh etc. These studies have pointed out the need to renew the growth model due to the intrinsic weaknesses of Vietnam's economy in 2001-2020 period, for example: broad-based growth was the mainstream; a number of growth policies proved to be incompatible with the requirements of integration; negative impacts on human growth have occurred; the risk of further lagging behind in terms of economy and technology... The impact of external factors required renewal of the growth model, including: the global financial crisis in 2008-2009; the adjustment of the world economy; advocates promoting economic restructuring towards the balance of many countries, which emphasis on endogenous growth factors, renovating economic structure towards sustainability... Proposing a new growth model of Vietnam for the period of 2016-2020, with a vision to 2030, Nguyen Ke Tuan suggested that the economic growth model in the new development conditions must still be a combination of

growth in breadth and growth in depth, but taking growth in depth as the main direction, relying on market economy institutions, science and technology, high-quality human resources, international economic integration[24].

The above works also mentioned solutions to implement a new economic growth model, which emphasized the solution to human resource development, especially high-quality human resources - an input factor to create important motivation for economic growth.

3. RESEARCH RESULTS

***Vietnam's economic growth model in the period of 2000-2010**

The factors leading to the need to change Vietnam's economic growth model

- High investment but low efficiency

During this period, the Vietnamese economy faced many difficulties and challenges. At the same time, the economy revealed internal problems, one of which was the rapidly increasing proportion of investment capital in GDP but without causing inflation, since actual output was still lower than potential output.

The ratio of investment capital to GDP has increased from 35.4% in 2001 to 41.9% in 2010. The average ratio for the period of 2001-2010 was approximately 41%, compared with 30.7% in the period of 1991 – 2000, was highest among countries in East and Southeast Asia. In 2007. The ratio of Vietnam's investment capital to GDP was only lower than that of China (44.2%), but much higher than that of South Korea (29.4%), Thailand (26.8%), Indonesia (24.9%), Malaysia (21.9%) and the Philippines (15.3%). Over the years, this proportion tends to decrease in most countries, while in Vietnam, it increases sharply and always remains at a high level [14] .

Stage	Growth rate	Investment capital/GDP
1991 - 1995	8.21	28.2
1996 - 2000	7.00	33.3
2001 - 2005	7.49	39.1
2006 - 2010	6.90	42.7

Table 1: Economic growth rate and investment capital/GDP in 1991–2010 period

Source: General Statistics Office of Vietnam [20]

Although in absolute terms, Vietnam's economic growth rate was quite high, but compared to other transitioning economies, Vietnam was the only country which growth rate of the next 10 years (2001 - 2010) was lower than the previous 10 years (1991-2000). Despite being one of the developing countries which was very short of capital, Vietnam maintained a growth mode based mainly on capital intensiveness - which contributes over 50% of GDP growth. While the advantage of abundant, young labor force, together with the total factor of productivity (TFP) contributes to growth about 50% [14] only. In developed countries, the share of TFP alone in growth results usually accounts for a much higher proportion, from 50-60%. On the other hand, Vietnam's economic growth has not yet relied much on knowledge, science and technology.

After the Asian financial crisis, the room for short-term economic stimulus policies of the Government was still large leading to high GDP growth rate, averaging 7.5% in the period. However,

this stage showed low investment efficiency and the dependence of growth on investment. This shows that the economic development model was mainly in breadth, not in depth [10].

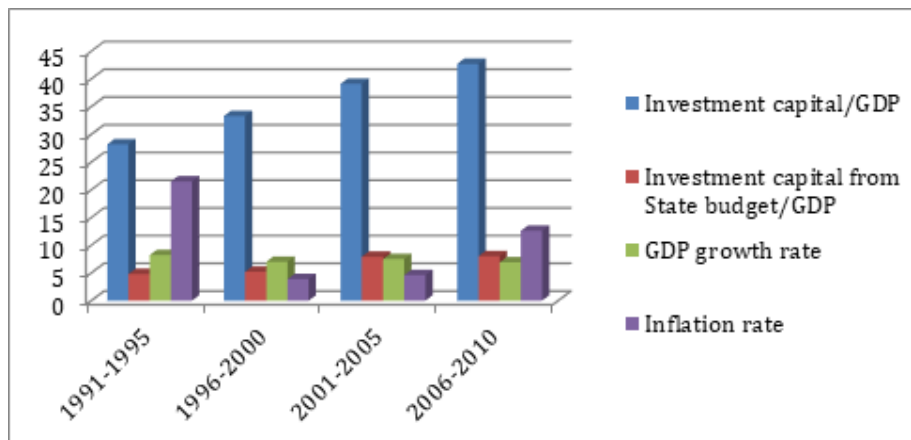


Figure 1: Relationship between investment, growth and inflation in 1991–2010 period

Source: General Statistics Office of Vietnam [20]

- Big budget deficit

Vietnam is a developing country that need capital for development investment, so the state budget is often in serious deficit. This makes inflation worse. The budget deficit of Vietnam in this period was much bigger compared to other countries in the region. Another reason why the budget often in deficit was due to recurrent expenditure. Recurring expenditure accounted for a large proportion of total expenditure because Vietnam's economy was affected by the world economic recession during this period, thus, the need to spend on social security tends to increase. At the same time, this was also the period when the Government was implementing a salary reform program in administrative and non-business units to match the actual situation. Consequently, recurrent expenditures always kept a large proportion of annual spending. Besides, loan repayments also accounted for a significant part of GDP, averaging about 4.2% of GDP in the period of 2006 – 2010 [10].

- High investment cost for infrastructure

During this period, the Vietnamese economy maintained high level of public investment, including investment in infrastructure. In fact, Vietnam's infrastructure was still asynchronous and was a bottleneck hindering socio-economic development. The unit price of infrastructure investment projects in Vietnam was much higher than that of other countries in the world because of the inefficient management of the use of capital due to losses and waste. The following table shows that the average investment rate per km of 4-lane road in Vietnam was very high, the highest level is 5 times higher than that in the USA and about 9 times higher than that of China.

Table 2: Investment cost of expressway

Project/location	Distance	Total cost (million USD)	Year built	Investment rate (million USD/km 4 lanes)
Vietnam's highways				
Phap Van – Cau Gie(*)	32.3	53	1998-2002	1.86
Cau Gie - Ninh Binh	56.0	548	2006-2012	9.78
HCMC – Trung Luong	61.9	613	2004-2010	9.90

Da Nang – Quang Ngai	131.5	1.404	2012-2016	10.67
HCMC – Long Thanh – Dau Giay	51.0	932	2009-2013	18.28
Trung Luong – My Thuan	54.0	1,000	2009-	18.52
Ben Luc - Long Thanh	57.1	1.608	2012-2015	28.16
International comparison				
China				
Jiangxi	134.0	320	1996-2004	2.39
Liaoning	109.0	288	1996-1998	2.64
Shenyang – Jinzhou (6 lanes)	192.0	729	1996-2001	2.53
Shanxi	176.0	618	1999-2006	3.51
Chengdu – Nanchong	208.0	772	1998-2004	3.71
Changchun – Harbin	101.9	404	1998-2003	3.96
Chongqing (4 & 6 lanes)	89.0	461	1996-2004	4.37
United States (average of 25 states)			2002 (**)	5.80

(*) *Phap Van Cau Gie has not yet reached highway standard*

(**) *The USD price index in the USA increased 1.21 times from 2003-2010, the average highway investment cost in the USA was adjusted to 7.0 \$million/km (It should be noted that this is general price index : construction price index is usually higher than general price index)*

Source: Project completion and appraisal reports for Vietnamese and Chinese projects and Washington State Department of Transportation for US projects.

Thus, during this period, the economic growth model in Vietnam was still mainly based on investment capital and the economy itself still has shortcomings that make it necessary to renew the growth model.

***Vietnam’s economic growth model in the period of 2010-2020**

From the analysis of the factors leading to the need to renew the economic growth model in Vietnam during 2000-2010 period, it showed that it is necessary to renew the growth model. In the next period, the Vietnamese economy has changed in applying the growth model and has achieved certain achievements, but besides that, there were still some shortcomings. This section will discuss the limitations of the economic growth model innovation in 2010-2020 period and point out the causes of these limitations. Thereby, some initial suggestions for the next phase will be proposed.

Limitations in transforming the economic growth model in Vietnam

Firstly, there has not been a breakthrough in the use of factors that create economic growth from breadth to depth.

In terms of input factors, the economic growth model in this period was still mainly breadth-based and capital-intensive growth. In the whole period on average, capital and labor factors contributed over two-thirds of GDP, capital increasing alone still contributed over 54% of GDP. Although the contribution of TFP has increased, it still accounted for a low proportion of GDP compared to other countries in the region. For example, the share of TFP’s contribution to economic growth was 51.5% in Korea, 52% in China, 53% in Thailand, 49% in Indonesia and Malaysia[11].

In particular, Vietnam has not yet exploited the advantage of the labor factor in GDP growth, leading to a rapid decrease in the contribution of labor to GDP, from 25.4% (in 2011) to 5%

(in 2018), much lower than the average contribution from 20% - 30%, even 40% of labor to GDP growth of countries in the region with similar population sizes. From output perspective, the economic growth model was highly dependent on the foreign direct investment (FDI) business sector. During 2010-2020 period, the proportion of export turnover of the FDI sector per total export turnover of the economy was approximately 70% [11], in which, there are 6 years (2012; 2014; 2016; 2018; 2019; 2020) Vietnam achieved a trade surplus, but all of these belong to FDI enterprises, on the contrary, domestic enterprises always hold a trade deficit.

In the export structure, the group of processed and manufactured goods accounted for 80% of total export turnover, but mainly belonged to FDI enterprises. From the perspective of economic structure, the economic growth model has basically not changed significantly, this was shown by: (1) Growth structure by sector: economic growth still relied on traditional economic sectors and processing industries. Economic growth during 2010-2020 period was determined by industry and services, but only 10% of service industries owned scientific content, and the rest were traditional, low added value commercial and service industries. 66% contribution to the industry from the processing and manufacturing industry, nevertheless, the localization proportion accounted for less than 40%, which mainly were processing and assembling. The agricultural sector was still mainly traditional agriculture, the proportion of high-tech agriculture, smart agriculture, and processing agriculture was very small; (2) The growth structure by economic sectors: economic growth was mainly based on the informal sectors (individual business) with the contribution of 30% to GDP, while small scale private enterprises contributed only about 8% to GDP and the sector has low efficiency (state economy). The foreign-invested sectors has had a high growth rate over the years (9.56% per year) and tended to overwhelm the private sector [11]. From institutional perspective, in general, the institutional system in our country has not completed and asynchronous, there were overlaps and contradictions that made it difficult to implement in practice and often had to be revised. In addition, complicated administrative procedures, unfairly treated among the economic participants, these limitations have reduced the effectiveness of the State's management, reduced the competitiveness of the economy as well as caused wasting and losing of resources for economic growth.

Secondly, the quality of economic growth was not high

When assessing the quality of economic growth, it is often based on: economic growth efficiency, competitiveness of the economy, labor productivity or ICOR coefficient... In Vietnam, in this period, the growth efficiency of the economy was still low, for example: economic growth was mainly based on outsourcing, so it was unsustainable. The difference between the growth rate of production value and GDP growth has decreased 5-6% during 2006-2010 period to 3-3.5 % during 2011-2020 period [11]. This reflected that the economy growth was still based on outsourcing, depended on raw materials and supplies imported from abroad. The trend of outsourcing was not only in industry but also in agriculture. This factor caused industries to decline in efficiency and affected the entire economy in the long run. Besides, the competitiveness of Vietnam during 2010-2020 period was low and tended to decrease and unstable. Among ASEAN countries, Vietnam's competitiveness ranking was only higher than Cambodia and Laos, lower than the rest with increasing distances. The ICOR coefficient was higher than that of some countries in the region with the same technology level and growth period: other countries and territories needed only 2.7 to 4.1 VND to generate 1 VND of GDP increase while Vietnam needed nearly 6.2 VND to generate 1 VND of GDP increase, which means our country's investment efficiency was less than half that of other countries .

The cause of the restriction

Firstly, the market economy institution still has many shortcomings and has not made a breakthrough to promote socio-economic development. For example, the legal system has not been synchronized and overlap. When formulating laws, the collection of opinions from individuals, businesses and experts has been in general, not really open and transparent, sometimes imposing, leaving difficulties for businesses. In the context of deeper international integration, our country's economic institutions were still slow to innovate, lack of initiative in building barriers that was not contrary to international commitments to protect the market and domestic enterprises against negative external influences. In the past time, many aspects has been improved when the country enter the international market, however, issues such as contracts, markets, production factors, labor, finance, and especially land were necessary to adjust to be more suitable. These limitations made domestic enterprises in particular and the country's economy in general not taken advantage of the opportunities brought about by international integration. Regarding institutional improvement, the development of human resources, especially high-quality human resources was still limited and has not met the requirements of hi-tech enterprises, especially in the context of the booming 4.0 industrial revolution. The infrastructure system has not kept up with the development requirements: The transport infrastructure is still unbalanced in development investment, the connection between the transport sectors is still weak, putting high pressure on the road system. Electricity infrastructure due to lack of investment capital, degraded power grid and asynchronization make it not meet production requirements.

Secondly, inefficient public investment .

As mentioned above, in recent years, the economic growth model in Vietnam has been broad-based, based on exports and labor-intensive sectors. The economic growth mainly relied on investment capital, most of them were from public investment. Despite large capital investment, labor productivity has been being low, resource allocation mechanism was not reasonable leading to low efficiency in public investment. Public investment has not been strongly directed to key sectors and fields key works and projects which were pervasive and create driving force for socio-economic development of the whole country. Many projects were implemented behind schedule, long standing debt in construction caused waste and inefficiency.

Thirdly, many shortcomings in restructuring some industries and fields in the economy

In order to effectively restructure the industry, it is necessary to rely on the advantages of each industry as well as identify and create comparative advantages in localities. However, the restructuring of economic sectors has not yet created positive changes in the structure between economic sectors and within the industry: For example, the restructuring of the agricultural sector has taken place slowly compared with integration pressure, market demand and climate change. Agricultural production was still mainly based on the small, scattered and backward household. Industry restructuring has not been drastic. Industry growth still depended heavily on capital, resources and low-skilled labor. The high-tech industry contributed less than 6% of the economy's GDP[14]. Export-oriented industries have not been organized along value chains, only participating in low added value. The restructuring of service industry has been slow to implement, unable to meet the requirements, especially services with added value and high scientific and technological content. There has not been a close connection between the industries - agriculture and services...

4. DISCUSSION AND CONCLUSION

This section will focus on some recommendations and conclusions about Vietnam's economic growth model in the period of 2020-2030, which clearly indicate the orientation and objectives set in renewing the economic growth model and at the same time propose some solutions to renew the economic growth model in Vietnam.

Orientation and objectives in renewing the economic growth model in Vietnam

The document of the 13th National Party Congress identified the need to “strongly renew the growth model”, “strongly shift” the economy to a new growth model, and “make a breakthrough” in improving productivity, quality, efficiency and competitiveness of the economy. The 12th Congress set the targets to strive for by the end of the term (2020): The productivity of all factors contributing to economic growth was about 30-35%; average social labor productivity increased by 5% per year. The 13th Congress set targets by 2025: The contribution of total factor productivity to economic growth will reach about 45%; average labor productivity growth rate to be over 6.5% per year and by 2030: the contribution of total factor productivity to economic growth will reach 50%; the average growth rate of social labor productivity to be over 6.5% per year. The document of 13th Congress clearly stated that in the new economic growth model, the improvement of productivity, quality, efficiency and competitiveness must be based on scientific, technological and innovation progress, especially the application of the achievements of the Fourth Industrial Revolution; high quality human resources; rational, economical and efficient use of resources; improving the business investment environment, promoting innovative start-ups; continue to accelerate the restructuring of the economy, industry, agriculture and services in the direction of focusing on developing fields and products with potential, advantages, high technology, competitiveness and value, environmental friendly, effective participation in the global production network and value chain; restructuring domestic enterprises, especially state-owned enterprises, focusing on technological innovation, digital transformation, application of new technologies of the Fourth Industrial Revolution and management innovation in the direction of modernity.

To improve the potential of science - technology, human resources quality and create a basis for promoting national digital transformation and digital economy development. The 13th Congress identified strong development of science - technology, innovation and digital transformation as the main driving force of growth model innovation as well as of economic growth. From then on, it is required to strongly innovate, to synchronize institutions, to apply policies, to develop science - technology; to prioritize the transfer and application of scientific and technological advances to economic fields; to encourage the import and transfer of the world's advanced technologies, to improve enterprises' capacity to absorb, master and innovate technologies. To develop a number of key science and technology industries, new technologies, to prioritize digital technology, 5G and after 5G connecting, artificial intelligence, blockchain, internet of things, cyber security, green energy, environmental technology to improve productivity and efficiency of the economy. To develop and improve the operational efficiency of the national innovation system, the innovation start-up ecosystem, taking the business as the center. To promote digital transformation in economic sectors and fields, enterprises, including small and medium enterprises; digital transformation in national governance, state management, organizations and social activities. Taking the improvement

of the technological level of the economy as a criterion to evaluate the performance of science - technology. To promote the development of human resources, especially high-quality human resources to meet the country's development requirements in the context of the Fourth Industrial Revolution and the country's deeper and broader international integration. To continue to synchronously renovate the objectives, contents, programs and methods of education and training to create great changes in the quality of education and training as well as comprehensive human development. To focus on building and developing teams of experts, technical human resources, technology management and corporate governance. To renovate the recruitment mode, special recruit talents in science - technology, to innovate management and state administration. To renovate and improve the quality of vocational education and training, to re-train the workforce which is subject to changing occupations due to economic restructuring, technological innovation, forming skilled workforce with creative thinking to contribute to improving the national competitiveness.

Restructuring and improving science - technology to improve productivity, quality, efficiency and competitiveness of industries, agriculture and services. Restructuring industry, raising technology level, accelerating transformation to digital technology; focusing on developing fundamental industries, especially mechanical engineering, manufacturing, metallurgy, chemicals, fertilizers, supporting industrial materials, improving the autonomy of the economy. To prioritize the development of a number of spearhead, high-tech and new-technology industries such as information technology, electronics, telecommunications, biotechnology, automobile manufacturing, robotics, autonomous motion with remote control equipment and vehicles, digital products, information security industry, pharmaceutical industry, production of biological products, environmental industry, green energy, renewable energy coupled with energy and raw materials saving technology application. Basing on new and modern technology to develop industries that still remain advantages (agricultural product processing, textiles, footwear, etc.), creating many jobs, exporting goods, focusing on stages with high value added. Developing the defense and security industry in the direction of dual-use, truly becoming the national industrial spearhead. Striving to 2025, the proportion of the processing and manufacturing industry will reach over 25% of GDP, the digital economy will reach about 20% of GDP, and by 2030, the proportion of the processing and manufacturing industry will reach over 40% of GDP, the digital economy accounts for about 30% of GDP [3].

Some solutions to renew the economic growth model in Vietnam

To achieve the above mentioned basic goals, the author proposes a number of solutions to transform the growth model in breadth to the growth model in depth for sustainable economic development. Accordingly, to strongly shift the economy to digital marketing on the basis of increased productivity, scientific and technological progress, enhancing high-quality human resources, economical and efficient use of resources to improve the quality, efficiency and competitiveness of the economy. To improve the business environment and to promote innovative start-ups, to develop industries, fields and businesses on the basis of strong application of scientific and technological achievements, especially the fourth industrial revolution...

Firstly, the renewal of the growth model must be associated with the process of accelerating the completion of the socialist-oriented market economy institution, especially the development of the market for production factors; associated with substantive reform of administrative procedures

towards the interests of enterprises (especially the private sector), investors and individuals. For the time being, Vietnam has deeply integrated into the world economy, the explosive development of digital technology has led to the formation and development of many new business models and economic forms (circular economy, digital economy, night economy...). However, the system of laws, regulations, policies and administrative procedures is still in asynchronizing, inconsistent, not really transparent and publicization, not really creating favorable conditions for businesses and people, not yet encourage the participation of the whole society in infrastructure investment. Therefore, reforming and perfecting the economic institutional system, in association with substantive reforming of administrative procedures should be considered first as the most important breakthrough, untying all constraints of inappropriate regulations in the new context of the country and the world; creating an attractive, healthy and fair investment and business environment. At the same time, it is necessary to build a compact management apparatus, with a team of cadres and civil servants with ethical qualities, integrity, constructive spirit, professional and creative capacity.

Secondly, to improve general productivity with special attention being paid to the development of human resources, especially high-quality human resources with modern knowledge and skills to meet the new development trend of the economy, rich in creative motivation, boldly taking risks. The new context and trends depend greatly on human resources and a team of dynamic, qualified and skilled managers who are able to apply and innovate, master knowledge and techniques to invent, develop and apply new ideas. Vietnam needs to implement an overall strategy to build skills for workers, including: (1) enhancing school readiness through early childhood education development; (2) building cognitive and behavioral foundations in general education; (3) to develop technical skills through linkages between employers and vocational training institutions. At the same time, the State needs to have appropriate policies to carry out the restructuring of labor from agriculture to industries and services.

Thirdly, improving the country's competitiveness. Factors which hinder the country's competitiveness include inefficient governance, corruption, lack of technical infrastructure, lack of skilled labors and poor access to finance. Therefore, in order to improve the country's competitiveness, it is necessary to synchronously implement many different solutions, including continuing to improve institutions and institutions implementation to facilitate business activities and competition, perfecting the multi-sectoral coordination mechanism between the central and local governments, stepping up judicial reform, public administration reform, enhancing publicity and transparency, preventing and combating corruption. To promote breakthroughs in building modern and synchronous infrastructure, creating a foundation for promoting the development of new industries and fields, especially digital economy, digital society and digital government. In particular, the leading role in the development of the digital economy has two important tasks: strategy for digital economy development and state management of the digital economy. These are quite correct orientations of our growth model in the coming time to ensure a fast and sustainable growth rate. Synchronously dealing with the promulgation and enforcement of legal regulations on business and competition; improving the efficiency of mobilizing to access domestic and world markets resources, to strongly promote domestic linkages and international integration capacity. To focus on developing and increasing access to input factors of the production process, especially capital, labor, science and technology, infrastructure and resources. To promote healthy competition

motions and bring into play the comparative advantages of localities, strengthening linkages of economic sectors, economic actors and economic space, economic regions, improving capacity for international integration; to strongly develop various types of enterprises, building an open legal corridor to create favorable conditions for enterprises to develop. Regarding the restructuring of state-owned enterprises and state-owned economic groups, it is necessary to be more drastic in order to end the equitization roadmap of state-owned enterprises as well as to divest state capital in large economic groups in which the state does not need to hold capital.

Fourthly, renewing the growth model must be associated with promoting international economic integration. International economic integration has become one of the important driving forces for socio-economic development, increasing the national synergy; promoting the completion of the socialist-oriented market economy institution in Vietnam; expanding markets, boosting exports, taking advantage of a large amount of investment capital, technology, knowledge, management experience and other important resources; creating more jobs; raising the people's intellectual level and improve the people's material and spiritual life. The effective implementation of new-generation free trade agreements (FTAs) will create opportunities for market expansion and diversification with high incentives, deeper participation in the global supply chain and product network; actively contribute to the process of synchronous and comprehensive renovation, arousing the potential of the country and the creativity of all classes of people, improving people's living standards, raising the level of development, gradually reducing the rate of outsourcing and assembly of the economy. To take advantage of the opportunities offered by FTAs, the state needs to orient businesses so that they can adjust their business investment strategies, adapt, seize and take advantage of opportunities. In addition, businesses need to focus on constantly making efforts to improve product quality, enhance their competitiveness, thereby improving their position in the regional value chain; The business community also needs to take advantage of opportunities to apply technical technology as well as information technology in approaching, marketing markets, dealing with partners, creating higher surplus values for businesses. By that way, the economy has the opportunity to actively and deeply participate in the process of shaping and reforming regional and international institutions, mechanisms and structures.

Transforming economic growth model to realize the goal to be a high medium income country and basically become a modern industrial country in 2030; become a prosperous countries in 2045, the powerful innovation of the economic growth model in the directions for institutional improvement, economy reconstruction, improving overall productivity, enhanced national economic competition capacity and further active in international economic integration are the right directions in the coming time, in order to overcome the limitations and inadequacies from previous growth models.

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DEVELOPMENT OF THE DIGITAL ECONOMY IN VIETNAM IN THE CONTEXT OF INDUSTRIAL REVOLUTION 4.0

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Abstract: *The Fourth Industrial Revolution and the emergence of the Internet of Things (IoT) mark a remarkable development in the use of data in activities of social life, especially in the field of manufacturing business. In that context, the digital economy is becoming an important feature and development trend, researched, applied and developed by many countries. For Vietnam, developing the digital economy is a great opportunity to close the development gap. The article focuses on four main issues: (1) Initial awareness of the digital economy, (2) Reality and prospects for digital economy development in Vietnam, (3) Advantages and problems set out in the development of the digital economy, (4) Some solutions to develop the digital economy in Vietnam in the context of the industrial revolution 4.0.*

Keywords: *digital economy transformation, digitalization trend, smart data, globalization, industrial revolution 4.0.*

1. INITIAL PERCEPTION OF THE DIGITAL ECONOMY

The emergence of the industrial revolution 4.0 with the trend of digitalization or digital transformation is really appearing strongly in all fields. At the heart of the industrial revolution 4.0 is digital transformation, digital integration, connectivity or hyper-connectivity, and intelligent data processing. Digital technology is applied in all fields and economic sectors, from industry, smart agriculture to digital services; From production to distribution, goods circulation to supporting infrastructure such as transportation, logistics, finance, banking... Therefore, the content of the digital economy gradually coincides with the content of the digital economy.

According to the common definition of the Oxford Digital Economy Collaboration, a digital economy is “an economy that operates primarily on digital technology, especially electronic transactions conducted via the Internet”. In Vietnam, at the “Vietnam Private Economic Forum 2019”, the digital economy is understood as all economic activities based on a digital platform, and digital economic development is the use of technology and data to create out new business models.

R. Bukht and R. Heeks came up with the most general concept of the digital economy by proposing the system of “Conceptual Framework for the Digital Economy”. This conceptual framework clearly outlines the scope of the core Digital Economy in the field of information and communication technology, the narrowly defined Digital Economy and the broader Digital Economy. In which (1) the core digital economy includes hardware manufacturing, information services, software and information and communication technology consulting; (2) The digital economy adds digital services and the platform economy to the core digital economy. Moreover,

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the narrow digital economy also includes part of the sharing economy, the loosely linked economy; (3) Digital economy complements ebusiness, ecommerce, industry 4.0, precision agriculture, algorithmic economy, rest of the sharing economy, economy loosely matched numbers.

In general, the Digital Economy is an economy that uses digitized knowledge and information to guide and improve resource allocation, productivity, and high-quality economic growth. An economy that embraces the business and management models that create digital products and services or support the delivery of digital services to governments, businesses, and citizens. Digital economy development is the convergence of many new technologies, such as: big data, cloud computing, Internet of things - IOT, blockchain - Blockchain, Artificial Intelligence AI, 5G wireless network. New technology allows humans to handle massive workloads and make smarter decisions. This also means that big data analysis creates a new level in digital economic development.

In essence, these are organizational models and operating modes of the economy based on the application of digital technology. Applications of the digital economy can be seen every day, including: cross-border ecommerce, online retail, common digital currency, digital industry platform, online learning, online medical examination, working. Remote, transportation, delivery, online advertising... are also integrated with digital technology to meet the convenience needs of people.

2. REALITY AND PROSPECT OF DIGITAL ECONOMY DEVELOPMENT IN VIETNAM

Currently, Vietnam is considered as one of the countries with a good digital economy development rate in the ASEAN region with good telecommunications and information technology infrastructure, wide coverage, and high user density high. By the end of 2020, all three major domestic mobile phone carriers, Viettel, VNPT and Mobifone have simultaneously announced coverage areas and officially tested 5G service business, bringing Vietnam into the group of countries the first in the world to access this technology, contributing to strongly promoting the digital economy. More importantly, unlike previous technologies, which were mostly imported, Vietnam has gradually mastered and manufactured 5G devices, a strategic step in the development of telecommunications - technology country information. Currently, there are about 30,000 enterprises in hardware, software, digital content and telecommunications and information technology services. The software industry has about 10,000 enterprises, with a high growth rate (15-20%/year). Some businesses have demonstrated their digital technology capabilities, implementing many high-tech projects such as self-driving cars, robots, AI...

The trend of digitization has appeared in many fields and economic sectors, from commerce, payment to transportation, education, health... and the use of technology has gradually entered the lifestyle, living and working habits of people. people thanks to the great benefits that it brings. Social networking applications, video viewing applications, games, work applications or shopping applications through ecommerce platforms are used regularly by internet users every day. Vietnam currently has at least 64 million internet users, an average of 1 day each person spends up to 6 hours 42 minutes using the internet on smart mobile devices. Therefore, digital transformation brings many opportunities for small, medium and micro businesses and households through ecommerce platforms - a bridge between suppliers and customers.

Vietnam's ecommerce is at a stage of rapid development in terms of both market size and form, becoming one of the ten most potential growth markets in the world for ecommerce growth. Online marketplaces, shopping, business, entertainment, along with delivery services, online

payment solutions, card payments, payment machines exploded strongly, present everywhere place in each family, residential area. While world-famous ecommerce brands are strongly landing in Vietnam such as Amazon, Ebay, Alibaba, Shopee... ecommerce sites originating from Vietnam are also blooming, a Pages such as: Lazada Vietnam, Tiki, Sendo, FPT Shop, Dien May Xanh, Mobile World ... gradually dominate the domestic market share, thereby, promoting changes in shopping trends and behaviors of customers citizen Vietnamese consumption.

According to the Vietnam Ecommerce White Paper in 2020, Vietnam's ecommerce will grow impressively in 2020 with an increase of 18%, the market size is 11.8 billion USD, accounting for 5.5% of total retail sales of consumer goods and services nationwide. And is considered to be the high growth rate of the region in the complicated situation of the Covid-19 pandemic.

It is the Covid-19 epidemic that is a big push to Vietnam's ecommerce industry, strictly applied social distancing and isolation measures have increased the demand for internet use of people and businesses. At the same time, changing people's shopping and consumption habits towards online shopping and making businesses change their traditional business methods to online business. The number of people participating in online shopping in Vietnam tends to increase rapidly, if in 2015, this number was only 30.3 million people, in 2020 it will reach 44.8 million people. The percentage of internet users who participate in online shopping at least once a year has also increased, from 70% in 2018 to 77% in 2019. The average number of customers accessing ecommerce platforms is about 3.5 million visitors on day.

However, in order to maintain the speed of development of e-commerce platforms, it is necessary to especially overcome obstacles when buying online such as the problem of poor quality products compared to advertising, customer service, insurance. Confidentiality of personal information, uncompetitive prices, shipping problems, unprofessional website, complicated payment methods... The report of the Vietnam Ecommerce White Paper in 2020 shows that these numbers are still quite large, specifically: 72% poor quality products compared to advertising; fear of personal information being disclosed is 58%; price (more expensive than direct purchase/ unclear) is 42%; poor customer service is 27%; the hassle of ordering online is 26%; transportation and forwarding services are still poor at 23%; Unprofessionally designed sales website/app is 13%; The complex payment method is 12%.

According to the Southeast Asian Digital Economy Report 2019 released by Google, Temasek and Bain & Company, the digital economy in Vietnam reached 12 billion USD in 2019, leading the region along with Indonesia. Vietnam and Indonesia are two breakthrough markets in the trend of developing the digital economy compared to other countries in the region, with growth rates exceeding 40% a year, while the rest of the countries grow by 20-30% annually. The report also assesses the prospect of digital economic development in Vietnam that can reach 43 billion USD by 2025, including the fields of: ecommerce, online travel, online communication and ride-hailing technology. Data61 organization (Australia) also shared the same opinion when assessing that Vietnam's GDP could increase by about 162 billion USD in 20 years, if the digital transformation process in Vietnam takes place successfully and fast. This can completely be expected because Vietnam has many advantages to enter the era of digital economic development.

Firstly, our Party and State clearly show their determination, orientation and strong efforts in promoting the development of the digital economy in Vietnam. In the long-term strategic vision, the

Report “Vietnam 2035: Towards Prosperity, Creativity, Equity and Democracy” sets out the task of taking advantage of the industrial revolution 4.0 and the digital economy to achieve the goal of exiting the country “middle income trap”, sustainable development, putting Vietnam in the group of twenty largest economies in the world. The Politburo issued Resolution No. 52-NQ/TW dated September 27, 2019 on a number of guidelines and policies to actively participate in the fourth industrial revolution. The Prime Minister also signed and promulgated Decision No. 749/QĐ-TTg dated June 3, 2020 approving the “National Digital Transformation Program to 2025, with orientation to 2030”.

Most recently, in the Document of the XIII Party Congress, the concept of the digital economy was repeated many times and was identified as one of the key tasks, including: “promoting research, transferring, application of scientific and technological advances, innovation, especially achievements of the fourth industrial revolution, implement national digital transformation, develop digital economy, improve productivity and quality quality, efficiency and competitiveness of the economy”. The Congress also identified and focused on developing information and telecommunications infrastructure, creating a foundation for national digital transformation, and gradually developing the digital economy and digital society as one of the strategic breakthroughs in this term. The guidelines and orientations of the Party and State on the digital economy have been clearly institutionalized, becoming a great driving force for the development of the digital economy in Vietnam.

Second, Vietnam has quite favorable infrastructure platforms for digital transformation and application. The network of telecommunications, information technology and internet network infrastructure has developed rapidly, covers a wide area and is modern, not inferior to advanced countries in the world. The percentage of people using internet and smartphones is always in the top of the fastest growing countries in the world. Potential labor force, with nearly 100 million people, of which the proportion of the population aged 15 - 64 accounts for 68%, the educational level is quite high. Vietnamese psychology and personality adapt quite quickly to new things, especially technology. These are also important advantages for the development of the digital economy in Vietnam.

3. ADVANTAGES AND PROBLEMS IN DEVELOPING THE DIGITAL ECONOMY IN VIETNAM

3.1. Advantage

Firstly, Vietnam has a high proportion of young population, providing human resources for the development of the digital economy in Vietnam. With the advantage of a young population, consumption patterns, and a relatively good background in mathematics and information technology, Vietnamese people love and quickly approach new technologies, which is the key to success promoting the development of the digital economy in Vietnam.

Secondly, the Vietnamese Government has had many policies, showing great determination in orientation, action and taking advantage of all opportunities of the 4.0 revolution to promote the development of the digital economy in Vietnam.

Third, Vietnam’s digital economic infrastructure is quite convenient for digital transformation and application. Vietnam has a network of telecommunications network infrastructure, information technology and internet infrastructure that develops rapidly, covers a wide range and is modern, not inferior to advanced countries in the world. The rate of people using the internet and smartphones is high, among the top countries with the fastest growth rates in the world.

Fourth, Vietnam's political system and macro economy has always maintained stability. Along with rapid economic growth and an increasingly integrated economy with the world, the increase in people's incomes, the growth of the middle class and a large market with nearly 100 million people. This is really the foundation to promote the digital economy in general and ecommerce in particular.

Fifth, recently, the forms of digital economy in Vietnam have developed diversely, and tend to grow stronger in the coming years. The trend of digitalization, transformation and application of digital technology in many fields and economic sectors, from commerce to transportation, banking, healthcare, education, tourism, entertainment, advertising and other forms of applications in which ecommerce grows rapidly in both scale and form. Online marketplaces, shopping, business, entertainment, along with delivery services, online payment solutions, card payments, and payment machines exploded strongly, present everywhere place. While world-famous ecommerce brands are strongly landing in Vietnam, such as Alibaba, Amazon, Ebay, Shopee... ecommerce sites of Vietnamese origin are also blooming. Some sites such as Lazada Vietnam, Tiki, Sendo, FPT Shop, Dien May Xanh, Mobile World... are gradually taking over the domestic market share and thereby promoting changes in shopping trends and behaviors of Vietnamese consumers.

3.2. Difficult

First, the economy uses a lot of cash: According to economic experts, a challenging factor for the digital economy is that the use of cash is still too large. Cash is used for the majority of ecommerce transactions which is one of the huge obstacles to the development of the digital economy. It demonstrates a lack of trust and mutual suspicion and greatly reduces the possibility of successfully connecting transactions.

Second, build a database and data connection. Data connection is a difficult problem for Vietnam. Many ministries, branches and localities have also built up fragmented and scattered databases, lacking connectivity. In order for the foundational models of technology services and digital technology service models to be implemented well and securely, it is very necessary to connect and share data from State agencies.

Third, human resources have not met the requirements. Human resources, especially information technology human resources - the most important factor in the competition and development of the digital economy - are still few in quantity, not guaranteed in quality. Vietnam is facing a shortage of high-quality human resources, especially information and communication technology human resources, human resources for new technology fields such as artificial intelligence (AI). Vietnamese education has not kept up with the development trend of the digital economy and the creative economy of the Fourth Industrial Revolution. If this issue is not paid attention to and invested properly in the coming time, it will be a big obstacle for the development of the digital economy in our country.

Fourth, the institutional and legal environment for the development of the digital economy. The institutional and legal environment is still weak, not tight, not synchronized, transparent and constructive. Due to the rapid development of science and technology, along with the outbreak of the Covid-19 epidemic, the digital economy, business methods and new creative ideas make state management agencies more transparent quite confused in the management of digital economic activities.

Fifth, the assurance of network security, confidentiality and information safety. The digital economy is based on information technology, the internet always contains great risks in terms of security, information safety, finance and privacy of data, of entities participating in the digital

economy. Vietnam is one of the countries that is frequently attacked and is also vulnerable to cyberattacks. According to the Vietnam Computer Incident Response Center, there were a total of 10,000 cyberattacks targeting Vietnam's internet in 2019, causing a loss of VND 12,300 billion. According to research and statistics of Kaspersky security firm, Vietnam is in the top 3 countries with the most cyberattacks in the world in 2020. This shows that there is a big gap of Vietnam in the field of security. network security, information security. Failure to ensure network security and information safety will hinder the goal of turning the digital economy into one of the main pillars of our country's economy.

4. SOME SOLUTIONS TO PROMOTE THE DEVELOPMENT OF THE DIGITAL ECONOMY IN VIETNAM

Firstly, Accelerate reform and digitization of state management agencies as well as businesses, including building a national data infrastructure, building a digital governance strategy. Strongly reform administrative procedures such as simplification, digitization, electronicization and transparency of information to support people and businesses. Focus on developing e-government, e-banking, e-transactions and e-commerce. Request central and local state agencies to set up their own websites, provide many online services to facilitate people's work and life. In particular, the Government needs to accelerate organizational reform to meet the requirements of the digital economy and pioneer the process of digitizing the national governance apparatus.

Second, Build and perfect institutions, laws and policies to create a framework for digital economy development. Establish a specialized, competent and highly responsible institutional agency in the development of the digital economy, usually under the Government with the participation and coordination of relevant ministries and sectors. The State should issue decrees on data sharing, electronic authentication, protection of personal data and assurance of the privacy of individuals, as well as the handling and settlement of disputes and conflicts over activities business, commercial and civil activities in the digital environment.

Thirdly, Support to improve the capacity and competitiveness of Vietnamese enterprises, and at the same time focus on fostering, disseminating and equipping knowledge for Vietnamese businessmen to meet the requirements of the digital economy and trends the industrial revolution 4.0 as well as adapting to the integration into the world market in the new era. There should be an incentive mechanism to promote the adoption of digital technology in both small and medium enterprises as well as financial support for businesses to digitally transform and promote innovation. Enterprises also need to actively integrate digital technology, promote the development of production and business solutions based on digitization; business model optimization, efficient use of intelligent supply chain. Develop new skills for staff such as enhancing accessibility, creative thinking and adaptability to the constantly changing and evolving technology environment.

Fourth, Encourage and promote the e-payment in the economy. Use modern electronic payment methods such as scanning QR codes, paying with ewallets via mobile phones.

Fifth, Improve the quality of human resource education and training for the digital economy. In which, focus on developing and attracting experts in digital technology and digital entrepreneurs; Renovating education and training to re-train the workforce to catch up with digital technology trends; Update and supplement training programs on digital technology, digital platforms, from coding to design thinking and necessary digital skills for the future in the school; Promote training and practice linkages between the university and the business sector in digital technology

application; Develop policies to connect the domestic science and technology community with foreign countries, especially with the overseas Vietnamese community.

Sixth, Equip knowledge, unify thoughts and actions on the digital economy, thereby drastically transforming the thinking of leadership, management and socio-economic management in the digital economy. Currently, the awareness and knowledge of many officials, businesses and people about the opportunities and challenges of the digital economy for the development of the country is still uneven at all levels and sectors. Digital transformation at some levels, sectors, localities and businesses is still limited. Vietnam must identify the digital economy development and integration strategy as an inevitable trend of the times, an important and necessary direction in the national development orientation, and an opportunity for Vietnam to break through and move forward off, pick up. Accordingly, state management agencies and businesses need to absorb new management models as well as new production and business ideas, and also create conditions and opportunities for new initiatives to be born and develop.

5. DISCUSSION AND CONCLUSION

The emergence of the industrial revolution 4.0 with the trend of digitization or digital transformation is really appearing strongly in all fields. For Vietnam, developing the digital economy is a great opportunity to close the development gap. The suggestions and solutions that the article focuses on have contributed to promoting the digital economy in the face of the strong impact of the 4.0 industrial revolution. Accelerate reform and digitization of state management agencies as well as businesses, including building a national data infrastructure, developing a digital governance strategy. Building and perfecting institutions, laws and policies to create a framework for the development of the digital economy. Support to improve the capacity and competitiveness of Vietnamese enterprises, and at the same time focus on fostering, disseminating and equipping knowledge for Vietnamese businessmen to meet the requirements of the digital economy and revolutionary trends. Industry 4.0 as well as adapting to the integration into the world market in the new era. Encourage and promote the electronic payment in the economy. Improve the quality of human resource education and training for the digital economy. Equipping knowledge, unifying thoughts and actions on the digital economy, thereby drastically transforming leadership thinking in management as well as socio-economic management in the digital economy.

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SOME RECOMMENDATIONS ON THE CHOICES OF BROADENING THE EXCISE DUTY BASE IN VIETNAM

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Abstract: This article summarizes the published research results related to the broadening of the excise duty base to point out the theoretical basis of broadening the excise duty base and the need for further researches on broadening the excise duty base in Vietnam. This paper also outlines the process of broadening Vietnam's excise duty base for nearly 20 years and its impacts on the Vietnam government revenues. The researchers also assume the broadening of Vietnam's excise duty on four groups of goods and services (Sugary soft drink, smart phones, online games and cosmetics) and survey consumers' response. On that basis, this paper proposes some recommendations on broadening the excise duty base in Vietnam in the coming time.

Key words: Tax base, tax base broadening, excise duty, government revenues.

1. METHODOLOGY

In this study, we used the following research methods:

Statistical analysis: Basing on statistics of government revenues from excise duty to evaluate the changes in both absolute and relative numbers of revenues from excise duty over time and to analyze the trend of government revenues.

Survey by questionnaire: This method is used to assess the impacts of excise duty base broadening on consumption behavior and those which are affected by the policy. The survey was carried out using a questionnaire to capture information about the respondents and their consumption choices according to the assumed possibilities of broadening the excise duty base. On that basis, the researchers synthesize and process data in order to determine the research hypotheses about the impacts on the consumption behavior and the impacts on the relevant subjects. The groups of goods and services in the survey include: Sugary soft drink (except milk and dairy products); smart phones; online games; cosmetics. In order to obtain objective information, the survey respondents were selected diversely by being classified by sex groups, ages, income levels, training levels, occupations and living areas. During the survey, the assumed excise duty rates are below 5%, from 5% to under 10%, from 10% to under 20%, from 20% to under 50% and over 50% on the selling price. Online survey was made via Google form at the link: <https://forms.gle/g7vWG4dCnjaHdKYS9>. The period in the survey is from 8th March 2021 to 30th March 2021. The total number of people who responded to the survey is 508 with all walks of life in society. The majority of survey respondents are women (84.6%) compared to 15.4% of men. The rate of

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single respondents is also much higher than the married ones (63.8% compared to 36.2%). The age groups of respondents are from 22 to under 30 years old majorly (occupying 39.2%), followed by from 18 to 22 year – old group (occupying 30.5%) and under 18 year – old group (occupying only 0.2%). In terms of education level, the majority are university graduating or higher (accounting for 95.3%) with income from VND9 million to under VND20 million, accounting for the highest rate of 28.1% in comparison with the remaining income levels. In terms of occupation, the largest proportion is office workers with 49.4% and concentrated in cities directly under the central government accounting for 63.4%. Basically, the sample is diverse and ensuring representativeness and reliability.

2. LITERATURE REVIEW

Tax base broadening has been mentioned in many published studies. Especially, in recent years most countries around the world with the pressure of reducing government revenues due to tariff cuts and the race of reducing corporate income tax rate, the problem of broadening tax base has been discussed a lot.

Tax reform in several groups of countries has empirical studies. On that basis, a number of policy recommendations are made, including a recommendation to broaden excise duty base. The World Bank (1997) with the report “Tax Reform in Developing Countries” has comprehensively assessed the tax reform process in developing countries for about 30 years, from the 1960s to the mid-1990s. In this study, excise duty is considered in the consumption tax group with quantitative assessments of the impacts of policy changes in developing countries in each period associated with the adjustment of the excise duty scope and excise duty rates. This study shows that tax reform, including the broadening of the tax base, is a process that requires a long time due to many different reasons including political, institutional and technical issues. At the same time, in reality, some countries are forced to find ways to broaden the tax base, including the excise duty base, when they must expand the tax base due to the reduction of government revenues pressure.

Bert Brys, Stephen Matthews and Jeffrey Owens (2011) with an OECD -sponsored study titled “Tax Reform Trends in OECD Countries” found that tax reform practices in some OECD countries show that an broadening of the tax base (including excise tax base) with the reduction of tax rates has the effect of increasing government revenues but less distorting the business decisions of enterprises and business households.

One of the practical conditions motivating countries to study to broaden the excise duty base for the service sector is that the proportion of consumption of goods tends to decrease while the proportion of consumption of services tends to increase. Broadening the tax base on final consumer is fairer and has less distorting effects on economic activity than it does on input elements of production (Fred Nicely and Liz Malm, 2015).

Robert A. Pierce Carol D. Peacock (1986) analyzes the impact of the new legislation on consumption tax in Florida in 1986 to give some policy suggestions, which are: (i) The government needs to carefully consider many aspects of the impact of the broadening of consumption tax base, including the excise duty, on revenue, on prices, on economic growth, on regulation of income and on a number of other important economic indicators; (ii) When broadening the tax base, it is also necessary to pay full attention to the organizational aspects of tax administration in practice.

Luu Duc Huy (2019) clearly analyzes the elements constituting the tax base in general and excise duty in particular, as a theoretical basis to study the current situation and the ability to broaden the tax base and prevent the erosion of government revenues in Vietnam. Theoretically, Le Xuan Truong (2017) affirms that the broadening of the tax base has a positive impact on many aspects. The most positive impact of expanding the tax base is to create a foundation to ensure sustainable government revenues while still lowering tax rates. This means that expanding the tax base has the effect of redistributing the tax burden among different actors in the economy. Unlike taxing on subjects that have not been taxed before, expanding the tax base allows to reduce the amount of tax collected on objects that have been taxed before.

Some general studies on the broadening of the tax base and the broadening of the consumption tax base have assessed the fact that the scope of application of excise duty in Vietnam is still narrow. Because of narrow scope of application of excise duty, Vietnam's excise duty revenues still accounts for a modest proportion of total government revenues (Nguyen Thi Thanh Hoai, 2017). Vietnam's excise duty base is still narrow and there is plenty of room to broaden the tax base (Luu Duc Huy, 2019; Tran Thi Phuong Nhung, 2018).

Truong Ngoc Phong and Pham Thanh Thai (2017) conducted a quantitative economic evaluation study on the possibility of applying excise duty on non-alcoholic beverages in Vietnam and made a controversial statement that "The excise duty policy for soft drinks in Vietnam does not meet 2 out of 3 important criteria of a good tax policy, namely (1) good economic impact and (2) fairness, while the other criteria namely simplicity (feasibility) is also not supported if tax policy with discriminatory tax rates is applied. On the other hand, soft drinks are not a luxury product, so taxation will not satisfy the basic arguments of excise duty theory. These researchers recommend: (1) Soft drinks should not be included in the list of items subject to excise tax; (2) Analysis of price elasticity of demand shows that soft drinks have strong price elasticity of demand, so imposition of tax will sharply reduce the revenue of manufacturers, and the target of tax collection will not be achieved. Therefore, if the objective of the tax is revenue, the government may consider taxing based on sales, or improve corporate income tax policy; (3) The beverage item is not a luxury good and the tax policy if used would be a regressive tax policy. In this case, the government should pursue a sales tax policy; and (4) Beverage in Vietnam is a very price-sensitive commodity and not a luxury good, so manufacturers can use price tool to expand their market and focus more on low-income market areas such as rural and mountainous areas.

Nguyen Hong Thang (2017) said that broadening the tax base will face some challenges as follows: (1) Low national competitiveness, mainly low price competition, low VAT making it difficult to broaden the tax base in terms of value; (2) The low quality of economic growth makes it difficult to expand the tax base in a sustainable way; (3) The level of staff and management quality is still low, there is no tax management technology to keep up with advanced countries, making it difficult to expand the tax base in terms of quantity; (4) Tax data is still insufficient and incomplete, making it difficult to control transactions that are likely to erode the tax base; (5) Social factors are not favorable, because tax culture in the community of more than 90 million people can be said to have not yet formed, so the voluntary compliance level of residents is weak. These social factors affect the political will in designing and implementing a drastic policy of expanding the tax base.

From the above analysis, a number of studies have analyzed the current status of tax reform, including broadening the excise duty base in some countries around the world. A number of studies have evaluated the impact of excise duty base broadening over historical periods associated with specific socio-economic contexts. Some studies suggest that the scope of excise duty in Vietnam is still narrow and under current conditions, the excise duty base can be expanded. Some studies propose to expand the scope of excise duty for some specific goods and services in Vietnam. There are also different opinions on whether or not to add certain goods and services as excisable items with conflicting qualitative and quantitative analysis results. For example, it is suggested that non-alcoholic beverages and carbonated soft drinks should be added to the subjects subject to excise duty, while some researchers suggest that excise duty should not be levied on these items. Therefore, it is necessary to further analyze with sufficient scientific and practical evidence on the possibility of broadening the excise duty base in Vietnam in the present and future conditions.

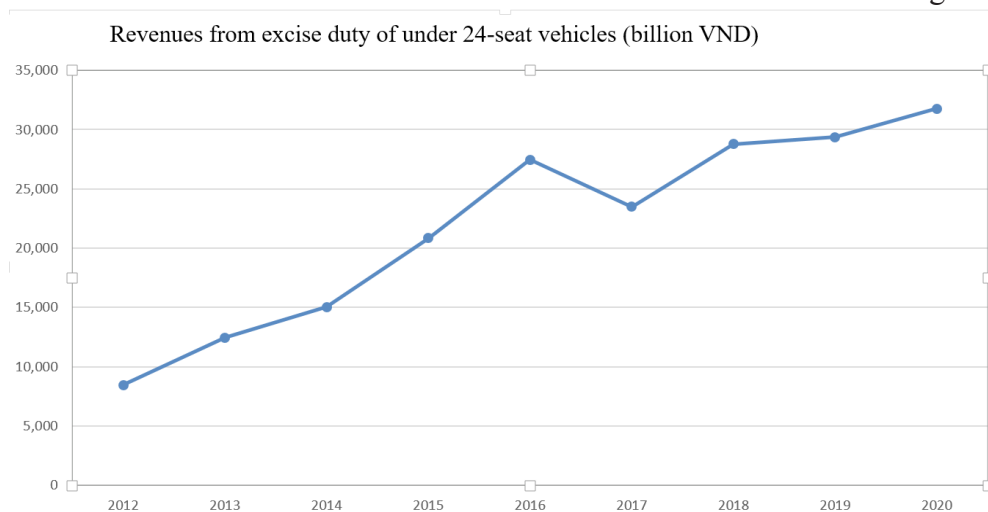
3. THE PROCESS OF BROADENING THE EXCISE DUTY BASE IN VIETNAM IN THE RECENT YEARS AND ITS IMPACTS ON THE GOVERNMENT'S REVENUES

The main features of the broadening of the excise duty base in Vietnam over the past 20 years can be summarized as follows:

From 1st January 2004: Lottery was added to the list of services subject to excise duty with the tax rate of 15%. Unfortunately, The tax authority's database of excise duty revenues for this service cannot be accessed.

From 1st January 2009: The following goods are added to the excise duty category: (1) Motorcycles with a cylinder capacity of more than 125 cc; (2) Aircraft and yachts (except those used for the business purposes of transporting goods, passengers and tourists); (3) Cars with less than 24 seats carrying both people and goods.

In the data of government revenues, the tax authority only records the excise duty by item from 2012 and also only a few major groups of goods. According to the accessible data, the excise duty revenue from 2012 to 2020 from under 24-seat cars is shown in the following chart:



[Source: General Department of Taxation]

The above chart shows that excise duty revenue from under 24-seat cars has increased from VND 8,465 billion in 2012 to VND 31,765 billion in 2020. In terms of proportion, the excise

duty revenue from under 24-seat cars is 19.5% of the total domestic excise duty revenue in 2012 and gradually increased to approximately 30% in the following years, reaching the proportion of 31.7% in 2020. This shows that the addition of under 24-seat cars on the list of goods subject to excise duty has brought huge government revenues. Unfortunately, the data on the amount of excise duty on imported cars and domestically produced cars could not be separated by the tax office. However, in recent years the proportion of imported cars is quite high and tends to increase, reaching about 60% to 70% in value compared to domestically produced cars. This shows that the contribution of excise duty revenue of under 24-seat cars to the government revenues is significant.

From 1st July 2016: The excise duty base was broadened by changing the base price. Accordingly, the excise duty base price for imported goods is determined to be the price sold by the importing business establishment. According to previous regulations, the excise duty assessable price for imported goods is determined by the import tax base price plus import tax. With the change in regulations on base prices for imported goods, importing establishments must declare and pay excise duty both when importing and when reselling domestically imported goods. Importing establishments must pay excise duty at the stage of importation. When selling domestically, excise duty must be paid and the amount of excise duty paid at the import stage is deducted.

The above change in the tax base of excise duty which aiming at broadening the base have raised the government revenues from excise duty. The following table shows that impact.

Unit: billion VND

Products	2017	2018	2019	2020
Cigarettes, cigars	1	1	76	1
Wine	543	658	639	460
Beer	33	84	123	82
Under 24-seat car	1,158	1,890	4,411	3,078
Gasoline	32	9	2	1
Others	275	419	443	508
Total	2,042	3,061	5,694	4,130

[Source: General Department of Taxation]

The data shows that the excise duty revenue of imported goods when sold domestically reached more than VND 2,000 billion in 2017 and tended to increase gradually, reaching nearly VND 6,000 billion in 2019. Particularly in 2020 due to the impact of the epidemic disease the excise duty revenue decreased in comparison with 2019 but still reached more than VND 4,000 billion. It should be noted that the reduction of the excise duty paid domestically of imported cars is significantly affected by the decrease in the consumption of imported cars in 2020 compared to 2019, in which, there is the impact of 50% reduction of registration fee for domestically produced and assembled cars.

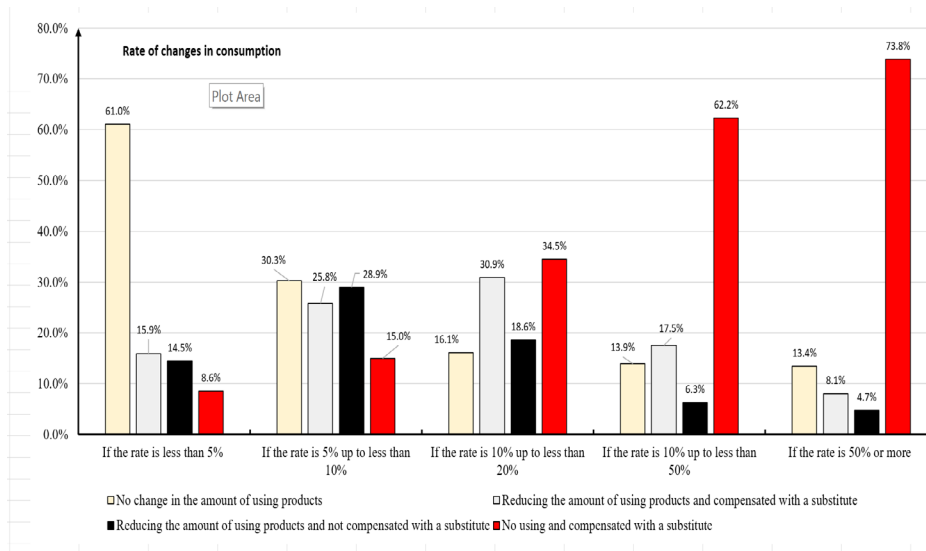
4. SURVEY'S RESULTS

a. Average spending on products and services assumed to be subject to excise duty

Criteria	Amount of money (VND)	Ratio to average income per person per month in Vietnam ¹
Average monthly spending on sugary soft drinks (except milk and dairy products)	277,484.85	6.6%
The amount of money to buy the current smart phones	10,415,329.73	246.2%
Average monthly spending on online games	260,347.22	6.2%
Average monthly spending on cosmetic products and services	983,804.35	23.3%

The above survey results show that compared to the average income (AI) per person per month in the whole country is VND 4,230,000 (from the results of the population living standard survey in 2020 announced by the General Statistics Office in 2021), the average spending on buying and using smart phones is much higher than the AI (246.2%); The average monthly spending for the use of sugary soft drinks (except milk and dairy products) is low at only 6.6%, similar to the level of expenditure. Spending on the use of online games accounted for only 6.2%. As for the average monthly expenditure for using beauty products and services is 23.3% higher than the AI level.

b. The level of response to products and services according to the assumed excise duty rates applicable to sugary soft drinks (except milk and dairy products)

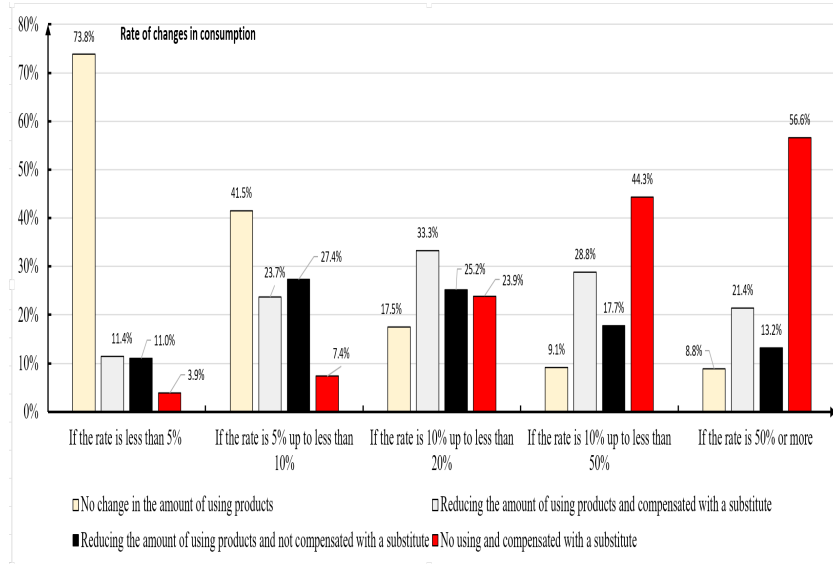


The chart above shows that with a tax rate of less than 5%, the “No change in the amount of using products” rate is only 61%, the rest is nearly 40% of “Reducing the amount of using products” rate (compensated or not compensated with a substitute) and up to 8.6% of “No using” rate. When the tax rate is increased from 5% to 10%, the rate of “No change in the amount of using products” reduced to about half with only 30.3%, the rate of “No using” nearly doubles to approximately 15% and the rest is “Reducing the amount of using products” choice. The higher the tax rate, the higher the “No using” rate. When the tax rate is over 50%, the “No using” rate rises to 73.8%, but the rate of no change in the amount of using products at the tax rate from 20% or more

¹ The results of the population living standard survey in 2020 announced by the General Statistics Office at www.gso.gov.vn: The average income per person per month for the whole country is VND 4,230,000.

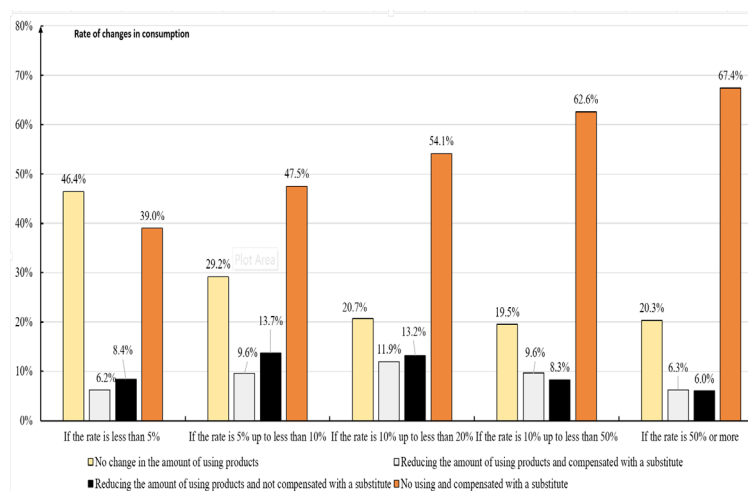
has not changed much. This is considered as an almost mandatory product of this group. The level of response also varies widely according to the group of subjects surveyed.

c. The level of response to products and services according to the assumed excise duty rates applicable to smart phones



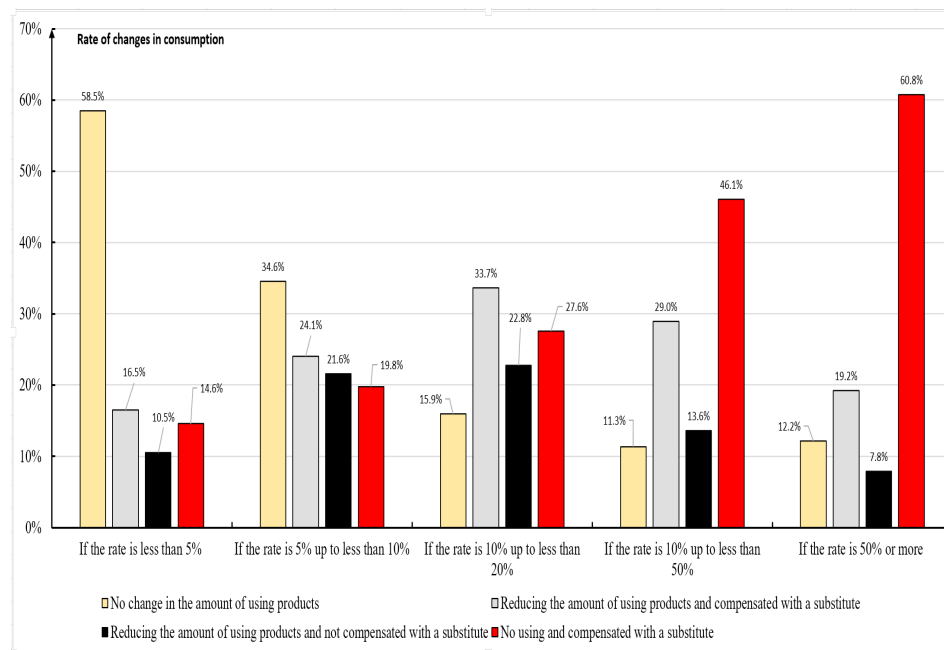
The chart above shows that with a tax rate of less than 5%, the rate of “No change in the amount of using products” is only 73.8%, the rest is 26.2% of “Reducing the amount of using products” rate (compensated or not compensated with a substitute) and 3.9% of “No using” rate. When the tax rate is increased from 5% to 10%, the rate of “No change in the amount of using products” is nearly halved to 41.5%, the rate of “No using” nearly doubles to about 7.4 % and the rest is “Reducing the amount of using products” choice. The higher the tax rate, the higher the “No using” rate, when the tax rate is over 50%, the “No using” rate is up to 56.6%, but the rate of no change in the amount of using products at the tax rate from 20% or more has not changed much. This is considered as an almost mandatory product of this group in the range from 8.8% to 9.1%. The level of specific response to each group according to the tax rate is also very different.

d. The level of response to products and services according to the assumed excise duty rates applicable to online games



The chart above shows that with a tax rate of less than 5%, the rate of “No change in the amount of using products” is only 46.4%; while “Reducing the amount of using products” is 14.6% (compensated or not compensated with a substitute) and the rest up to 39% of “No using” rate. When the tax rate is increased from 5% to 10%, the rate of “No change in the amount of using products” is nearly halved to 29.2%, the rate of “No using” increased to about 47.5 % and the rest is “Reducing the amount of using products” choice. The higher the tax rate, the higher the “No using” rate, when the tax rate is over 50%, the “No using” rate is up to 67.4%, but the rate of no change in the amount of using products at the tax rate from 20% or more has not changed much (around 20%). This is considered as an almost mandatory product of this group. The level of specific response to each group according to the tax rate is also very different.

e. The level of response to products and services according to the assumed SCT rate applicable to cosmetics



The chart above shows that with a tax rate of less than 5%, the rate of “No change in the amount of using products” is 58.5%; “Reducing the amount of using products” rate (compensated or not compensated with a substitute) is 27%, and the rest 14.6% is of “No using” rate. When the tax rate is increased from 5% to 10%, the rate of “No change in the amount of using products” is nearly halved to 34.6%, the rate of “No using” increased to about 19.8% and the rest is “Reducing the amount of using products” choice. The higher the tax rate, the higher the “No using” rate, when the tax rate is over 50%, the “No using” rate is up to 60.8%, but the rate of no change in the amount of using products at the tax rate from 20% or more has not changed much (reducing from 15.9% to 12.2%). This is considered as an almost mandatory product of this group. The level of specific response to each group according to the tax rate is also very different.

g. Overall assessment from survey results

Among the four goods and services surveyed, the percentage of smart phones users at the highest level is up to 96.7% of the respondents, followed by sugary soft drink (excluding milk and dairy products) at 78%. As for online games and cosmetics, the usage rate is low, even the

rate for online games is only 14.2%. Therefore, applying the excise duty rate on these goods and services will affect much more significantly “Sugary soft drinks (except milk and dairy products)” and “smart phones” than the other two services (in which many groups do not use these two types of services, so there is no impact). For the assumed excise duty rates applied when giving the survey, it shows that at less than 5%, the change in product use is not large. But if the tax rate is increased from 5% to 20%, there is a large decrease in use, up to more than half. And if the tax rate is from 20% or more, the change is no longer large. Because people changing the level of use and switching to not use or use the substitute products are whose needs cannot be changed anymore, so they have to accept the high tax rate.

For the product “Sugary soft drink (except milk and dairy products)”, when applying the assumed excise duty rates, the largest change in the “Reducing the amount of using product” rate is the group of subjects being “Over 55 years old” and “State officials, civil servants, teachers” when the tax rate increases. While the group with income “From VND 50 million to under VND 100 million” has almost no change in use of this product across tax rates.

For the product “smart phones”, when applying the assumed excise duty rates, the largest change in the “Reducing the amount of using product” rate is the groups of subjects in “Rural plains” and having “Not yet available income”. The groups with income “Under VND 5 million”, age of “Over 55” and “General education level” also had a large decrease in the level of usage when the tax rate increased. While the group “State officials, civil servants, teachers” had the least change in the rate of using this product in the survey groups.

For the product “Online games”, when applying the assumed excise duty rates, the largest change in the “Reducing the amount of using product” rate is the group of “State officials, civil servants, teachers” and gender “Male”. When the tax rate increases, there is almost no change in the rate of product use for the groups living in the “Midland and mountainous rural areas” and having income of “Between VND 50 million and less than VND 100 million”.

For the “Cosmetics”, when applying the assumed excise duty rates, the largest change in the “Reducing the amount of using product” rate is the groups with age of “Over 55” and having income “From VND 50 million to under VND 100 million” when the tax rate increased. While the group “State officials, civil servants, teachers” had a change in the rate of using this product through the lowest tax rates.

5. SOME RECOMMENDATIONS ON THE CHOICES OF BROADENING THE EXCISE DUTY BASE IN VIETNAM IN THE COMING TIME

From the results of the assessment of the impact on government revenues of the previous broadenings of the excise duty base and the survey results, there are a number of ideas that can be researched on the broadening of the excise duty base in Vietnam in the coming time as follows:

Firstly, the list of goods and services subject to Vietnam’s current excise duty includes 10 groups of goods and 6 groups of services. These goods and services are all high-class goods and services (Aircraft, yachts, passenger cars with less than 24 seats, air conditioners with a capacity of 90,000 BTU or less, discotheque business, massage, karaoke, golf business, betting business ...) or goods with negative externalities for life such as cigarettes, beer, wine, gasoline etc. However, in comparison with international practice, it is still possible to research and add non-essential

goods and services or goods and services having negative externalities to the taxable list to further promote the role of excise duty in the instructions for production and consumption.

Secondly, in the context of the need to lower the tax rates of most taxes to improve the competitiveness of the tax system and to cut tariffs according to the roadmap for the implementation of free trade agreements, the broadening of tax base in general and excise duty base in particular is inevitable. Therefore, it is most important to consider broadening the excise duty base, in which the focus is on adding excise taxable objects. Besides, it is possible to study changing the tax method to expand the tax base. Combining both the absolute tax and the tax rate on certain items (e.g.: tobacco, beer, wine) is a choice that can be considered to broaden the excise duty base. Unfortunately, in this study, we do not have enough data to analyze the possibility of expanding the excise duty base by changing the tax method.

Thirdly, in term of specific goods and services, it is possible to consider additional options to the list of goods and services subject to excise tax in order to broaden the tax base. Basing on real-life observations and survey results, we found the following policy options could be considered:

- ***For sugary soft drinks*** (except for milk and dairy products): This is a non-essential item. At the same time, the abuse of this item is not good for human health. According to studies by the World Health Organization (WHO), the abuse of soft drinks will lead to obesity and diabetes. Overweight and obesity are risk factors for many non-communicable diseases such as: cardiovascular diseases, hypertension, stroke, atherosclerosis and coronary occlusion, myocardial infarction; risk of type 2 diabetes and some cancers such as gallbladder cancer, breast cancer, colon cancer, prostate cancer and kidney cancer... In Vietnam, the proportion of adults being overweight and obese accounts for about 25% of the population. For children under 5 years old, the obesity rate increased rapidly from 0.6% in 2000 to 5.3% in 2015. In Ho Chi Minh city, this rate was up to 10.8% (especially in the urban areas this rate is up to 12%) which is higher than the average for Asia and developing countries (the global average of under-five obesity is 6.9%). According to our survey results, when levying excise duty, it depends on the assumed tax rate that affects different target groups. There is a group that have significantly reduced their usage and switched to using alternative products. There is a group that hardly change the level of use. Thus, it can be seen that, if this item is placed under excise duty at an appropriate tax rate (about 10% to 15%), there will be two main effects: (1) Reducing consumption in some target groups and reduce the demand for this item; (2) There is more government revenues from the excise duty on this product and an increase in value-added tax revenue from substitute goods. Therefore, we recommend that this item be excisable.

- ***For smart phones***: In the context of social explosion of information and digitization, almost everyone uses a phone. In which, the percentage of smart phones use accounts for the majority. However, only people with a good income or higher and those living in urban areas often change smart phones when a new generation is born and tends to use more than one smart phones. The survey results also show that people living in rural areas spend less on smart phones and reduce their usage the most when this item increases in price due to excise duty. Meanwhile, the reduction in smart phones spending in urban areas and high-income groups is insignificant. Therefore, we recommend adding this item to be excisable with the tax rate of about 15% to 20%. This helps to increase government revenues and redistribute income of high-income earners, contributing to ensuring social justice.

- **For online games:** This service has developed in the very first stage in Vietnam and needs to be controlled to ensure healthy growth. However, the market size is still small. In addition, the way online games fees are currently charged is quite complicated in the context of the sharing economy. In the current situation of Vietnam, there is no technical solution to ensure the determination of a suitable tax base. Therefore, in the immediate future, this service should not be subject to excise duty.

- **For cosmetics:** Depending on the target group, the demand for use changes differently when the selling price changes due to the assumption of excise duty rate. There are groups of people who still accept to consume cosmetics even though they are taxed with high excise duty rate. Because this is a luxurious goods, excise duty is very suitable to redistribute income and ensure social justice. Therefore, we recommend adding this item to be excisable with the tax rate of about 15% to 20%. This helps to increase government revenues and redistribute income of high-income earners, contributing to ensuring social justice.

6. LIMITATIONS AND FURTHER RESEARCH

As for assessing the actual impact of the excise duty base broadening process, this study only shows the actual impact on government revenues of some specific goods and services but has not shown impact of all items when added to the taxable list. Other items cannot be evaluated due to the lack of database.

Because of the lack of data, the research team could not assess the impact of the proposed options on adding excisable items to the government revenues, prices of goods and services and GDP, although if using the overall equilibrium model this is doable. In order to have an initial basis for considering broadening the excise duty base, the research team used the survey by questionnaire and qualitative analysis. The research results are preliminary suggestions to a more complete assessment when data are available.

If there is enough data and time, we believe that the general overall equilibrium model should be used to evaluate the quantitative impact of the options for broadening the excise duty base on government revenues, prices of goods and services and GDP. Base on the full forecast by the model, policy decisions of the State are chosen appropriately.

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THE RELATIONSHIP BETWEEN ECONOMIC GROWTH AND CULTURAL DEVELOPMENT DURING THE FOURTH INDUSTRIAL REVOLUTION

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Abstract: *The relationship between economic growth and cultural development is a fundamental relationship that reflects the qualifications and quality of the country's sustainable development. Cultural development is always based on the material basis of economic and targeted economic growth, motivated by culture. In this digital age, to address the relationship between economic growth and cultural development, a micro-to macro perspective is needed.*

Keywords: *Economic growth, cultural development, cultural industry.*

1. CONCEPTS OF ECONOMIC GROWTH AND CULTURAL DEVELOPMENT

Economic growth is one of the indicators of development of each country. Economic growth is the increase of gross domestic product (GDP) or gross national income (GNP) over a certain period. Economic growth is also defined as an increase in the level of production that the economy generates over time.

Sustainable economic growth is economic growth that not only involves increasing per capita income but must be geared towards the sustainable development of both the present and the future, focusing on all three factors: economic, social and environmental; maintaining a high growth rate in the long term, increasing income must be associated with improving the quality of life or increasing welfare and poverty alleviation. Growth does not necessarily have to reach a high rate but needs to be at a reasonable, sustainable level. Thus, sustainable economic development must be associated with social development, environmental protection and human development.

Cultural development is the comprehensive and synchronous development of the components that constitute the cultural life of a nation.

Culture is a multi-meaning concept, with a wide content with many different interpretations, related to all aspects of human material and spiritual life.

First, culture is understood as the creative capacity towards human values, promoting the progress of society. Therefore, culture is the category of only human attributes (individuals and communities), evaluating the level and quality of life of people in social practical activities. Therefore, cultural development is the development of the capacity and qualities of people, of the community, crystallizing into the personality, character and bravery of people in each country, each people. This is the origin of material cultural values and spiritual cultural values, serving the needs of human existence and development.

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Second, culture is understood as a part of superstructure based on the development of infrastructure at the core of economics. The economy is the basis, the condition for cultural development. Culture reflects socio-economic development and has a dynamic impact on social survival, on the economy. Therefore, to build and develop a culture, it is important to develop the economy, fight the fundamentalism, dogma - want to build a high culture while the economy is still low and backward.

However, it is not until there is a high economic foundation to build and develop a new culture, but to build step by step in the process of developing the economy. Therefore, cultural development is the development of areas related to the spiritual life of society, united with the material foundation as the socio-economic basis to create the synchronous and comprehensive development of the new socio-economic form.

2. MICRO-APPROACH: CULTURE IS THE VALUE ATTACHED THROUGHOUT EACH PERSON'S LIFE, BUILDING CULTURAL NORMS AND SKILLS

By this approach, culture can be considered as a system of values, norms and skills, human habits are expressed in life, learning, labor and production and business. In this sense, the dialectical relationship between economic growth and cultural development should be considered and addressed in the influence of the cultural value system, norms and skills on the economic behavior and activity of individuals and social groups. This means that culture creates indirect economics through the creation of motivation, orientation, adjustment of human behavior and activities in the field of economics.

From there, it can be seen that cultural development is the promotion and formation, development of positive values, norms, habits, progress, capable of promoting behaviors and activities to ensure economic growth and sustainable development. The most prominent are the core values, such as patriotism, national spirit, humanity, community, creativity, logic. Some studies from this perspective show that the importance of the motivation for success, the desire to get rich legally, the rule of law and the promotion of democracy, science and technology are enough to improve labor productivity and improve the quality of life. At the same time, building culture or cultural development in addition to preserving the traditional and beautiful features of the nation, is also the process of eliminating, eliminating, or "destroying" bad, negative, backward habits (agricultural style, passivity, closure, conservatism, stagnation, self-deprecation, disuading, arbitrariness, raking, dependence, sectarianism, appearance, eagerness) can hinder and inhibit economic growth.

This approach can create a great advantage in addressing the relationship between economic growth and cultural development through two mechanisms. According to the first mechanism, economic growth is both a result and a particularly effective practice to test each component and cultural structure of each subject, each party to the economic process.

According to the second mechanism, economic growth requires the formation and development of appropriate qualities and competencies to ensure the motivation for sustainable development. The strategic solution here is to develop culture with characteristics of ethnicity, humanity, democracy, science and form cultural characteristics, such as patriotism, compassion, compassion, honesty, solidarity, industriousness, creativity. This strategy is carried out simultaneously throughout each individual's life, from within the family, during schooling and then, throughout his life; each

person is both active, actively “lifelong learning” and while fundamentally and comprehensively renovating education and training.

In the process of lifelong learning, people are constantly learning to gradually improve their self-awareness. These are the values that the continuous process of human learning brings. From self-supplied labor to reasonably assigned labor that produces high productivity, to new scientific and technologically intelligent labor that produces superior economic growth and to creative labor that can meet and develop high human needs.

Similarly, through lifelong learning, people can develop a system of values of employment, for example from working to serve the needs of human survival towards having stable jobs to have stable incomes, to high-quality jobs to have high incomes and moving towards creative jobs for economic growth and higher. It's about working and being happy with your job.

For the young generation, the fundamental and comprehensive renovation of education and training aims to form and develop the value system, standards and cultural habits necessary for economic growth and sustainable development. The new general education program issued in 2018 is oriented to form and develop in students 5 qualities and 10 core competencies necessary for the people of Vietnam in the 21st century. The five qualities are patriotism, responsibility, honesty, hard work and kindness. The ten core competencies are autonomy and self-study, physical capacity, aesthetic competence, computer capacity, technological competence, scientific competence, mathematical capacity, language capacity, problem-solving and creativity capacity, communication and collaboration capacity. In which, the capacity of informatics and technological capacity directly meet the requirements of the digital economy and the digital age. Accordingly, the educational program in Vietnam and many countries around the world over the past 2 years has demonstrated its superiority. During the COVID-19 pandemic, Vietnam saw this challenge as an opportunity for digital change and transformation in education with nearly 80% of high school students learning online and 50% of higher education institutions teaching remotely. In fact, digital transformation in education not only helps to change the method of teaching and learning, but it creates rapid adaptation in any situation. In particular, help teachers and students maximize their ability to think, create and be proactive.

3. MACRO APPROACH: CULTURAL INDUSTRY DEVELOPMENT GOES HAND IN HAND WITH BUILDING AND PERFECTING THE CULTURAL MARKET

The settlement of economic growth and cultural development relationships requires the development of a sum of parts and cultural aspects, including economic culture, political culture, socio-culture, arts and culture, religious culture, educational culture, scientific culture, technology culture, environmental culture and other dimensions. Each part, this edge can be divided into parts and its constituent edges, such as technology culture including agricultural technology culture, industrial technology culture, service technology culture, science technology culture. Cultural development manifests it is manifested in the development of each part, each side, each type of culture, in which the digital and digital elements penetrate and transform throughout the culture and each part, its composition and edge. In the strong globalization trend, countries with underdeveloped cultural industries will easily become countries specializing in importing and consuming cultural products. This both loses its advantage in the domestic market and limits the ability of the industry to export products to international markets.

In Vietnam, cultural industry is a fairly new concept, still debated but generally unified “Cultural industry is the industry of creativity, production, reproduction, dissemination of cultural products and services using industrialization, computerization, commercialization, in order to meet the diverse cultural needs of society, such activities are protected by copyright”¹. This view has stated the basic characteristics of the cultural industry as an industry but unique compared to other industries, expressed in the products created that have a close combination of high technology and cultural values, economic value, such products are geared towards serving the community, serving society. In 2016, the concept of cultural industry adopted by the Government in the Strategy for the Development of Vietnamese Cultural Industries to 2020, the vision to 2030 is as follows: the cultural industry “is the application of scientific and technological advances and business skills, using creative capacity, cultural capital to create cultural products and services, meet consumer needs, enjoy the culture of the people”². In general, many concepts recognize culture as a special industry in the context of the explosion of information technology, a product of the technological revolution “Cultural industry is the typical industrial field of the 21st century, developed bases on the use of digitalization, relying on information connectivity technology and internet networks, taking advantage of informational resources and related resources to serve the process of composing, developing, distributing, consuming and consuming cultural products on a global scale”³. Cultural industries in Vietnam include advertising, architecture, software and entertainment games, handicrafts, design, cinema, publishing, fashion, performing arts, fine arts, photography and exhibitions, television and radio, cultural tourism⁴.

On that basis, a solution that became popular and internationally implemented is to promote the construction and development of cultural industry and attach it to it as “cultural economy”. The sectors of the cultural industry are expected to become important service economic sectors, developing markedly in both quality and quantity, contributing positively to economic growth and employment settlement through the production of more and more diverse cultural products and services, high quality, meeting the creative needs, enjoyment, cultural consumption of the people in the country and export. At the same time, the development of the cultural industry is also a means of preserving, preserving and promoting the good values of the country with a long-standing culture; contributing to promoting the image of the country and people of Vietnam, establishing brands of cultural products and services, in which priority is given to the development of industries with many advantages and potentials. Typically, the cultural tourism industry in the context of the tourism industry is being paid attention and has policies and strategies to promote the development of the key “smokeless” industry, with great contributions to the country’s socio-economic growth.

In the U.S., for example, the output value of the arts and culture industry is estimated at nearly \$919.7 billion, accounting for 4.3 percent of the country’s gross domestic product (GDP) in 2017⁵. According to a summary report by the Arts Support Fund and the Department of Economic Analysis, U.S. Department of Commerce, in 2019, U.S. cultural and arts exports reached nearly

¹ Nguyen Thi Huong, Topic of Cultural Industry Development in Vietnam – Status and Solutions, 2009

² Decision No. 1775/QĐ-TTg dated September 8, 2016 on the strategy for the development of Vietnam’s cultural industries to 2020, with a vision to 2030

³ Pham Hong Thai, The Development of Cultural Industries in Japan and Korea, Social Science Publishing House, 2015.

⁴ Decision No. 1775/QĐ-TTg dated September 8, 2016 on the strategy for the development of Vietnam’s cultural industries to 2020, with a vision to 2030

⁵ According to the Summary Report of the Endowment for the Arts and the Department of Economic Analysis, U.S. Department of Commerce, 2021

\$78 billion, imports nearly \$45 billion and nearly \$33 billion were up to 10-fold from 2006 to \$3.3 billion. However, the definition and classification of cultural industries in the world vary. In the U.S., for example, the cultural industry consists of 11 industries: advertising, architecture, services and schools of art, design, film, museums, music, performing arts, publishing, television, and the visual arts. According to the United Nations Educational, Scientific and Cultural Organization (UNESCO), the cultural industry consists of two sectors. The group of core cultural industries consists of 11 disciplines: museums, exhibitions, libraries; performing arts; festival; visual arts, handicrafts; design; published; television and radio; film and video; photography; Interactive communication. The expanding cultural industry group consists of seven industries: musical instruments, audio equipment, architecture, advertising, printing equipment, software and audiovisual hardware.

In Vietnam, the task of developing the cultural industry goes hand in hand with building and perfecting the cultural market was officially launched in 2014 and the main target is set by the end of 2020, the revenue of the cultural industry will contribute about 3% of the gross domestic product (GDP) and create more jobs for society. In particular, the goal of some fields is expressed specifically: The film industry reached about 150 million USD (Vietnamese films reached about 50 million USD); Performing arts industry reached \$16 million; The art, photography and exhibition industry reached about \$80 million; The advertising industry (in television, radio, newspapers, magazines, internet and outdoor advertising) reached about \$3,200 million; The cultural tourism industry accounts for 10-15% of the total of about \$18-19 billion in revenue from tourists¹.

The domestic cultural market is growing rapidly with the penetration and widespread use of phones and internet-connected vehicles. Some of the industries that have advantages are focused on development including Cinema, performing arts, advertising, handicrafts, software, and entertainment games, television, and radio, fashion, cultural tourism. In addition, the architecture, design, publishing, fine arts, photography, and exhibition industries are oriented and gradually developed in many forms, many “exchanges” from directly to online have become an important service economy, contributing positively and effectively to the socio-economic development of the country.

It is expected that by 2030, the cultural industry will contribute up to 7% of GDP, of which: The film industry will reach about 250 million USD (Vietnamese films reach about 125 million USD); The performing arts industry reached about \$31 million; The art, photography and exhibition industry reached about \$125 million; The advertising industry (in television, radio, newspapers, magazines, internet, and outdoor advertising) reached about \$3,200 million; The cultural tourism industry accounts for 15-20% of the \$40 billion in revenue from tourists. Towards the diverse, synchronous, and modern development of all cultural industries in a sustainable manner, applying advanced technology; cultural products and services have prestigious brands in the region and internationally, meet the standards of developed countries, and participate deeply in the global cultural product and service value chain.

Not unexpectedly, only statistics from major cinemas across the country in 2019, total Vietnamese screen revenue reached over VND4.1 trillion (equivalent to about US\$178 million),

¹ Prime Minister (2016), Strategy for development of Vietnam’s cultural industries to 2020 vision to 2030, approved in QD No. 1755/QĐ-TTg, September 8, 2016.

of which, Vietnamese films accounted for about 29% of revenue with about VND1.15 trillion (about US\$50 million). This is the highest year of Vietnamese film revenue in the previous history; achieve and exceed the objectives set out in the Strategy to develop Vietnam's cultural industries to 2020. Meanwhile, cultural tourism activities are one of the four product lines that attract a large number of domestic and foreign tourists largely organized based on regional cultural characteristics, associated with localities that hold many cultural festivals, such as rural areas,

Ethnic minority areas have made significant contributions to the cultural development of the social community, especially the effectiveness of poverty alleviation of the nation. The advertising sector has also seen strong growth in both quantity and quality with about 6,000 businesses advertising and advertising methods being widely implemented in many other mass media. Other sectors of the cultural industry also grew strongly, not only bringing economic efficiency but also promoting and promoting the values of Vietnam to the whole world.

In 2020, like most economic sectors, the cultural industry also faces major difficulties and challenges due to the covid-19 epidemic, which is complicated around the world, the revenue of the industry may not meet expectations. However, the demand for entertainment and access to cultural types has become indispensable spiritual meals for all subjects and is increasing with more frequent density, so the cultural industry in Vietnam can still be confident about recovery and development when the epidemic is controlled. Despite being a new economic sector, behind many countries in the world, Vietnam still has a lot of potential and development opportunities to become a center of creative cultural industry in the region and reach international brands.

4. SOLUTIONS TO EFFECTIVELY ENHANCE THE RELATIONSHIP BETWEEN ECONOMIC GROWTH AND CULTURAL DEVELOPMENT

In order to realize the strategic goal of developing 13 cultural industries into service sectors that make an important contribution to economic growth and sustainable development, it is necessary to actively and actively implement tasks and solutions, specifically:

First, you need to focus on your strengths. The right identification and focus on the area of strength is an important requirement to ensure that the performing arts become a successful cultural industry. Some of the industries that have advantages are focused on development including: Cinema, performing arts, advertising, handicrafts, software and entertainment games, television and radio, fashion, cultural tourism. In addition, the branches of architecture, design, publishing, fine arts, photography and exhibitions are oriented and gradually develop into important service economy, contributing positively and effectively to the socio-economic development of the country.

Secondly, to promote and resolve the above-mentioned relationship, it is important to persevere in building the economy as the center, making efforts to develop production capacity, and renew the growth model towards sustainable growth. Rich social material wealth is the basis for the implementation of social justice. Only by efforts to develop the production power and creation of increasingly rich material wealth will we be able to meet and enhance the material and spiritual life of the people. Moreover, it is possible to gradually improve the level of production capacity to be able to perfect the socialist-oriented market economy, creating a powerful material basis to ensure the happiness of the people.

Third, well address the dialectical relationship between market economic development and cultural construction.

The market economy has contributed to the release of economic potentials, the dynamicization of economic life, the development of economic sectors, and the speed up of international economic integration. However, the market economy also leads to deep social fragmentation, the phenomenon of widespread ethical degradation of lifestyle, distorting many values leading to the loss of national cultural identity. That requires us to know how to maximize the positive impact and minimize the negative impact of the market economy, maintain stability and social development.

It is important to quickly overcome the underdevelopment of Vietnam's education, successfully build a lifelong learning and learning society under modern and advanced mottos, expand the vocational school system, promote undergraduate and postgraduate training towards knowledge economy development.

In terms of science and technology, it is necessary to have a development strategy in the right direction, focusing on strengthening the capacity of endogenous science and technology, expanding and developing the technology market, strengthening the link between research in universities and enterprises to improve the quality of human resource training. Promote international cooperation in science and technology activities, implement technology transfer, strongly innovate scientific and technological management mechanisms. Creating a deep penetration of the natural and social sciences, gradually moving from the goal of material growth to the goal for the comprehensive quality of life of people.

Fourth, further strengthen the improvement of social policies. This work should be carried out in the direction of: Firstly, quickly improve the income distribution regime, the regulation of income distribution order; secondly, actively improving the public finance regime, establishing a reasonable welfare system, paying proper attention to hunger eradication, poverty reduction, effective investment in health, education and culture, ensuring jobs for the people, building a healthy ecological environment, safety; thirdly, pay attention to ensuring and improving social security, perfecting the social security regime, and strengthening the system to ensure social welfare equity. Applying various measures based on law, gradually forming the social security system, taking equity rights, fair opportunities, fair distribution is the main content, so that the whole people enjoy the fruits of the cause of innovation.

Fifth, to promote the good settlement of the relationship between economic growth and cultural development, it is necessary to promote the education and propagation of this relationship because this is a relationship related to the whole of social life to everyone and all walks of life. It must be well aware that this relationship refers not only to economic, political, cultural and social rights and obligations, but also to the concept of thought, subject consciousness and cultural qualities of the people. Therefore, it must become the awareness of the whole people and rely on the efforts of all members of society.

CONCLUSION

Properly addressing the relationship between economic growth and cultural development is a condition of economic and social development. Therefore, we do not wait for high economic development to develop culture, much less sacrifice culture to pursue pure economic growth. Every economic development policy must be geared towards cultural development, the implementation of progress and social justice, and each policy of cultural development, ensuring progress and social justice, must contribute to promoting economic growth, whether directly or indirectly, immediate or long-term.

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FACTOR AFFECTING CONSUMER BUYING BEHAVIOR IN THE CONTEXT OF COVID 19

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Abstract: Apparently, the outbreak of the Covid-19 epidemic has disrupted supply chains, production and business activities on a global scale with a series of negative impacts on many industries such as: aviation, tourism, catering and so on. Furthermore, the pandemic also has a significant influence on the insurance industry specifically. It definitely has made the market and customers more aware of the meaning of having health, which has pushed the insurance market to grow stronger in the past two years, opened up opportunities for insurance companies to get approach to consumers. As a result, this study will clarify the factors and the extent of their influence particularly on the life insurance area during the Covid-19 epidemic in Hanoi based on the theory of consumer behavior with opportunities for insurance companies to get approach more easily to consumers. It also identifies the factors and extent of their influence based on the theory of consumer behavior with 4 groups of elements according to a survey of 200 customers in Hanoi using insurance products. According to the research results, a number of solutions are proposed to protect consumers health by insurance, thereby helping to stabilize and develop national financial market.

Key words: Covid-19 epidemic, life insurance consumers, consumer protection

1. INTRODUCTION

It cannot be denied that the impact of the Covid-19 pandemic on each economy has consequences and hidden risks related to the achievement of socio-economic goals in the process of moving towards a sustainable development. In which, the fields of banking, insurance and financial markets are directly affected and have a great impact on the whole economy generally. In the context of the strong development of the life insurance market, consumers' awareness of health protection and safety financial investment needs are enhanced, insurance products are increasingly diversified, financial transactions are also increasingly complex, consumer protection issues are increasing. Apparently, insurance is recognized these days with their vital role. Through the results of the study on the factors influencing on the buying behavior of insurance consumers, they help administrators to respond flexibly and proactively, accurately to fluctuations in needs, desires, tastes of customers, and improve the effectiveness of decisions related to customer relationship management, especially in the fierce competition of the market.

2. THEORETICAL FRAMEWORK AND RESEARCH METHOD

2.1. Theoretical framework

Undoubtedly, insurance needs come from practical needs in production and human life. Insurance demand is the need to have a financial resource for shopping, for children to start a

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business or continue going to school, to ensure life when they retire or when their income is reduced, etc. According to Law on Insurance Business No. 12/VBHN-VPQH: Life insurance is a type of insurance business in case the insured person lives or dies. From a legal point of view, life insurance is a contract of commitment to pay insurance premiums from a life insurance company when the insured has an unfortunate accident, provided that the policyholder pays a fixed premium. The full term according to the pre-agreed time can be 5 years, 10 years, 30 years, and so on. In today's socio-economic development conditions, the demand for life insurance becomes more and more diversified with higher requirements. The appearance of buyers and sellers together with insurance products and services also means that a new product and service market has been formed in the market, which is the life insurance market.

In the insurance business, consumers are regarded as an extremely important link. They are understood as individuals and organizations wishing to use insurance products and services. Hence, researching consumer behavior in order to offer solutions to approach and protect insurance consumers does have an important meaning in the long-term development strategy of life insurance businesses. According to David L. Loudon & Albert J. Della Bitta (1993) "*Consumer behavior is the decision-making process and actual actions of individuals when evaluating, purchasing, using or disposing of goods and services*". And Leon G. Schiffman & Leslie Lazar Kanuk (1997) indicated that "*Consumer behavior is the whole action that consumers show in the process of exchanging products, including: investigation, shopping, using, evaluating and disposing products and services to satisfy their needs*". Meanwhile, Philip Kotler (2007) defines that "*consumption behavior is the act of a person purchasing and using products and services, including both the psychological and social processes that precede and happen after the buying action*".

Undoubtedly, the significant negative impact of the current pandemic together with the government's particular restrictions and measures leading to the fact that people need to follow and act accordingly as customers. In this manner, the behavior of customers influences, to a significant extent, the demand of business activities. On the other hand, the purchasing behavior is impacted by the closing down of businesses around the world with shortages in products and services. Thus, customers would mainly rely on online platforms to meet their necessities (Hasanat et al., 2020).

Eventually, it is the customer integration that has turned into upshots and antecedents in the procedure of value co-creation that indicate customer behavior, emotion and cognition (Brodie et al., 2013), while according to Oyner & Korelina (2016) customer engagement does have an influence on the value of co-creation (Oyner & Korelina, 2016). It is indeed underpinned by Storbacka et al.'s (2016) defense that "*factor engagement is a micro foundation value to co creation*", which illustrates that inquiry sources are indispensable in consumer behavior during the COVID-19 pandemic (Laato et al., 2020). Interestingly, the anxiety buying behavior was observed by Miri et al. (2020) throughout the epidemic. Nevertheless, in some nations, customers purchased goods such as canned foods, paracetamol and hand sanitizer to arrange for and prevent the prominent symptoms of coronaviruses such as nausea, diarrhea, vomiting, and so on (Miri et al., 2020).

In reality, consumer purchasing decisions are influenced by many factors. According to Phillip Kotler (2007), there are **four** groups of factors affecting consumer buying behavior:

Initially, *cultural factors*: consumer behavior is greatly influenced by culture. Each consumer in different cultures has different thoughts, perceptions and ways of choosing products and services

to satisfy their own needs. Studying subcultures, cultures, and social classes in the group of cultural factors to see the similarity of consumers, thereby offering solutions about products that create competitive advantages of enterprises. In addition, cultural and community groups coexisting in a country also affect purchasing behavior. In reality, those cultural groups can be formed by a region or by people of a certain religion or ethnicity. As a result, understanding national, community and local cultures makes it easier for enterprises to enter the market and develop their businesses in that market. In terms of customers, Fisk (2008, p. 37) “*are looking for brands (and companies, products and people represented by them) that they can trust and cling, in a rapidly changing world, confusing and intimidating*”. This is a typical example of consumer behavior based on cultural values, that is beliefs. As the values have a cultural dimension, they provide individuals the opportunity to belong to a specific society (KARSAKLIAN, 2008).

Secondly, *social factors* include reference group factors, social class, and lifestyle that affect consumers’ buying behavior. A reference group is a group of people who have a direct or indirect influence on a consumer’s shopping process, including family, friends, relatives and influential people. This is considered an important factor influencing consumer behavior. Souza, Farias and Nicoluci (2005) indicate that individuals receive direct influence of reference groups in different ways: being exposed to new behaviors and different lifestyles, obtaining influences on the self-image and attitude and getting pressure on compliance in relation to social rules, factors providing a preference for a particular service or product. Moreover, buying behavior of consumers is greatly influenced by different social classes. Social class is understood as relatively stable groups of people in society arranged in a hierarchy, characterized by common values, interests and ethical behavior in each class. In fact, enterprises that pay attention to consumer behavior in business classes will have the principle to offer products which better satisfy consumer needs.

Thirdly, *personal factors* consist of basic factors such as age, occupation, lifestyle, psychology, etc., which greatly affect consumption behavior. Actually, different psychological characteristics resulting in relatively consistent and continuous reactions in the environment. The personality is usually described in terms of characteristics such as self-confidence, domain, autonomy, submission, sociability, endurance and adaptability. It is revealed that personality is helpful variable to analyze consumer behavior as the personality types can be classified accurately and there are strong correlations between certain personality types and the choices of products and brands. Accordingly, in each stage with different age, people’s shopping habits also change. It can also be applied for people’s occupations. Usually, people with different occupations will also have different buying behavior because occupation determines income so they are able to select goods that they can afford. Simultaneously, each person has a different lifestyle. Therefore, shopping preferences are discrepant, whether in the same locality or the same occupation. When shopping, people also rely on their own appearance to choose products that are suitable and illustrate their own style.

Fourthly, *psychological factors* with factors such as motivation, perception, knowledge and beliefs are considered as important factors affecting consumer buying behavior. Correspondingly, each person will have their own motivation for their shopping and also be self-aware to be able to select the right product. Usually, before buying anything, people often go through specific stages such as attention, distortion, selection and selective memory. In addition, when shopping, people also absorb opinions from others; or go through their own experiences in life. It is also possible

that the subjective assessment of oneself through beliefs about a certain issue is also a crucial factor contributing to the decision of consumers' buying behavior.

2.2. Research method

Secondary data: including documents such as books, newspapers, reports, scientific researches, relevant legal documents on insurance enterprises, buying behavior of life insurance consumers; Reports and articles on experiences related to promoting the role of researching on factors affecting consumer buying behavior; Provincial reports; statistics on population, people's income, revenue and market share of insurance enterprises.

Primary data: Actual survey of the influence factors on life insurance market in Hanoi in the context of Covid 19 pandemic. The author group will carry out survey towards insurance market managers at provincial and city levels, associations participating in exploitation, research and use customer information such as Marketing Association, Insurance Association, Consumer Association, Production Group, and Business Group. The author group will investigate the above primary documents by means of interviews with questionnaires, in-depth interviews, group discussions, and observations. Furthermore, the survey questionnaires are sent to consumers who have purchased insurance products. The number of votes issued was 200 votes; the number of votes collected was 190 votes; the quantity of valid votes was 185 votes. What's more? Convenience sampling method is applied in this study. The survey period is from January to March 2021 (The article uses decimal writing according to international standards).

Methods of synthesis and analysis of documents: Synthesizing documents, domestic and international experiences from secondary documents; Synthesizing primary survey documents using Excel, Microsoft Word, etc; Processing information and illustrating information with diagrams, drawings, data tables, charts, graphs, statistics, and qualitative and quantitative results tables. To analyze data, the author group used the methods of comparison, logical inference, statistical analysis, induction, etc.

3. RESEARCH RESULT

3.1. Overview of life insurance market

Historically, the year 1996 marked the birth of the life insurance industry in Vietnam by the Ministry of Finance allowing BaoViet to pilot life insurance. Responding to the requirements of the opening and integration process as well as the development requirements of the life insurance industry itself, after the pilot period, the Ministry of Finance has in turn granted operation licenses to foreign life insurance enterprises. In 1999, it granted licenses to 3 businesses, namely Prudential, Manulife, Bao Minh - CMG - now known as CMG). Daiichi Life), then AIA (2000), Prevoir, ACE Life, Great Eastern Life and Cathay Life. Up to now, there are 09 enterprises operating in the market and it is forecasted that more life insurance enterprises will be licensed to operate in the near future. With the entry of foreign life insurance companies, Vietnam's life insurance market has grown strongly in terms of scale, products, service quality and professionalism.

According to data from the Insurance Supervision and Administration Department (Ministry of Finance), by the end of the first quarter of 2021, the total assets of insurance enterprises reached VND 600,818 billion, an increase of 22.8% in comparison with the same period of 2020, of which life insurance enterprises are estimated at VND 500,603 billion. According to Ms. Nguyen Thi Bich Chung - Representative of Kantar Market Research Company, the impact of the Covid-19

epidemic and social distancing has changed the lifestyle and financial management of Vietnamese people in the insurance market. Specifically, 18% of consumers have a plan to buy life insurance and 30% of them have purchased insurance virtually, which also illustrates a new increase in customer demand. In fact, insurers need to see this as an opportunity to deliver superior internet experiences over their competitors.

3.2. Factors affecting consumer buying behavior of life insurance

- Influence of cultural factors

Culture is a factor that has a profound influence on the behavior of consumers in general and customers in the insurance market in particular. Cultural influences can make insurance business become strenuous. Since Vietnamese people often restrict or abstain from talking about risky and bad things (bad words) such as illness, death, loss, business risks, and so on, so insurance employees often have difficulty in consulting to help customers understand the product. If the advice is not skillful, the customers may misunderstand or be selfish and not buy insurance. However, from another perspective, culture also has a positive impact on insurance buying behavior, because in general, Vietnamese culture attaches great importance to filial piety and love, so insurance products emphasize their role in helping and supporting customers. Absolutely, tackling this problem will help customers decide to buy and use insurance faster.

Influence of social factors

Opinions of influencers, specifically family members such as parents, spouses, children or friends, colleagues also influence customers' decisions to buy insurance products. Life insurance is a new field in Vietnam, so it will be more difficult for customers to make purchasing decisions and need to be consulted from people around. In a family, there must be an agreement between the husband and wife or the consent of the parents for the new purchasing decision to be made and the new contract to be maintained for the duration of the contract. Without reaching these consensuses of the above influencers, it will be very difficult for customers to make purchasing decisions. According to the research team's survey data, up to 82.9% of customers having families when buying insurance will consult with their family members, friends and colleagues. Among them, the opinion of relatives is the most important. Single customers tend to trust consultants of insurance companies. 91.1% of them will refer to friends, colleagues, acquaintances who have used life insurance services to decide.

Those who are the economic breadwinners in the family tend to buy insurance for their beloved ones and themselves. Because they think that if misfortune occurs (sickness, illness, loss of work capacity), there will be a certain financial source to support their family in difficult times, or ensure a good life in the future. In addition, people in the middle class (with income of above 15 million, having college-university degree or higher, working as managers) are the most important insurance reviewers and buy the most quantity of insurance.

- Influence of customers' individual characteristics

It is illustrated from the figure below that the ratio of customers in the age group 36-55 buying insurance is the most, accounting for 37.3% of the total. Furthermore, the group of 25-35 years old accounts for 30.8%, the group under 25 years old makes up 11.4% and the group over 55 years old accounts for 20.5%. Thus, it can be seen that the age group 36-55 buys the most number insurance, followed by the group of 25-35 years old which also makes up a fairly large proportion with 30.8%. This is also the period when most customers have families, high and stable incomes,

and are aware of the importance of risk prevention insurance. Meanwhile, the group over 55 years old makes up a lower proportion of insurance purchases, possibly because this group has already settled the insurance policy with high- risk ratio so they are refused to continue their insurance contracts. Especially in respect to the group under 25 years old, this is usually the group that are bought insurance by other people. Only few of them have self-insurance. At this age, the customers are still young, the perception is still highly subjective, and the income is not stable. Actually, they just started working, so they do not pay much attention to insurance.

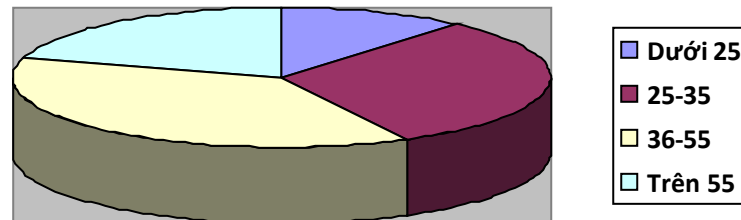


Figure 1 – Age to join life insurance in Vietnam

(Source: survey data from the author group)

Customers who do not have a stable or low income are less likely to participate in insurance. Not all customers have regular and discretionary income because of the seasonal nature of work. Hence, some customers have unstable income, especially, in the context of Covid 19 pandemic, a majority of people have lost jobs, suffered from unemployment situation. Undoubtedly, income is always fluctuating, so customers also tend not to have desire to buy insurance. In general, customers with higher incomes participate more in insurance, especially those with good incomes (over 15 million - under 30 million and the group from 5 million to 15 million). Because these two groups having this income have enough basic needs in life, so they have spare money available to buy risk insurance or to invest. This group is usually a group with a clear awareness of risks and a high level of education. In contrast, the group with a high income of over 30 million/month has a lower proportion of insurance purchases than the first two groups (61.1% of respondents with an income of over 30 million/month participate in insurance, accounting for 15.4% of the total), possibly due to the high investment capacity of this group, which can help to earn higher investment interest rates than insurance rates. That is the reason why there are many other financial security options besides buying insurance. Meanwhile, the group with income below 5 million VND/month has the lowest rate in participating insurance- only 28% of them buy insurance, accounting for 12.4% of the total.

Table 1 Influence of the average monthly income of customers on the behavior of participating in life insurance

Average monthly income (million VND)	Quantity	%	The number of people purchasing insurance	Proportion of buying insurance	
			Quantity	In the group	In total (185)
Below 5 million	82	28,96	23	28%	12,4 %
From 5 million to below 15 million	137	48,41	115	83,9%	62,2%
From 15 million to below 30 million	51	18,02	39	76%	21%
More than 30 million	13	4,61	8	61,1%	15,4%

(Source: survey data from the author group)

The rate of female insurance participation is higher than that of men. 61.2% of insurance customers are female. It can be seen that women are more interested in insurance. This may be due to gender characteristics, women have psychology to choose risk prevention solutions for life, while men often prefer risk. On the other hand, in Vietnamese families, the majority of women are still the family financial managers, so they are more active in finding and using products to manage the family's idle money. As a result, the level of interest and participation in insurance is also higher than that of men.

Table 2. The influence of gender on life insurance participation behavior

Gender	Quantity	Percentage (%)
Female	113	61,1
Male	72	38,9
Total	185	100%

(Source: survey data from the author group)

High-risk industries such as finance and business also make employees buy more insurance because they are aware of risks that can happen at any time. That is the reason why customers participating in these industries easily decide to buy insurance than other groups. Especially in terms of the group of students, and unskilled workers, the level of insurance participation is quite low.

Table 3. The influence of occupation on behavior of participating in life insurance

Occupation area	Number participating life insurance	Percentage (%)
Students	37	20,1
Office workers, teachers, doctors	51	27,6
Finance – Business	58	31,4
Others	24	12,9

(Source: survey data from the author group)

- Influence of psychological factors

Table 4. Motivation for buying life insurance in Vietnam

Motivation for buying insurance	Quantity	Percentage (%)
Saving for future	84	45,4
Preparing for retirement	34	18,4
Protecting financial situation of family	67	36,2
Total	185	100

(Source: survey data from the author group)

Motivation is regarded as a major factor influencing consumers' buying behavior toward life insurance. According to the research group, the survey indicated that the motivation to buy life insurance to save for the future accounted for the highest proportion of 45.4%. As life improves more than before, many people want to accumulate money to meet their growing financial needs in

the future, such as buying a house, sending their children to study abroad, traveling or other plans. In real life, there are many different ways to accumulate savings: remove the piggy bank, store it in the old-fashioned way. Today many people bring money to the bank or invest it. However, another equally safe and attractive option is to buy life insurance. Buying life insurance helps customers to accumulate financial resources to carry out future plans, such as saving money for their children to go to school, giving them some capital for life, or saving money for life to buy a car, buy a house, enjoy life when no longer having the strength to work or carry out other plans.

The second strongest impact is the incentive to buy insurance to protect the family's finances with 36.2%. In reality, risks are unpredictable. They can happen at any time and to anyone. An accident took the breadwinner of a family. A healthy person suddenly got a serious illness. In life, we cannot avoid sickness, disease, and accidents, then medical expenses become a worry and burden for the whole family. Customers will relieve this worry when participating in life insurance, then they and their families can get rid of financial difficulties when unfortunate risks occur. For each of us, family is always everything. Everyone wants the best for themselves and their families. Sometimes, buying life insurance can help give customers peace of mind that they will have a secure financial source in the event of an unfortunate accident. Hence, life insurance contributes significantly to stabilizing family life.

Finally, there is an incentive to buy insurance to prepare for retirement. For people between the ages of 40 and nearly 55, when retirement is approaching, it is time to think about their retirement plan. Retirement insurance products are also born to serve the increasing needs of customers, which can help customers save from now to prepare for later retirement years. Customers' understanding of insurance services, service providers, experience, etc., also influence their behavior in the life insurance market.

In order to identify the impact of knowledge factor on customers' buying behavior in the life insurance market, the authors have investigated 185 customers in different geographical areas on the perception of existence of life insurance products available in the market. Research shows that customers' understanding of the existence of life insurance products in the market is still very modest, which can be seen in the following table:

Table 5. Customers' knowledge about life insurance

(Unit: %)

	Inside Hanoi	Suburban of Hanoi	Not in Hanoi
Ratio of hearing about life insurance products			
Yes	50,48	30,12	22,38
No	49,52	69,88	77,62
Total	100,00	100	100
Ratio of comprehending about life insurance products			
Yes	45,13	20,16	15,8
No	36,24	70,42	78,7
Vague	18,33	19,52	5,5
Total	100,00	100,00	100,00

(Source: survey data from the author group)

CONCLUSION

In response to the development requirements of the insurance industry in general and the insurance market in particular, it is recognized that theoretical and practical research on the influence of factors on life insurance market is actually essential for life insurance companies. Through researches and evaluating the factors affecting the buying behavior of customers in the life insurance market as well as evaluating the development of the life market in recent years according to statistical methods, comparing, analyzing, synthesizing, interviewing and investigating topics have highlighted the positive and negative impacts of a number of factors on the life insurance market, particularly under the impact of Covid 19 pandemic. For instance, under the influence of the epidemic, many people had to suffered being out of work. This factor resulting in their reluctance in buying specific goods like life insurance. As a result, the author proposed solutions to develop the life insurance market on the basis of consumer protection.

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MEASURES TO PREVENT ILLEGAL USE OF INVOICES AND USE OF ILLEGAL INVOICES

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Abstract: *The illegal use of invoices and usage of illegal invoices is a major issue nowadays. In this situation, in order to promptly prevent violations of invoices from gaining illicit profits and avoid loss of government budget revenue, tax authorities need to implement and strengthen efficient solutions. This article analyzes the causes of common violations in order to provide key solutions to solve the above problems.*

Keywords: *Invoice, illegal use of invoices, usage of illegal invoices.*

1. CASE

Originally, the issue of purchasing, selling, and using unlawful invoices was complicated by subtle tricks, resulting in budget income loss and a negative impact on the corporate environment. To properly avoid this predicament, the tax sector must execute a number of synchronous measures, with a concentration on tax administrative procedures. The Law on Tax Administration stipulates that taxpayers can declare themselves, take responsibility before the law, and businesses have the authority to issue invoices for production and business purposes. Suspicious transactions were discovered during actual inspections at businesses, and they mostly involved the illegal use of invoices, the purchase and sale of invoices which take advantage of the policy mechanism's openness to use invoices illegally or use illegal invoices to gain illicit profits. To prevent and avoid the aforementioned circumstance, it's vital to figure out what's causing it to occur in the first place.

2. OVERVIEW AND RESEARCH METHODS

Usage of illegal invoices and vouchers is the use of fake invoices and vouchers; using invoices and vouchers that are expired or not yet valid; use invoices that are discontinued during the period of being coerced by the measure of stopping using invoices, except in cases where the use of invoices is permitted under the notice of tax authorities; using e-invoices without registration with tax authorities; using e-invoices without the tax authority's code in the case of using an e-invoice with the tax authority's code; use invoices for purchase of goods and services with a date on the invoice from the date the tax authority determines that the seller is not operating at the business address registered with the competent authority; use invoices and vouchers for purchase of goods and services with a date on which the invoice or voucher is made before the date on which the invoice or voucher maker is determined not to operate at the business address registered with the competent authority, or there has not been a notice from the tax authority that the invoice and document maker does not operate at the business address registered with the competent authority

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but the tax authority or the police or other agencies has concluded that invoices and vouchers are not legal.[5]

Illegal use of invoices and vouchers is the use of: Invoices and vouchers that do not contain all required contents as prescribed; invoices for erasure or repair not in accordance with regulations; using fake invoices and vouchers (invoices and vouchers with economic operations criteria and contents written on, but the purchase and sale of goods and services are partially or completely unreal); using invoices that do not reflect the actual value incurred or making false invoices or making fake invoices; using invoices with differences in value of goods or services or deviations from mandatory criteria between copies of invoices; use invoices for rotation when transporting goods in circulation or use invoices of these goods and services to prove other goods and services; use invoices and vouchers of other organizations or individuals (except for invoices of tax authorities and cases where they are authorized to issue invoices) to legalize purchased goods and services or sold goods and services; using invoices or vouchers that tax authorities or police or other authorities have concluded is illegal use of invoices and vouchers. [5]

The issue of using illegal invoices and using invoices illegally is of great concern to the General Department of Taxation. This is a prominent problem not only in Vietnam but also in other countries around the world. The Organization for Economic Cooperation and Development (OECD) stated in a 2017 report that as technology advances, it may allow taxpayers to use more sophisticated methods of tax evasion, however, it is also a powerful tool for tax authorities to quickly identify fraud and tax evasion. The report also includes a technical portfolio of technology solutions, to encourage other tax authorities facing similar types of risks to learn from their experience. The point of this is to use technology to prevent fraud. When it comes to limiting the use of illicit invoices and illicit use of invoices, it is impossible not to remark that Latin American tax authorities have been ahead of their worldwide counterparts in adopting technology and leveraging it to transfer compliance to the digital, real-time realm. With technology automating routine compliance activities and opening access to richer, deeper levels of transaction data, tax authorities and tax functions will evolve and become more proficient in applying technology tools, such as data analytics and artificial intelligence, to create strategic insights and value. As the tax functions of the future take shape, it is an exciting time for tax authorities and tax professionals in Latin America and around the world. The electronic invoicing system of these countries is also one of the important factors in the process of improving tax compliance in the Latin American community. At the same time, European Union countries are also a typical group in terms of deploying e-invoices, which helps to prevent fraud and tax evasion. In 2014, the European Union issued Directive 2014/55/EU on e-invoicing standards for European countries, mandating the use of B2G (between business and the Government) e-invoicing by administrative authorities in all 28 member states no later than 2018.

In the fight against fraud and tax evasion, especially the illegal use of invoices and use of illegal invoices, the Government of Vietnam has stepped up research, finding optimal methods, placing out in the management and operation from both sides of the state and enterprises. For the state, invoice management is an important part of tax management and state revenue management. The State always tries to manage the revenue well and improve the compliance of taxpayers. Synchronous coordination between departments is very important. On the business side, invoices are a means of recording arising economic transactions. Of course, each business will have different

business characteristics, especially retail businesses compared to businesses with products and services of great value or low frequency, as well as different customers, but in general, invoice management at the enterprise needs to be reasonable and scientific, to avoid errors and confusion, to improve the sense of compliance with the law.

Based on the collected material, the author conducts qualitative research using methods such as theoretical analysis and synthesis, experience summarization analysis method, and so on. From the point of view of dialectical materialism: deduction is used to speculate on unavoidable consequences, comparison is used to make intermediate judgments, induction is used to draw conclusions, synthesis is used to propose recommendations and solutions, and so on. The article primarily collects data and secondary data from books and newspapers, the final report of the General Department of Taxation, scientific studies, documents found on the Internet, and so on.

3. SCOPE AND PURPOSE OF THE RESEARCH

In the current context, the tax industry has had solutions to prevent businesses from using illegal invoices and using invoices illegally, but the situation of violating enterprises still occurs with extremely complicated variables, requiring strong prevention measures and timely blocking

On the basis of an overview of the illegal use of invoices and usage of illegal invoices, from the perspective of a professional in the tax field, through this article, the author hopes to exchange, share and consolidate theoretical and practical knowledge while updating and adding to the working process. In this article, the author will analyze in depth the causes of the illegal use of invoices and the usage of illegal invoices in Vietnam, as well as propose solutions and effective ways to deal with them. It is a critical job to contribute to the battle against tax evasion and fraud, and to ensure a clean and strong business environment.

4. STATUS

According to the General Department of Taxation, from 2017 to 2020, the tax industry has detected over 8000 businesses buying, selling and using illegal invoices, with nearly 550.000 violated invoices and tax arrears totaling nearly 7.000 billion VND. The trick of some subjects is to organize the establishment of many enterprises but have no production and business activities to take advantage of the openness in management policies of the State. The main purpose of this is to collude with some other local businesses, create false documents, and fraudulently withdraw money from the State budget. In 2019 and 2020, the tax authorities summarized violations of illegal trading and invoice use, consolidated the dossier, and transferred hundreds of cases with signs of violations to the police agency, 135 cases and 162 cases, respectively.[3].

Many cases have been detected and strictly dealt with, most notably the case of 13 enterprises in Thanh Hoa province established by 8 people to sell value-added invoices for illicit profits. This line issued and sold 15,000 invoices to approximately 1,000 businesses in Thanh Hoa province and other provinces and cities throughout the country, including Hanoi, Ho Chi Minh City, and Hai Phong, with a total transaction amount of more than 2,000 billion VND, illegally earning more than 200 billion VND [11].

Another common occurrence in Hai Phong is the involvement of 15 companies in the illegal trading of large quantities of value-added tax invoices (VAT invoices), led by Ngo Van Phat, Chairman of the Board of Directors of Phat-Petraco Petroleum Trading Joint Stock Company.

According to this case, the authorities accused this company of trading VAT invoices worth more than 5,000 billion VND. Since 2012, 14 companies have been established, 13 of which have ceased operations since 2019, while a petroleum trading company in An Duong district, Hai Phong, is still operating normally and has no tax debt. Many tax officers have been suspended from their jobs as a result of their involvement in these businesses [12].

Another typical case was Junma Phu Tho Co., Ltd., which was discovered to be a group specializing in the purchase and sale of large quantities of VAT invoices worth more than 2,000 billion VND. During the tax refund inspection at this company, the tax agency discovered that the number of logs purchased by the company and put into production during the tax refund application period, based on income statements purchased from direct growers, was enormous. Verification at 9 households and individuals in Yen Lap district, Phu Tho province revealed that neither the households nor the individuals sold logs to the company or signed the purchasing documents. As a result, the Tax Department has provided the PC03 Department with information on invoices and the contents of invoices from 16 businesses and four households that provide peelers to the Company in order for the PC03 Department to verify to detect and handle violations in accordance with the law. In the case of “illegal purchase and sale of invoices” and “scam to appropriate property” at this company examined by the Investigation Police department - Phu Tho Provincial Police, the Tax Department continued to inspect, examine, and resolve tax refund dossiers as prescribed by law. The amount of VAT that has not been settled for tax refund according to the Company’s tax refund applications from July 2019 to March 2020 is more than VND 135 billion [3].

Tax authorities can recognize a number of unexpected risk indications linked with the usage of invoices:

- Enterprises declare input tax nearly equal to output; buying and selling invoices on a large scale; low VAT return or = 0; small or disproportionate corporate income tax returns; use a lot of invoices in a short time
- The status of operation is frequently changing. Enterprises established but not having actual production and business activities, only buying and selling invoices to make illegal profits then declares large turnovers; After a while, they stop working (State 05), roam (State 02), remove from the registered address (State 03; 06).
- Business owners change many times; a group of people who take turns owning a business in a group of companies; business owners are foreigners or not local people;
- Organize into groups in the same area, or in neighboring areas to buy and sell on a large scale; Acquisition of businesses to organize purchase and sale of invoices; Establish a chain of businesses linked together to issue invoices to each other in order to balance inputs and outputs and hide violations before issuing invoices for illegal profits. Some groups also create businesses with a portion of real revenue to hide the act of buying and selling invoices.

Acquisition, sell, and merge small and medium-sized businesses and cooperatives, and then manage the purchase and sale of invoices.

Invoice purchasers are typically businesses, economic organizations, regulatory authorities, and others who purchase invoices to use as budget payment documents, legal documentation for input products for tax evasion, and getting tax refunds.

5. CAUSES

+ Objective causes

Sense of compliance with the law: enterprises commit violations to obtain illicit benefits, purchase and sell invoices, and exploit legal loopholes to cheat and evade taxes.

Taxpayers' Negligence: Taxpayers lack inspection and detailed review of which some individuals take advantage.

Law on enterprises: The business registration regulations are open, which has resulted in the situation of using the establishment of firms to illegally buy and sell invoices.

+ Subjective reasons

- Tax authorities have not identified and promptly tackled businesses illegally trading in invoices: the trick of invoice trading criminals is to hire a legal representative to set up many micro-enterprises, perform many illegal purchase and sale of invoices with large turnover and large invoice value with diversified types of goods and services, goods purchased and sold at the same time with equivalent value, short period of time, create a fake bank payment transaction (fast deposit and withdrawal from the account, large transaction volume during the day but very small account balance); then escape when they see risk of being prohibited by a legal competent government agency.

The enterprise has issued large invoices but has temporarily ceased operations, or the enterprises have given notice to abandon their business address but apply to resume operation, have large fluctuations in revenue, use many invoices but do not generate tax payable or the payable tax amount is not commensurate with revenue; businesses that report using invoices have zero usage invoices (0) or unusually large unreported usage invoices.

- Risk identification is done manually, and information technology has not been used to identify businesses with signs of illegal invoice purchase and sale.

- There is still a gap in the handling of businesses that have escaped: The verification of information related to bank accounts, information of legal representatives and individuals related to bank account beneficiaries has not been carried out.

- Thematic inspections of businesses with suspicious transactions involving invoice violations have not been comprehensive and effective.

- Thematic propaganda in the field of invoicing is not consistent or focused.

- Tax officers' ability and qualifications to identify acts of using illegal invoices and using invoices illegally are still limited in some places .

- Tax mechanisms and policies are still insufficient, resulting in loopholes for those who violate the law.

6. SOLUTION

- *Firstly, strengthen propaganda, support and guide taxpayers to properly and strictly abide by the provisions of the law*

Promote propaganda through the media, illegal use of invoices, and use of illegal invoices detect conferences; propagate sanctions for each behavior so that taxpayers are aware and avoid participating in invoice trading transactions, contributing to the prevention and repelling of

businesses established to buy and sell invoices illegally. Instructing taxpayers on how to look up information on invoices on the General Department of Taxation's website about information related to taxpayer status and illegal invoices in order to take precautions when using invoices.

- Second, the Tax Agency closely monitors and supervises businesses that have a high risk of using invoices, such as:

Collecting information and data on taxpayers from tax authorities and other agencies, for example suspicious transaction information from the banking regulatory authority; information from other state management agencies; denunciation letters and media.

Conduct an inspection to identify businesses that show signs of invoice problems; document the behavior and methods of taxpayers who use, buy, and sell illegal invoices. Simultaneously, identify signs of the behavior and manner in which taxpayers buy, sell, and use invoices.

Make a list of taxpayers who are at risk of illegal invoice printing, issuance, use, sale, and purchase (taxpayers are at risk of invoices); analyze risk to identify taxpayers who are at high risk of invoices. Forcing taxpayers to stop issuing invoices themselves and instead purchase invoices from tax authorities or use electronic invoices with authentication codes.

- Third, the functional departments of the tax authority shall verify the operation status of the taxpayer at the address registered with the tax agency according to regulations.

Announce and promptly update information on businesses that have issued invoices but have absconded or suspended operations, as well as businesses that are illegally using invoices, on the Tax Department's website and other media. Public information is used to prevent tax evasion, as well as the illicit purchase and selling of invoices. Examine and assess firms with a high risk of invoices in order to conduct inspections and checks on the appropriate subjects with attention.

- Fourthly, coordinate closely with appropriate authorities.

Regularly pay attention and direct tax authorities, strictly handle violations, actively coordinate with police agencies to investigate or transfer dossiers for handling taxpayers who use illegal invoices and illegally use invoices according to regulations in order to promptly take preventive measures to avoid consequences and damage to the government budget. Detect and promptly handle cases with signs of illegal purchase and sale of invoices through suspicious banking transactions by a coordination mechanism with the State bank. Exchange information with the Customs office to get information related to the export of goods.

- Fifth, increase discipline and civil service throughout the tax industry, strengthen staff management, and promote and raise awareness among officials, civil servants, and employees in order to avoid risks.

It is necessary to strengthen training, cultivation, and professional development for the contingent of cadres and civil servants engaged in inspection and examination in order to ensure adequate capacity to inspect and detect enterprises showing signs of establishment, as well as using false vouchers when buying and selling materials and goods.

Simultaneously, it is necessary to strengthen the inspection and supervision of tax officers during the performance of their official duties. Pay attention to training and fostering to improve the quality of human resources, ethical qualities of civil servants and public employees, prioritize

training civil servants working in departments that regularly interact with taxpayers, and inspect, examine on a regular basis in order to prevent and minimize risks and consequences during the performance of official duties by civil servants.

- Sixth, fully implement tax mechanisms and policies

The tax sector must issue a regulatory mechanism for verifying information related to a fugitive enterprise to conclude on fugitive enterprise violations, which then serves as a foundation for future dealings with businesses that receive invoices from absconding units

Mechanism for coordinating and entrusting the tax agency where the individual resides or temporarily resides or works to verify information to the individual who is the legal representative of the absconding enterprise, the beneficiary of the money in the case of suspicious banking transactions.

Reforming administrative procedures, creating favorable conditions for buyers of non-regular business individuals and renting assets of substitute individuals to make tax declaration and payment, contributing to increased revenue, and preventing and repelling the illegal purchase and sale of invoices.

- Seventh, apply information technology and electronic invoices for preventing the use of illegal invoices and illegal use of invoices.

The current use of illegal invoices is very complicated, with an alarming increasing number, if the old form of invoices is still applied, it will cause great difficulties in preventing this behavior in time. Therefore, it is necessary to implement the widespread application of e-invoices, eliminate manual intervention in the invoicing process so that the phenomenon of no-invoice, forged invoicing, and settlement of false invoices can be eliminated. thoroughly solve the situation of not making invoices, the problem of fake invoices. At the same time, the tax authorities must rapidly improve the network infrastructure to prepare for the nationwide deployment of e-invoices.

Mechanisms should be in place to require certified electronic invoicing systems that are linked to tax authorities to send real-time reports. Using artificial intelligence technology to detect invoice violations. All input data is digitized by tax authorities for analysis. The data to be processed and analyzed must be made available to both taxpayers and tax officials in real time or near real time. Tax authorities must invest heavily in technology to improve their ability not only to access more business information in real time but also to unlock the value of that data, and gain insights into the financial and tax situation of the taxpayer.

CONCLUSION

Tax fraud through the use of illegal invoices and illegal use of invoices continues to occur with increasingly complex and sophisticated tricks, resulting in a loss of government budget revenue and causing discontent in society. Facing that situation, the tax authorities need to be more aggressive in implementing solutions to prevent and stop tax frauds, as well as create a clean and healthy business environment.

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POLICY TO ATTRACT SUSTAINABLE FDI IN VIETNAM IN THE CURRENT CONTEXT

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Abstract: After 30 years of innovating and opening, there are great achievements thanks to FDI capital, though some limitations should be taken into account in attracting and using FDI in Vietnam especially when looking at the perspective of sustainable development such as cooperation, production association between FDI enterprise and domestic corporation; revenue budget decreases because of long and widespread preferential treatment; FDI enterprises have few little motivation in applying top-notch technology. As a result, employees get low incomes, a high risk of contaminated environment, etc... This writing aims to summarize policies to attract FDI in recent years from the perspective of sustainable development. Based on three elements (sustainable economy, society, and environment), this writing clarifies drawbacks in current policies to propose some measures to improve the legal framework, policy with the FDI sector, to enhance the sustainability of this area and contribute to the sustainable economy.

Keywords: FDI, sustainable development, policy, investment attraction, environment, Vietnam.

1. INTRODUCTION

Sustainable development is a particularly important strategy for Vietnam in this period now. The connotation of sustainable development is widely recognized as a uniform improvement on three pillars: economic, social, and environmental. In the integration trend, FDI has many positive results and plays an increasingly important role in the development of Vietnam. However, sustainably attracting FDI is still limited. This article is designed to review policies to attract and use FDI in recent years from the perspective of sustainable development. Based on three pillars (economic, social, and environmental sustainability), the article will clarify inadequacies in current policies, thereby, propose recommendations to improve the legal framework, policies with the FDI sector to improve the sustainability of this sector as well as contribute more to the sustainable development of the whole economy.

The article consists of 3 contents: (1) Discusses some related concepts and associated with FDI; (2) An overview of current and previous policies, clarifying and presenting limitations of the policy; (3) Making some recommendations to adjust policies to attract FDI from the perspective of current policy overview.

2. LITERATURE REVIEW AND METHODS

2.1. Literature Review and Previous Research Studies

There have been many studies conducted to assess the impact of FDI on economic sustainable development with different approaches and methods. Studies often examine the impact of FDI on growth, investment, exports, and technology and clarify the factors that affect the degree of FDI

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impact. Typically, the study of Blomstrom et al (1992) examines the impact of FDI in two groups of developing countries: lower-income countries and higher-income countries; research by De Mello (1999) sampling in 16 developed countries and 17 developing countries has shown that net FDI has a positive and important effect on economic growth in the period 1970 - 1990; Agrawal (2000) has shown empirical evidence on the impact of FDI on domestic investment and economic growth; Krkoska (2001) also finds that FDI has a positive effect on the formation of total domestic investment; Research by Campos and Kionoshita (2002) with a smaller sample, including Central and Eastern European countries, and countries with transition economies of the former Soviet Union, the authors suggest that FDI has a positive effect. to economic growth in countries with economies in transition; Johnson (2006) argues and quantifies the relationship between potential FDI inflows and economic growth in the host country.

Studies on indirect effects of FDI on economic development in Vietnam often consider the spillover effects of FDI on output, productivity, exports, and technology... of Vietnamese enterprises. From different research approaches, studies have shown that FDI has positive and negative spillover effects on domestic enterprises. Studies have also more or less mentioned the process and mechanism of spillover effects as well as the causes of FDI spillover effects on production, productivity, and export of domestic enterprises. For example, Nguyen Thi Tue Anh et al (2005); Le Xuan Ba (2006) studies the impact of FDI on growth in the textile, food processing, and mechatronic industries; Feenstra and Hanson (1995) use the North-South trade model and the investment model to examine the impact of FDI on the demand for skilled labor in Mexico during the period 1975-1988; Slaughter (2002) assesses the impact of multinational companies on both the demand and supply of skilled labor in the host country's labor market.

The impact of FDI on the environment is a topic that is attracting more and more research attention in Vietnam. Some typical studies such as Dang Nhu Toan and Le Ha Thanh in the paper "The relationship between trade and environment in the market economy" in 1996; Research by Le Minh Tu (2012) on attracting low-carbon foreign direct investment (Low-carbon FDI - LCF); research by Nguyen Thi Kim Anh (2014) on "Policies to attract FDI for low-carbon economic development: International experience and lessons for Vietnam"; The ministerial research project of Dinh Duc Truong (2016) is the most comprehensive work to analyze and evaluate the effects of FDI on the ecological environment in Vietnam.

In general, up to now, although there have been much researches on FDI, there has been no research focused on FDI that has not focused deeply on the goal of sustainable development. less associated with FDI. Moreover, studies still have conflicting views and opinions about the direction and extent of the impacts of FDI on aspects of socio-economic development. In addition, up to now, there have been some studies on adjusting FDI policies to handle problems arising in the practice of attracting and using FDI. However, the policy adjustment studies have not been considered from the perspective of sustainable development. The studies also have not approached systematically and comprehensively policy adjustments such as examining the coordination and cohesion between policies related to the FDI sector and the policy of sustainable development.

2.2. Methods

The basic data analysis methods used in the article are a qualitative method through analysis, theory synthesis, comparison, contrast... The comparison and contrast method are mainly used in analyzing the theory of sustainable FDI and the reality of attracting FDI and policies to attract sustainable FDI in Vietnam; on that basis, propose solutions to improve Vietnam's sustainable FDI attraction policy.

3. RESEARCH RESULTS

3.1. The concept about the policy of attracting foreign direct investment sustainably

Nowadays, there are some concepts about sustainable development from various perspectives. Generally, “Sustainable development is a new type, the combination between production process and resources preservation to protect the environment. Sustainable developments must meet the needs of the present without compromising the possibility of future generations to meet their own needs” (ADB). With this concept, from the perspective of attracting and using FDI, sustainable development of FDI area is associated with two issues: (1) environmental emissions in the FDI sector; (2) exploiting and using resources. However, the main role is additional capital flows from outside into the economy, inner sustainable development it is not enough if the environment and exploiting resources are mentioned. UNESCAP has two ways of grasping about FDI “sustainably”. *First*, sustainable FDI is FDI that contributes to a country’s sustainable development to achieve social, economic, and environmental objectives. *Second*, FDI is somewhat yielded sufficient profits to maintain effective corporate engagement without harming host country interests while producing positive net benefits for the country’s long-term goals.

3.2. The current situation of attracting FDI sustainably of Vietnam

a) The results of attracting FDI

The reality of foreign investment capital in Vietnam over the past 30 years shows the constant fluctuations in the size of investment capital over time. From 1988 to the end of 2020, the total registered capital reached over 400 billion USD, the realized capital is estimated at 234 billion USD, equaling 58.5% of the total registered capital. In which, although the period 2011 - 2020 had 4 years from 2011 to 2014 and in 2020 that FDI did not increase, in 5 years from 2015 to 2019 it continuously increased in new investment as well as investment expansion and especially shares bought by foreign investors. The total registered capital, additional capital, and share purchase reached 270 billion USD, equaling 67.5%, realized capital reached 156 billion USD, equaling 66% of more than 30 years of FDI attraction of Vietnam. In the period 2011 - 2020, the average annual realized FDI capital accounts for about 22-23% of social investment capital. (See Figure 1)

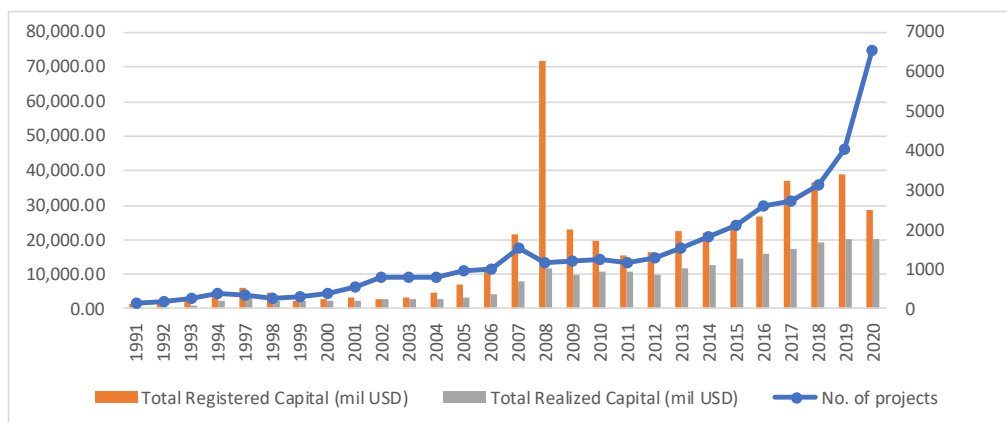


Figure 1. Number of projects registered capital and realized capital in Vietnam

Source: Author's compilation based on data of General Statistics Office (1991-2020)

By the end of 2020, the total newly registered capital, adjusted and contributed capital, bought shares of foreign investors reached 28.53 billion USD, 75% compared to the same period in 2019. The realized capital of the FDI project is estimated at 19.98 billion USD, 98% compared to the same period in 2019. Due to the impact of the Covid-19 pandemic, production and business activities were affected, and the realized capital of foreign investment projects in 2020 is down compared to 2019 (down 2% compared to 2019). However, the reduction level has improved. Many foreign-invested enterprises are gradually recovering and maintaining good production and business activities and expanding projects. The highlight in 2020 was that the adjusted investment capital was over \$6.4 billion, up 10.6% over the same period in 2019, there were 1,140 projects registered to adjust the investment capital, down 17.5% over the same period. Regarding newly registered capital, there were 2,523 new projects granted investment registration certificates, down 35% over the same period, the total registered capital reached 14.65 billion USD, down 12.5% over the same period in 2019. In 2021, according to just announced report of The Ministry of Planning and Investment, from the beginning of the year to April 20, 2021, the total foreign direct investment (FDI) registered for new, adjusted, and contributed capital, and purchased shares in Vietnam equal to 99.3% over the same period in 2020. In which, realized FDI capital was estimated at 5.5 billion USD, up 6.8% over the same period last year. In the first four months of the year, the whole country had 451 new FDI projects granted investment registration certificates, down 54.2% over the same period, but the total registered capital reached nearly 8.5 billion USD, an increase of 24.7% over the same period in 2020. The scale of FDI projects in the first months of 2021 has improved compared to the same period in 2020.

From 1988 to 2019, Vietnam has attracted investment from thousands of corporations and businesses from 136 countries and territories. In July 2020, investors from Malta had a new investment project in Vietnam, bringing the total number of countries and territories with investment projects in Vietnam to 137 partners. In which, the leading countries in FDI into Vietnam are mainly in Asia such as Korea, Hong Kong, Singapore, Japan, China, Taiwan, Thailand... The number of registered FDI projects and capital from these countries increased rapidly and always accounted for a high proportion (accounting for about 75% of total FDI capital). Meanwhile, Western countries where there are many large investors with high technology and source technology are also gradually shifting capital flows towards Vietnam such as the Netherlands, the United States, the United Kingdom, Seychelles, Australia, France, Canada, Germany, Switzerland, but the capital size is still low (*see Table 1*).

Table 1. The registered capital of 10 major FDI investors in Vietnam in the period 2013-2020

Unit: Million USD

No.	Investors	2013	2014	2015	2016	2017	2018	2019	2020
1	Korea	4466,0	7705,0	6983,2	7036,3	8494,3	7212,1	7917,0	3.949,11
2	Hong Kong	729,9	3036,4	1148,1	1640,2	1486,3	3231,6	7868,6	1.999,57
3	Singapore	4769,0	2892,8	2082,5	2419,1	5307,8	5071,0	4501,7	8.994,11
4	Japan	5875,5	2299,0	180,4	2589,9	9111,9	8599,0	4137,6	2.367,98
5	China	2338,6	497,1	744,1	1875,2	2168,4	2464,9	4062,9	2.459,43
6	Taiwan	637,3	1228,9	1468,2	1860,2	1459,9	1074,1	1842,3	2.058,40
7	British Virgin Islands	309,3	790,4	1217,3	858,2	1651,3	1866,3	1372,0	902,93
8	Samoa	125,5	260	1394,7	527,8	466,8	336	886,7	242,18
9	Thailand	398,7	204,7	430,5	86,6	1036,3	387	827,8	1.785,49
10	Netherlands	398,7	204,5	430,5	86,6	1036,3	387	827,8	896,54

Source: Ministry of Planning and Investment (2013-2020)

b) The limitations of attracting FDI

In conclusion, from 1988 up to now, although the number of FDI projects in Vietnam is high and tends to increase, the proportion of large projects is still quite small and uneven. The number of projects with over 1 billion USD registered capital is almost very few and the proportion of investment projects with small capital accounts for a relatively high proportion. Apart from a few large projects, including the Bac Lieu liquefied natural gas (LNG) power plant project under the Bac Lieu LNG Thermal Power Center (granted an investment registration certificate on January 16, 2020) and the project Southern Vietnam Petrochemical Complex (Thailand) in Ba Ria - Vung Tau province, adjusted to increase the investment capital of 1,386 billion (adjusted investment certificate issued on April 18, 2020), the remaining's average capital size is only 1-1.5 million USD. FDI projects with an investment of 1-1.5 million USD are considered too small in scale, especially if the projects are implemented in big cities such as Hanoi, Ho Chi Minh City, and especially not service projects but industrial projects.

Besides, investment partners from countries holding source technology are very few. Looking at the investor structure shows that projects from countries that own source technology such as the US, Japan, and EU are very few in the total FDI projects in Vietnam. FDI into Vietnam is still based on the advantages assessed by investors (cheap labor, cheap fuel, natural resources, large market, low environmental standards...). Very few businesses believe that good skills or competitive local supply chains are strengths of Vietnam. Vietnam has not been proactive, selective in attracting FDI projects with high CNC content and strictly controlling pollution levels. Many FDI projects are in the form of raw production, high processing capacity, high emissions, low value-added, lacking fundamental industries such as supporting industries, CNC. FDI enterprises mainly focus on processing and assembling activities, raw materials are mainly imported from abroad, so value-added is not high. (In 2019, Hanoi also had a project on the smart city of 4 billion USD contributed by BRG Group and Sumitomo Group - Japan, but has not been implemented yet. Or Ho Chi Minh City is also preparing an area called "city within the city" but has not created interest and attraction for foreign investors).

In addition, the imbalance in FDI attraction by industry will lead to consequences for the economy such as reduced natural resources, slow scientific development, increased environmental pollution, which adversely affect sustainable development. Because of the stability of the economy, the supporting industries that supply raw materials for the main economic sectors are not attractive to foreign investors, leading to the economy being heavily dependent on imports. FDI capital invested in the service sector is still low while investing heavily in outsourcing projects is one of the reasons why the added value of the FDI sector in Vietnam is not high, leading to low socio-economic efficiency.

Infrastructure projects, some of which are implemented in the form of general contractors, pose many risks to Vietnam's foreign debt and energy security. Regarding the goal of creating income and jobs, the contribution of FDI is relatively limited, especially in creating jobs for localities (only increased from 3.3% to 8.36% in the period 2011-2020). It is worth noting that many enterprises also use informal, low-skilled, medium, and low-tech workers. These have significantly reduced the quality of Vietnam's FDI in recent years.

3.3. Results and assessing reality FDI attraction policy in Vietnam

3.3.1. Policy, orientation, and general strategy

Some general policy, strategies that cover FDI attraction activity: *Sustainable development policy* (Decision No. 432/QD-TTg of April 12, 2012) towards general macro goals of sustainable development. Including (1) Ensuring macroeconomics especially great balance; maintaining food security, energy security, financial security. Transforming growth model into harmonious development between width and depth; carrying out green growth step by step, developing low carbon economy, using all resources economically and effectively; (2) Building a democratic, disciplined, consensus, fair, civilized society; advanced civilization, deeply imbued with national identity; warm, progressive and happy family; developing human intellectually, morally, physically, mentally, creative capacity, civic consciousness, and law compliance. Education and training about science and technology become vital development motivation. To maintain social and political stability; firmly safeguarding national independence, sovereignty, unity, and territorial integrity; (3) Alleviating negative effects of economic activities on the environment. Exploiting and utilizing natural resources reasonably and effectively especially non-renewable resources. Preventing, controlling, and overcoming environmental pollution and degradation, improving environmental quality, protecting and developing forests, preserving biological diversity. Reducing impacts of natural disasters, adapting proactively to climate change especially sea-level rise.

One policy that is more associated with FDI is *Green Growth Strategy*. The aim of this one is “restructuring and perfecting economic institutions towards greening current industries and stimulating developing economics sectors to utilize energy and resources effectively, applying modern technology to use resources effectively, reduce the intensity of greenhouse gas emissions”. This strategy has four main elements (policy-institute, promoting the use of clean and renewable energy, greening production and greening lifestyle, and promoting sustainable consumption). Which related more to FDI is greening production, including 25 activities with 4 groups (reviewing and adjusting existing sectoral master plans, using effectively natural resources and developing green economy; developing sustainable infrastructure, promoting sustainable business movement). However, it can be seen that *Green Growth Strategy* focuses on the environment rather than other perspectives of sustainable FDI.

Resolution No. 103/NQ-CP of August 29, 2013, on orientation to increase the efficiency of attracting, using, and managing foreign direct investment in the future is a direct policy for this capital to overcome weaknesses in attracting FDI in the previous years. The resolution gave four big orientation which deal with sustainable FDI attraction into Vietnam partially: (1) Attracting FDI in the direction of selecting projects with high quality and high added value, using modern technology which is environmentally friendly, especially in information technology and biotechnology field serving agriculture; developing infrastructure, training qualified workforce, studying and developing advanced services... (2) Attracting large-scale projects, high competitive products, participating global value chain of transnational corporations, from that building, developing branches, supporting industries; stimulating industrial projects which convert from outsourcing to manufacturing; selecting big reputable in investing and developing financial market; while focusing on medium and small scale projects suitable with each economic sector, each region; (3) Improving the link among FDI enterprises and domestic companies; (4) Planning

to attract FDI by sectors, fields, appropriate partners in accordance with the advantages of each region suitable with general plan, ensuring national profit and restructuring the economy to new growth model. Although this resolution is quite synchronized, it does not put FDI in sustainable development completely; it focuses mainly on solving drawbacks in investment promotion. Besides, it is considered from the host country's perspective rather than balancing with investors' benefits when evaluating the benefit of attracting and using FDI in Vietnam. As a result, investors' "sustainability" perspective is not solved suitably.

The most recent is Resolution No. 50/NQ-TW of August 20, 2019, on orientations to perfect institutions, policies, improve the quality and efficiency of foreign investment cooperation activities to 2030. This resolution gives a balance and sustainable viewpoint about FDI attraction, emphasizing facilitating long-term development, ensuring benefits among investors, the host country, and human resources; selective attraction, effective quality, and environment are the main evaluation criteria; prioritizing projects with modern, new, clean and high technology, modern governance with high added value, spillover effect, the link between production chain and global supply. This is the most oriented text and it also shows FDI orientation most, showing require with four perspectives: management, economy, environment, and labor and society.

There are some which mention technologies and the environment such as *The national strategy for Climate change* (Resolution No. 2139/QD-TTg of December 5, 2011). Vietnam's climate change response must be associated with sustainable development toward a low-carbon economy, green growth, and developing science and technology potential; *The strategy for using clean technology* (Resolution No. 2612/QD-TTg of December 30, 2013) to stimulate using energy and resources effectively, low emissions in industrial production towards green growth, reduce climate change and improve community life; *Vietnam's National energy development strategy up to 2020, with 2050 vision* (Resolution No. 1855/QD-TTg of December 27, 2007). Overall, these strategies are quite synchronized and somewhat overlapping; however, with the role of an implementing subject, these policies have great effects on sustainable FDI in Vietnam.

3.3.2. Specific policies

a) Investment incentive

To direct FDI into target industry, field, and area, investment incentives about corporate income tax, import, export, and land use tax with investment projects in the system of legal documents in Vietnam shown the goal of stimulating FDI attraction which is associated with sustainable development.

Most industries and fields given priority FDI follow Law on Investment, 2014 are which relate to sustainable development. For example, according to Article 16, Clause 1 of Law on Investment, 2014 the industries eligible for investment incentives include industries related to high technology, clean energy, recycled energy, investing in waste collection and treatment, education, health, developing infrastructure. FDI projects in these industries meet the standards of "FDI standard" as the definition of OECD, UNCTAD, or sustainable FDI as the definition of UNESCAP.

Form of preferential application: Rules about the form of preferential application to the priority fields to attract investment include (i) Applying corporate income tax level lower than the normal tax rate for a term or entire implementation period of an investment project; exempting,

reducing corporate income tax; exempting import tax for imported goods to create stable assets, resources, materials, components to carry out investment project; and (iii) Exempting, reducing land rental, land use fees, land use tax (Article 15, Clause 1b of Law on Investment, 2014).

The incentives: New established business from investment project in the high technology industry, researching and developing science, investing in developing nation's vital infrastructure, manufacturing software products is applied a tax rate of 10% for 15 years (compared to 23% as a normal); Enterprises working in education-training, health, culture, sporting, and environment are applied preferential tariff of 10%; (iii) Projects which especially attract investment with large-scale and high technology, time to apply preferential tax rate may be extended (Article 13, Law on Corporate income tax, 2013). New establish enterprises from investment projects in areas with extremely difficult economic conditions, economic sector, high technology sector; newly established businesses from investment projects belonged to the high technology field, researching science and developing technology, investing in developing nation's vital infrastructure, manufacturing software products; new established working in education-training, health, culture, sporting, and environment are exempted up to four years and reduced 50% payable tax amounts for no more than 9 subsequent years. Article 16, Law on import and export tax, 2016 also defines import tax exemption with goods are resources, materials, imported components to process or produce exported goods; resources, materials, components that cannot be domestically produced for investment projects belonged to list of industries with special investment incentives as prescribed by law.

Tax and land use incentives are important and effective tools to attract FDI for years in Vietnam. However, the fact that many subjects of tax exemption and reduction lead to reducing state tax sources, affecting spending on development investment, especially in the context that Vietnam will have to implement tax reduction schedules in FTAs in the up-and-coming years. Law on Corporate Income Tax with 3 levels of preferential tax based on industries, investment fields, investment areas to Law on Investment made Vietnam's incentive policies become spread out.

Applying tax rates is difficult since the provisions on investment incentives and encouragement domains are not clear. For example, preferential tax is applied in high technology fields such as electronic without a clear definition of high technology; it is just arranged to industry group name which may lead to attracting FDI into the electronic assembly.

Reducing imported tax on input materials and intermediate goods has a positive effect which is reducing costs for foreign investors when investing in Vietnam. However, this may cause the excess of imports over exports on FDI investment countries in Vietnam, while reducing motivation about developing domestic supporting industry.

b) Human resources development policy

In Vietnam, policies to improve the quality of human resources are shown in different legal documents such as Education Law, 2015, Education Law, 2019 (effective from July 1, 2020), Law on Higher Education, 2018, Resolution No. 77/NQ-CP of October 24, 2014, on the pilot renovation of the operation mechanism of public tertiary education institutions during 2014-2017. Decision No. 579/QD-TTg of April 19, 2011 approving the Strategy on development of Vietnamese human resources during 2011-2020, Decision No. 630/QD-TTg of May 29, 2012, of the Prime Minister approving the vocational training development strategy for the 2011-2020 period, UNITAD (2015), Investment Policy Framework for Sustainable Development. Technology

science 2013, and Directive No. 16/CT-TTG dated May 04, 2017, on the strengthening of the ability to access the Fourth Industrial Revolution. Vietnam's policy gives priority to spending a large budget on education. Article 102, Law on Education, 2015, arranging the education budget is the top priority, ensuring the annual increase in education budget is higher than the increase in state budget expenditure. As Article 91, Law on Education 2019, at least 20% of the state budget expenditure is spent on investing in education, stimulating education socialization to invest in education. Law on Higher Education, 2018 orienting to develop a qualified workforce, have preferential tax, credit, and land incentives to developing higher education, prioritizing investment in higher quality, regional and international higher education institutions, encouraging socializing higher education.

Besides, the government also gives programs, projects, developing education plans, training human resources to develop human resources, such as Decision No. 579/QD-TTg of April 19, 2011, approving the Strategy on development of Vietnamese human resources during 2011-2020 and Decision No. 630/QD-TTg of May 29, 2012, approving the vocational training development strategy for the 2011-2020 period. *The Strategy on development of Vietnamese human resources during 2011-2020* has the general objective is to make Vietnamese human resources a foundation and the most important advantage for the country's sustainable development, international integration, and social stability, raising the competitiveness of Vietnamese human resources to a level corresponding to those in advanced regional countries and reaching in certain lengths those of developed countries in the world. This policy also gives some detailed targets such as the rate of trained laborers reaches 55% in 2015 and 70% in 2020; the rate of vocationally trained laborers reaches 40% in 2015 and 55% in 2020...*The Vocational training development strategy for the 2011-2020 period* with the aim is until 2020, vocational training meets the needs of the labor market both in quantity and quality, vocational structure and training level, training quality of some industries reach the level of developing countries in ASEAN and the world; forming teams of skilled workers, improving national competitiveness; universalizing vocational training for workers, restructuring of labor, increasing income, alleviating sustainable poverty, ensuring social security. This policy also gives specific target need to be achieved until 2020 about the rate of trained laborers, the number of vocational colleges, vocational teachers, programs, schoolbook for the national key profession.

- In general, educational policies in Vietnam facilitate education and training, improving the quality of human resources. However, the policy implementation is still inadequate leading to vocational quality cannot meet the needs. The quality of education and training in Vietnam is not improving much for years. The proportion of unemployed graduates has been increased (a hundred thousand people per year), which not only puts the burden on workers but also wasting human resources for developing education. Up to now, exported laborers of Vietnam mainly are low-skilled, while importing high-quality laborers abroad is necessary. This partially reflects failures in training human resources in Vietnam.

Institutionalizing viewpoints, policies of The Party and State about developing education and vocation is slow and awkward. Building, organizing the implementation of strategies, plans, and education and training programs does not meet the needs of society. Most targets set in educational and vocational strategies have not been achieved.

Educational and vocational management also has weaknesses, leading to long-term drawbacks in education and reducing the quality of human resources. Teachers and staff managers also have many shortcomings in terms of quality, quantity, and structure. Investment in education is not effective. Educational programs do not pay much attention to practice and applying knowledge. The educational system lacks association between training levels and education modes, which is not suitable with the requirement of developing country and international integration; do not link between training and using and the needs of the labor market.

c) Policy related to science and technology

Vietnam starts taking part in the community of international intellectual property issues (IP) quite soon. Since 1949, Vietnam has taken part in the Paris Convention for the Protection of Industrial Property and Madrid Agreement concerning the International Registration of Marks. Until 1976, Vietnam participated in Stockholm Convention on establishing world intellectual property organization. However, the process of joining and establishing the intellectual property rights of Vietnam has come into reality since Vietnam's economy integrates actively into the regional and world economy, especially when Vietnam begins joining World Trade Organization (WTO). Therefore, legal normative documents were issued to realize the establishment of intellectual property rights in Vietnam. Civil Law 1995 spends 61 articles in part IV to mention Intellectual Property and technology transfer, with many legal documents about IP are promulgated. Decree No. 63/CP dated October 24, 1996, of Government detailing the regulations on industrial property; Decree No. 76/CP of November 11, 1996, to explain regulations in Part IV, Civil Law; Decree No. 54/2000/ND-CP of October 03, 2000, on the protection of industrial property rights to business secrets, geographical indications and commercial names, and the protection of the right against industrial property-related unfair competitions; Decree No. 06/2001/ND-cp dated February 01, 2001, of the Government, amending and supplementing some articles of the Governments Decree No. 63/CP dated October 24, 1996, specifying the industrial property; Decree No. 13/2001/ND-CP dated April 20, 2001, of the Government on the protection of new plant varieties; Berne Convention has been officially effective in Vietnam since October 26, 2004...

Up to now, compared to TRIPS' requirements, the Intellectual Property Rights – System in Vietnam has been quite fully established, Intellectual Property Law was enacted in 2005 officially effective from January 07, 2007, which replaced completely decrees and guiding documents on previous intellectual property domains, while setting individual rules into Intellectual Property Law with the division into 3 areas: copyright, industrial property and plant varieties.

Stimulating technology transfer is prescribed in Law on Investment, Law on Technology Transfer, Law on High Technology. Law on Technology Transfer, 2017 (Article 3, Clause 5) prescribes state's policy on technology transfer activities, including "promoting advanced technology transfer, high technology from abroad to Vietnam; stimulating technology transfer from Vietnam to outside, promoting domestic technology transfer". Until now, Vietnam has a legal system regulating technology transfer activities with the specific decision to promoting technology transfer activities in general and technology transfer from abroad to Vietnam in detail. Vietnam applied the highest incentive level in the current laws in Vietnam to high-tech application projects, high-tech enterprises. At the same time, Law on Investment prescribes high-tech enterprises are subject to investment incentives, high-tech activities are industries of investment incentives and

high-tech sectors are areas of investment incentives. This shows consistency in policymakers about foreign investment, high-tech attraction, advanced technology from abroad to Vietnam.

Intellectual Property Rights Protection System in Vietnam is formed relatively fully up to now. However, the enforcement of Intellectual Property Rights remains limited, the effects of the system of regulations on Intellectual Property Rights Protection are still low, transparency and enforcement of law need to be considered...leading to infringement of intellectual property rights happening quite popular. Most types of goods have counterfeit goods, items containing ownership infringement elements... About technology transfer, although there is a full legal framework for technology transfer into Vietnam and FDI into Vietnam, according to assessment, the technology transfer level of FDI sectors to domestic economic sectors is still low compared to countries in the region even reducing step by step. Considering the policy adjustment framework, Vietnam has adjustments about law related to technology transfer but asynchronous. Law on Technology Transfer, Intellectual Property Law, Law on Environmental Protection in Vietnam have legal effects but enforcement is not high, the measures to prohibit and limit low technology transfer and causing environmental pollution only stop at administrative penalties, with no strong deterrents. As can be seen that Vietnam's policies make no technology transfer motivations and low quality of Vietnam's technology though FDI flows increase sharply.

d) Infrastructure development policy

In current years, besides prioritizing the maximum use of state resources, the Government takes good care of promoting, attracting private investment, especially through Public-Private Partnership (PPP). Decree No. 15/2015/ND-CP dated February 14, 2015, on investment in the form of public-private partnership, prescribing about sectors, conditions, procedures for implementation of projects developed under PPP investment form. Decree No. 63/2018/ND-CP of May 4, 2018, on investment in the form of PPP, replaced completely Decree No. 15/2015/ND-CP.

However, in the implementation process of these decrees, there is a mismatch with the provisions of different laws such as Law on State Budget, Law on Investment, Law on Public Investment, Law on Environmental Protection, Law on Enterprises, Law on Land, Construction Law, Law on Public Debt Management... Now, the Ministry of Planning and Investment is drafting Law on Investment toward Public-Private Partnership (PPP). According to statistics of the Ministry of Planning and Investment, up to now, Vietnam has attracted about 150 investment projects follow the PPP form (not include investment projects follow BT form), with a total investment of over 1 million billion VND (about 50 billion USD). Investment projects with resources from crucial private sectors contribute to the improvement of infrastructure quality in Vietnam.

Besides achievements, investment attraction policy in developing infrastructure in Vietnam also meets challenges. New policies such as attracting investments in developing infrastructure under PPP form (drafting PPP law) and Law on Support for Small and Medium-sized Enterprises, 2017 are so simple in general and have little time to evaluate efficiency. The size of the economy is not large, the ability to accumulate is low leading to continuing to maintain the high level of investment from the State Budget into developing infrastructure which will put a burden on ensuring macro balance, affecting the general development of the total economy. Besides, the pressure of high public debt in the context that Vietnam became a middle-income country (it means that foreign loans spent on infrastructure development have decreased and borrowing preferential

loans with higher interests and greater repaying debt pressure) also makes resources spent on infrastructure be in difficulty.

e) Policy related to environment and resources

The legal document system of Vietnam also has regulations on protecting the environment related to environmental treatment in industrial sectors, high-tech sectors; preferential tax to environmental protection goods; stimulating investment in environmental protection fields; applying environmental protection tax on goods causing environmental pollution (petroleum, coal, and gas).

From Article 65 to Article 68, Law on Environmental Protection, 2014 prescribe about protecting the environment in the economic sector, industrial sector, processing, high-tech sector, industrial complex, concentrated business and service area. It is the place where gather many FDI enterprises in the manufacturing and processing industry, therefore, these regulations will have great effects on environmental issues of FDI projects into Vietnam. Regulations mainly require management of the economic sector, industrial sector, processing sector, the high-tech sector having department specializing on the environment, coordinating with the provincial government in solving environmental issues; sectors, groups need to have the equipment to collect and treat wastewater and waste by regulations.

Article 104, 112, 148, 160, and 168 in Law on Environmental Protection, 2014 prescribe issues related to handling environmental violations such as handling establishments causing serious pollution, the responsibility of overcoming environmental trouble, environmental protection fees, handling organizations, individuals violating environmental laws.

As Environmental Protection Tax Law, 2010, Vietnam also has regulations about environmental protection tax to put a tax on goods causing environmental pollution such as petroleum, coal, and gas.

In recent years, there are many regulations related to the environment and resources in Vietnam, showing the managers' interest in this field in developing the economy and attracting FDI. However, these regulations are too general without specific deterrents and preventive tools to control environmental pollution effectively. This is a big reason that causes FDI projects in Vietnam with great emissions, low added value, high risk of environmental pollution and degradation since waste includes wastewater, emissions, large solid waste with a high concentration of pollutants. FDI enterprises importers old, out-of-date technology and equipment, lack waste treatment technology.

4. SOME SUGGESTIONS AND RECOMMENDATIONS TO PERFECT SUSTAINABLE FDI ATTRACTION POLICY IN VIETNAM

To attract and use sustainable FDI resources, Vietnam needs to regulate policy orientation to attract FDI investment in the up-and-coming years:

- *First*, prioritizing FDI attraction in high-tech and advanced sectors, environmentally friendly technology, clean energy, recycled energy, medical equipment production, providing health care services, education and training, high-quality travel, financial services, logistics, and other modern services; high-tech agricultural production, intelligent agriculture; developing modern technical infrastructure especially new industrial on The Fourth Industrial Revolution. FDI attraction has to ensure the harmony among export growth, product and service development investment with added value and use of domestic materials, developing supporting industry, training domestic human resources.

- *Second*, to partners, focusing on attracting FDI, especially multinational corporations associated with domestic companies to form and develop industry clustering to each value chain. In the short term, continuing attracting FDI into advantageous industries in Vietnam such as textile, footwear... Focusing on stages creates high added value associated with the intelligent production process, automation. FDI attraction diversifies from potential markets and partners. Exploiting effectively the relationship among strategic partners (comprehensive, strategic partners), attaching special importance to leading developed countries in the world, transnational corporations hold advanced source technology, modern governance level, Besides, actively follow, evaluate FDI capital flow movement trend into Vietnam with out-of-date technology, high risk of environmental pollution from some countries in the region to deal with suitable solutions. FDI attraction from small and medium enterprises, small and super-sized projects have to ensure technology upgrade conditions and production network participation and global value chain, developing supporting industry.

- *Third*, FDI attraction has to be suitable with strengths, conditions, development level, and local planning in regional association, ensuring general economic, social, environmental efficiency. To sensitive locations and sectors, related to defense security, border areas, sea areas, islands, exclusive economic zones, FDI attraction need to ensure defense security and sovereignty first.

5. CONCLUSION

In recent years, Vietnam has had vital legal reforms towards improving FDI attraction associated with sustainable development. FDI preferential incentives are mainly intended for sectors related to sustainable development. Vietnam also gives incentives for human resources development investment, developing infrastructure systems, environmental protection to attract high-quality FDI. However, shortcomings in FDI policy in Vietnam still exist and have effects on sustainable development. Too many fields received investment incentives leads to budget revenue loss, less sustainability about budget, and price transfer phenomenon. Regulations about the environment on investment projects are not tight, so FDI enterprises take advantage of it to transfer out-of-date technology, causing environmental pollution. Besides, policy implementation still has drawbacks such as legal system about Intellectual Property Rights is quite full but weak enforcement capacity which makes Intellectual Property Right Protection in Vietnam inadequate, do not stimulate investing FDI into high technology and technology transfer. Educational investment is a priority but the use of investment in human resources is not effective leading to low quality of human resources. Some policies are on the right track such as increasing investment in infrastructure development, however, because of the limitation of the economic scale, investment resources are still low, requiring strengthening socialization. Furthermore, corruption, waste in investment also cause the quality of infrastructure system which has not met the requirements. Therefore, in the up-and-coming years, Vietnam needs to perfect the legal document system and enhance the policy enforcement capacity to improve FDI attraction associated with sustainable development.

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PROMOTE FAST AND SUSTAINABLE DIGITAL ECONOMIC DEVELOPMENT IN VIETNAM - CHALLENGES AND SOLUTIONS

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Abstract: *Currently, in the world, the digital economy is changing drastically under the strong impact of the Industrial Revolution 4.0 and the development trend of the digital economy. Vietnam is no exception to that trend and is considered as a country with great potential for developing the digital economy. The article focuses on 3 basic issues: (1) The position and role of the digital economy in the industrial revolution 4.0, (2) Advantages and problems posed by state management on digital economic development in Vietnam, (3) Some solutions to develop the digital economy in Vietnam in the context of globalization.*

Keywords: *digital economy, industrial revolution 4.0, e-commerce, digitalization trend.*

1. THE POSITION AND ROLE OF THE DIGITAL ECONOMY IN THE INDUSTRIAL REVOLUTION 4.0

Currently, the world economy is changing profoundly, especially the impact of the Covid-19 pandemic. Economic activity is not merely the exchange of goods between people, but also based on digital technology. That is the digital economy. A digital economy is “an economy that operates primarily on digital technology”, especially electronic transactions conducted through the Internet. Digital economy is present in all fields and economies (industry, agriculture, services; production, distribution, circulation of goods, transportation, logistics, finance and banking...) to which digital technology is applied. In essence, these are organizational models and modes of operation and management of the economy based on the application of digital technology. The evolving field of digital technology has paved the way for innovation and growth globally. The application of technological advances in recent years has impacted businesses as well as every aspect of life. Digital technology drives many businesses to improve development models, create new industries, and blur geographic borders. Digital technology appears anytime, anywhere in social life, such as ecommerce sites, online advertising or applications for food, transportation, delivery... also integrate technology digital technology to meet the convenience needs of customers. At the macro level, the digital economy also makes significant contributions to the integration of businesses into the global technology chain. The characteristic of the digital economy is that it can be gathered in three main processing processes interwoven, including: material handling; energy handling; information processing. In particular, information processing plays the most important role and is also the field that is easiest to digitize. Connectivity between entities and economic cycles thanks to the achievements of information technology and the Internet helps to connect resources, eliminate many intermediaries and increase access to global value chains. The digital economy

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is now worth more than 3 trillion USD and uses approximately 10% of the world's electrical energy. Businesses of all backgrounds and sizes are increasingly relying on a secure, stable, and reliable internet platform that helps businesses carry out their day today operations. It is with the digital economy that economic efficiency has achieved many high achievements, industries have made breakthrough changes in business models, from ecommerce to online advertising on social networking sites. (Facebook, Instagram), entertainment (Netflix, Pinterest), to transportation (Uber, Grab, goViet) to distribution, wholesale and retail (Lazada, Shopee)... Many business models have appeared. completely different from traditional businesses such as global media companies but do not own the copyright of any news, global taxi company but own no cars, global hotel company but do not own Which hotel room... has been contributing to shaping a new economic era, the era of the digital economy.

In the context of the global 4.0 technology revolution, it is the contribution of the digital economy for Vietnamese businesses to gradually participate in the global technology chain. Vietnam must also be in tune with the world's digital wheel. According to a study by the Center for Global Business of Tufts University (USA), Vietnam is currently ranked 48 out of 60 countries with the fastest digital economic transformation in the world at the 22nd position in terms of digitization development speed. In 2019, Vietnam has 61 million internet users, on average we Vietnamese spend 3 hours and 12 minutes using the internet on mobile devices such as smartphones. Vietnam's digital economy is being assessed as having rapid development, bringing important contributions to the country's economy. According to the report "Southeast Asian Digital Economy 2019" conducted by Google, Temasek and Bain, Vietnam's digital economy in 2019 is worth 12 billion USD, 4 times higher than 2015 and is expected to reach 43 billion USD in 2025. Vietnam's digital economy, along with Indonesia, is leading in growth in Southeast Asia. While the average growth rate of the whole region has been 33% since 2015, Vietnam's digital economy has grown by 38% in the same period and contributed 5% of the national GDP in 2019. This proves that a major change in the business model of Vietnamese enterprises, a turning point to help Vietnam's socio economic development to a new height. Due to the prolonged Covid-19 pandemic, developing countries like Vietnam currently at 2.0 - 3.0 often take a long time to catch up with the 4.0 revolution, and soon have a good opportunity to promote digital and economic transformation. Faster growth of numbers creates a new way of life and a new culture in urban construction and development. Revolution 4.0 gives Vietnam the means and tools to "take a shortcut" in the right direction with the progressive world. The remaining problem is our people, institutions and beliefs, our aspiration for innovation and creativity.

2. ADVANTAGES AND PROBLEMS OF STATE MANAGEMENT ON DIGITAL ECONOMY DEVELOPMENT IN VIETNAM

2.1. Advantages for the development of digital economy in Vietnam

Firstly, Vietnam's digital economic infrastructure is quite convenient for digital transformation and application. Vietnam has a network of telecommunications network infrastructure, information technology and internet infrastructure that develops rapidly, covers a wide range and is modern, not inferior to advanced countries in the world. The rate of people using the internet and smartphones is high, among the top countries with the fastest growth rates in the world.

Secondly, the Vietnamese Government has had many policies, showing great determination in orientation, action and taking advantage of all opportunities of the 4.0 revolution to promote the development of the digital economy in Vietnam.

Third, recently, the forms of the digital economy in Vietnam have developed diversely, and tend to grow stronger in the coming years. The trend of digitalization, transformation and application of digital technology in many fields and economic sectors, from commerce to transportation, banking, healthcare, education, tourism, entertainment, advertising and other forms of applications. in which ecommerce grows rapidly in both scale and form. Online marketplaces, shopping, business, entertainment, along with delivery services, online payment solutions, card payments, and payment machines exploded strongly, present everywhere place. While world famous ecommerce brands are strongly landing in Vietnam, such as Alibaba, Amazon, Ebay, Shopee... ecommerce sites of Vietnamese origin are also blooming. Some sites such as Lazada Vietnam, Tiki, Sendo, FPT Shop, Dien May Xanh, Mobile World... are gradually taking over the domestic market share and thereby promoting changes in shopping trends and behaviors of customers Vietnamese consumers.

Fourth, Vietnam's political system and macro economy has always maintained stability. Along with rapid economic growth and an increasingly integrated economy with the world, the increase in people's incomes, the growth of the middle class and a large market with nearly 100 million people. This is really the foundation to promote the digital economy in general and ecommerce in particular.

Fifth, Vietnam has a high proportion of young population, providing human resources for the development of the digital economy in Vietnam. With the advantage of a young population, consumption patterns, and a relatively good background in mathematics and information technology, Vietnamese people love and quickly approach new technologies, which is the key to success promoting the development of the digital economy in Vietnam.

2.2. Problems facing the development of the digital economy in Vietnam

Firstly, the databases of many ministries, branches and localities are built up and are fragmented and distributed, with no connection or connection. Therefore, it is difficult to compete with the world.

Secondly, the system of institutions, policies as well as enforcement and dispute settlement institutions and the effectiveness of enforcement agencies related to digital economy development is still weak, not uniform and effective, so it has not been exploited yet exploit the full potential to develop the digital economy. In the past time, due to the rapid development of science and technology, the digital economy, new business methods and innovative ideas appeared, unprecedented, making state management agencies quite confusion in the management of digital economic activities.

Third, the habit of transaction and cash payment of the majority of consumers is a big obstacle. Cash on delivery erodes trust between businesses and consumers. Transactions are suspicious of each other, making the possibility of successful connection of transactions always low. Business and consumption behavior of people in non-urban areas has not changed much. The digital economy in general and e-commerce in particular still has a large gap between urban areas and rural, mountainous, remote and ethnic minority areas of our country.

Fourth, digital economy enterprises in Vietnam are facing competition from foreign enterprises. ABI Research's report on Vietnam's ride-hailing market in the first six months of 2020 shows that Grab is still the market leader in ride-hailing, accounting for 74.6% of the market share, a slight donation compared to 73% in the first half of the year. In 2019, competing directly with

domestic enterprises such as Go-Viet, Be, MyGo... Nearly 70% of the online advertising market share in Vietnam belongs to foreign companies such as Facebook and Google. In just 10 years, Vietnam lost about 50% of the advertising market share.

Fifth, the quality of human resources has not yet met the requirements of transformation to the digital economy. Vietnam has a shortage of high-quality human resources, especially information and communication technology human resources. Vietnamese education has not kept up with the rapid development trend of the digital economy, the creative economy of the industrial revolution 4.0 in the world today. If this issue is not paid attention to and invested properly in the coming time, it will become a big bottleneck for the development of the digital economy in Vietnam.

Sixth, the awareness of the people and a part of the state management staff about the digital economy is still limited, the skills to use the internet safely are low and have not kept up with the speed of technology development.

3. SOME SOLUTIONS TO DEVELOP THE DIGITAL ECONOMY IN VIETNAM IN THE CONTEXT OF GLOBALIZATION

Firstly, build and perfect the legal framework, mechanisms and policies to create conditions to promote and support Vietnamese enterprises, especially small and medium enterprises to transform and develop in the digital economy. The State creates a favorable environment and promulgates mechanisms and policies to encourage enterprises to transform themselves into smart enterprises and start up enterprises. Formulate and implement the National Strategy on the development of technology enterprises, giving priority to the development of digital technology enterprises and hightech enterprises that design, create and manufacture in Vietnam.

Second, promote the development of socio economic infrastructure to meet the requirements of the digital economy. Building and developing e-government with smart technology infrastructure. Forming and operating an e-government that is strong enough, smooth, administrative procedures compact, quickly creating a favorable business environment for enterprises. Building and synchronously developing national data infrastructure, forming a system of national data centers, regional and local data centers with synchronous and unified connection. Building a digital database of the government and authorities at all levels, creating conditions for all citizens, especially businesses, to update necessary information on the guidelines and policies of the State.

Thirdly, thoroughly grasp and well implement the views, guidelines and policies of the Party and State in actively participating in and strengthening the capacity to approach the industrial revolution 4.0, promoting the development of smart enterprises, develop the digital economy in the whole political system and businesses. In particular, it is necessary to renew thinking, unify awareness, strengthen the leadership role of the Party and the State in the development of the digital economy, create favorable conditions for businesses to access and operate in the digital economy digital economic environment. Promote propaganda, raise awareness of the whole people to respond and accompany businesses in order to create a favorable environment and conditions for the development of smart businesses in Vietnam. In particular, raise people's awareness of the role of the digital economy in socio economic life and the awareness of using electronic services to move towards a cashless economy.

Fourth, focus on the protection of economic security, information security, and network security. Focusing on ensuring information security and cyber security not only at the national level

but also at each agency, unit at all levels and each enterprise, especially the financial monetary system and government agencies. digitizing. Along with the construction and development of modern telecommunications infrastructure, becoming the foundation of the digital economy, it is necessary to focus on monitoring and preventing and combating various types of cybercrime and high tech crimes to create favorable conditions conditions for people and businesses to easily and equally access opportunities to develop digital content. In addition, ensuring network safety and security will help Vietnam gain the trust of foreign partners, which is a safe environment for business investment, as well as an opportunity for us to develop products for network security. In addition, it is necessary to actively explore and participate in international and regional cooperation and cooperation mechanisms and initiatives in fields related to digital economic development, especially ensuring security and safety cyberspace, data security and privacy, preventing and combating crimes that take advantage of technology. In this aspect, it is necessary to attach importance to promoting cooperation and linkage in multilateral institutions at both regional and global levels, such as the United Nations, ASEAN... in order to develop rules for coordination and application joint arbitration, agreements, conventions and agreements on cooperation and coordination on related issues arising from the development of the digital economy in order to ensure information security and network security.

Fifth, improve the quality of education - train human resources for the digital economy. The shortage of information technology human resources is considered one of the major challenges for the development of Vietnam's digital economy. Therefore, along with changing training programs to keep up with new technology trends, speeding up the socialization of training and fostering activities for the business sector so that businesses can soon access and implement the transformation. number in the business you manage. Along with upgrading and completing hard infrastructure, Vietnam needs to focus on investing heavily in science - technology and education, attaching importance to education and training innovation as required by the Second Industrial Revolution private and digital economy. This includes developing strategies for training and attracting domestic and foreign technology talents, developing technology human resources, especially information technology in both quantity and quality, innovating and updating, absorbing The world's training programs and textbooks are associated with the trend of digital economy development, especially the training of information technology and finance and technology human resources in the digital age. Promote international cooperation in training, fostering and building a contingent of cadres and civil servants for the digital economy, capable of protecting, supporting and promoting the interests of Vietnamese enterprises in the environment international integration into the global digital economy.

3. DISCUSSION AND CONCLUSION

Vietnam is considered as a country with great potential for developing the digital economy, especially under the impact of the industrial revolution 4.0. On the basis of the above analyzed contents, the article has focused on suggesting solutions such as: Building and perfecting the legal framework, mechanisms and policies to create conditions to promote and support businesses. Vietnamese enterprises, especially small and medium enterprises, are transforming and developing in the digital economy. Building and developing e-Government with smart technology infrastructure. Forming and operating an e-government that is strong enough, smooth, administrative procedures

compact, quickly creating a favorable business environment for enterprises. Thoroughly grasp and well implement the views, guidelines and policies of the Party and State in actively participating in and strengthening the capacity to approach the industrial revolution 4.0, promoting the development of smart businesses, developing digital economy in the whole political system and business. Paying attention to the protection of economic security, information security, and network security. Focus on ensuring information security and cyber security not only at the national level but also at each agency, unit at all levels and each enterprise, especially the financial - monetary system and government agencies. digitizing. improving the quality of education - training human resources for the digital economy. The shortage of information technology human resources is considered one of the major challenges for the development of Vietnam's digital economy.

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THE URBANISATION FOR SUSTAINABLE DEVELOPMENT IN VIETNAM

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Abstract: *Together with the industrialisation and application of new technologies as well as scientific-technological progress, the urbanisation is one of the key pillars for the sustainable development of Vietnam. However, the urbanisation in Vietnam, which is going quickly since last decades, is behinds many countries in the region and faced difficulties as well as challenges. In order to maintain the sustainability of socio- economical development Vietnam's, positive impacts of the urbanisation should be utilised more and effectiver. For this purpose, a deep study the reality and problems of the urbanisation process in Vietnam is very important.*

Key words: *Urbanisation, sustainable development, cities and town*

1. INTRODUCTION

The urbanization is the process of the population and resource concentration in cities and towns, which leads to the increase of the share of urban area on the total country's population and production, which is combined closely with the change of the organization model of the socio-economic life as well as the living style of that country, region from traditional into urban one. The World Bank defines that the urbanisation includes "various functional and spatial transformations needed for long term growth and development. The pace and form of urbanization are inherently linked to the fluidity of factor markets and the provision of basic services". This process consists of 5 dimensional change: the economic shift, the welfare shift, the demographic shift, the physical shift and the administrative shift [7]. In this process, the economic shift plays the role as the baseline for the long term success, but the administrative shift is often implemented firstly and influences the scope, speed and results of all other dimensions.

The urbanisation of Vietnam goes together with the country's socio- economic development in the same direction. The process was implemented with high tempo, even it slown down a litle bit in the last few years. In its policy, the Government wants to remain a sustainable urbanisation, which should contribute to a sustainable and effective/ efficient socio- economic development of the country. However, the reality shows that besides the initial successes, the urbanization process in Vietnam also reveals many difficulties and limitations. Since then, it is necessary to have specific analysis of the urbanization problem in Vietnam to aim for sustainable development in the coming time.

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2. METHODOLOGY

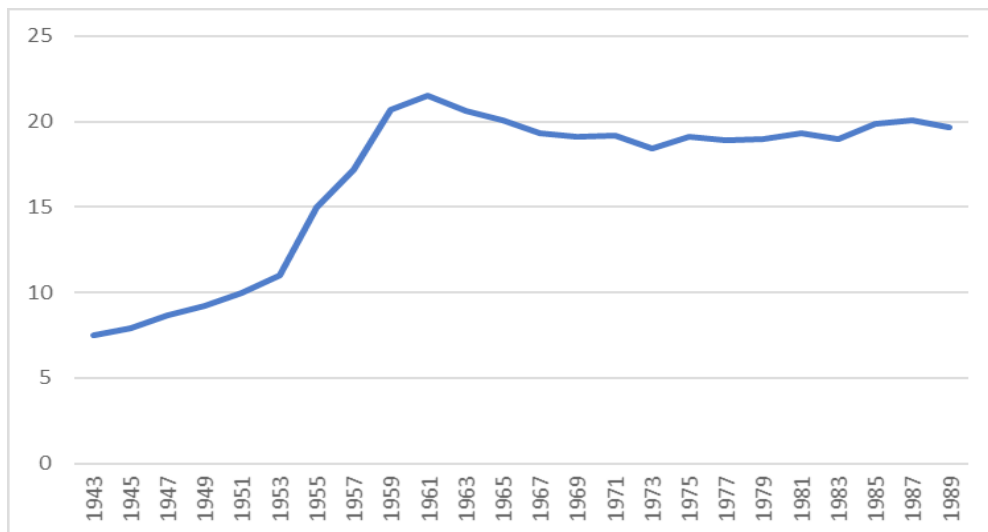
This research uses qualitative research methods, evaluations which are synthesized from previous studies. Statistical analysis and description of urbanization in Vietnam on the basis of data analysis from the General Statistics Office and the World Bank.

3. OVERVIEW OF URBANIZATION PROCESS IN VIETNAM

In 1945, Vietnam has 23 cities; the number was remained until 1954 but the share of urban area rose from 7.9% in 1945 to 15% in 1955. From 1954- 1975, the urbanisation in the North of Vietnam started slowly, while from middle of 60's, almost of cities were bombed, urban citizen should evacuate into rural areas, especially between 1965- 1970 and 1971- 1972. The government focused more on development of industrial zones and improvement of urban infrastructure than territorial extension of cities. However, some regions, which had high economic potentials and achieved a high level of economic development, have got more investments and were considered as “potential urban creating region”. In the South, cities were remaining the political and administrative center of provinces. The urbanisation went more quickly and with larger scope, proportionally to the civil and military assistance of the USA. New cities were built in this period and the share of urban population on total population increased quickly, too. Military actions caused diversified damages for cities in the South [28].

From 1943 to 1989, the urbanisation in Vietnam was characteristic mostly by the expansion of existing cities. The share of urban population increases continuously, even there were 2 wars in this period (from 1945- 1954 and 1956- 1975). Statistical data showed an increasing trend of urban population (see figure 1).

Figure 1: Percentage of urban population on total country's population between 1943- 1989 [21]



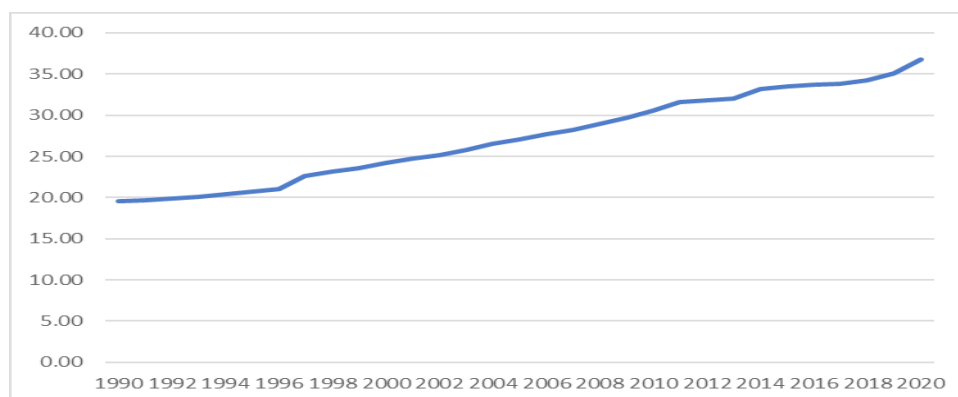
In term of administration, Vietnam's cities are grouped into 3 categories: Cities managed by the central government; cities and towns managed by the provincial administration and towns managed by the district administration.

On the technical aspect, urban communities of Vietnam were grouped in 6 classes (special class, and class I- V). The order of a city/ town to a group reflects not only its role and impact, but also the level of its development. In 2009, the Decree 42/2009/NĐ-CP of the Government maintained the urban classification in 6 classes, but put an additional criteria: the view on the

landscape [19, 20]. Coulhart, Quang, & Sharpe (2006) noted that up grading the city/ town is one of most important concerns of local authorities, which could create negative impacts on efforts of the local authority [8]. In many cases, the level of a town/ city could be upgraded even some criteria are not fully met. Reports of the World Bank (2011, 2016) raised the same concern. WB commented that “a city’s physical transition is determined by its location-specific endowments rather than its urban hierarchical position (or its location in the city size distribution in a non-spatial context)” [7].

The urbanisation rate of Vietnam increases quickly in the last decades. In 1989, 19.4% of the total population of Vietnam lived in urban area [27]. This percentage grew up to 24.8% in 1990, 35% in 2019 and 36.8% in 2020. The data shows that the economy and economical resource are “urbanised” more quickly than the population, even the urbanisation Vietnam’s slowed down in the last decade and did not meet the target set by the Government of Vietnam¹. The data on the urbanisation provided by the General Office of Statistics are some time lower than those ones indicated on reports of different sources (see figure 2). The World Bank remarked that the urban population in Vietnam increased very quickly [7]. However, statistical data showed that their share on total population of the country increased really strongly since 1996 (see tables 1 and 2).

Figure 2: Rate of the urban population in Vietnam between 1990 and 2019 [22,25]



The General Office for Statistic of Vietnam indicated “Between 1931- 1995, the urban extension of Vietnam was more quickly than in the middle of 20th century (50s and 70s). The speed of urbanisation in the last 25 years of this century was relatively slowed down. The highest growth rates were noticed in 1941 (3.1%), 1957 (3.7%), 1967 (3.3%) and 1975 (3.3%). Between 1995-2008, the increase rate of the urbanisation went up again, varied between 3.0- 3.5%, excepted 9.2% for 1997, 4.2% for 2003 and 2004. From 1999- 2009, the annual growth rate of urban population was 3.4%. Between 1999 and 2009, Vietnam’s population increased by 9.47 million, among those, 7.3 million of increase (77%) belonged to urban areas”. With a growth rate of 50%, Hanoi and Ho Chi Minh City were cities with highest population increase in this period [23]. However, in that period, the annual growth rate of urban population in Vietnam went down to 2.64%. Beside the natural population increase and the increasing immigration of rural population into cities and towns, administrative reorganisation contributed lots to the increase of urban population: At the same time, 4.1 million rural habitants became urban ones only because of administrative decision

¹ The master plan for urban development to 2025 and vision to 2050 foreseen that urban population will make 45% of total population by 2020 and 50% by 2025. In 2016, the target for 2020 was adjusted to 38- 40% [14, 47].

[25]. The increasing trend of the urbanisation of Vietnam continued in 2020: At the end of 2020, urban population made around 39.3% total population of Vietnam [49]. The number of cities were 862, and most of them are small and medium cities.

Statistical data let clarify clearly the trend of developing medium cities and small towns as well as expansion of Hanoi and Ho Chi Minh City as centers of 2 “city blocks” at the 2 ends of Vietnam. According to statistical data, the number of cities of Vietnam went up from 604 to 833 unit in the last 20 years, from 1999 to 2019 (equivalent to 1.62% annually). In term of its quantity simply, the growth was not high, but its structure in term of urban classes changed continuously in the direction of increasing the share of cities of class I, II, III and IV on the total number of Vietnamese cities, while the share of small towns (administrative center of districts and inter- communes’ economic center) went down. On the other hand, even more small towns were established/ recognised, but their infrastructure could not improved as quick as expected. The situation could be easily to be understood: Most of newly established/ recognised towns/ cities are budget receiver, their internal budget income could not cover needs of their expenditures, so that the Government has to balance for their deficits. Under the circumstance of lack on resources and budget, the amount to be shared for each of increasing beneficiaries should be limited, if not reduced. Hanoi and Ho Chi Minh City are only 2 cities of special class and their share on total number of cities and towns decreased (see table 1). They could develop more than the other cities because of 2 main reasons: They have internal resources for covering their needs and they could attractive well external investors for improving their technical and social infrastructure.

Table 1: Number (unit) and shares (%) of cities of Vietnam by city class between 2018- 2020 [23, 43, 44]¹

	Special class	Class I	Class II	Class III	Class IV	Class V	Total
1999	-	2 (0.33%)	8 (1.32%)	12 (1.99%)	64 (10.60%)	518 (85.76%)	604
2009	2 (0.27%)	5 (0.68%)	12 (1.64%)	40 (5.47%)	47 (6.43%)	625 (85.50%)	731
2018	2 (0.24%)	19 (2.28%)	29 (3.48%)	45 (5.40%)	80 (9.60%)	658 (78.99%)	833
2019	2 (0.24%)	20 (2.4%)	29 (3.48%)	45 (5.40%)	85 (10.20%)	652 (78.27%)	833
2020	2 (0.23%)	22 (2.55%)	31 (3.60%)	48 (5.57%)	87 (10.09%)	672 (77.96%)	862

Even cities of class V are dominant in quantity (77.96% in 2020), their contribution to the economy is not adequate, while producing only 3.0% of the total country’s GDP. In 2009, the share of cities of special class and 2nd, 3rd and 4th class on total country’s population was 36.5%, but their share on total urban population was 79.6% and their share on total country’s GDP was only 17.8% (see table 2). 10 years later, the picture doesn’t change remarkably [25].

Table 2: Share of cities of each categories on total country’s, on country’s urban population and on total country’s GDP [7]

City category	% on total country population	% on country’s urban population	% on total country’s GDP
Cities of special class	15.9%	33.9	30.5
Cities of class 1	6.2%	12.2	6.9
Cities of class 2	4.1	11.1	5.2
Cities of class 3	6.2	15.7	5.7
Cities of class 4	4.1	6.8	3.0

¹ The Journal of Construction no. 4. 2020 indicated that at the end of 6/ 2020, the were only 853 cities, including 2 special cities, and number of cities from class 1 to class 5 were 20, 31, 43, 85 and 672 accordingly [2].

The regional allocation of cities in Vietnam reflects the administrative role of cities rather than their economical and demographical role. Therefore, subjective efforts play more important role than objective factors. Total number of cities in each region of Vietnam as well as their structure by class currently could be described in the table 3.

Table 3: Number of cities in each class in 6 economical regions (2009) [22]

	Special class	Class I	Class II	Class III	Class IV	Class V	Total
Northern mountain and upland			2	7	12		17
Red River delta	1	1	2	11	3		18
Northern Central and sea bank region of Central Vietnam		3	3	9	6		21
Highland region			2	2	4		8
South- East region in South Vietnam	1	-	2	3	3		9
Mekong Delta		1	1	9	8		19
Total	2	5	12	41	34		94

On the other aspect, while the number of cities and towns, urban land increase continuously in the last 25 years, the average land area of each city/ town and the share of the urban land area on the total area of whole Vietnam went up in this period (see table 4). The increase of urban space resulted in administrative decisions, which are made according to the resolution of the standing committee of the Parliament on decentralisation urban management [50].

Table 4: Urban area and its share on total land area of Vietnam between 1995 and 2020 [56]

	Number of cities and towns	Total urban land (ha)	Average land per city/ town (ha)	% of urban land on total country's land
1995	420	836,117	1990.75	2.53
2000	629	990,276	1574.37	2.99
2005	675	1,153,549	1708.96	3.48
2010	752	1,372,038	1824.52	4.14
2015	775	1,642,420	2119.25	4.96

Even percentage of non- agriculture on the total local economy is an important indicator for the recognition of a community as an urban location, in fact, the value of this indicator is still high in cities and towns in Vietnam, excepted for Hanoi and Ho Chi Minh City (see the table 5).

Table 5: Urban employment structure, by city class [7]

Unit: %

Economic sector	City class						Urban total
	Special class	Class I	Class II	Class III	Class IV		
Agriculture, forestry and fishery	17.2	41.4	54.7	57	61.7	54	
Industry and construction	35.5	23.6	21.4	19.3	15.5	20.3	
Service and commerce	47.3	35	23.9	23.7	22.8	25.7	

The urbanisation process in Vietnam since 1975 is characterized by following issues:

- The urbanisation in Vietnam is linked closely with the industrialisation of the country. In 60's of the 20th century, all the industrial zones are constructed in the cities. However, since 1990s, industrial potentials are step by step moved from urban to industrial parks/ zones in the rural areas. The land of former industrial zones are used for building apartments, trade centers

or mix complexes of both. Another argument of the impact of the historical development in the urbanisation process in Vietnam is the spillover effects of big cities of Vietnam, especially Hanoi and Ho Chi Minh City. The spillover effect are not demonstrated by their territorial extension, but also in spreading the industrial space into their neighbouring provinces as well as the establishment of many “satellite cities” around these cities. Beside the formal role as the center of a “city spin net”, Hanoi and Ho Chi Minh City became really the social and economic power, which guides and leads the socio- economical development of a big region around them.

- Urbanisation model changed from center oriented to network oriented. Until 2000, Vietnam concentrated their efforts and resources to develop some big cities in each of economic regions. Hanoi and Ho Chi Minh City played not only the role as the centers of the Red River Delta and South- East region of Vietnam, but the role as 2 dynamic poles for the development in the North and in the South of Vietnam.

The role of the 2 cities are remained until today, even the basic concept of the urbanisation in Vietnam changed: From 2000, the urbanisation model was changed in the direction that cities and towns are integrated and developed into a urban net, acting more and more as dynamic point for their surrounding areas. By the assessment and recognition of a rural residential community as an urban one or upgrading a town/ city of a low class to a higher one, authorised government agency usually checks the social, technical relationships with other towns and cities in the region as well as its connections to national and regional infrastructure systems. However, under impacts of the development habits in the history and investment attraction policy/ potentials as well as local interests, the administratively selected concept is implemented with limited scope and could be fully successfully realised if it could be supported by economic integration and a better, more consistent urban master planning. On the other hand, spill over effects of locally managed cities are encouraged very much by local government agency, especially at provincial level. In 2012, 5 biggest cities of Vietnam produced 35% of country’s GDP. Their contribution to the country’s export value was 37% and their percentage on the total government’s budget income was more than 56%. In 2018, all the cities and towns contributed around 70% of total GDP of Vietnam [43].

- Urban areas become more and more attracting location for either rural population/ labour or other resources. Rural labour flows into urban regions, especially into the big cities, in increasing scope and in very diversified forms, which creates lots of social problems for the big cities. The results of the population census of Vietnam in 1999 and 2009, indicated that 855,943 people migrated from rural areas into cities, making 7.2% of urban population. In 2009, these indicators were 2,062,171 people and 8.9%, accordingly. Annually, number of rural migrants into urban areas increase by 9.2% [5]. In the period between 2012 to 2017, the migrating labour force of Vietnam went up from 726,000 to 816,000 people. The percentage of migrating workforce moving from rural into urban area grew from 50.95% to 60.92%. The result of this process is: The urban labour force of Vietnam increased annually 2.5%, while the annual growth of the rural labour force was only 0.4% [32].

- Vietnam’s urban management faces big and multiple challenges, achieves a level below the requirement. UN Habitat (2012) indicated the improvement of the urban management as one of 3 key issues to be strongly improved in the close future [55]. The Government of Vietnam practices a standard model of territorial management, which is applied for both rural and urban administrative

units. Poor urban administration leads to lots of problems, such as insufficient urban master planning, inconsistent and insufficient implementation of master plans, insufficient control of civil construction, ... Tu Phuong Nguyen (2020) reported that the “illegal house construction” is a typical example for weak “urban order” and concluded that “precariousness influences individuals’ perceptions of and behavior toward the law; at the same time, however, law creates and reinforces precariousness, a condition of vulnerability and uncertainty subject to the local state’s discretion and compassion” [46]. Another very important weaknesses in the urban administration is the poor land management and “poor land management and bottleneck in land market causes difficulties in developing transportation system. Traffic congestion has been a daily concern of urban areas” [52].

- The urban infrastructure development was under proportional to the urban development. Up to 2018, the urban land planned for the urban internal transportation made only 10% of the urban land in the big cities and around 20% in medium and small cities/ towns; public transportation achieved only 30- 50% target.

- The level of urbanisation differs strongly between regions and provinces. In 2014, the rate of urban population in Ho Chi Minh city and Da Nang was 83% and 76.6%, while the same indicator of Thai Binh (10.7%), Tuyen Quang (12.4%), Bac Giang (13.05%) and Son La (13.7%). At the same year, 5 biggest cities are home for 16% of urban population. The similar indicator for Hanoi, Ho Chi Minh City and all cities of 1st rank (15 cities) was at the same time 50% [30]. 10,7%, Tuyen Quang 12,41%, Son La 13,7%, Bac Giang: 13,05%... According to the Population and Housing consensus 2019, within 10 years from 2009- 2019, 210 rural communes were recognised as towns and 49 towns were newly established thanked to administrative decisions only. This factor influenced mostly the Red River Delta in the north and the South- East region in the South of Vietnam. 28.7 and 37.8% of 4.1 million “new urban habitants” (equivalent to 12.3% of Vietnam’s total urban population in 2019) belonged to these 2 regions [24].

- The urban development was very closely combined with the real estate market. Almost all “price balloon” of the real estate were based on the changes and adjustment of urban master plan, even if some plans were developed and proposed, not approved. Currently, prices of urban land and housing are very high and percentage of people living in renting houses is low and concentrates mostly only in Vietnam’s big cities.

- The space urbanisation of Vietnam consists of 2 trends: increase of the quantity of cities/ towns (see tables above) and growth of cities. Between 1979 and 2009, the number of cities with more than 100,000 habitants increased from 15 to 32. The area of some cities and many towns became larger because of their administrative extension.

In coming period, Vietnam’s target is to achieved an urbanisation rate of 50- 52% in 2030 and the percentage of urban areas on the country’s GDP will be around 80- 90%.

4. PROBLEMS OF THE URBANISATION PROCESS IN VIETNAM

The urbanisation process of Vietnam in the last period, especially since 1990, faces following important problems:

- Inadequate urban management by rapid urbanisation. “Chaos” in adjusting the urban development master plans, construction without license or not following the license, disorder in “street markets” and in internal transportation in traffic hours in big cities, ... were addressed by many researchers and government officials, but the situation is improved slowly [31].

- Increasing needs on resources for developing new cities and modernisation of existing cities by insufficient resources and ineffective resource mobilisation. Experts estimated the required financial investment for the urbanisation in Vietnam for the period 2006- 2020 is equivalent to 15- 20% of the country's GDP, clearly exceed the internal ability of Vietnamese economy. In 2010, Vietnam needs USD 17.3 billion and 2020 the amount will rise to USD 46.1 billion. In fact, between 1996- 2000, Vietnam spent only above USD 5 billion [36]. Between 2016- 2020, the Government arranged around VND 2,200 billion for the urban social housing programme, meeting only 24% of the need [53]. Ho Chi Minh City needed VND 6,416 billion (equivalent to USD 276.5 million) for transportation infrastructure in 2017, increased by 64.12% in comparison to 2016, but could satisfy only 56.35% [39]. Similarly, Hanoi planned to invest around VND 332,516 billion (nearly USD 14.4 billion) for 460 transportation infrastructure projects in the period 2021- 2025 [38]. About the water supply and waste water processing utilities, in 2017, the Ministry of Construction estimated that Vietnam's cities and towns need to invest around USD 10.2 billion for the period between 2018- 2020, including USD 3.3 billion for water supply and USD 6.9 billion for processing waste water [29].

The main resource for the urban development are 1) government budget; 2) "social resource" and 3) ODA. Even the Government of Vietnam wants to extend investments from private sector, the share of this form on total investment for the urbanisation is low and increase slowly. Nguyen To Lang (2021) commented that "the resources mobilisation was not sufficient for the effective implementation of approved plans and master plans, which leads to slow down the speed of the urbanisation and wasting time and resources because of project delay and low quality of utilities" [37].

- Increasing of urbanisation level by increasing degradation of the environment. Hanoi "has achieved excellent results during the period between 1999- 2016, and the results in the field of economic development and modernization of urban infrastructure are most noteworthy. However, Hanoi also faces serious environmental problems", such as the increase of the air temperature, environment pollution, change of local climate, over increase of residential (from 10.08% of the total city's area in 1999 to 23.26% in 2016) in comparison with the forest and green area (from 12.07% to 8.79% in the same period), decrease of urban internal wind speed, ... [41]. Other cities in Vietnam faces the same situation. The insensitivity of the problem is over proportional to the scope of cities. The Air Quality Indicator (AQI) of Hanoi, for example, achieves high value for many years. In term of the Air quality, Hanoi was evaluated as the most air polluted in the world at the morning of June 6th with the AQI of 184 (the AQI value between 171- 184 means dangerous for human health) [26]. The problem repeats since several years and become especially worse in 2 rice harvest seasons.

- Continuous over increasing population in big cities, especially Hanoi, Ho Chi Minh City and Da Nang. Experts of UN Habitat Vietnam and The Association of Vietnam's cities evaluated the very quick increase of the urban population as one of the biggest challenges for the urbanisation process in Vietnam [55].

- Increasing traffic of the urban internal transportation. Indicators on transportation infrastructure satisfied around 35- 40% of projected level; Hanoi provides only 7.8% of natural land for transportation and the road density achieves only 3.89 km/ km²; the similar indicators of Ho Chi Minh City are 7.5% and 3.88 km/ km², accordingly [42]. Bus is the only one public

transportation means in the cities of Vietnam. Ho Chi Minh city wants to set up a metro system with 8 lines with a total length of 169 km [34, 16]. The City started to build the first line in 2012 and plans to bring it into the operation in 2021. The construction of the second line should be started in 2013, but this event was postponed to 2020. Hanoi also planned to build a metro system with 8 lines [33, 18]. The construction of first line (13.5 km) was started in 2011, but its deadline has been delayed many times. The work on the second line (12.5 km) began to be built in 2010 and should be finished just at the end of 2021. The most popular transport mean in Vietnam's cities is privately owned motorbikes. In 2015, in average, 1.5 people in Hanoi owned a motorbyke and in Ho Chi Minh City it was 1.31. Private transport means satisfied around 70% of transportation needs of citizen in these 2 big cities [51]. In 2019, 91.8% of total urban households owned private motorbikes [25]. Currently, number of private cars increases quickly and continuously and will strengthen the urban traffic seriously.

- Strong negative impacts of the climate change and sea water rise on lots of cities of Vietnam.
- High and diversified needs on employment. The employment remains one of challenges for the cities in Vietnam. According to a joint research between ILO and ILSSA (2018), between 2012- 2017, the urban labour force makes only 69.86- 70.93% of urban population in working age (same indicator for the rural area was 79.13- 81.28%). On the other hand, the percentage of urban labour with informal jobs at that period was very high and rose from 42.3% to 43% [32]¹. Urban employees, especially for youths, usually require good working conditions and “good” jobs themselves. In the last 2 decades, most of youths, who are entering into the workforce, want jobs in sectors/ branches such as information/ communication, trading and services, etc. Hard, “dirty” and lowly paid jobs like construction works, cleaning and wastes processing works, ... are transferred more and more for immigrants from rural community.
- Many cities of Vietnam, especially small cities, face the potential risk of unsustainable. They often have the same economic structure, underdeveloped infrastructure and insufficient resources for its improvement. Most of them could not integrated closely with big cities as well as with high capable industrial/ economic zones [3]. In addition, the environment pollution and urban traffic could not be reduced as expected. The high increase of urban wastes dangers that the problem could be worse [40]. In that condition, spill over effects of big cities could not explored well for small cities and towns. On the other hand, lack of investment for environment protection projects will lead to low life quality in cities. There also are additional risks of sea water rise for cities and towns in Mekong Delta and on the seaside.
- Poor and inefficient connectivity between urban and rural areas. The World Bank considered it as one of important bottle necks for the urbanisation in Vietnam, which hinders the quick and sustainable urban development of the country. In same direction, the connectivity within the urban infrastructure is also a point to be improved in the urbanisation process of the country [57].
- Increasing need on rehabilitation of old housing complexes by poor readiness of citizen actually living in these complexes and lack of appropriate laws and legal regulations. Almost of these housing complexes were built before 1975, but there are also such complexes, which were built between 1975 and 1990. While habitants of these housing complexes in Southern provinces

¹ Informal job was understood as those ones, which are unstable, lowly paid and in which workers don't have working contract as well as no social insurance.

before 1975 were very diversified, citizens living in such complexes in the North before 1975 were mostly government officials and employees of state owned enterprises. Hanoi, for example, has at the end of 2020 1,597 old housing complexes, which were built in the period 1960- 1990. Within 13 years (2007- 2020), there were 18 projects on their rehabilitation, which reconstructed/ improved 1.14% of total number of units to be rehabilitated/ reconstructed [1]. Ho Chi Minh City has, at the end of 2020, 474 housing complexes, which were built before 1975. The City want to rehabilitate/ reconstruct 237 complexes in the period 2016- 2020, but could implement only 2 [35]. All old housing complexes are heavily degraded and need to be replaced [49].

5. CONCLUSION

Comprehensive efforts of the Government and urban communities were implemented and their positive results should be recognised. In fact, many sustainable indicators are achieved and improved, even there are urgent and strong needs on improvement of many other indicators, especially in term of infrastructure and environment protection. The process of urbanisation in Vietnam as well as the improvement of its sustainability should be continued in the future. They are surely influenced by different factors in different manners, depending on the concrete conditions at each period. Therefore, further studies on these factors should be continued, in order to clarifying their impacts, the ways and directions of their influence, which could help government authorities and communities at all levels to have effective responses in the direction of maintaining an appropriate tempo of the urbanisation and improving its sustainability.

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FINANCIAL POLICY FOR FDI ATTRACTION IN VIETNAM – SITUATION AND ISSUES.

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Abstract: Over the past 30 years, Vietnam has continuously improved its financial policies to attract foreign direct investment (FDI). The FDI preferential financial policy includes the following main contents: (i) Corporate income tax incentives, (ii) Import and export tax incentives and (iii) land incentives. The article studies how the above financial policies have affected FDI attraction in the past time and points out the limitations and shortcomings that need to be further researched and perfected in the coming time.

Keywords: FDI, financial policy, corporate income tax, import and export tax, land finance, investment incentives.

1. INTRODUCTION

Financial policies directly affect the interests of foreign investors; Therefore, it has a significant impact on the goal of attracting FDI of countries. Tax incentives are one of the most important contents of Vietnam's financial policy in attracting foreign investment. Most of Vietnam's taxes have provisions for tax incentives, including both direct and indirect taxes. The objective of tax incentives is to encourage investment in industries, territories, or fields that the Government orients to attract investment. Vietnam is in the process of transitioning to a market economy, the investment environment is still limited (underdeveloped infrastructure, lack of synchronous legal framework, ..); Therefore, the application of tax incentives is necessary to offset the above limitations, especially in the context of Vietnam's desire to attract FDI.

2. LITERATURE REVIEW AND PREVIOUS RESEARCH STUDIES

In the period from the 1980s to the present, tax incentives have been seen as a flexible and necessary tool to promote investment in many countries around the world (Zee, Stotsky and Ley, 2005). To date, there have been many empirical studies investigating the effect of tax incentives on FDI incentives. However, there are still many different opinions when evaluating the effectiveness of tax incentives. Some studies support the view that tax incentives are effective in encouraging FDI; but there are also some other studies that argue that tax incentives have little role in attracting FDI. After studying tax systems in developing countries, where tax incentives are quite common, Tanzi and Zee (2000) concluded that: the effect of tax incentives on FDI is not clear, because the decision to invest in a country depends on many factors, of which tax incentives are only one of the factors that play a small role. In addition, it is also argued that tax incentives are only meaningful to complement other factors that investors choose to invest in for profit (Heady, 2002). These factors may include access to raw materials and quality labor at competitive prices.

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According to research by James (2013), out of 12 countries in East Asia and Pacific region, 92% of countries apply tax exemption or reduction with term or tax exemption; There are 72% of countries applying the reduction of corporate income tax (CIT) rates and 67% of countries applying the reduction of tax liability for investment. Currently, developed countries mainly apply the form of incentives through deduction of taxable income on investment and direct reduction of tax liability (James, 2013).

Over the past 30 years, Vietnam has continuously improved its financial policies to attract FDI, including the following main contents: Corporate income tax incentives, import and export tax incentives and land incentives.. The authors have reviewed a number of previous studies on financial policies, using qualitative methods combined with data analysis to draw conclusions about the actual use of financial policies affecting the FDI attraction in recent years; thereby pointing out the limitations and shortcomings that need to be further researched and perfected in the coming time.

3. CURRENT SITUATION OF FINANCIAL POLICIES TO ATTRACT FDI IN VIETNAM

After more than 30 years of attracting foreign investment in Vietnam, the FDI sector has made positive contributions to the country's socio-economic development. According to the data of the Ministry of Planning and Investment: accumulated to June 20, 2021, the whole country has 33,787 valid projects with a total registered capital of 397.9 billion USD. The accumulated realized capital of foreign direct investment projects is estimated at 241.1 billion USD, equaling 60.6% of the total valid registered capital. The proportion of FDI in total social development investment gradually increased from 15% in 2005 to 23.7% in 2017 (in 2008 alone, this proportion accounted for 30.8%). The FDI sector is increasingly becoming an important driver of economic growth, with the contribution of FDI to economic growth also increasing. If in the period 1986 - 1996, the FDI sector only contributed 15.04%, then in the period 2010 - 2017 it contributed to the economic growth up to 27.7%. FDI was present in all 63/63 provinces and cities in the country. Although the two years 2020 and 2021 are significantly affected by the Covid-19 pandemic, the situation of FDI inflows into Vietnam is still very positive. This is reflected in the data of FDI attraction to Vietnam in the first quarter of the 2nd quarter of 2020 and 2021 in Table 1:

Table 1: FDI attraction in the first quarter of 2020 and 2021 (Unit: million USD)

Targets	Until March 2020	Until March 2021
Realized capital	3.850	4.100
Registered capital (*):	8.552,47	10.130,55
- New level registration	5.531,47	7.222,68
- Sign up for extra	1.065,07	2.102,57
- Contribute capital, buy shares	1.955,93	805,30

(*) Source: Foreign Investment Bureau (2021)

The aggregated financial statements of FDI enterprises from 2012 to 2020 show that the scale of production and business activities of FDI enterprises has always maintained high growth on all three aspects: revenue, total assets. and equity with an average growth rate of about 20% over the previous year. However, there are also many FDI enterprises that are still in a state of loss, especially in the period 2012 - 2014 and 2020 due to the impact of the epidemic. In the context of the economy facing many difficulties, FDI enterprises are more cautious in increasing the scale

of investment capital. While the majority of FDI enterprises in 2019 were profitable, in 2020, this figure is only 43%. (Table 2).

Table 2: Performance of FDI enterprises in 2012-2020 (Unit: %)

Year	Percentage of enterprises increasing investment capita	Percentage of enterprises increasing the number of employees	Percentage of businesses reporting profit	Percentage of enterprises reporting losses
2012	5,2	31,0	60,4	27,5
2013	5,1	30,0	63,6	24,1
2014	16,1	62,4	57,9	34,2
2015	11,4	62,4	55,1	37,6
2016	11,0	63,3	59,0	33,4
2017	13,2	62,4	54,3	37,9
2018	11,8	58,2	53,1	36,7
2019	10,4	61,6	56,2	34,3
2020	8,4	55,0	42,6	47,1

Source: VCCI (2020), PCI Report 2020.

The transition between the Investment Law 2014 and the Investment Law 2020 has affected the situation of new and adjusted FDI projects in Vietnam. According to the Investment Law 2020, the financial policy of investment incentives includes the following main contents: (i) Incentives on corporate income tax (CIT), (ii) Incentives on import and export tax and (iii) Incentives on land. So how have these policies affected FDI attraction in recent years?

****Preferential policies on corporate income tax.***

In 1987, the Government promulgated the Law on Foreign Investment, tax reform phase 1. The common tax rate of profit tax for FDI enterprises is 25%. In addition, there is a lower preferential tax rate of 10%, 15% or 20% applied to projects that encourage investment. FDI enterprises are entitled to income tax exemption for up to 4 years from the date of business start, 50% reduction of tax payable for the next 4 years, depending on the fields and areas where investment is encouraged. In case the enterprise uses the profit earned for reinvestment, the paid profit tax amount will be refunded. With a lower CIT rate and a longer tax exemption and reduction period, FDI enterprises enjoy higher incentives than domestic enterprises (according to 1997 regulations, domestic enterprises are still subject to the tax rate of 32%).

From 1995-2000, the second phase of tax reform. In 1999, the Law on Corporate Income Tax replaced the Law on Income Tax and removed the tax on repatriation of profits. The 1999 CIT Law allows to apply many incentives to encourage investment, such as newly established production facilities being exempt from tax for the first 2 years, and being reduced by 50% for the next two years. The maximum exemption period is 13 years (4 years of exemption, 9 years of reduction).

Period 2001 - 2010: tax reform phase 3. The regulation of tax obligations and tax incentives applied uniformly to both domestic enterprises and FDI enterprises creates equality of tax obligations for all enterprises. Investors.

From 2011 to now, the Government implemented tax reform phase 4. With the reduction of the universal tax rate through amendments to the CIT Law (in the 2001 - 2008 period, it was 28%,

in the 2009-2013 period it was 25%. , 22% in the period 2014-2015 and 20% from January 1, 2016), the provision of high CIT incentives for a number of key sectors that need to be encouraged for investment has contributed to attracting investment. investment, creating favorable conditions for enterprises to increase their accumulation and have more resources to increase investment in the economy. Specifically: Preferential tax rates (10% up to 15 years and 20% up to 10 years); tax exemption or reduction for a definite term (up to 9 years); allow loss transfer within 5 years; exempt from tax on remittance of profits abroad; tax refund on reinvested profits; allows for quick depreciation...

Tax incentives, with a focus on corporate income incentives, have made an important contribution to attracting FDI investment, increasing state budget revenue and developing Vietnam's socio-economic development (Table 3).

The data in Table 3 shows that: The number of FDI enterprises doing profitable business and contributing CIT to the State budget of Vietnam also increased proportionally with the number of enterprises that went into operation. If in 2015 only 4,453 enterprises out of 9,845 FDI enterprises declared profits and incurred CIT payable of 29,043 billion VND, by 2019 there were 7,842 out of 18,414 FDI enterprises that incurred CIT payable. up to 92,509 billion VND, up 218.5% compared to 2015.

Table 3: Contribution of CIT of FDI enterprises in Vietnam

Year	Total number of FDI enterprises	Number of enterprises declaring profits and paying CIT	Percentage (%) of enterprises declaring profit and paying CIT	Paid CIT (billion VND)
2015	9.845	4.453	45,23	29.043
2016	10.661	4.898	45,94	33.327
2017	11.099	5.283	47,60	34.272
2018	11.141	5.472	49,12	38.292
2019	18.414	7.842	42,59	92.509

Source: General Department of Taxation, 2020.

Vietnam's current tax incentives are uniformly applied to all economic sectors, in line with international practices. The criteria for applying the current tax incentives are based on sectors and locations, which require large investment capital to operate effectively in these sectors and regions. Due to the limited financial capacity of Vietnamese enterprises today; Therefore, only FDI enterprises with strong capital can invest in the fields and areas that need to attract investment from the Government. That leads to the beneficiaries of tax incentives in Vietnam in the past time, mainly FDI enterprises (Table 4).

Table 4 shows that: the preferential CIT is concentrated mainly in the foreign-invested economic sector, while the tax receivable from the non-state economic sector accounts for the majority of the total. national income tax revenue. The provision of many tax incentives for FDI enterprises meets the requirements of promoting FDI attraction in Vietnam. This is reflected in the following two aspects: (i) The proportion of the FDI enterprises' preferential tax exemption or reduction in the total CIT exempted and reduced of enterprises nationwide is up to 76%; (ii)

The ratio of CIT amounts eligible for exemption or reduction of FDI enterprises to total CIT payable calculated at the common tax rate is 48%, while this rate of SOEs is 4.6% and of foreign enterprises. state-owned is 14%.

Table 4: Incentives for corporate income tax by economic sector for the period 2015-2018 (Billion VND)

Targets	2015	2016	2017	2018
1. Total CIT payable at the common tax rate	155.142	170.927	199.619	222.822
In which: - State sector	26.451	25.915	42.902	45.461
- Foreign investment area	61.694	73.819	90.892	96.969
- Non-state sector	66.997	71.193	65.825	80.392
2. Total amount of CIT exempted and reduced	41.049	46.829	53.538	51.625
In which: - State sector	1.465	1.194	2.949	2.084
- Foreign investment area	28.723	35.357	41.971	39.736
- Non-state sector	10.861	10.277	8.618	9.805
3. Total CIT payable to the state budget incurred in the period	114.093	124.098	146.081	171.197
In which: - State sector	24.985	24.721	39.953	43.377
- Foreign investment area	32.971	38.462	48.921	57.233
- Non-state sector	56.136	60.915	57.207	70.587
4. Percentage of CIT exempted or reduced in preference to the amount payable to the state budget (%) (2/3)	35,98	37,74	36,65	30,16
In which: - State sector	5,86	4,83	7,38	4,80
- Foreign investment area	87,12	91,93	85,79	69,43
- Non-state sector	19,35	16,87	15,06	13,89
5. Ratio of CIT exempted or reduced in preference to total payable tax calculated at the common tax rate (%) (2/1)	26,46	27,40	26,82	23,17
In which: - State sector	5,54	4,61	6,87	4,58
- Foreign investment area	46,56	47,90	46,18	40,98
- Non-state sector	16,21	14,44	13,09	12,20

Source: General Department of Taxation, 2019.

****Preferential policies on import and export tax***

In order to implement policies to encourage and attract foreign investment, to encourage the production of goods to replace imports, the 1991 Law on Import Tax and Export Tax stipulates a number of tax exemption cases such as: temporarily imported goods. re-exported to attend trade fairs and exhibitions, specialized imported goods serving science, education and training, goods being movable property, etc. Import tax exemption applies to goods that create fixed assets of the State. FDI enterprises, raw materials imported for processing for foreign parties also contribute to attracting FDI enterprises to boldly invest in Vietnam

In the period 1995-2000, continue to reform import and export tax on the principle of giving priority to encouraging the import of machinery, equipment, supplies and raw materials for production (most import tax is 0%) over consumer goods; give priority to encouraging the export of processed goods (zero tax rate) over goods in the form of raw materials.

From 2001 up to now, the Law on Import Tax and Export Tax has also been continuously updated and revised in 2001, 2005 and 2016 to meet the requirements of integration commitments and foreign investment attraction; As for the import tax mentioned in Article 5 of Circular 83/2016/TT-BTC, it is shown that: Exemption of import tax on equipment, supplies, means of transport and other goods for the implementation of the investment project. private in Vietnam. Incomes from technology transfer activities for projects eligible for investment incentives are exempt from income tax. Goods are exempt from export tax and import tax under international treaties to which Vietnam is a member.

According to data from the General Statistics Office (2016), Vietnam's total export revenue in 2015 reached US\$162 billion, an increase of 11 times compared to 2000. In 2015, exports of the FDI sector accounted for 63% of the total. Vietnam's export revenue, compared with 47% in 2000. In particular, some large-scale FDI projects (usually projects enjoying high tax incentives) such as those of Samsung Group implemented Currently, Bac Ninh and Thai Nguyen provinces have contributed greatly to Vietnam's export turnover in recent years. In 2015, the total export turnover of Samsung projects in Vietnam reached more than 30 billion USD, equivalent to 20% of the total export turnover of Vietnam. In addition, with the strong participation of export activities of the FDI sector, exports of high value-added products have increased faster than other traditional products.

Currently, due to the lack of statistics on the reduction of state budget revenue due to the implementation of tax incentives (tax spending) and the effectiveness of tax incentives, it is difficult to accurately assess the impact of tax incentives. action of tax incentives. However, through the statistics recently announced by the Government, it can be seen that the cost of tax incentives (loss of budget revenue) is quite large. According to the IMF (2014), the expansion of tax incentives is one of the causes leading to the decrease in the level of budget mobilization in Vietnam. The statistics show that the amount of CIT incentives is quite large. The ratio of the preferential CIT amount to the CIT incurred in the years 2015, 2016, 2017, 2018 is: 35.98%, respectively; 37.74%; 36.65%; 30.16% (Table 4). Regarding export tax and import tax: The tax exempted and reduced in 2015 and 2016, 2017 only accounted for 11.5% and 7.5% and 6.4% of the collected export and import taxes, respectively. in year. (Table 5)

Table 5: Preferential tax amounts of import and export taxes in Vietnam in the period 2015 - 2017

Targets	2015	2016	2017
1. Tax exemption and reduction (billion VND)	9.206,4	5.993,2	4.684,2
In which: - Export tax	205,1	135,9	158,8
- Import Tax	9.001,3	5.857,3	4.525,4
2. Amount of tax collected (billion VND)	79.891	80.293	73.577
In which: - Export tax	12.089	6.836	6.235
- Import Tax	67.802	73.457	67.342
3. Ratio (%) (1/2)	11,5	7,5	6,4

(Source: General Department of Customs)

Vietnam's administrative reform process, especially the reform of tax and customs administrative procedures, has had positive impacts on FDI attraction and disbursement. The tax field has expanded the service of tax declaration, tax payment and electronic tax refund in 63/63

provinces and cities; Currently, the electronic method is being implemented for the following services: tax payment services for land, individual households... Automated cargo clearance system and Industry information database system service; deploying the National Single Window and Electronic ASEAN Single Window. According to the survey results of VCCI (2020), with significant improvements in the tax sector with attractive tax policies, the percentage of FDI enterprises choosing to invest in Vietnam also increased from 55% in 2015 to 62% in 2020.

****Preferential policies on land finance.***

Before 2005, the introduction of the Land Law in 1993 marked an important development in land finance policy. There have been regulations on incentives for exemption and reduction of land use levy, land rent, and water surface rent, contributing to improving the investment environment, and reasonably settling interests between the State and land users.

From 2005 to now, the Government has issued many supporting policies, specifically: (i) 50% reduction in land rent in the period 2011-2014; (ii) Adjusting down the rate (%) for calculating the general land rental unit price from 1.5% (specified in Decree No. 121/2010/ND-CP) to 1% (specified in Decree No. 46) /2014/ND-CP) and the People's Committee of the province specify the rate (%) in the frame from 0.5% to 3% for each area and route corresponding to each land use purpose. to apply land rent collection locally; (iii) Regulations on application of land price adjustment coefficient in determining land price for calculation of land rental...

Implementing the 2003 Land Law, then the 2013 Land Law, the Government has issued Decrees on collection of land use levy, collection of land rent, and water surface rent with regulations aimed at supporting businesses. Industry: Exemption from land rent and water surface rent for investment projects in the fields and areas eligible for investment incentives in accordance with the provisions of the investment law; Expand the scope of application of the land price adjustment coefficient method and its subjects to determine the financial obligations of land rent for enterprises that have reformed administrative procedures, shorten the time for determination and notification. pay land rent to the state budget and partially support businesses..

To attract investment, strengthen the management and effective use of land financial resources in economic zones and hi-tech zones; The Government has issued Decree No. 35/2017/ND-CP dated April 3, 2017 stipulating the collection of land use levy, land rent, and water surface rent in economic zones and hi-tech zones with incentives higher than the incentives of ordinary investment projects. In addition, the Ministry of Finance has coordinated with the Ministry of Natural Resources and Environment to issue 02 Joint Circulars: Joint Circular No. 87/2016/TTLT-BTC-BTNMT guiding the appraisal of the draft land price list of the Association. the land price list appraisal council, the land price plan appraisal of the Land Price Appraisal Council and the Joint Circular No. 88/2016/TTLT-BTC-BTNMT stipulating the documents and the order and procedures for receipt and rotation. transfer the dossier to determine the financial obligations to the land of the land user. Accordingly, the responsibilities of agencies (natural resources, environment, finance, taxes) have been clearly defined in the process of performing the task of determining land prices, circulating documents to determine the financial obligations of users. soil; reform, publicize administrative procedures, shorten the time to determine land use levy and land rent.

According to the PCI survey (2020), one of the factors attracting foreign investors to Vietnam: (i) the risk of having their production and business premises withdrawn and (ii) the risk of instability.

policy is low. In 2013, 64% of FDI enterprises participating in the PCI survey said that the risk of land expropriation is low, and 60% think that Vietnam has a lower risk of policy instability than other countries they have weighed. investment reminder. In 2020, these two factors will continue to be highly appreciated by investors, with the respective ratio reaching approximately 80% (79.7% for Low risk of business ground forfeiture and 81.7% for Low Policy Uncertainty) [2]. Obviously, after the 2013 Land Law was promulgated, the confidence of FDI enterprises has increased significantly in the stability of holding land use rights, helping FDI enterprises to feel more secure when investing in land. Vietnam.

4. ASSESSING THE IMPACT OF FINANCIAL POLICY ON FDI ATTRACTION IN VIETNAM

****Positive results:***

In recent years, the implementation of tax incentives and other financial incentives have had very positive impacts on the development of the foreign-invested enterprise sector:

The foreign-invested economic sector has developed rapidly and effectively, becoming an important part of the economy, making positive contributions to the country's socio-economic development. Foreign investment activities are more and more exciting, many multinational corporations, large enterprises with modern technology invest in our country; capital scale and project quality increase, contributing to job creation and income for employees; raise production level and capacity; increasing state budget revenue, stabilizing the macro-economy; promoting economic restructuring, renovating growth models; improve Vietnam's position and prestige in the international arena.[3]

Through the National Information System on Foreign Investment, providing early information to the investment registration certificate authority for faster and more convenient processing of project documents. In addition, the information about the investor's investment project, together with the project implementation report made by the investor online, will form the national information data system on foreign investment. of Vietnam, providing information for management agencies in monitoring this activity as well as in studying and orienting on mechanisms and policies.

To date, Vietnam has participated in and completed negotiations of 12 bilateral and multilateral free trade agreements (FTAs). Among them, 8 FTAs have been in force and are being implemented. The signing of FTAs has opened up many opportunities for FDI enterprises in terms of import and export, technology transfer and in the long run, rather than benefit from the pressure of institutional reform, the system of legal institutions according to the provisions of the law. conditions and commitments in international treaties.

****Limitations that need to be overcome***

Besides the achieved results, the financial policy to attract FDI in Vietnam also reveals many limitations that need to be overcome soon:

Firstly, ***Policies to encourage the issuance of Certificates (Transfer Certificates) for FDI enterprises have been improved but are still slow to be implemented and have poor enforcement effect.*** Although the Law on Foreign Investment 1987 has affirmed that technology transfer is an important goal of foreign investment policy; however, it was not until 1990 that the first Ordinance on Technology Transfer was issued in Vietnam. Decree 11/2005/ND-CP on Technology Transfer, Law on Technology Transfer 2006, Investment Law 2005, 2014, 2020 although there are

adjustments with more incentives for technology transfer activities, but the effect is still unclear. The time to complete investment procedures is much longer than prescribed, especially at the stage of applying for a license (it can take up to 2-3 months), there is no uniformity and coordination between agencies. concerns, leading to overlap in procedures.

Second, *The system of tax incentives and subsidies built specifically for priority and selective FDI sectors and fields has not shown its effectiveness.* On the basis of incentives to attract FDI in general, a number of tax incentives are issued by the Government to orient FDI according to different criteria: geographical area, economic area, high-tech zone; in the field of high technology, scientific research and technology development, investment and development of especially important infrastructure, software production, education - training, environment... In which, enterprises Enterprises investing in high-tech sectors receive the highest incentives (CIT rate of 10% for 15 years, tax exemption for the first 4 years and a reduction of 50% for the next 9 years) but must meet the criteria set by Vietnam. go out. However, the impact of this policy on the allocation of resources in investment is still limited, unable to attract investment capital in areas with difficult socio-economic conditions.

Foreign investment activities are still concentrated in areas with favorable conditions such as the Southeast region and the Red River Delta region with the proportion of 49% and 31% respectively; Meanwhile, difficult areas such as the North Central Coast and the Central Highlands have a low proportion of FDI enterprises at 1.6% and 0.8%, respectively. Moreover, the target audience in the legal documents is not clearly defined, making tax incentives and subsidies not reach the right audience. For example, the CIT Law stipulates the application of preferential tax to “high-tech sectors such as electronics”, but does not clearly define what high technology is, but only ranks it by industry group name, leading to the industry “ electronic assembly” is also considered to be selected and entitled to incentives.

In addition, the incentive area is wide and spread out. According to research by Oxfam (2016), Vietnam’s tax incentives are relatively complicated because the scope of incentives (incentives by sector and incentives by location and capital size) are stipulated in the Law on Investment. is quite wide. Decree No. 118/ND-CP dated November 18, 2015 guiding the implementation of the Law on Investment, which specified conditions for tax incentives by field and area. Accordingly, there are 30 areas of investment encouragement and 27 areas of special investment incentives that are entitled to investment incentives, including tax incentives. In terms of geographical areas, tax incentives are applied to investment incentives, including districts and towns of 53 out of 63 provinces and cities nationwide. In addition, high-tech zones, economic zones, industrial parks and export processing zones established under the Prime Minister’s decision are also subject to tax incentives. Currently, there are more than 300 types of such zones enjoying tax incentives in different forms.

Third, *FDI enterprises still find it difficult to access preferential policies.* According to VCCI’s report on the PCI index (2020) shows that: In 2020, the policies to support businesses can be divided into three groups: 1) reducing interest rates, extending lending time to ease financial pressures. key for businesses that are struggling; 2) suspend payment of social insurance, health insurance and unemployment insurance; delay the time of paying trade union dues; and 3) extension of tax payment (VAT, CIT) and extension of tax and land rent payment. The purpose of these policies is to reduce operating costs and maintain the financial position of the business. PCI data (2020) shows that businesses

rate tax support as the most accessible and useful. Next is the policy of suspending payment of social insurance and union fees, while the policy of reducing interest rates and extending the loan period ranks third. Specifically, 57% of enterprises said that it was difficult to access the policy of reducing interest rates and extending the loan period, the policy of suspending social insurance contributions, delaying payment of union dues with a difficult-to-access rate of 43%, and extension of time for payment of CIT and VAT to 44 and 40% respectively. The above data shows that policymakers need to come up with a clear support mechanism and more specific eligibility conditions for preferential policies to really reach businesses in need of support in the context of the Covid-19 epidemic. The production and business activities of enterprises are facing many difficulties today.

Fourth, ***The scale of investment capital for FDI projects is small:*** With the small scale of actual contributed capital, to supplement capital, FDI enterprises have used land as collateral to borrow money from banks in Vietnam. Therefore, the post-audit work on the actual contributed capital, determining the reasonable interest expense should be controlled more closely in the coming time. The reality is that the scale of FDI enterprises is small, while enjoying many incentives. Therefore, in the coming time, it is necessary to review the preferential financial policy to attract modern and large-scale technology to attract high-tech FDI projects, bring about qualitative changes, and improve labor productivity. contribute to enhancing competitiveness.

Fifth, ***The number of enterprises operating inefficiently, tax debt accounts for a large proportion, there are signs of “transfer pricing” in some enterprises:*** In fact, although some enterprises have suffered continuous losses for many years, still increase investment capital to expand production. This phenomenon allows the regulator to judge the loss statements of these enterprises as dishonest. Transfer pricing activities of FDI enterprises have become a challenge to the control capacity of state management agencies (taxes) on post-licensing audits.

Sixth, ***There is a shortage of high-quality labor resources to meet the needs of FDI enterprises.*** According to the Provincial Competitiveness Index (PCI) Report conducted by VCCI in 2017, 55% of enterprises claim that it is difficult to find high-quality labor sources to meet their needs and 69% of FDI enterprises for that they have difficulty in recruiting skilled technicians. Therefore, in order to attract FDI in the coming time, it is also necessary to have supportive financial policies to develop the workforce to meet the needs of FDI enterprises in the coming time. At the same time, preferential policies for the development of joint ventures and linkages between domestic enterprises and FDI enterprises also need to be reviewed to focus on developing a high-quality workforce.

The above situation is due to the fact that some localities in the process of attracting FDI still follow the quantity. The reason lies in investor subjectivity. The openness in licensing procedures has increased autonomy for investors and businesses, however, there is a lack of sanctions, monitoring tools, binding and handling investors' responsibility in the implementation. As committed, investment registration content on progress, capital ..., leading to the situation that some projects are delayed in implementation, wasting resources in terms of land and natural resources, affecting efficiency and environment investment school.

5. CONCLUSION

Empirical studies have shown that investment decisions of FDI enterprises depend on many factors, of which ensuring macroeconomic stability, political stability and maintaining a healthy institutional environment are the key factors. the most important factor; Financial incentives are just one of the other factors that investors consider when making investment decisions.

The completion of financial policies to attract FDI in Vietnam is still slow compared to the practical requirements of the development and integration process; There is still a lack of synchronization, even contradictions between relevant documents in fields such as investment, business, environment, land, construction... and specialized laws due to the promulgated documents at different times and drafted by different ministries. The article has pointed out a number of limitations and inadequacies in the financial policy to attract FDI in the past time, which need to be further improved in the coming time to effectively enhance and attract FDI into Vietnam.

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DEVELOPMENT OF INVESTMENT BANKING MODELS IN VIETNAM IN GLOBALIZATION CONDITIONS

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Abstract: *In recent years, the number of securities companies in Vietnam has tended to decrease in quantity and increase in quality, specifically in terms of quantity, the highest time was 105 companies in 2009. Up to now, according to statistics from HOSE and HNX (VNX), the number of active securities companies is only about 70 companies, the scale, and competitiveness of securities companies are significantly improved. Securities companies for many years have suffered long-term operating losses, leading to forced restructuring and self-restructuring through transformation and merger activities. On the contrary, some securities companies are operating more and more effectively, the main reason is that in addition to actively improving financial capacity, these companies are gradually tending to change strategies and upgrade to banking operations. investment goods to increase competitiveness such as: SSI Securities Corporation; VPS Securities Joint Stock Company; VNDIRECT Securities Corporation; Ho Chi Minh City Securities Corporation; Viet Capital Securities Joint Stock Company; Techcom Securities Joint Stock Company. However, the results are still not as expected, when the proportion of revenue and income structure still depends on other activities but not on investment banking activities. Vietnam is in the process of global economic integration; it is necessary to promote the development of the capital market. To do so, the Government needs to build a mechanism to form large, competitive, and effective investment banking groups to carry out the function of directing capital into the economy.*

Keywords: *Investment bank, Capital market, Securities companies*

1. INTRODUCTION

The capital market plays an important role in any modern economy, where the supply and demand for medium and long-term capital for the economy take place, and to develop this market cannot fail to mention an important intermediary which is the investment banking model, although modern capital markets today have a history dating back to the Middle Ages (in Italy where the city-states of Venice, Genoa, and Florence were formed: new financial instruments stem from the need for commercial exchanges between the East and the West), investment banks were only mentioned most during the 2008 financial crisis. Investment Bank is an important financial intermediary in the modern economy, closely tied to services related to capital market operations, they are knowledgeable about the capital needs of business organizations and governments, through the provision of a set of activities including mergers and acquisitions (M&A) advisory; Underwriting, Asset management and some other activities. The author's research shows the inevitable trend of the formation of large enough investment banks in Vietnam, implying that governance for

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securities companies in sustainable development is necessary to transform operating strategies into investment banking model, in order to expand segments and market share, through the inevitable activity of increasing scale and financial capacity to create reputation and create peace of mind for issuers, partners, and customers. Developing a business strategy for financial consulting, equity financing, and underwriting must account for a large proportion, strengthening innovation in business and product types: market innovation, innovate customers, innovate products, innovate business models and at the same time raise requirements for application of Information Technology.

2. LITERATURE REVIEW

The Glass-Steagall Act of 1933 (amended by the Gramm-Leach-Bliley Act of 1999) introduced the concept of an investment bank as an organization that conducts securities transactions, underwrites securities issuance (different from the activities of commercial banks, which are deposit-taking and lending organizations).

According to Morgan Stanley CEO, Gae-mon, defines: In which, a lending bank is an essential financial intermediary in the capital market, and its chief function is to provide financial services to those with capital needs. Investment banking can divide into two parts for the primary market, which is the issuance and underwriting of securities, and for the secondary market, which is agency activities after the issuance [7].

According to German researcher Iannotta (2010), investment banking consists of a heterogeneous set of activities, which can classify into three main areas:

- Core or traditional investment banking: underwriting services for companies to raise capital in the financial market and consulting services on mergers, acquisitions, debt restructuring, etc.

- Trading and brokerage: Buying and selling securities using the bank's money (stock trading) or on behalf of customers (brokers).

Asset Management: Managing investors' money like traditional wealth management (open-ended mutual funds) and alternative asset management (real estate funds, hedge funds, private equity funds, and mutual funds) any other investment vehicle in alternative asset classes) [12].

According to Gemici et al. (2019), investment banks provide advisory and management services for complex financial transactions and create capital for corporations, institutions, and governments. The two main activities are underwriting (borrowing and issuing equity securities) and mergers and acquisitions (M&A) [9].

Thus, it can see that an investment bank is a securities company, but has achieved a high and comprehensive level of development, the main business activity of an investment bank is as an intermediary between the issuer (who has capital needs) and investors through M&A (**Mergers and acquisitions**) advisory functions; **Underwriting securities** (Underwriting), and some other activities such as Brokerage and Investment (Sales & Trading); Equivalency Research; Asset management (Asset management); Mer-chant Banking and Prime Brokerage.

To classify investment banks can be based on the criteria of the field of operation, in this way investment banks with full-service investment banks such as JPMorgan Chase, Citigroup (USA), Deutsche Bank (Germany), and the rest are retail investment banks that focus only on certain activities. The scope of operation of investment banks depends on their financial capacity, below

is a summary table comparing the size of Vietnamese securities companies/investment banks compared to some countries (Table 1) belongs to Asian:

TABLE 1: SIZES OF SOME SECURITIES COMPANY/INVESTMENT BANKING COUNTRIES

Country	Assets	Country	Assets
Vietnam		South Korea	
SSI Securities Corporation	\$1.177 B	KB Financial Group	\$564.4 B
VPS Securities Joint Stock Company	\$0.522 B	Woori Financial Group	\$367.4 B
VNDIRECT Securities Corporation	\$0.504 B	Mirae Asset Daewoo	\$114.2 B
Ho Chi Minh City Securities Corporation	\$0.326 B	NH Investment & Securities	\$57.8 B
Viet Capital Securities Joint Stock Company	\$0.315B	Kiwoom Securities	\$34.6 B
Techcom Securities Joint Stock Company	\$0.274 B	Samsung Securities	\$58.8 B
Saigon - Hanoi Securities JSC	\$0.264 B	Meritz Securities	\$40.5 B
China		Japan	
Citic Securities	\$161 B	Daiwa Securities	\$254.1 B
Bank of Beijing	\$421.2 B	Chiba Bank	\$170.7 B
Huatai Securities	\$109.6 B	Hokuhoku Financial Group	\$156.5 B
Guotai Junan Securities	\$107.5 B	Yamaguchi Financial	\$109.1 B
Haitong Securities	\$96.3 B	Japan Securities	\$98.4 B
China International Capital	\$79.8 B	Gunma Bank	\$95.2 B
GF Securities	\$70 B	Chugoku Bank	\$88.6 B
China Merchants Securities	\$76.4 B	Nanto Bank	\$60.8 B

(Source: Financial statements of securities companies/investment banks in Vietnam 2020 and forbes.com, unit B is billion dollars)

3. DEVELOPMENT HISTORY INVESTMENT BANKING IN SOME DEVELOPED COUNTRIES IN ASIA.

The role of investment banks in the economies of countries is extremely important, this has been concluded by Schöder et al. (2012) in the study “The role of investment Banking for the German Economy” is the provide financial intermediary services on its capital market to the economy, these activities make a very important contribution to the economy [18]. Sharing the same view, Raza et al. (2011), argue that investment banking plays an essential role in the domestic financial sector as a viable component and that there is no major difference between investment banking services and investment banking services and commercial banks [17].

During the global financial crisis (September 15, 2008), when Lehman Brother declared bankruptcy, the 158-year-old investment bank was unable to refinance its leveraged investments. high, including those involving failed mortgage-backed securities, the U.S. government intervened to prevent the collapse of other major investment banks by brokering the acquisition of JP’s Bear Stearns Bank of America’s Morgan and Merrill Lynch, while Goldman Sachs and Morgan Stanley quickly switched legal status. Referring to the cause of the crisis, one expert suggested that investment banking activities caused it, but in fact, according to Bordo et al. (2011), the US banking system is weak, fragmented and Crisis susceptibility has developed since the 19th century, leading to the rise of stock markets, investment banks, and money market mutual funds, and Canada has not experienced a similar crisis [4]. Even so, after the global crisis, the market share

of US investment banks increased, the market share of investment banks in Europe decreased, US investment banks were on the way to a dominant role in the European investment banking sector (Goodhart et al., 2016). The dominant position of the US investment banking has given way to new positions in Asian banks, especially Japan, and China (Wójcik et al., 2018), indeed the financial networks of the banks. Investment banks in the Asian equity market are focusing on the three key economies of Hong Kong, Japan, and even Singapore [20].

History of investment banking in Japan. The post-war development of the Japanese financial market was characterized by the strong role of the Ministry of Finance (MOF) through three aspects of the Japanese political economy. First, there has been close cooperation between the ruling Liberal Democratic Party (LDP) and the Ministry of Finance since 1955. Second, well-known Japanese banks conduct banking relations through the form of cross-ownership and long-term commitment to large companies. Third, competition in many industries, including finance, is managed to promote efficiency, cooperation and commitment to economic development. The 1997 Asian financial crisis then led to a wave of reforms known as the Japanese financial “Big Bang” (Toya, 2006) which led to a wave of bank mergers. As a result, major Japanese banks hold an overwhelming share of the Japanese capital market, with a dominant position in the financial sector in addition to a comprehensive domestic branch network. High savings rates increase the financial strength of Japan’s major banks as they capture large market shares of private and corporate deposits through their commercial branch networks. The highly consolidated banking industry makes Japan a difficult place for foreign financial institutions [9].

History of investment banking in Hong Kong. After the 1997 period, the “one country, two systems” principle allowed the Hong Kong dollar to continue to circulate as a separate and convertible currency, allowing Hong Kong to act as an important gateway for capital flows into and out of China. The deep capital markets within Hong Kong, the strong regulatory environment and regulatory framework, helping investors through the global network of investment banks make it particularly attractive to Chinese companies looking for IPOs and public listings. However, preference for local investment banking in Hong Kong or China is also due to language, familiarity with the business culture and regulatory requirements of the mainland [9].

History of investment banking in Singapore. The establishment of the Asian Dollar Market in 1968 was an important milestone that paved the way for the steady entry of British, American, Canadian and German investment banks (from 1970 to 1980). Following the banking liberalization of 1999-2004, liberalization measures included a new type of Qualified Banking License (QFB) for foreign banks, increased the number of restricted banks, and helped foreign banks are more flexible in trading in Singapore dollars and remove the limit on foreign ownership in local banks. And with the merger of three units (DBS, UOB and OCBC) into a larger bank, the expanding local bank has moved from traditional lending intermediaries to capital markets services and expanded into foreign markets, Asia. At the same time, banking liberalization allows foreign investment banks to increase their product offering and capabilities in Singapore and create a substantive investment banking sector [9].

4. STATUS OF INVESTMENT BANKING IN VIETNAM.

The number of Vietnamese securities companies in the market increased dramatically in the period 2000-2007, from 3 newly established companies in 2000 to 78 companies in 2007. This

number continued to increase to 105 companies in 2009. However, according to statistics from HOSE and HNX, the current number of active securities companies is just over 70, of which the brokerage market share of the top 10 securities companies has accounted for 55.23% (Table 2).

TABLE 2: TOP 10 SECURITIS COMPANIES WITH HIGH STOCK MARKET SHARE ON HOSE QUARTER 1/2021

Name	Member	Ratio	Time
VPS	VPS Securities Joint Stock Company	13,24	01/2021
SSI	SSI Securities Corporation	11,89	01/2021
HSC	Ho Chi Minh City Securities Corporation	8,23	01/2021
VND	VN Direct Securities Corporation	7,46	01/2021
VCI	Viet Capital Securities Joint Stock Company	5,62	01/2021
MAS	Mirae Asset Securities (Vietnam) Limited Liability Company	4,41	01/2021
MBS	MB Securities Joint Stock Company	4,07	01/2021
FPTS	FPT Securities Joint Stock Company	3,46	01/2021
TCBS	Techcom Securities JSC	3,60	01/2021
BSI	Bank for Investment & Development of Vietnam Securities Company	3,25	01/2021

(Source: <http://thoibaotaichinhvietnam.vn/>, %)

The network of securities companies is concentrated in big cities and has not had a wide scope, the remaining number of rooms and branches are mainly concentrated in big centers, the city with economic development is Hanoi. and City. In Ho Chi Minh City, capital scale and total assets are not high (Table 3), the highest is SSI Securities Company (in the top 10) with equity of VND 9,873 trillion.

TABLE 3: CAPITAL SIZE OF 10 SECURITIES COMPANIES WITH THE LARGEST MARKET SHARE QUARTER/2021

Name	Member	Equity	Assets
VPS	VPS Securities Joint Stock Company	4.975	16.052
SSI	SSI Securities Corporation	9.873	35.770
HSC	Ho Chi Minh City Securities Corporation	4.440	12.489
VND	VNDirect Securities Corporation	3.819	14.976
VCI	Viet Capital Securities Joint Stock Company	4.521	8.382
MAS	Mirae Asset Securities (Vietnam) Limited Liability Company	6.637	13.290
MBS	MB Securities Joint Stock Company	2.060	7.016
FPTS	FPT Securities Joint Stock Company	2.202	3.396
TCBS	Techcom Securities JSC	6.179	8.759
BSI	Bank for Investment & Development of Vietnam Securities Company	1.490	2.921

(Source: compiled by the author based on the audited 2020 financial statements, in billion VND)

In terms of revenue structure, in addition to the uneven distribution of market shares of securities companies, the revenue structure of each securities company also has the following highlights:

Firstly, mergers and acquisitions (M&A) advisory activities and securities underwriting and issuance account for a very small proportion of less than 3% (Figure 1), a negligible level compared to the total revenue of securities companies.

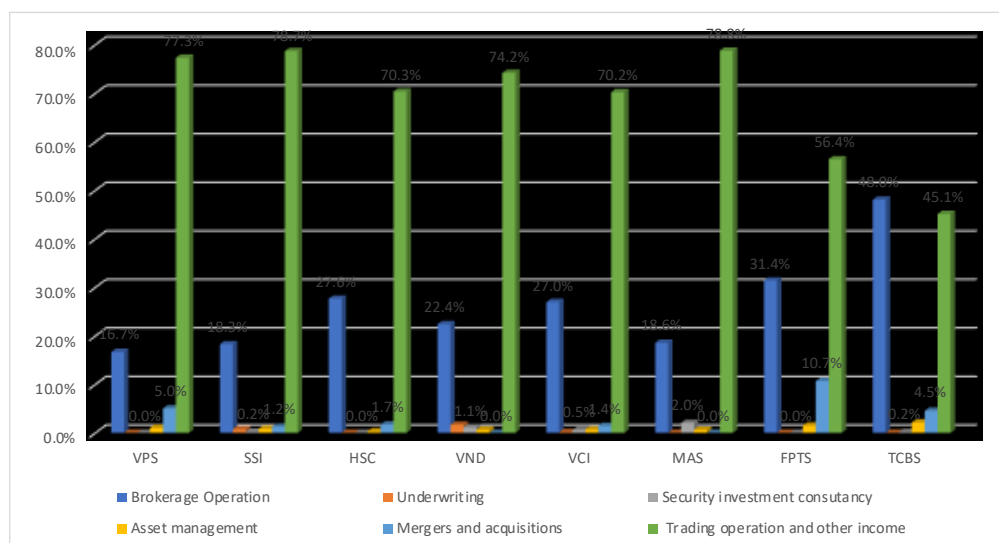


FIGURE 1: CHART SHOWING THE REVENUE STRUCTURE OF VIETNAM SECURITIES COMPANIES IN 2020

(Source: compiled by the author based on audited 2020 financial statements)

Normally M&A is the main activity of the investment banking model, while the Vietnamese market is still developing strongly, the market share of this segment of Vietnam Securities Company is very low, specifically in 2018 Vietnam ranked 2nd in M&A value in Southeast Asia (Table 4), ranked 3rd in 2019 with M&A values of \$7.6 billion and \$7.2 billion, respectively.

TABLE 4. M&A ACTIVITIES OF SOUTHEAST ASIA COUNTRIES 2017-2019

Country	2017	2018	2019	Growth (%)
Thailand	9	9,3	11,3	21,5
Singapore	25	6,7	29,2	335,8
Malaysia	11,73	5,1	2	-60,8
Indonesia	10,76	2,8	4,3	53,6
Vietnam	10,2	7,6	7,2	-5,2

(Source: <https://baodautu.vn/>)

In countries with developed financial countries such as Japan, China or Singapore, in the early stages, investment banks also have a large commission revenue structure, but after adjusting their business strategies according to the banking model. In modern investment products, the structure has changed to the proportion of revenue from M&A activities and underwriting is the largest and most stable.

According to Anand and partners. (2006), the underwriting performance in the market is characteristic of issuers rarely choosing underwriters through competitive bidding, or price selection without relies on the relationship between investment banks and firms, and the sunk costs that investment banks incur in establishing and maintaining the relationship [3]. In addition, according to Carter and partners (1998) the reputation of the investment bank has an influence on the deals [5], and Chemmanur and partners (2019) explain the real investment bankers have a significant impact on the execution of the transactions they advise on in more M&A deals and

across the investment banking spectrum, investment bankers with more skills and experience will be able to select transactions with higher synergy for the acquirer, while investment banks use their reputation to reliably communicate private information to financial markets [6]. With this same view, Mamatzakis and partners (2015) assert that CEO power positively affects business performance [7]

In fact, the current Vietnamese securities company, the size of the organization, the reputation of the brand, the relationship, and the human resources for management and administration are still limited, so that the market share of income from M&A and M&A activities is limited, underwriting is relatively small.

Secondly, securities trading activities and supporting activities account for a relatively high proportion of total income, over 70% of the total revenue of securities companies.

This is not the main activity of investment banking, but it accounts for a large proportion, but this source of income is not stable, high risk due to dependence on the market and many different factors. The failure of Lehman Brother in the US is an important lesson for the motivation for securities companies to adjust their business strategies on this source of revenue.

Third, brokerage activities account for a relatively modest proportion, revenue from brokerage activities of securities companies only accounts for an average of 26% of total revenue. This shows that brokerage activities are not the main activities of securities companies today. Although Vietnam's economy is growing well, achieving economic growth of 7.02% in 2019 and 2.91% in 2020 (while other countries around the world have negative growth in 2020, due to the Covid-19 epidemic- 19).

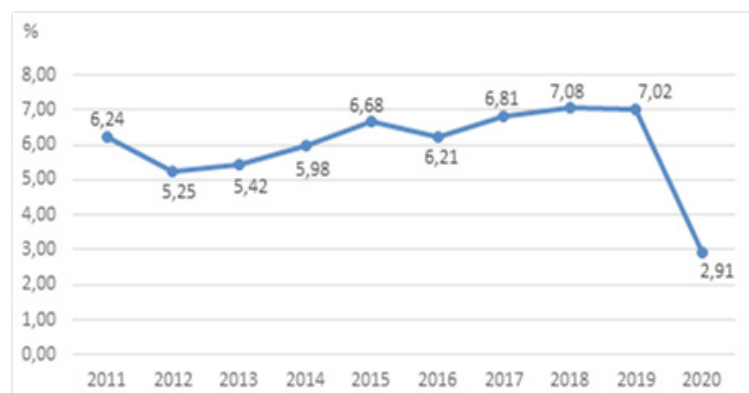


FIGURE 2: GDP GROWTH IN 2010-2020

(Source: General Statistics Office <https://www.gso.gov.vn/>)

However, the Vietnamese stock market has not been attended by investors due to the lack of market information, and Circular 128/2018/TT-BTC only stipulates the ceiling price of brokerage services, buying and selling stocks, fund certificates, covered warrants (applicable to listed securities and securities registered for trading) is 0.5% of the transaction value, but no longer requires a floor level of 0.15%. As the old regulations make it difficult for small securities companies.

According to the author's statistics, the revenue structure of Vietnamese securities companies has not changed significantly from 2018-2020, the growth chart below shows (Figure 3)

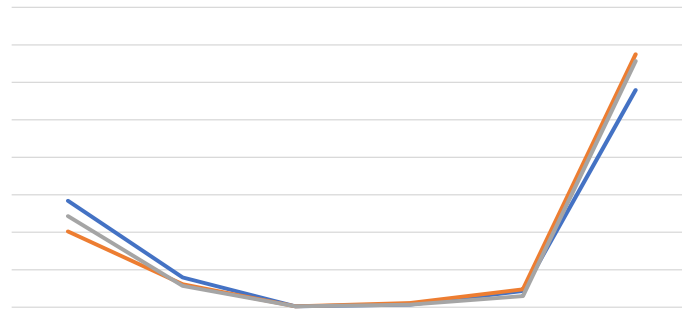


FIGURE 3: REVENUE GROWTH OF SECURITIES COMPANIES PERIOD OF 2018-2020

(Source: compiled by the author based on the audited 2018-2021 financial statements)

5. SOLUTIONS TO DEVELOP INVESTMENT BANKING MODEL IN VIETNAM IN THE CONTEXT OF GLOBALIZATION.

An Investment Bank Global Market Report 2021: Covid-19 Impact and Recovery to 2030 shows that the global investment banking market is expected to grow from \$102.84 billion in 2020 to \$111.45 billion in 2021 at a compound annual rate (CAGR) of 8.4%. The growth is mainly due to companies restructuring their operations and recovering from the impact of Covid-19, the market is expected to reach \$137.97 billion by 2025 at a CAGR is 5% [13,1].

Thus, following the inevitable development trend of the world when Vietnam is in need of a large financial source for development, it is imperative that Vietnam make timely adjustments to develop the leading type of bank. On February 28, 2019, the Prime Minister issued a decision approving the restructuring of the securities market and insurance market until 2020 and orientation to 2025 [1], and at the same time the National Assembly promulgated Law No. 54/ 2019/QH14 dated November 26, 2019 taking effect from January 1, 2021 has created a high legal framework, on which basis the Prime Minister issued Decision No [2]. 37/2020/QĐ - TTg established the Vietnam Stock Exchange (Vietnam Exchange) operating under the model of parent-subsidiary company on the basis of the rearrangement of the Hanoi Stock Exchange (HNX) and the Ho Chi Minh City Stock Exchange (HOSE).), scale of charter capital 3,000 billion.

In parallel with the fundamental changes, the Ministry of Finance issued Circular 91/2020/TT-BTC dated November 13, 2020 stipulating financial safety norms and handling measures for securities trading organizations do not meet financial safety criteria, and Circular 121/TT-BTC dated December 31, 2020 regulates the operation of securities companies. A synchronous and unified legal and infrastructure system for the operation of the stock market, step by step eliminating inconsistencies in previous Law documents, in line with international practices, creating a foundation for the market. Vietnamese securities have the ability to integrate with international and regional capital markets, enhance publicity and transparency for the market, and improve the management and supervision capacity of State agencies.

However, according to the author, the above changes are still lacking a stronger mechanism and policy.

Firstly, the size and financial capacity of Vietnamese securities companies are not really big enough, the reputation, creating peace of mind for the issuer is not high, it is necessary to have a

merger and amalgamation, not a merger to encourage, to form large investment banking groups. According to Mamatzakis and partners (2015) for banks with a board ownership ratio higher than the threshold value, the effect becomes positive, showing a concordance between shareholder motivations and managers [7]. In fact, according to Healy and partners (1992), consolidated firms show significant improvements in asset productivity relative to their industry, resulting in higher operating line returns, an improvement especially strongly differentiated for companies with highly overlapping businesses, as mergers do not lead to long-term capital cuts and investment in R&D [11]. In the field of investment banking, according to Lee and partners (2014), companies achieve economies of scale and benefit significantly from economies of scale in the brokerage sector, especially this advantage has appeared in large companies [14], evidence that size has an impact on the performance of investment banks (securities companies) in Vietnam from 2009 to 2017 has been found by My and partners (2020) demonstrated in his study [15].

Looking out to the world, the mergers of ABN AMRO of the Netherlands and Barclays PLS of the UK to form the world's leading bank, or Bank of America with Merrill Lynch, Wells Fargo with Wachovia, UFJ Holding with Mitsubishi Tokyo Financial Group to form the most powerful Mitsubishi UFJ Financial Group, surpassing Citigroup in terms of total assets.

Second, diversify products in the capital market, and have tax incentives (for the long term) for securities companies and investors, and have mechanisms to protect investors, such as the abolition of regulations on commissions agency. For the investment bank (Securities Company) itself, developing a business strategy for financial advisory, equity financing, and underwriting must account for a large proportion, strengthening business and product type innovation: market innovation, customer innovation, product innovation, business model innovation. At the same time, it is necessary to improve the professionalism and ethics of investment banking practitioners, constantly learn laws and regulations, experience partner development and constantly improve personal skills [22]. On the other hand, according to Elyasiani and partners (2007), investment banks need to have risk management measures to ensure the safety of the system, because profit and risk are interdependent and closely related [8].

Third, Improve requirements for information technology application (for investment banks/ Securities).

According to researcher Papaioannou (2002), Internet and e-commerce applications have been affecting the business of investment banks, the application of internet technology and strategy in investment banking can be influenced by the structure of the industry as well as its development, the internet allows investment banks to expand their capabilities in managing customer relationships by reaching a broad customer base [16]. The application of internet technology to capital markets is primarily the pricing and distribution of securities (William, 1999), securities offerings consisting of a complex series of events organized by the investment bank of the country issuer [21]. Part of this reflects regulatory requirements for full disclosure regarding potential investors, followed by registration of an offer and a series of Roadshows geared towards the investor community. Organization is an essential source of information. Putting Roadshows on the internet is a prime example of how an industry can use the new capabilities of internet technology to disseminate complex information sets at low cost. Information and begin to form an opinion on the value of the company's securities offering, the securities distribution process involves the active participation of technology.

Consulting banks are an important financial institution in the modern economy, associated with services related to capital market operations, they understand the capital needs of business organizations and all principally, by providing a set of activities including M&A (Mergers and Acquisitions) advisory; Underwriting (Underwriting), Asset Management (Asset Management) and some other activities. Vietnam is in too the import of the global economy; it is necessary to have a developed competitive and efficient capital market to ensure functional capital investment in the economy

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ATTRACTING FOREIGN DIRECT INVESTMENT IN HIGH-TECH AGRICULTURE SECTOR IN VIETNAM

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Abstract: *In the context of the Fourth Industrial Revolution which has been fiercely spreading around the world and changing all aspects of socio-economic activities, the agriculture known as a traditional industry of Vietnam has been gradually adjusting itself to meet the demand of the reality in terms of integration and development. Therefore, attracting foreign direct investment on high-tech agriculture in Vietnam is absolutely an urgent issue nowadays. Vietnam's land and climate conditions as well as its stable and attractive business investment environment is a huge advantage of attracting foreign direct investment on high-tech agriculture. However, the amount of FDI flowed in this sector has been still small until now. So it is necessary to find out the limitations and the causes of them as well as in attracting FDI on this field and promote solutions to cope with the real situation.*

Key words: *Foreign direct investment, high-tech agriculture, the Fourth Industrial Revolution*

1. INTRODUCTION

In the context of the fourth industrial revolution, many industries as well as sectors in the economy have been being applied high technology in production including agriculture. As we have known, hi-tech agriculture combines latest technologies in farming to enhance effectiveness, efficiency and farm product quality in order to meet the market demand. This is the sustainable development of agriculture. On the other hand, hi-tech agriculture needs more invested capital in the comparisons with traditional agriculture. Foreign direct investment has been proved as an efficient investment channel to satisfy the need of capital demand and the technology as well as management experience transmitted. That is why it is essential to boosting FDI in hi-tech agriculture sector.

2. LITERATURE REVIEW AND PREVIOUS RESEARCH STUDIES

There have been some FDI research studies such as Fabienne Fortanier (2007) "*Foreign direct investment and host country economic growth: Does the investor's country of origin play a role?*"; Pravakar Sahoo, Geethanjali Nataraj, Ranjan Kumar Dash (2014) with the title "*Foreign Direct Investment South Asia, Policy, Impact, Determinants and Challenges*" which were focused on the pros and cons of FDI, therefore, proposed some policies to attract more FDI to develop the economy. But in these studies, attracting FDI in agriculture was not mentioned in particular. In Vietnam, there have been some studies on attracting FDI in hi-tech agriculture such as the study of MSc Duong Thi Trang, "Attracting FDI in high-tech agriculture sector in Vietnam" posted in Finane Journal (tapchitaichinh.vn) in August 2018; Organic Agriculture Association with the same study title in 2020... The authors have shown the definition of hi-tech agriculture and some char-

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acteristics of it, for instances, saving land used in planting, avoiding the spread of pestilent insects, isolating with the external environment and weather conditions, ensuring the growth of plants and vegetables, absolutely providing sufficient nutritions and essential water demand for the plants, appropriately adjusting the light, automatically remote controlling, significantly decreasing human resources and operating expenses, preventing the loss of water, being able to adjust the environment toward each phase of trees' growth... But some disadvantages of hi-tech agriculture as well as the relationships between FDI and high-tech agriculture have not been clarified yet.

3. RESEARCH METHODOLOGY

Data collection method: collecting data through official information sources of the government as well as gather information from reliable website and references.

Researching method: Based on collected data start analyzing the fluctuation according to the requirements and purposes of the topic.

Comparison method: Based on processed data, make comparisons between years, thereby assessing the achieved and unsatisfactory results, mainly concentrating on the drawbacks of attracting FDI in high-tech agriculture sector in Vietnam.

Time range: 2012-2020

4. RESEARCH RESULTS:

4.1. The need of attracting foreign direct investment in high-tech agriculture in Vietnam

Firstly, according to the assessment of World Bank, Vietnam has been invested in research and development in agriculture approximately 0,2 % GDP in agriculture, meanwhile, this proportion is 1,8% in Brazil and 0,5 % in China in the period of 2013-2017. Regarding to the survey of Agriculture Science Technology Index (ASTI 2020), with the development level of Vietnam, the investment proportion of agriculture science technology should be 0,86% GDI in agriculture which means a four times increase in that field. This also means that in the upcoming time, Vietnam needs to raise its investment level of science technology in agriculture sector to meet the demand and domestic reality of production. Therefore, with the advantage of technology transferring capability, FDI completely plays an important role in developing hi-tech agriculture sector in Vietnam. This type of capital is supposed to bring more opportunities for the Vietnamese agriculture in approaching high technology in production.

Secondly, The Fourth Industrial Revolution brings both new opportunities and challenges to the whole economy. Smart factories, Internet of Things IoT, Big Data, Artificial Intelligence, ... will strongly affect on present producing methods. This revolution leads to the big changes in the market, labor as well as the way of using natural resources. In Vietnam, the progress of restructuring the economy with the aim of high growth rate which show some unstable and less sustainable aspects. Vietnam set the goal of becoming an upper-middle income country in 2035 and a high-income country. That target is very ambitious and needs the huge efforts of the entire mechanism.

Thirdly, the more countries involved in Free Trade Agreement (FTA) and Economic Conventions, the bigger the chance to take the foreign capital such as FDI. In the context of tense trade war between America and China has been occurring, the capital flow of multinational companies and transnational corporations tends to move to ASEAN countries. There are some foreign capital flows that are suitable for the development orientation of Vietnam.

Fourthly, the strategy for new generation FDI is being built in order to meet the need of development for the country in which the country must encourage the advantages and discourage the disadvantages of attracting FDI for the socio-economic development in Vietnam in the future. The present preferential policies in attracting FDI need to be reassess in some aspects such as the aim, effect, cost and benefit so as to improve and boost the efficiency of those policies.

Fifthly, the world has been suffering the negative effects of climate change. The agriculture has also been seriously suffered from these changes. The available natural resources for agriculture has been demolishing. Land resources are limited, water resources are gradually exhausted, the environment pollution is more and more serious. Meanwhile, the world population has been increasing rapidly. If the agriculture industry doesn't make any breakthroughs and the output doesn't increase, the world may get in food crisis. Therefore, it is crucial to increase both quantity and quality in agricultural products.

Because of those reasons above, the application of high technology in agricultural producing process is the trend of the future. In Vietnam, the lack of capital invested in this sector is the prominent issue. Thus, attracting FDI on hi-tech agriculture will meet that need.

4.2. The relationships between hi-tech agriculture and sustainable economic development in Vietnam

There has been an absolutely close relationship between the development of hi-tech agriculture and sustainable economic development that can be seen through some aspects mentioned as following:

Firstly, the climate change has been spreading globally which causes more and more natural disasters to humans such as flooding, landslide, drought, earthquake, tsunami, hurricane... Therefore, agricultural production has been effected negatively and the food security has been under threat. Moreover, farmers are always conventionally at the mercy of the weather, so it is high time to find out solutions to cope with climate change. The application of high technology in agricultural production will solve this problem. As we can see in fruit and vegetable growing areas, membrane technology applied in production helps farmers to prevent rime, bugs, ... and unfavorable elements of the weather and reduce the use of toxic chemicals in production.

Secondly, the application of automatic technology helps farmers save time and labor power in production. Automatic watering technology has been more and more applied in agriculture production that is very useful in saving water and in ensuring the growth of plants. Besides that, cloud computing technology helps farmers control the land and climate elements in production such as temperature, humidity, PH...with remote supervision from smartphone or computers... This is very convenient and accurate.

Thirdly, hi-tech agriculture helps us reduce the pollution, for examples, land pollution, water pollution, air pollution... The use of plant protection products and pesticides which have been known as the causes of pollution can be decreased significantly in the condition of high technology application in production.

Fourthly, high-tech agriculture helps us protect our health. The technical standards of agricultural products, for instances, pesticides residues, preservative residues... can be under good control to meet the strict demand of the market. This is a huge advantage of applying high technology in agriculture. People will be served with fresher, healthier products. The number of people who will

suffered from cancer due to consuming agricultural products with high pesticides residues or toxic chemicals can be reduced. This is the greatest benefit for the community.

4.3. Capital source for investing and developing hi-tech agriculture in Vietnam

The capital source of investing and developing hi-tech agriculture has been gained from individuals, local enterprises, foreign investment capital (mainly FDI) and a small portion of offer support capital from the Government. In particular, capital from domestic private enterprises namely Vingroup, TH True Milk, Hoa Phat, Truong Hai Auto, FPT, Elcom Company, Vinaseed, Thaco, Lam Son sugar cane Company, Mobile World JSC invested in Green Department, prominently Vingroup with the brand of Vineco implemented the link model with 1000 cooperatives and farmer households from 2016, Hoang Anh Gia Lai, PAN Group, NutriFood... also invested in agriculture sector. However, according to the survey data of Vietnam Chamber of Commerce and Industry (VCCI), there was 1% enterprises in total local enterprises invested in agriculture with the capital proportion of nearly 3% in total capital invested in manufacturing business. Regarding to capital from abroad, the trend of integration and globalization has promoted the flow line of foreign capital especially foreign direct investment (FDI). With the advantages of capital sources, science and technology, experiences and management level, FDI is supposed to boost the economic development of countries particularly developing countries. In Vietnam, FDI flow has reached some fierce transformations in the economy. However, in reality, FDI invested in agriculture sector in Vietnam has been still limited.

4.4 The current situation of attracting foreign direct investment in high-tech agriculture sector in Vietnam

There are enterprises in different countries in the world which are investing in agriculture sector in Vietnam. The leading country having most FDI capital invested in this field is Japan. Accumulated FDI capital till 2020 of Japan in agriculture sector in Vietnam is 420.9 million USD with 50 FDI projects. China is the second in the rank with 220.7 million USD with 20 FDI projects. Taiwan, South Korea, Singapore, Netherland, Thailand, France has invested FDI capital in this sector in Vietnam relatively. Other countries in the world have just had small amount of capital invested in this sector.

	Country	Number of projects	The amount of investing capital (million USD)	The average amount of investing capital (million USD)
1	Japan	50	420.9	8.42
2	China	20	220.7	11.03
3	Taiwan	27	204.8	7.59
4	South Korea	22	112.5	5.11
5	Singapore	20	112.8	5.64
6	Netherland	18	112.9	6.27
7	Thailand	18	114.8	6.4
8	France	17	105.5	6.21
9	Other countries	25	119.82	4.79
Total		217	1524.72	7.03

Source: Department of Foreign Investment, Ministry of Planning and Investment

Table 1: Countries investing in agriculture sector in Vietnam until 2020

This table below shows the proportion of FDI invested in high-tech agriculture in the comparison of total FDI invested in agriculture in Vietnam from 2012-2020

Year	FDI in agriculture		FDI in high-tech agriculture sector					
	The amount of project	Registered FDI capital (million USD)	The amount of project	Proportion of FDI projects on hi-tech agriculture and total FDI projects on agriculture	Registered FDI capital (million USD)	Proportion of FDI registered in hi-tech agriculture and Total FDI of agriculture	Realized FDI capital (million USD)	Proportion of realized FDI capital in hi-tech agriculture and registered FDI capital
2012	26	87.89	5	19.23%	16.4	18.7%	10.49	63.62%
2013	26	97.68	6	23.08%	22.4	22.9%	11.5	51.45%
2014	37	91.68	6	16.22%	21.9	23.9%	12.5	57.02%
2015	16	258	6	37.50%	22.8	8.8%	14.5	63.72%
2016	35	99.47	5	14.29%	24.373	24.5%	15.8	64.83%
2017	60	191.55	20	33.33%	35.88	18.7%	17.5	48.77%
2018	75	215.97	25	33.33%	43.4	20.1%	26.5	61.1%
2019	83	332.54	27	32.53%	57.8	17.38%	43.8	75.8%
2020	115	473.76	32	27.8%	73.5	15.5%	53.2	72.4%

Source: Department of Foreign Investment, Ministry of Planning and Investment

Table 2: FDI in high-tech agriculture sector in Vietnam from 2012 to 2020

It can be seen that in 2020, there were 115 FDI projects on agriculture in Vietnam with the registered capital of 473.76 million USD in which there were only 32 FDI projects on high-tech agriculture sector (27,8%). The proportion of realized FDI capital in high-tech agriculture in total registered FDI capital is 72.4% with 53.2 million USD realized FDI capital. From 2017 to 2020 there has been an increase in the amount of FDI projects on high-tech agriculture (20 FDI projects on hi-tech griculture in 2017, 25 projects in 2018, 27 projects in 2019 and 32 projects in 2020). This is a positive signal of FDI attraction on high-tech agriculture in Vietnam.

Assessment of attracting FDI in high-tech agriculture sector in Vietnam

Achievements

Firstly, in the age of technology with renovation and creativeness, the traditional technology barriers are the big ordeal, every country can thrive and renovate in the 4.0 ground which is determined as a new economic growth motivation in the future. This can be seen as a big chance for Vietnam to enhance its ability of innovation and creativeness in order to improve the labor productivity and competing capability of businesses as well as of the country. And this is the opportunity for Vietnam to shorten the development gap between the country and other developed countries in the world.

Secondly, Attracting FDI in high-tech agriculture sector in Vietnam has promoted the technology transmission and competing capability of the country, increased the proportion of high-tech products and raised the level of agriculture value chain.

Thirdly, Vietnam has been attracting FDI from multinational corporations and transnational companies which have strong financial capabilities and experiences in management as well as the ability of transferring technology through research and development (R&D) activities. For that

reason, FDI invested in high-tech agriculture will both affect positively on other industries of the economy and encourage the community involving in this technology revolution creatively.

Fourthly, Bringing more benefits to the farmers through the high-quality products with higher value. The productivity of agriculture production has been rising, the risk of changing weather conditions in producing process has been coped up with high technology. Therefore, the farmers can gain benefits from these advantages.

Drawbacks

The first, the proportion of FDI invested in high-tech agriculture sector has been still small in total FDI invested in agriculture in Vietnam (approximately counted for 18% in total FDI in agriculture).

The second, the FDI projects on high-tech agriculture mainly focus on some fields such as planting flowers and vegetables, agricultural processing. There are not many FDI high technology projects in other fields, for examples, researching and producing cultivars, producing veterinary medicine, producing organic pesticides...

The third, FDI high-tech agriculture projects has still been concentrating on several advantageous areas. For instance, Lam Dong is the leading province with many FDI high-tech agriculture projects of the country in attracting FDI on hi-tech agriculture especially FDI from Japan because of its climate conditions which are suitable for agriculture productions.

The fourth, foreign investors or partners invested in high-tech agriculture in Vietnam has not been diversified, mainly investors from Japan. In total countries invested FDI in high-tech agriculture in Vietnam, Japan is the top country with many FDI high-tech agriculture projects.

The causes of drawbacks

There are some main reasons for drawbacks in attracting FDI in high-tech agriculture in Vietnam nowadays, they are as following:

The first, it can be seen that there are still difficulties in land concentration and accumulation activities as well as in the procedure of land use rights transferring from residents to enterprises. Moreover, the preferential mechanism of taxes, land, infrastructure, credit...has been limited. The approaching of preferential loans is still difficult for economic sectors. It is necessary to have special preferences policies for enterprises investing in this field in a certain period of time.

The second, the lack of technique standard and certification for high-tech agricultural products and the products' certificate of origin should be printed clearly on the labels. Once the regulations of label for high-tech agricultural products are clear and sufficient, businesses can make their own competitiveness. So that they are willing to invest their money on producing high-tech agricultural products.

The third, the labor forces working in high-tech agriculture have not been qualified and sometimes they are in shortage of using technology skill. This is a big disadvantage that makes foreign investors disappointed. If the enterprises wish to train labors, they should support training expenses for the farmers. In fact, if we lack of human developing strategy in high-tech agriculture, we will soon face up with higher risks in operating process of the projects.

The fourth, the market for exporting high-tech agricultural products has not been expanding widely although Vietnam has become the members of some Free Trade Agreement (FTA). Along with the satisfying production standards, the businesses always care about the consuming market for their outputs. It is very important to untie this knot for enterprises.

4.5. Solutions to attract foreign direct investment in high-tech agriculture sector in Vietnam

In order to attract more FDI in high-tech agriculture sector, Vietnam should take the advantages of methods which were allowed by World Trade Organization (WTO) to enhance absorbing FDI in hi-tech agriculture. Moreover, the country should continually reduce risks in agriculture and strengthen the implementation of Intellectual Property Rights as well as protect the rights of agricultural products.

The most important issue is that Vietnam needs to build the agricultural value chain in which focuses on the role and position of the farmers, the market and other positively supportive measures.

The first, related to land concentration and accumulation in agricultural production. Meanwhile, the capital and the way of approaching investment capital to develop high-tech agriculture are the most difficult matter that small and medium-sized enterprises in the country are facing with, on behalf of foreign investors investing in this sector, the most considerable issue is land concentration and accumulation for expanding high-tech agriculture. Because application of high-tech agriculture needs the large scale of land using, however, with the regulation of allocation quota for agricultural land, the area for agricultural production is still humble.

The process of transferring the land use rights from residents to enterprises often faces up with the difficulty in procedure and financial problems and persuading farmers to agree with the land transmission for the projects and businesses. Therefore, in this process, the local authorities need to make efforts to convince residents so as to make them understand the benefits and cooperate proactively. Besides that, the local authorities should play the role of the link between the citizens and businesses and ensure the rights and benefits of each party in the process of land concentration and accumulation.

The second, implementing preferential policies for foreign investors investing in high-tech agriculture sector

In order to attract more FDI, Vietnam has been carrying out many supportive and preferential policies for foreign investors, for example, preference in land rent with 20% in the first five-year period in basic construction, preference in taxes for coffee exporting enterprises (free VAT-exporting taxes), giving tax exemptions and tax reductions (maximum in 9 years), allowing transferring losses within five years, free taxes in oversea profit transferring, giving tax refunds for reinvestment profits. These preferences aim to make more attraction in attracting foreign investors. However, due to the joining in WTO, Vietnam will have to cut off and delete some subsidies in agriculture in the future in order to be appropriate with commitments.

With the high-tech agriculture sector, it seems that those preferential policies mentioned above are not sufficient as this field has many internal risks. Thus, besides the policies of land concentration and accumulation, the Government should focus on some matters as following:

- Maximally manipulating methods that are allowed by WTO to boosting the attraction of FDI in agriculture, supporting the farmers to expand the development of domestic materials by giving preferential loans (green light subsidies).

- Boosting scientific research activities and R&D segments

- Investing in developing hi-tech agriculture projects, R & D projects with modern and advanced technology, giving priority for choosing hi-tech FDI projects which are sustainable and friendly with the environment.

The third, building agricultural value chain concentrating on the role and position of farmers

Building value chain for agriculture is a crucial issue in developing hi-tech agriculture, especially the market for the outputs of agriculture production, in order to build an efficient agricultural value chain, the Government should resolve some matters:

- Focus on the market issues, the development of market for agricultural productions accompanied with supportive methods.

- In the value chain, the role and position of the farmers should be put under careful consideration because when the farmers understand and make changes in their minds about new methods of carrying out agriculture productions, a sustainable agriculture industry can be built successfully.

The fourth, enhancing investment promotion activities in attracting FDI on high-tech agriculture sector

The investment promotion activities should be strengthened in agriculture :

- Boosting the investment promotion conferences in the high-tech agriculture sector
- Studying experiences from other countries in the world about high-tech agriculture sector, especially countries in ASEAN
- Motivating Public- Private Partnership (PPP) in agriculture sector in order to produce extra values in agricultural products.

5. CONCLUSION

The Fourth Industrial Revolution has been creating more and more opportunities and challenges for all economic sectors including high-tech agriculture sector. The application of high technology in agriculture production makes more high-quality products and meet the increasing demand of food for people all around the world. Foreign Direct Investment is considered as the momentum of boosting high-tech agriculture in developing countries including Vietnam. Because of that reason, attracting FDI in high-tech agriculture sector in Vietnam has been becoming more and more important. Therefore, some solutions to complete this task should be implemented as soon as possible.

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FACTORS INFLUENCING THE SUSTAINABLE URBANISATION IN VIETNAM

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Abstract: *The urbanisation in Vietnam underwent a process with up and down increase. It contributed positively to the socio- economic development of the country. However, the process faced difficulties and created, on the other hand, problems and obstacles for the development of Vietnam, too. Recognising that opposite impacts and the fact, that the urbanisation is an objective trend in the socio- economic development, the Government of Vietnam have lots of efforts to keep the process going in the right directions and contributing positively to the sustainable development of Vietnam. In order to develop appropriate policies and implement them consistently, effectively, the identification and comprehensive analysis the factors, which influence the urbannisation process, belongs to preconditional tasks. However, depending the socio- economic development, these influencing factors themselves as well as their impacts could change flexibly. Therefore, the identification and analysis of those influence factors should be periodically reviewed.*

Key words: *Urbanization, sustainable development, urbanization policy, Vietnam*

1. INTRODUCTION

Urbanization growth and level of urban concentration in Asian countries, especially in developing countries, is now outpacing that of other continents in the world that are caused by a number of different reasons. The principal foundation for expanding levels of urbanization is rural-urban migration, which is caused by most of developing countries still strongly depend on agriculture and the natural growth in urban are generally lightly lower than in rural areas. Furthermore, the expansion of the metropolis boundary may be initiated both the arrival of new migrants or by the sub-urbanization of the middle class out of the central city. In addition, the political institutions and policies in countries may be leaded the unequal urbanization growth and urban concentration between hinterland cities.

The political institutions and policies in developing countries may encourage urbanization growth, urban concentration, and economic development. The national government approving one or more cities over others may lead to asymmetry in the speed of urbanization, as well as urban concentration among cities. In other hand, some researches imply that cities which are strongly urbanization growth and higher level of urban concentration, may promote economic development [51, 53]. However, others argue that rapid urbanization has often arisen in the face of low or negative economic growth over some decades [52].

The urbanization process slightly difference among countries, though it mainly consist of five dimensional changes, namely: the economic shift, the welfare shift, the demographic shift, the

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physical shift and the administrative shift [7]. In Vietnam, the urbanization goes with the country's socio-economic development in the same direction, which was implemented with high tempo, even it slow down a little bit in the last few years. Hence, it is necessary to have specific factors that influencing to the urbanization problem in Vietnam to aim for sustainable development in the coming time.

2. TRENDS OF THE URBANISATION PROCESS IN VIETNAM IN THE NEAR FUTURE

Following the development in the past, the urbanisation in Vietnam will be strengthened and remains as a focus policy of the Government of Vietnam. Experts forecast that following trends and facts will dominate the urbanisation process in Vietnam:

Number of cities in Vietnam will not increase as quickly as before, but the percentage of urban population will remain the increasing trend, even the development will slow down. This also means that the scope of Vietnamese cities in term of population will increase. The most reason for that trend is the migration flow of rural population into the urban centers, especially into big cities [35]. Hanoi and Ho Chi Minh city will be consistently 2 biggest cities of Vietnam and tend to develop to 2 megacities.

Small and medium towns and cities will develop more quickly than big cities, especially cities with the scope between 750,000 and 5,000,000 habitants [35].

Sustainability will become one of requirements, which will be checked more carefully by decision on city/ town establishment, recognition of urban status and upgrading urban class for towns and cities in Vietnam [18]. It means that urban and rural communities should be developed in balance and basic requirements should be fulfilled, such as: i) the urbanisation should be implemented based on the socio-economical needs and at that time that all the urban criteria are achieved; ii) cities and towns should be allocated proportionally between regions; iii) the complexity of cities and towns should be guaranteed and iv) the ability of poor people and people with low income to access social security services as well as housing should be ensured. The development of "Green cities" and "rural cities" in the neighbourhood of big cities belongs to this trends.

The application of new technologies and technological progresses in the urbanisation process in Vietnam. The trend consist of i) strengthening the trend of "smart cities" and ii) innovation of current technologies as well as application of new, modern technologies for solving problems in the urban life of Vietnam, especially by the development and innovation of the infrastructure of Vietnam's cities and towns [37, 28, 24].

The urban space development/ extension will go in 3 directions: merging cities' neighbouring rural communes/ districts without important changes of their economic and social structure, systematically developing, improving the infrastructure and constructing new and modern urban living complexes, encroaching the sea and constructing new urban community on it [34].

The urbanisation is implemented in close relationships with the development of national and international economic corridor and economic centers. On the other hand, the urbanisation in Vietnam should be in link with the regional and international urbanisation. This opinion is explained many times by experts of Vietnam's Institute for Urban and Rural Master Planning [6]. The "Belt and roads initiative" of China, initiative "ASEAN Smart City Network, ASCN" and programme "Society 5.0" and "ASEAN- Japan Innovation Network" of Japan as well as "ASEAN Smart City Network, ASCN" of Singapore [30].

3. URBANISATION POLICY OF THE GOVERNMENT OF VIETNAM

The last adjustment of the master plan for the urban development was made in 2009. In the last 12 years, there are lots of changes of the cities and towns of Vietnam as well changes of conditions for the urban development in the country. Thus, the updated urban master plan needs to be revised and adjusted soon. Currently, the Ministry of Construction conducted lots of seminars, conferences and discussion platforms to collect experts', researchers' and communities' opinions and proposals/ suggestions on the future urban development and urbanisation. On the other hand, the 13th Conference of the Communist Party was organised at the begin of this year, which decided orientations for the socio- economical development of the country, including the urbanisation. Vietnam's Parliament of new term was also elected and will held first meeting in the next month, which will decide the law making plan for the whole period 2012- 2025. These events lead to the opportunity of reviewing and adjusting urbanisation policy. All these changes and adjustments will base on the previous researches and discussions among experts, government officials and communities. Followings are main contexts of these activities, which will be integrated into urbanisation policies in the next period(s).

Recognising that a nation could not develop quickly and maintain its status as a "mid- income" country if it does not undergo an urbanisation process and achieve a certain level of urbanisation, Vietnam spends lots efforts for the urbanisation and keeps the urbanisation as one of key pillar in its socio- economical policy since 90s' of the last century. From 2000, the urbanisation in Vietnam was integrated with the industrialisation and the modernisation of Vietnamese economy.

In the urbanisation master plan for the period 1998- 2020, Vietnam wanted to concentrate its resources for the development of "central cities" in the 10 "typical urban regions" of the country, i.e. the focus economic zone and Red River Delta, the focus economic zone in South and South-East of Vietnam, focus economic zone of Middle and Central Vietnam, the Mekong Delta, North urban area of Central Vietnam, South urban area of Central Vietnam, High land area, North- East region and North region of Vietnam [11].

Between 2007- 2009, the urban development master plan was reviewed and adjusted. 3 developments of the urbanisation policy of Vietnam were: 1) development of cities network instead of development some big cities as the development centers of economic regions; 2) integrating the urbanisation with the rural development programme and 3) urbanisation in close relationships with the environment protection [12].

One year after the issue of the Decision on the adjustment of the master plan of urbanisation (2009), in 2010, the Prime Minister of Vietnam issued the Decision 800/QĐ-TTg approving the national target programme for developing the "new rural community" in Vietnam for the period 2010- 2020. Accordingly and based on the scope of the rural development, 2 administrative levels of rural "community" are clarified: the village of "new rural community", commune of "new rural community" and district of "new rural community". The programme aimed to improve the infrastructure, improve the economical structure of rural region, to develop rural area in the integration with the urbanisation, to improve the living standard, to ensure the security and wealth faire of rural region [13, 14, 15].

"Socialisation" of resources for the urbanisation is an important policy of Vietnam. Its main purpose of the policy is the mobilisation of resources of the private sector for the urbanisation.

However, it surely leads to changes in the urban management, at least in urban master planning and management/ utilisation of the urban infrastructure.

Currently, Vietnam practices the approach for the change of a rural to a urban community: Traditional rural community is developed and recognised as “new rural community”; a “new rural community” will be developed to achieve certain level and recognised as “new rural community at advanced criteria”; a “new rural community at advanced criteria” will be developed to achieve a higher level and recognised as an urban community; and lastly, a urban community of lower rank will be developed to a urban community of higher rank.

The Government of Vietnam requires that “The urbanization must be in accordance with the economic and social background of each region and help to keep the balance as well as reducing the inequality among region. It also must be sustainable and stable in using natural resource, land capacity, efficient energy; protecting environment and maintaining the balance of ecosystem. The social and technical infrastructure have to be relevant to the level of urban” [43].

The orientation for the urbanisation in Vietnam in the next 10 years was updated by the 13th conference of Communist Party of Vietnam, the leading party in Vietnam, as followed: Increasing the speed and improving the quality of the urbanisation and urban economy; constructing mechanism and policies to strengthen the hamonised development of the cities system, appropriate to the potentials and strengths of each region, each location; developing satellite cities for some big cities, especially Hanoi and Ho Chi Minh City; completing the system of institutions, mechanism, policies, means and instruments for the urban management, applying the modern model for the urban administration in connection with the effective urban management; increasing the competitiveness and improving the quality of cities and towns in term of social, economical life as well as infrastructure, architecture, housing and quality of life of urban citizen; ... establishing series of smart cities in economic focus regions in the North, Central and South; integrating them step by step with regional and international smart cities network; ... integrating the urban development with the rural development” [44].

In the next years, Vietnam’s policies in urbanisation will focus on some key issues, especially following points:

Improvement of urban master planning, especially improving the quality of urban master plans and improving the “urban master plan order”.

Strengthening the capability of urban management, including 2 major directions: i) synchronization and rationalisation of the legal framework for the urbanisation and urban development, and ii) the strengthening the capability for the urban management personnel in order to make them being able to solve strategic as well as daily problem of urban life.

Improvement and further development of the urban infrastructure and urban- rural linkage.

Experts of the Ministry of Construction mentioned some trends and aspects, which should be observed and their impacts on the urbanisation in Vietnam should be assessed, such as counter urbanisation, differential urbanization, polariton reversal [7].

4. FACTORS INFLUENCING THE URBANISATION OF VIETNAM IN THE NEXT DECADES

Different factors affected the urbanisation process in Vietnam in different ways and at different scope. Government officials, researchers and communities debated lots about the results, obstacles of that process and their reasons. Studies on the factors, which influence the urbanisation in Vietnam

were conducted, focused on different aspects. Most of them approached the issues in qualitative manners. The following session summaries and analyses the most important factors, which could help to identify and develop most urgent policies for overcoming the current barriers and contributing to explore positive impacts of the urbanisation on the sustainable development in Vietnam.

The first and most important factor influencing the urbanisation in Vietnam is the *economical development*. International organisation in Vietnam (World Bank, ADB, UNFPA) and government institutions (Ministry of Construction, Hanoi, Ho Chi Minh) addressed the role of economical development while indicated that “lack of resources” for the development of urban infrastructure, for investing utilities for urban wastes processing, for solving social problems of social life (especially housing, traffic, health care, education), etc. [5, 47, 29, 41]. Experts and researches let concluded already that the urbanisation contributes lots to the economic development, including in Vietnam. Urban population, especially cities’ population, have greater economic potentials and business power in comparison with rural ones and big cities are usually economic development centers in Vietnam. However, the quick urbanisation created lots of problems for the urbanisation, especially for top cities of Vietnam, as described above. The problem was addressed very soon in Vietnam, at least since the begin of the 21st century. Researchers and government officials determined this situation as “forced urbanisation”, “overurbanization”, “hasty urbanisation”, “urban sprawl” or “urbanisation by lack of an appropriate economical basis”[38, 50]. The economy is the basis for the urbanisation and influence the urbanisation process in both aspects: It creates the need of urbanisation and provides resources for the urbanisation. International observation let see that the urbanisation will slow down if the urbanisation achieve 70% and it will nearly not increase by 80% [26]. Vietnam doesn’t reach that level now, but the change of many rural communities into urban ones seemed early, while they did not satisfy all urbanisation indicators.

Through their impacts on the economical development in cities and towns, *the globalisation and Vietnam’s international integration* is a kind of indirect influencing factor of the urbanisation in Vietnam [9, 45].

The second influencing factor of the urbanisation process in Vietnam is the *Government’s policy*, especially the urbanisation policy. It’s important to mention that a location could be recognised as an urban location in Vietnam (a town or a city) only by the Government. The Government determined (and announced clearly for public) a set of criteria as conditions for recognising a location as an urban area. According to the levels of achieving the criteria, The Government clarified 6 categories of the urbanisation, from the city of the special category (Hanoi an Ho Chi Minh City) to the town with local role (city of category 6). In 1998, the Government of Vietnam approved a master plan for the urbanisation of Vietnam in the period to 2020. In 2009, the master plan was adjusted and extended to 2025 (and vision to 2050). The recognition and classification of a location into a concrete urban category is, in its turn, a criteria for Government investment for the relevant location.

Of course, the urbanisation and its results as well as its progress is not depend much on the urban classification, but on the ability of mobilising resources for that process as well as the legal framework for it. All aspects of these 2 issues should be clarified in the related government policies and their implementation as well as community’s participation on the process. But both issues are behind the requirement. Even many members of the Parliament recognised that “there is a paradox

that the urbanisation happens very quickly while the mechanism, regulations, policies and legal frameworks related to the urban management don't meet requirements, which leads to the fact that our cities have to face large challenges in term of master planning, environment, infrastructure. Another expert also commented that "legal regulations on managing the urban development are currently not unique, not scattered, not sustainable and could not regulate comprehensively all practical problems" [1]. Lots of inconsistencies, irrational and inappropriate regulations about issues belong to most related laws and their guiding regulations, especially which are addressed by either researchers, business community or government officials [31, 39]. In its law developing/adjusting agenda, the Parliament tries to improve the inappropriateness, but there are always weaknesses to be improved. On the other hand, under-law- regulations and guidelines are useful developed and issued late, which hinders the effective implementation of laws.

Thirdly, the poor quality of master plans and its ineffective, inconsistent implementation leads to poor urban management and pulls back the urbanisation, hinders the development of cities and towns with different scopes at different levels. The issue is addressed very often and is considered as one of the most important influence factors, which will affect not only the current progress of the urbanisation in Vietnam, but also the sustainable existence and development of cities and towns of Vietnam for long term [41, 17, 27, 10, 42]. Some experts also emphasize that the need assessment was often conducted in insufficient ways and scope. Issues of master planning affect the urbanisation in following aspects [40, 2, 8]:

The city's/ town's development is guided/ oriented in irrational direction, which may lead to waste time and resources, to threaten the existence and development of cities/ towns. Tran Thi Lan Anh (2015) emphasized especially that leading principles and opinions decides directly the urbanisation praxis for a long time, not only for years, but decades.

Needs on key issues of the urbanisation, especially needs on the infrastructure development, needs on urban housing, needs on social infrastructure utilities, such as health care, educational, cultural services, etc. are not exactly estimated, so that solutions and measurements could be wrongly decided and resources for them could be not prepared sufficient in term of quantity, quantity, time and space allocation.

Available potentials and resources as well as schedule for the urbanisation are determined irrationally, inappropriately.

Fourthly, the weak infrastructure of cities, which leads to low life quality of urban population and hinders the progress of the urbanisation. The infrastructure is a condition for the socio-economical development. The weakness of the urban infrastructure is raised by all researchers and experts as well as government officials. International experts as well as ODA providers for Vietnam have the same assessment. They agreed that it is one of the most influential factor of Vietnam's urbanisation in next decades. The 13th national conference of the Communist Party concluded that improvement of urban infrastructure will be one of key tasks for urban policies in next 10 years period. Nguyen Thi Vu Ha (2019) mentioned that the "infrastructure" as an influencing factor of the urbanisation should be seen in a broader context, not only the urban internal infrastructure, but also at the national scope, for example roads and highways connect either cities with each others, but also urban and rural regions, or electricity net is always a national system and effective/ efficient environment protection systems serve either urban or rural regions, etc. [21]. Because of

its importance, infrastructure is one of key criteria for reviewing and recognising a community as a town or a city of low class to be a city of higher class in Vietnam. Indicators related to the infrastructure are also used for measuring the competitiveness at provincial or national level [48].

With an underdeveloped infrastructure, urban economy could not develop quickly, the urbanisation is therefore hindered or slow downed. The weak infrastructure also leads to unnecessary loss or wastes in money, time and material resources. H. Mai estimated that since 2018, traffic created annually for Ho Chi Minh City a loss of USD 1.3 billion because of traffic, a damage of around USD 2.3 billion because of environment pollution [32]. In term of scope, Hanoi is smaller than Ho Chi Minh City, but the loss and damages were similar [23]. Furthermore, this “bottlenecks” hinders cities by promoting their role as socio- economical center for their neighbouring region.

Weakness of infrastructure against flooding, a reason for disorder and chaos in the urban life, is another element to be improved for urban areas in Mekong Delta, cities in the seaside as well as big cities, especially old cities, such as Hanoi, Hai Phong, Nam Dinh, Da Nang, etc. Sea water rise will strengthen impacts of this factor [20].

Fifth factor, which influences the urbanisation in Vietnam, is the *historical “heritage” of the urbanisation* of the country. Not all of old, especially ancient towns and cities, become modern cities, but all big cities, especially cities, which were established or recognised since 60’s of the last century, were old, even ancient towns/ cities in Vietnam’s history. The historical impact could be recognised by the fact, that cities/ towns, which are newly established/ recognised (or even will be established/ recognised in the future), have to undergo a “step- by- step” development process, from traditional rural community to advanced, developed rural community, before they could be recognised as an urban one. In this process, the Government plays a decisive role, but the community and its citizen as well as the business community could play an important, increasing role in different aspects, from living styles and consuming habits, construction and architectural styles, ways and methods of doing business, etc. [36].

On the other hand, the current status of urban development is the basis for the future urbanisation. Understanding this relationship, in its future urban development plan, the Government of Vietnam want to spend lots of money as well as other resources for overcoming current weakness and obstacles of existing cities and towns. In a step further, some experts suggested that the development of rural communities to new towns and the upgrading or current cities into cities of higher class should be reduced, so that planned efforts for this purpose could be used for the improvement of currently existing cities and towns..

The sixth factor influencing the urbanisation is the *migration of rural population* into cities and towns in Vietnam [19, 49, 33, 16, 22, 46]. The immigration of rural population into cities and towns, especially in the big cities such as Ho Chi Minh City, Hanoi, Da Nang, Hai Phong, Can Tho, Vinh, etc. influences the urbanisation in both directions- positive and negative (see table 6). The dominant status of positive or negative impacts depends on efforts of related parties, especially on the recognition, policies and responding actions of the government as well as actions of related local communities.

Table 1. Positive and negative impacts of rural migration into urban community

	For home (rural) community	For host (urban) community
Positive impacts	<ul style="list-style-type: none"> - Restructuring the economy and increasing rural productivity thanks additional investment and intensivation of the production; - Modernising living styles in the direction of urbanisation through family members, who migrated into cities and towns; - Increasing the consumption power thanks additional income sent by family members, who migrated into cities and towns; - Contributing to reduce the rural underemployment, especially for rural youth, and to reduce rural poverty; 	<ul style="list-style-type: none"> - Increasing the urban work force, the urban population and its share; - Restructuring the urban population in the direction of increasing the share of young population; - Increasing the urban consumption power; - Developing urban small business; - Strengthening the integration between urban and rural economy;
Negative impacts	<ul style="list-style-type: none"> - Reducing the rural work force, therefore, leading to creating uninhibited land and reducing the rural economical potentials and outputs; - Population aging and increasing needs on social care, especially health care; 	<ul style="list-style-type: none"> - Increasing needs on social services and creating overloads of infrastructure and housing condition as well as the social care system in cities, - Loosing the urban disciplines, especially in the urban construction, - "Ruralising" the life style of urban population; - Creating interruption in education for rural immigrating children;

Source: Authors' collections

In the last years, the Government of Vietnam, tried to control and reduce the flow of migrants into big cities. Such solutions will be continued and their effectiveness/ efficiency will be more and more focus points of central and local institutions. Some experts forecast that the immigration of rural population will achieves its saturation point soon and will be reduced in the next decades [25]. However, the factor will affect anyways the urbanisation of Vietnam in at least coming 10 years. Researches indicated other influence factors, such as the development of the real estate market [4], climate change (especially for the urbanisation in Mekong Delta and mountain are of North Vietnam) [3], the scientific- technological revolution and application of scientific- technological in the socio- economical development as well as in the urbanisation [7].

CONCLUSION

The urbanisation is surely an objective development trend in the modern society, including Vietnam. Many experts commended that the process went quickly in Vietnam, many other have opposite idea. It may be not important that the process went quickly or slowly: the more important question is: Does the process appropriate to the development conditions and goals of the country, what and how does it contribute to the country's socio- economic development and could its impacts be maintained sustainably?!

The factors influencing the urbanisation in Vietnam are currently mostly analysed qualitatively. There are researches, which were conducted in an evidences based approach, but mostly in form of case studies or on selected examples. Lack of systematic, comprehensive and consistent statistical data is another barrier hindering the qualitative analysis on the basis of secondary information. It's not rarely that different sources provide different data on a same aspect of the urbanisation. The situation makes qualitative studies being more urgently. This study could be, therefore, considered as a first step, which prepares for further qualitative analysis of factors, which influence the sustainable and efficient urbanisation in Vietnam.

Excepted the influencing factors described above, there are surely many other factors, which may be mentioned by researchers, government officials or even not recognised yet or affect the urbanisation in an intensity, which may be not enough for a deeper study. On the other hand, each influencing factor, which is described above, is a topic for a very comprehensive study. In the framework of a contribution to a workshop, this paper tries to present the summary of some of research results achieved to date.

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GREEN FINANCIAL DEVELOPMENT IN VIETNAM – RECOMMENDATIONS

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Abstract: *In the context that the “brown economy” model is destroying the environment and degrading resources, developed countries have gradually turned to a “green economy”. Over the past time, Vietnam’s economic growth has relied heavily on exploitation and export of raw resources, making the environment at risk of being threatened, affecting sustainable development. Currently, Vietnam is making many efforts towards green growth through transforming the growth model and restructuring the economy. Therefore, the problem is to effectively implement financial policies for green growth. In this article, the authors have assessed the current status of green finance development in Vietnam and made recommendations for the Government of Vietnam.*

Keywords: *Green Finance, green bond, Green stock market*

1. INTRODUCTION

In the context that the “brown economy” model is destroying the environment and degrading resources, developed countries have gradually turned to a “green economy”. Green economy is an economy towards the harmony between economy and ecological environment. The basic growth strategy of the green economy is to protect the environment, develop clean production technologies and clean energy, and quickly achieve sustainable growth. Meanwhile, green finance is an important method in green growth strategies of countries around the world.

Over the past time, Vietnam’s economic growth has relied heavily on exploitation and export of raw resources, making the environment at risk of being threatened, affecting sustainable development. Currently, Vietnam is making many efforts towards green growth through transforming the growth model and restructuring the economy. Therefore, the problem is to effectively implement financial policies for green growth.

What is Green Finance?

Green Finance aims at the growth of the financial industry in the common goal of sustainable development. There is no unified definition of green finance, green finance is understood as follows:

According to UNEP [8], green finance is related to the diversification of financial products and services, which are provided by financial institutions towards the sustainable development of the country.

In Chowdhury’s study [2], the concept of “Green finance is financial support towards green growth by reducing greenhouse gas emissions and environmental pollution in a meaningful way”. means”.

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According to Yao Wang [10], Green finance is a phenomenon that combines the world of finance and business with environmentally friendly behavior. It is an arena for many participants, including individual and business consumers, producers, investors, and financial lenders. Green finance can be expressed differently depending on the participant, and it may be led by financial incentives, a desire to preserve the planet, or a combination of both. Contrary to the traditional financial activities, green finance emphasizes more on the ecological environment benefit and pays more attention to environmental protection industry.

Green finance is mobilized for use in green investment activities on green financial market channels and green financial intermediaries. The role of the government in developing a green financial system is none other than creating conditions for the system's operations to run smoothly, smoothly, and efficiently. In this article, the authors have assessed the current status of green finance development in Vietnam and made recommendations for the Government of Vietnam.

2. GREEN FINANCIAL DEVELOPMENT POLICY IN VIETNAM TODAY.

In common with the development trend of the world, in Vietnam, green growth is identified as a strategy towards sustainable development. On September 25, 2012, the Prime Minister approved the National Strategy on Green Growth for the period 2011-2020 and a vision to 2050 in Decision 1393/QD-TTG. After that, the agencies actively promulgated regulations on green financial development as follows:

Table 1: Policies of the Government of Vietnam on green financial development

No.	Content	Text Name / Release Date
1	National action plan on green growth for the period 2014-2020.	Decision No. 403/QD-TTG of the Prime Minister issued on March 20, 2014
2	Promulgating the Action Plan of the Banking sector to implement the National Strategy on Green Growth until 2020.	Decision No. 1552/QD-NHNN of the State Bank of Vietnam issued on August 6, 2015
3	Action plan of the financial sector to implement the National Strategy on Green Growth until 2020	Decision No. 2183/QD-BTC of the Minister of Finance issued on October 20, 2015
4	The guidance on disclosing information on the stock market stipulates those enterprises must disclose environmental and social information.	Circular No. 155/2015/TT-BTC of the Minister of Finance issued on October 6, 2015
5	Regulations on issuance, registration, custody, listing, and trading of government debt instruments on the stock market	Decree 95/2018/ND-CP issued by the Government on June 30, 2018

Source: Author's compilation, 2021

Decision No. 2183/QD-BTC is the fundamental document in the development of the green capital market in Vietnam. The Ministry of Finance identifies the responsibilities of state management agencies in the financial sector, including: (i) The Ministry of Finance continues to promote products of the green capital market including: Green bonds (the vouchers of green enterprises, issued for green projects or green products); Government bonds and local government bonds serve green goals, programs and projects; Green index, sustainability index, carbon index; Green investment certificates and certificates issued by investment funds; (ii) The State Securities

Commission (SSC), the Stock Exchange will study and build a green financial framework for the capital market such as: promulgating regulations and conditions when listing shares (green listing), reporting (in sustainability reporting) and in monitoring (under green finance criteria).

Since then, a system of documents to guide the implementation has been built. Firstly, the green bond market in Vietnam is being operated under Decree 95/2018/ND-CP. In particular, the regulations on the organization of the issue, registration, depository, listing and trading of bonds have been issued in detail. However, at present, green bonds in Vietnam are only recognized as a type of government bond. The Ministry of Finance is currently the focal point to develop the scheme on the issuance of green government bonds and report to the Prime Minister for approval. The major content includes the purpose and volume of release; conditions and terms of bonds; registration, custody, listing and trading... are being built to be widely deployed in the market. Secondly, on the stock market, Circular No. 155/2015/TT-BTC on guidelines for information disclosure on the stock market stipulates those businesses must disclose environmental and social information. This is the first mandatory document for businesses to publish sustainable development information. Specifically, when businesses publish their Annual Report, they will have to publish sustainable development goals (environment, society, and community) and key programs related to the short and medium-term. This, in turn, will gradually raise the awareness of environmental protection, towards a green stock market. At the same time, the application of this Circular also provides an additional criterion for investors to consider before making decision, thereby, creating conditions for green securities products to be more easily selected.

3. REALITY OF THE GREEN FINANCIAL DEVELOPMENT IN VIETNAM

The green financial market in Vietnam is in its infancy. Market operations are mainly new at the early stage. The green bond market is in the phase of pilot implementation and implementation of propaganda programs and the introduction of green bonds to subjects in the market. The green stock market was launched and implemented most strongly by putting into operation the sustainable development index - VNSI and regulations requiring listed companies to provide information on the environment and society community.

3.1 Green bond

The green bond market in Vietnam is being piloted, and there are no products to be widely released in the market. The authorities are operating programs to raise awareness and introduce green bonds.

a) Pilot green bond issuance

Since 2015, the Hanoi Stock Exchange (HNX) has developed a green bond market development project in the cooperation program between the State Securities Commission and the German Development Cooperation (GIZ). On October 20, 2016, the Ministry of Finance approved the project on pilot issuance of green bonds of the local government and directed relevant units to pilot implementation. Accordingly, green bonds are built to mobilize capital for green projects such as projects on irrigation, environmental protection, wind power, etc. The Hanoi Stock Exchange (HNX) supports owners can issue green bond products and pilot implementation in some localities that need to raise capital.

Up to now, the first two localities are TP. Ho Chi Minh City and Ba Ria - Vung Tau have implemented this project. Bonds are issued in the form of local government bonds, with maturities

ranging from 3 to 5 years. According to preliminary statistics, TP. Ho Chi Minh City has issued 3,000 billion VND of bonds for 34 projects, of which 11 green projects have been listed based on the “Green Project List” issued by the State Bank (SB); Ba Ria - Vung Tau issues VND 500 billion green bonds with a term of 5 years for 8 projects. These are all projects for sustainable development.

b) Implement other programs

To timely put the green bond market into official operation, the authorities have promoted activities to propagate, introduce and promote the development of the market. Specifically:

(i) The State Securities Commission, with the support of GIZ, has implemented training and capacity-building programs for investors when participating in the green bond market. The target audience of these activities is institutional investors such as investment funds, insurance companies, pension funds,...etc

(ii) Ministry of Finance, SBV, SSC, HNX, Ho Chi Minh Stock Exchange. Ho Chi Minh City (HOSE) and the support of international organizations such as GIZ, International Finance Corporation (IFC) is developing a project to develop corporate green bonds and green bonds of financial institutions together with the pilot issuance of green corporate bonds.

(iii) HNX researched and developed a green bond index, developed a combination of credit, bond and international concessional capital support.

2.2 Green stock market

The green stock market in Vietnam is still in the creation stage. The authorities have launched programs and indicators to encourage businesses to focus on sustainable development. The main activities carried are divided into 3 groups: (i) improving the whole market understanding of green finance; (ii) encouraging the participation of businesses with green finance; (iii) develop and apply a market-wide sustainable development index.

Firstly, improving the whole market understanding of green finance is enhanced through training activities on combining environmental, social and corporate governance (ESG) factors. Since 2012, the State Securities Commission has coordinated with IFC, Global Reporting Initiative (GRI), HNX and HOSE to implement training programs to improve the capacity of listed companies on ESG information disclosure. In particular, the concept of sustainability reporting has been introduced to listed companies since 2013. Up to now, HOSE still regularly organizes training courses on sustainable development and reporting standards. international report under the Global Report Initiative (GRI)...

Secondly, encouraging the participation of businesses with green finance is reflected in groups of activities such as: (i) guiding enterprises to make ESG reports: State Securities Commission with the support of IFC announced. ESG report implementation manual for listed companies in 2016. Businesses can follow the steps to make ESG report easily. Because the manual provides detailed instructions as well as recommendations on the work contents that businesses need to follow to produce a complete ESG report; (ii) HOSE and the Securities Investment Review have put the criterion of full disclosure of ESG information as a condition to vote for the best annual report of enterprises since 2013. This award generates more motivation for businesses to publish information on sustainable development activities.

Thirdly, developing and applying a sustainable development index for the whole market: at the end of March 2017, HOSE announced the Vietnam Sustainability Index (VNSI) and officially put it into operation at the end of March 2017 and July 2017. The index is researched and deployed by HOSE in collaboration with GIZ and the State Securities Commission. The criteria for assessing sustainable development are researched and developed based on the International Reporting Standards on Global Sustainability Reporting (according to GRI), the Corporate Governance Principles of the United Nations, Economic Cooperation and Development (OECD) and the provisions of securities law in Vietnam. The VNSI index aims to: determine sustainable development standards for listed companies; supporting institutional and individual investors to identify businesses with “green” characteristics for investment; strengthen the trend of sustainable development of the whole economy; defining environmental, social and governance best practice criteria; added a new investment tool, contributing to the growth of the stock market and the economy.

Sustainability Index (VNSI) is a tool for individual and institutional investors and, used as the underlying asset for investment products (such as ETFs and futures index derivatives). Currently, the VNSI index includes 20 enterprises with the best sustainable development scores listed on HOSE in the Top VN100 and is calculated in real-time every 5 seconds (similar to VNIndex).

According to the SSE’s frameworks, Vietnam (in particular HOSE) has accomplished the following: (i) ESG training; (ii) Implementation of a sustainable development report (since 2016); (iii) Guide enterprises to make ESG reports; (iv) Developing a market-wide ESG index (VNSI index); (v) Apply minimum standards on ESG to allow businesses to go public (Circular No. 155/2015/TT-BTC dated October 6, 2015, on guidance on information disclosure on the stock market). This result is equivalent to the Hong Kong Stock Exchange, India (Bombay Stock Exchange and National Stock Exchange), Singapore, Malaysia, South Africa, Brazil and South Africa.

It can be seen that Vietnam’s green financial market is at early stage. There have been several activities and products introduced to the market but have not become an investment and development trend. Challenges facing green finance development in Vietnam can be listed as follows:

- Vietnam’s common institutional challenge: Green finance policies in Vietnam are expanding in development directions. The specific implementation regulations, market operation are still being studied, not yet promulgated. Typically, the new green bond policy is in experimental form, and has only recognized government votes, not yet recognized green corporate bonds. For green stocks, there is no policy for market development, regulations on products (specs, issuance conditions...). For green banks, credit products come from international support or commercial banks actively develop products, new green credit policies focus on encouraging, unclear mechanisms to apply.

- The sense of responsibility of people, businesses and organizations for environmental protection in general and for green finance, in particular, is still quite limited. Individuals, businesses and organizations are mobilized to participate in environmental protection activities, but basically, there is a lack of awareness in daily activities. The concepts of green growth and green finance have not been disseminated to all subjects in society. In which, especially green finance, businesses do not have access to green finance, people hardly know about the concept of green finance.

4. EXPERIENCE IN DEVELOPING GREEN FINANCE IN SOME COUNTRIES AROUND THE WORLD

** Strengthen the management of the public sector, use the state budget to support businesses and investment activities for green growth*

Firstly, countries take the government and large financial institutions as the focus in the process of developing green finance

Develop a green financial system with the government and major financial institutions as the focus to spread the trend of green development and support financial resources for green economic development for economic organizations of each nation. One of the successful countries in this approach is the United States. In the US, green banking and green banking activities under the support of the Government in matters related to the legal framework are decisive for the development of the green financial system. The Green Banking Law was officially born and passed by the US Congress in 2005.

In line with the US approach to developing the green financial system, in the UK, the Green Investment Bank (GIB) has shown its role in completing the policy framework and providing the necessary financial support. to address free market failures, risk aversion, high transaction costs, and lack of capital. GIB's intervention helps to mobilize funds from equity and debt markets, facilitating the valuation of risk in financial markets by improving transparency and openness investment in sustainable development projects.

The report on green finance of the Environmental Inspection Committee of the British Parliament in 2014 assessed the progress of implementing the UK's strategy to transition to a green economic model to draw the necessary adjustments. Along with green financing, the UK Government's initiatives also aim to remove barriers to green investment through simplifying procedures, supporting risk management, skills development and experience in green projects. In the recommendations section, the report highlights the role of the Government in developing an overall strategy to support a faster and more efficient transition.

In Asia, Korea has also proven this approach to be correct, thereby promoting green credit in the green financial system. The Korean Government created a non-profit credit guarantee organization called Financial Technology Corporation (KOTEC).

This organization acts as a credit guarantee fund, solving problems of lack of financial resources due to limited collateral assets of businesses when borrowing capital at commercial banks. More specifically, KOTEC is the only financial institution that has been assessed and granted green licenses for businesses. Each company that receives a green license can apply a guarantee of up to 7 billion Won.

In China, according to the People's Bank of China (PBoC), China needs about \$320 billion in green investment per year to protect its environment. Therefore, to promote the development of green bonds, on December 22, 2015, the PBoC allowed financial institutions to issue "green bonds" on the interbank market to increase funding sources for projects. "green" projects, supporting the transition to a green economy. In particular, the conditions to be issued green bonds are not complicated, the implementation procedures are short, thereby, encouraging the increase in market size. Regulations on green bonds are quite flexible (with the right to redeem, the interest rate agreed by the parties...). The fields of investment are diversified with 31 sub-sectors in 6 main groups: (1) Energy-saving; (2) Pollution Prevention and Control; (3) Resource Conservation and Recycling; (4) Clean Transportation; (5) Clean Energy; (6) Ecological Protection and Climate Change Adaptation.

As a result, China's green bond issuance volume grew explosively from over 1 billion USD (in 2015) to 36 billion USD (2016). In the first six months of 2017, China issued an additional

\$11.52 billion, accounting for more than 20% of global green bonds. By the end of the first quarter of 2019, China became the world's largest green bond issuer with a total scale of over \$93 billion (accounting for 22% of the global market size), of which two-thirds are green bonds. Green bonds are issued by commercial banks.

Second, support businesses and encourage them to take measures to protect the environment.

To encourage enterprises to take measures to protect the environment, the Government can choose: (i) Non-refundable subsidy for enterprises that commit to take measures to reduce environmental pollution in the future; (ii) Support for lending interest rates for enterprises if in the production and business plan, measures to reduce negative impacts on the environment are implemented; (iii) Tax subsidies in the form of tax exemption or reduction when enterprises apply measures to combat environmental pollution as prescribed. Governments of OECD countries (especially France, Germany, Italy) often apply the above business support policies to industries with high rates of environmental pollution. Enterprises do not have enough financial capacity to implement pollution reduction measures.

They create conditions for businesses to expand their business activities in an environmentally friendly direction.

Third, increasing investment spending encourages energy-saving and environmental protection.

Green energy research and development activities are considered by countries around the world as a central activity in the green growth strategy with the development of solar energy, wind energy and solar cell systems (Korea Country); setting up a bonus fund for enterprises conducting technical renovation towards energy saving and setting up a special fund for the treatment of polluting waste (China). The application of advanced technologies such as in the US and Japan also helps to reduce carbon emissions and environmental pollution in these countries.

In Korea, the Government approved a plan to invest 5 trillion won (\$4.3 billion) in 2008 to develop the green energy sector by 2012. This is considered a part of the key strategy of Korea. The Korean government approved a plan to invest 5 trillion won (\$4.3 billion) in 2008 to develop the green energy sector by 2012. According to the decision of the Korean Government, from 2008 to 2012, the above money will be spent on research and development of green energy such as: solar energy, wind energy and solar panel system. Meanwhile, in China, in June 2011, the China Development Reform Commission and the Chinese Ministry of Finance announced the establishment of specialized bonus funds sourced from the state budget to reward enterprises conducting technical renovation towards energy saving, this fund is an innovation when implemented in the spirit of reward instead of financial support. In addition, China also implemented several other measures such as: financial support for consumers when choosing to use energy-saving products (2009); establishment of a dedicated fund for the treatment of polluting waste (2007). The Chinese Government also implements subsidy policies to encourage the development of renewable energy sources through national programs and projects such as: State budget funding for the real "Golden Sun" project in the period 2009-2011; The fund provides financial support for the extension of energy-saving standards and the use of new energy sources for automobiles.

Fourth, increase spending on subsidies, national programs to support green growth such as job subsidies, direct job creation, education, and training programs, etc., giving priority to related

programs related to education and training rather than subsidies in the private sector or direct job creation in the public sector. According to the OECD survey, most countries choose training and education (USA, Australia, Austria, Belgium, Canada, Czech Republic, Hungary, Slovenia, Turkey, Korea) as a measure implementation related to green growth, and also some countries use the form of employment subsidies (Australia, Belgium, Czech, Greece, Hungary).

Observing the support of green growth in countries shows that subsidies and policies to support technology are potential tools to support green growth strategies. Although subsidies require large budget expenditures, subsidies that encourage the transition to green activities are often used more than valuation tools because they directly affect the performance of enterprises' production and consumer buying behavior. Valuation tools affect indirectly through changes in selling prices due to an increase or decrease in costs (increase or decrease in taxes) for businesses.

** Tax policy and environmental costs*

This is a measure applied by most countries in the world, this policy on the one encourages polluters to reduce the amount of waste released into the environment by including the cost of using the environment in the price of products. on the principle that polluters pay, and users pay. On the other hand, this policy also increases state budget revenue. The estimated income from this group of taxes/fees accounts for an average of 5% of gross domestic product (GDP) and ranges from 3% - 13% of GDP varies by the country. This is the basis for countries to deploy direct support activities for businesses and other research and support activities.

There are many types of taxes being applied by countries such as carbon tax, water pollution fee, waste fee, noise fee, environmental use fee, noise fee. The specific forms applied in countries are shown in Table 2 below:

Table 2: Environmental taxes, fees, and charges by countries around the world

Nation	Carb-on tax	Water pollution fee	Waste fee	Noise fees	Environmental usage fee	Tax on sale and use of motor vehicles	Tax on packaging and handling of packaging	Tax on chemical use
America	+		+	+	+	+		
England	+			+	+			
France	+	+		+	+			
Belgium			+		+			+
Japan	+			+	+			
Korea							+	
China						+	+	+

Source: OCED, 2020

First, the carbon tax is a tool that governments, economists, and policymakers are interested in in the process of moving towards green growth. Taxes on energy and greenhouse gas emissions have the most potential of all environmental taxes and are likely to increase in the future. It is forecasted that in 2020, with a price of 50 USD per ton of carbon, revenue will account for 1-3% of GDP and can increase more depending on the individual conditions of each country.

Second, taxes on the purchase/sale and use of motor vehicles. The application of this tax is available in many countries (China, Austria, USA, Canada...). This can be directed to the purpose of regulating the consumption of motor vehicles and mobilizing revenue for the budget. Taxes on one-time vehicle sales and registration are distinguished by the weight or engine size of the car or truck. In Austria, the US and Canada, vehicle sales taxes are based on environmental criteria, such as emissions and fuel use. The United States charges very different taxes, ranging from \$1,000 to \$7,700, on the sale of a non-energy-efficient motor vehicle, based on the distance the vehicle can travel per Gallon. Meanwhile, in China, the motor vehicle purchase tax applies to individuals and domestic car buyers, and the tax payable is calculated according to the price of the motor vehicle. In addition, to regulate income, control the use and consumption of ships and vehicles is more equitable, from October 25, 2010, the tax on the use of boats and motor vehicles in China is divided into 7 levels (from 60 - 5400 yuan) based on engine parameters.

Third, packaging tax and tax on waste treatment from packaging. Many countries use a tax on packaging to reduce packaging use and packaging waste (Belgium, Denmark, Norway, Korea); or provide different tax rates to encourage the reuse and recycling of packaging materials (Norway, Finland). Denmark, Korea and Norway also levy taxes on other shipping containers, with different rates for the materials used in the crates. Different tax rates can encourage the reuse and recycling of packaging materials, for example in Norway only non-replaceable beverage containers are taxable, and in Finland, the tax rate depending on the type of bin is recyclable or not.

In addition, countries also have tax policies that regulate the final disposal of waste for specific packaging or products that may cause waste-related problems. In Austria, the government imposes different tax rates on landfills depending on the efficiency of the vehicles in three levels: EUR 58/ton of waste (inefficient grade), EUR 29/ton of waste (normal grade), or EUR 15/ton of waste (effective grade). Meanwhile, in Denmark, the government applies different taxes between incineration and landfilling; landfilled waste (EUR 50/ton of waste) will incur a higher fee than incinerated waste (EUR 45/ton of waste), waste deposited at an energy recovery facility will be subject to a lower tax rate (38 EUR/ton of waste).

Fourth, taxes use chemicals and deplete natural resources. In Belgium, Canada, Denmark, Finland and Norway, the Government has levied taxes on the use of pesticides. The Netherlands has a mineral accounting system where over 10 kg of excess phosphate per hectare will be taxed at EUR 4.54/kg and excess nitrogen will be taxed at EUR 0.68/ha. Sweden levies a tax on fertilizers, with a tax rate of 0.2 EUR/kg nitrogen and 3.4 EUR/gram cadmium. The US charges taxes on fertilizers with varying rates from 0.9 EUR to 3.7 EUR per ton of product on average. In China, the tax is levied on all resource products, while expanding the tax on the sales of crude oil and natural gas from some regions to the whole country. Taxes on crude oil and natural gas will be 5-10% of total sales. On average, a barrel of crude oil sells for \$80, the royalty tax is \$4 per barrel, 6-13 times higher than the tax rate before this reform. For coke, the tax will be 8-20 yuan/ton, and the rare earth tax will be 0.4-60 yuan/ton. The tax applied to coal remains unchanged at 0.3 - 5 yuan/ton.

** Develop green financial market*

According to the International Energy Agency (IEA) and the UNEP Green Economy Report, to reduce by a quarter of the world energy consumption by 2050 would require an estimated annual additional investment of up to to 1-2.5% of world GDP. The greening of existing financial markets will allow countries to more easily mobilize the capital needed to implement their green growth strategies.

Currently, several countries have implemented a greening strategy for financial markets in some different ways:

- First, the greening model of China's financial system:

China builds a green financial system. According to Chinese government calculations, over the next five years China will need up to \$320 billion annually in green investments to meet its environmental protection goals. While the state budget is currently only able to meet 15% of the demand, so the financial system will play an important role in transferring capital and mobilizing private capital to invest in green fields. The Green Finance Program in China consists of 14 official recommendations and 16 annexes that provide a detailed analysis of the rationale for green finance. The content of the program focuses on the following major issues: (1) building an effective green financial system using various financial instruments with green loans, green investment funds, green insurance, etc.; (2) introducing regulations and policies to support cost reduction for green projects and improve the funding mechanism for green projects; (3) developing financial institutions specializing in green lending and investment (these new institutions require partial investment from the government to demonstrate to the financial market the government's commitment to encourage green investment and will reduce the private sector's apprehension about the risks of investing in green projects)...

- Second, developing the green bond market:

Green bonds are a form of bond issued in connection with environmentally friendly investments. Initially, the bonds were mainly issued from international financial institutions and government-guaranteed financial institutions including the World Bank (WB), Asian Development Bank (ADB), Bank Korean Import and Export. Investors include institutional investors and some individuals. The average bond term is between 5 and 6 years. The main issuers are international financial institutions such as the World Bank and the International Finance Corporation (IFC). This form attracts investors due to its social value for supporting sustainable development and green growth; relatively short maturities, high liquidity (most green bonds have maturities from 1-7 years and can be traded easily on the secondary market); at the same time many green bonds are tax-exempt and therefore offer high returns and relatively low risk.

- Third, develop a green banking model:

Since 2010, the UK Government has announced a plan to establish a Green Investment Bank specializing in investing in green infrastructure projects that cannot be financed by the market due to concerns about associated risks. The UK Green Investment Bank went into operation in 2012 and is a policy bank owned by the UK Government. The UK government provides charter capital for the bank worth £3.8 billion and is a member of the Board of Directors. However, the Bank's operations are independent and not subject to the control of the Government. Green Investment Bank mainly finance green infrastructure projects. Through the establishment and operation of the Green Investment Bank, the British Government hopes to encourage private capital for green projects to accelerate the transition to a green economy. The bank's main investment areas include renewable energy, transportation, waste treatment and water resources, etc. The bank gives priority to green infrastructure projects with low risk, high value, high commerciality.

In the US, there are now 12 green banks at the state, county, and city levels, supporting the emergence of new markets. To date, green US banks have turned every \$1 of public capitalization

into \$3.40 in private investment by providing loans that spur new investments, generating \$3.67 billion in investments. invest in clean energy nationwide through 2018. Recently, the House Energy and Commerce Committee is introducing a comprehensive bill on climate and green finance, which includes National Green Banking Act. The National Green Bank Act will raise \$50 billion through green bond issuances to support state and local green banks. The Senate bill would also raise \$35 billion and create an independent nonprofit to invest in green projects.

The greening of the financial system is of great interest to many countries around the world in order to overcome and limit the negative impacts of economic development on the environment and improve the environment. Vietnam is taking the first step towards sustainable development and the experience it has drawn to realize the green growth goals of the economy, of which the important role is the leading role of the tectonic government shown in the following aspects:

Firstly, the government formulates strategies, creates markets and creates conditions for sustainable economic development.

Second, the government forecasts, shares and guides in sustainable economic development.

Third, the government brings enterprise spirit in encouraging sustainable economic development.

5. DISCUSSION AND RECOMMENDATIONS FOR THE GOVERNMENT OF VIETNAM

In the national development strategy on green growth for the period 2011-2020 and vision to 2050, Vietnam has identified a requirement throughout the strategy that is rapid development associated with sustainable development with the following objectives: namely, restructuring and perfecting economic institutions in the direction of greening existing industries and encouraging the development of economic sectors that use energy and resources efficiently with high added value; research and apply advanced technologies to more effectively use natural resources, reduce the intensity of greenhouse gas emissions, and contribute to an effective response to climate change; improve people's living standards, build environmentally friendly lifestyles through job creation from green industries, agriculture and services. Based on an assessment of the challenges that Vietnam faces in the process of moving towards green growth, combined with lessons learned on using financial policies to support green growth in some countries around the world, can suggest some policy recommendations for Vietnam as follows:

Firstly, ensure green security in health, control the Covid 19 epidemics, strengthen diplomacy to prevent Covid 19, create safety trust for people, domestic investors, foreign investors...

Second, promote the role of the Government in management and strategy formulation, to create markets and create conditions for green economic development.

The government implements market building, to make the market work efficiently by creating a fair and effective legal corridor. Specifically, the Government builds and strengthens the legal system, creates a legal framework for socio-economic relations, allows government actors, businesses, associations, and training organizations to its jurisdiction is willing to create an environment that encourages or can provide the financial products and services necessary to facilitate the transition from a traditional "brown" economy to a traditional "brown" economy. "green" economy.

The Government has the responsibility to create conditions for all economic sectors and sectors to promote their full potential in the competitive environment and international integration, strictly control and eliminate business monopolies as well as other mechanisms, policies that lead to inequality in competition. Laws and mechanisms and policies must create the most favorable conditions for all people and businesses. National resources and resources must be allocated to those who can use them with the highest efficiency for society towards the goal of building a green economy.

Third, associate the national green growth strategy with fiscal policymaking (taxes and budget expenditures). Tax policy orientations to encourage the use of products with low environmental pollution; at the same time combined with the restriction of price subsidies, fossil fuel subsidies (such as gasoline, kerosene, fuel oil, etc.) are not necessary. Besides, it is necessary to study the feasibility of alternative fuel sources, such as biofuels.

The Government needs to develop preferential policies, especially incentives on taxes, fees, and appropriate financial loans for the business sector in order to encourage enterprises to invest in technological innovation towards green technology, employment. green, creating competitive advantages for enterprises in the market.

Fourth, the Government forecasts, shares, and guides in green economic development

The government needs to be able to predict what manifests itself in the policy-making process with a systemic vision to be able to detect possibilities that can reconcile and balance different resource requirements. The Government needs to develop preferential policies, especially incentives on taxes, fees, and appropriate financial loans for the business sector to encourage enterprises to invest in technological innovation towards green technology to create competitive advantages for enterprises in the market.

However, from sharing and guiding, the Government will clearly understand the activities of businesses and the harmful effects that activities may have on the environment. Therefore, the Government must identify sanctions for violations of environmental protection regulations.

Another aspect of the Government's sharing and guiding mission is reflected in the implementation of measures to assist in raising consumers' awareness of environmental protection through changing consumption habits.

Fifth, complete the development orientation of the green capital market

In the coming time, the Government continues to improve the development orientation of the green capital market:

- Finalize the scheme on the issuance of green government bonds and submit it to the Government for approval to have a basis for widespread implementation.
- Develop and implement support policies for the green capital market such as: fiscal policies (taxes and fees) as well as a guaranteed mechanism to support green industries/fields.

Simultaneously, apply policies to support green capital markets through:

- Actively participate in cooperation with international financial institutions such as WB, IFC, Asian Development Bank (ADB)... and international green financial funds to take advantage of green development capital of organizations.
- Consider forming a green credit-finance fund: professionalize the granting of green credit for important projects.

Sixth, increase budget spending on investment in clean technology development and encourage support for production and business industries using clean technology and energy.

The above expenditure is used by the Government to support research and application of production technology that saves resources, consumes less energy, and offers support programs to promote each stage in the technology cycle, including research and development (R&D), commercialization and propaganda. In addition, it is necessary to encourage companies to directly invest in the development and implementation of new technologies, reduce outdated technology, and at the same time encourage businesses to use clean technology through channels such as tax policy, legal documents, procedures, favorable investment mechanism.

Additionally, there should be solutions to encourage and change consumer behavior towards environmentally friendly. With the synchronous, drastic, and flexible implementation of many of the above solutions, in the coming time, Vietnam will be able to fulfill the goal of fast and sustainable economic growth.

Seventh, raise awareness on green growth and green finance for all stakeholders in society in a practical, effective, and widespread manner.

- Increasing education and propaganda on environmental protection, garbage classification, economic use of resources...

- Advocate changing consumption habits with an increase in the choice of green, clean and environmental protection products.

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DIGITAL TRANSFORMATION FOR SUSTAINABLE DEVELOPMENT IN THE CONTEXT OF CORONAVIRUS DISEASE – A CASE FROM VIETNAM

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Abstract: *In Vietnam, the role of digitalization in a sustainable society has been discussed extensively in the past decades, but has yet to be reviewed through the lens of the current global pandemic crisis. This article aims to analyze the impact of coronavirus disease (COVID-19) to Vietnam from the social, economic and environmental perspective. Afterward, the study focuses on the area that hold particular promise in this endeavor: digital transformation. The paper also identifies the roles of digital transformation in enabling Vietnam to respond to the pandemic. Digitalization is, however, facing some limitations. The challenge before us is to shape the digital revolution in ways that ensure green, inclusive and resilient growth.*

Keywords: *Digitalization; Digital transformation, SDGs; COVID-19*

1. INTRODUCTION

In 2021, the COVID-19 pandemic continues to present an unprecedented challenge to the sustainable development of Vietnam. After considerable success during 2020, new COVID-19 wave since May 2021, with a significant pickup in reported daily new cases, is posing downside risks to Vietnam's economy. Although the Government has deployed vaccination campaigns while still monitoring for new outbreaks and continuing policies to protect those who do not yet have immunity, economic recovery efforts are also increasingly urgent to prepare for a "post-pandemic" reality.

September 2019 marked the beginning of the decade of action to deliver the Sustainable Development Goals (SDGs) by 2030. While Vietnam contributed to impressive progress in reducing poverty, hunger eradication, actions to protect the climate, and global partnership, there were big challenges with other remaining goals. The outbreak of COVID – 19 and containment measures can be a massive setback for Vietnam to achieve the SDGs by 2030. In that context, digitalization is one focus area that can help speed – up progress toward the 2030 Agenda for Sustainable Development. Even before the onset of the pandemic, the digital revolution was transforming how people and businesses work and create economic value. The pandemic has accelerated the digital transformation. The use of digital technology has helped the Government and economic entities manage pandemic responses, and face with the immediate effects of social quarantine and other containment measures. Nevertheless, there are major challenges to cope with in the process of digitalization to foster green, inclusive, sustainable and resilient recovery and enable progress towards sustainable development goals.

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2. THE IMPACT OF COVID – 19 DISEASE

The COVID-19 outbreak which originated from Wuhan city, China has widely expanded to 221 countries¹ and had been declared as a public health emergency by the World Health Organization.

The hit of the coronavirus disease (COVID-19) has created global health and socio-economic crises that further undermine the prospects of meeting the 2030 Agenda for Sustainable Development in the Asia-Pacific region as well as in Vietnam. The COVID-19 has challenged the Government to act promptly in controlling the spread of the pandemic and accelerate vaccination campaigns, simultaneously providing relief for vulnerable populations.

In 2015 United Nations Member State adopted The Sustainable Development Goals (SDGs), also known as the Global Goals as a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity by 2030. Before COVID-19 outbreak, as of 2019, Viet Nam only achieve 5 out of 17 SDGs by 2030 (including: Goal 1 on poverty reduction; Goal 2 on hunger eradication; Goal 4 on inclusive quality education; Goal 13 on actions to protect the climate; Goal 17 on global partnership). However, there remain 12 SDGs difficult to be completed, especially SDG 12 and SDG 14. The Covid-19 pandemic with its impact exacerbates the challenges of achieving the SDGs by 2030.

Figure 1. 1. Sustainable Development Goals

1 - No poverty	2 – No hunger	3 – Good health	4 - Quality Education	5 – Gender equality	6 – Clean water and sanitation
7 - Renewable energy	8 – Good jobs and economic growth	9 – Innovation and infrastructure	10 - Reduced inequalities	11 – Sustainable cities and communities	12 – Responsible consumption
13 - Climate action	14- Life below water	15 – Life on land	16 – Peace and justice	17 – Partnerships for the goals	Sustainable Development Goals

Source: Asia and the Pacific SDGs Progress Report 2021

2.1. Economic impacts

Given its deep integration with the global economy, the Vietnamese economy has been severely hit by the ongoing COVID-19 pandemic. The crisis has adversely affected all sectors in Vietnam and COVID-19 related losses may not be fully reflected in the statistics. It has affected the economy on both the supply and demand fronts.

On the demand front, aggregate demand comprising consumption, investment and exports has declined, with the tourism and airline sectors the worst. As of 2020, Vietnam Airlines — the only national airline — has reported that the damage from closing routes to be about US\$1.3 billion. Vietnam’s tourism industry is facing an expected loss of between US\$5.9 and US\$7 billion².

On the supply front, the pandemic and social distancing measures have disrupted supply chains inputs and labour supply. Prime Minister Nguyen Xuan Phuc signed Directive No 15, Directive No 16 in late March, 2020 and Directive No 17 in July 2021, which introducing measures that included nationwide social distancing. These measures have been effective but several business sectors, including manufacturers, restaurants, shops, cinemas and entertainment venues, have

¹ The Committee for the Coordination of Statistical Activities CCSA (2021) - How COVID-19 is changing the world: a statistical perspective Volume III

² General Statistics Office (2020), Seminar on Assessment of Covid-19 impact on Vietnamese enterprises

been affected by the collapse in demand. For instance, automobile manufacturers such as Honda, Nissan, Toyota, Ford, and Hyundai have halted production in Vietnam due to the scarcity of input components as well as the social distancing measures. Operations are only likely to resume when social distancing restrictions are lifted and supply chains are reconnected.

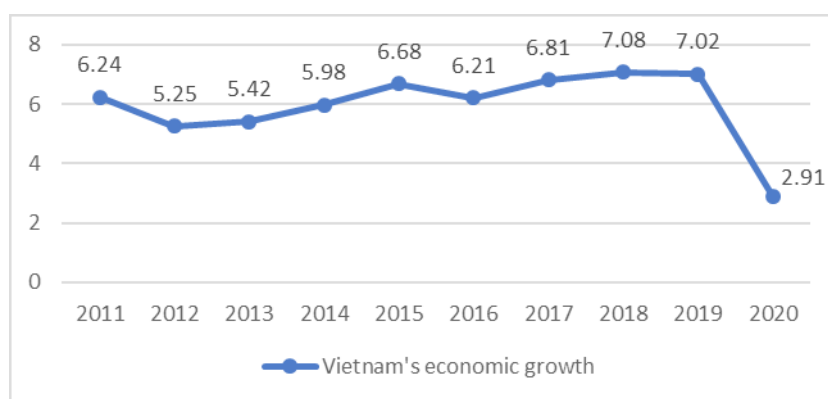
Many enterprises, especially those that rely on foreign specialists and workers, have also been heavily affected by Covid-19 due to a shortage in labor supply. The cost of labor for businesses has further increased due to the need to provide masks, disinfectant liquid, and the implementation of safety measures to prevent the spread of the virus.

According to a 2020 survey by Vietnam's General Statistics Office¹, 85.7 per cent of businesses have been affected by Covid-19. The construction and service sectors have been the most affected, with 86.1 per cent and 85.9 per cent of businesses being hit respectively. In the agriculture, forestry and fishery sector, the proportion of businesses affected by the pandemic was lower, at 78.7 per cent. However, there were specific industries such as aviation, accommodation services, catering services, travel services, education and training, textiles, leather production, leather products, electronic manufacturing, and car manufacturing which had over 90 per cent of businesses affected by the pandemic. These industries were heavily affected by disruption in global and regional supply chains as well as the implementation of social distancing measures.

Classified by size, micro firms saw the biggest drop in revenue, followed by small, medium, and large firms. Given that the vast majority of businesses in Vietnam are micro and small sized ones, the pandemic has therefore affected a vast number of businesses in the country.

The uninterrupted collapse in working hours globally due to the COVID-19 outbreak means that roughly 10.3 million of full-time workers in Vietnam stand in immediate danger of having their livelihoods destroyed. Poverty and near-poverty rates worsened across Vietnam, with migrant and ethnic minority households disproportionately affected. Vietnam's economic growth in 2020 declined sharply due to the Covid-19 pandemic, from a high of around 7 per cent to 2.91 per cent.

Figure 1. 2: Vietnam's economic growth



Source: General Statistics Office of Vietnam

1.2 Social impacts

From a social perspective, the loss of income brought about by the pandemic has raised the poverty rate and near-poverty rate in Vietnam. According to a 2020 survey conducted by the UNDP

¹ General Statistics Office (2021), Report on socio-economic situation of 4th Quarter and year 2020

and UN Women in Viet Nam, the proportion of income-poor households in Vietnam increased dramatically from 11.3 per cent in December 2019 to 50.7 per cent in April 2020¹

The proportion of near-poor households increased from 3.8 per cent to 6.5 per cent across the same time period. More importantly, the survey also highlighted that ethnic minority households, households with informal workers, and migrant families have been disproportionately affected by the pandemic. The survey estimates that ethnic minority households' income in April and May 2020 dropped by 75 per cent and 64.3 per cent respectively compared to December 2019 income levels, while income loss for the Kinh - Hoa majority² was less at 69.7 per cent and 48 per cent respectively. Likewise, migrant households experienced income loss of 74.9 per cent and 56.8 per cent respectively, while non-migrant households' incomes dropped 69.2 per cent and 47.5 per cent respectively.

Macroeconomic stability in 2020 was negatively affected by Covid-19 in 2020, although inflation remained low under 4 per cent. The budget deficit increased sharply (from 3.36 per cent of GDP in 2019 to 4.49 per cent of GDP in 2020) due to an increase in Government spending for pandemic-related financial support for citizens and businesses. Accordingly, debt indicators for 2020, namely public debt (as percentage of GDP), foreign debt (as percentage of GDP), government debt payments to total budget revenue, and foreign debt repayment (as percentage of total exports) all increased compared to the previous year³.

Women, children, the elderly, persons with disabilities, and migrant households have been among the most affected by the pandemic. Most older persons and persons with disabilities in employment work in the informal sector, which can make them especially vulnerable. The deaf and blind often cannot access critical information on the pandemic via television, radio or the Internet, owing to a lack of sign language, real time captioning and special needs websites.

Healthcare workers are predominantly women and therefore more exposed to the COVID-19 infection. The crisis has also disproportionately affected women's mental and emotional health as COVID-19 has increased the burden of unpaid care and domestic work.

2.2. Environmental impacts

At the start of the pandemic, in some parts of the country lockdowns temporarily reduced pressure on the environment, mainly due to reduced transport, manufacturing and energy use. But these effects were short lived and are not to be mistaken for a departure from prevailing unsustainable consumption patterns. Pollution levels rebounded quickly. At the same time, a short-term focus on stimulating the economy has been detrimental to the environment at times.

The pandemic has also triggered a surge in plastic pollution. Medical waste, single use facemasks, gloves and other non-degradable items have ended up in rivers and oceans, threatening marine lives and human health.

2. DIGITAL TRANSFORMATION TOWARD SUSTAINABLE DEVELOPMENT IN THE CONTEXT OF CORONAVIRUS DISEASE

2.1. The wave of digital transformation toward sustainable development society in Vietnam

Digital transformation changes the whole world, regardless of country, region or culture. Researchers and practitioners interpret the concept of digital transformation in different ways. While

¹ UNDP and UN Women in Viet Nam (2020), Covid-19 Socio-Economic Impact on Vulnerable Households and Enterprises in Viet Nam - A gender-sensitive assessment, p. 10.

² Kinh (Viet), Hoa (Chinese) are two major ethnic groups in Vietnam that tend to perform economically better than others.

³ Government's report on Vietnamese Economy (2020)

The OECD defines it as “the economic and societal effects of digitization and digitalization.”¹, experts at Price water house Coopers contend that this process “establishes new technologies based on the Internet with a fundamental impact on the society as a whole”²

Vietnam was already committed to a significant digital transformation toward a sustainable development, even before the COVID-19 pandemic. It launched in December 2019 the National Public Services Portal, an electronic platform connecting the government, citizens, and businesses and providing information on public services and administrative procedures. At the time, it vowed to become the leading digital economy in ASEAN by 2030, with digital economic activities set to account for 30 per cent of its GDP³. The pandemic accelerated the trend. On June 3, 2020, Prime Minister Nguyen Xuan Phuc approved the National Digital Transformation Roadmap 2025 (with a vision toward 2030), which sets additional targets and guidelines to help Vietnam reaching its digital transformation goals with a focus on three pillars: E-government, e-economy and e-society.

The first pillar, e-government, aims to overhaul the entire government infrastructure, from digitalizing all public services and administrative procedures to developing an integrated system of databases. This government digitization will require all government-related documents to be sent via the national e-document exchange platform and approved using e-signatures. Comprehensive national databases on population, land, enterprise registration, finance, and social insurance will be created, connected to a national data centre, and will be publicly accessible online. This platform builds on the National Public Service Portal, which will keep expanding to pull other services into its digital fold.

Under the second pillar, e-economy, the Government plans to build a digital economy that will represent up to 30 per cent of Vietnam’s GDP by 2030, a substantial increase from the five per cent that digital activities accounted for in 2019. E-commerce has been identified as an indispensable segment of this new economy. The National Digital Transformation Roadmap, building on the recently-approved National E-Commerce Development Strategy for 2021-2025, outlines specific measures to encourage more consumers to switch from offline to online shopping, increase the participation of small and medium enterprises on e-commerce platforms, and strengthen the supporting digital infrastructure. Vietnam has also set the goal of reaching 100,000 tech firms domestically as the main driver for the design and production of innovative tech products and services with its ‘Make in Vietnam’ brand.

The third pillar, e-society, intends to address Vietnam’s ‘digital gap,’ or the unequal access to the internet and the use of online services. Having an internet penetration rate of only slightly more than 60 per cent, Vietnam plans to boost access to its fibre-optic broadband network to 80 per cent by 2025 and to 100 per cent by 2030. Other major objectives include the deployment of 5G services nationwide and the increase to 80 per cent by 2030 of e-payment usage. The proposed reforms under this third pillar also highlight the urgent need for post-secondary educational reforms to foster the learning of new technologies such as artificial intelligence, blockchain, cloud computing, Big Data, and the Internet of Things.

There is more to digital transformation than the widely discussed the trend of dominant digital platforms and the use of big data. In the context of the 2030 Agenda for Sustainable Development,

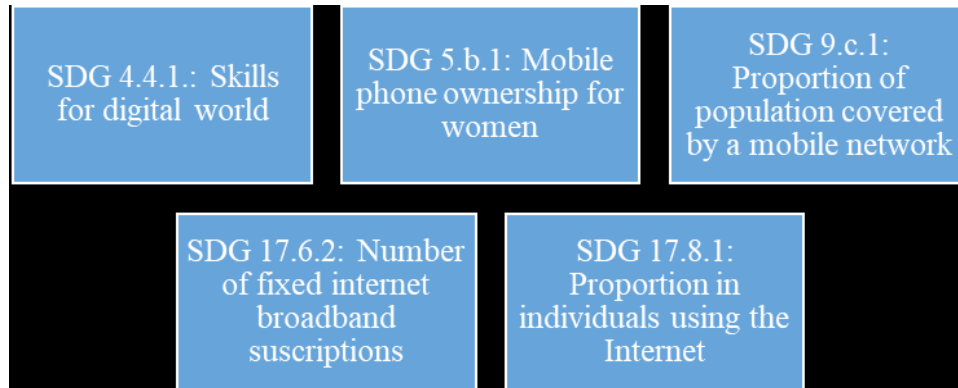
¹ OECD, OECD Digital Economy Outlook (2020)

² Pricewaterhousecoopers (2013) Annual Report 2013

³ National Digital Transformation Roadmap 2025 (2020)

digital transformation is a process that plays an important role in an equitable and sustainable development. Digital technology is critical to achieve 17 goals of the SDGs.

Figure 2. 1 Highlights selected targets of SDGs with digital scope.



Source: ESCAP based on the Sustainable Development Goals targets

The figure illustrates that digital transformation has a great effect on numerous areas of development and thus requires a system-wide approach. To make progress on all three pillars of sustainable development— social, environmental and economic—investments in broad and affordable digital infrastructure are indispensable. Applications of this infrastructure cover social protection services and payments, finance and product development for MSMEs, revenue collection and management of natural resources and public utilities such as electric grids and smart energy systems, among others.

Digital transformation in development is at its best when it is integrated, inclusive and responsive to the needs of marginalized populations and the vulnerable. The Government could take more actions to reduce the risks of further excluding marginalized populations in the face of accelerating digitalization in remote and lower-income areas with weak social protection systems. Proactive measures in areas such as education, skills development, tech startup ecosystem development and better access and affordability of digital connectivity are also important.

2.2. Digital transformation in responding to COVID-19 in Vietnam

- **Digital technology is vital for pandemic preparedness and response**

A new survey finds that responses to COVID-19 have speeded the adoption of digital technologies by several years and helped countries including Vietnam enhance the socio-economic recovery and resilience. The trend has confirmed the key role that the 2030 Agenda places on Science, Technology and Innovation in addressing development challenges. Digital transformation is imperative in the economic systems and modern society. In the era of the COVID-19 pandemic, digital tools are employed to monitor, coordinate and manage the public health crisis. They are used in contact tracing, social mobilization, and delivery of pandemic relief. Health and education systems have depended on virtual delivery modes and much of the economic system relied on digitalized supply chains and platforms to keep businesses alive.

COVID-19 has triggered an unprecedented demand for digital governance and platforms to provide health technology solutions and share successful experiences such as screening, tracking, prioritizing the use and allocation of resources, and designing targeted responses. The explosion

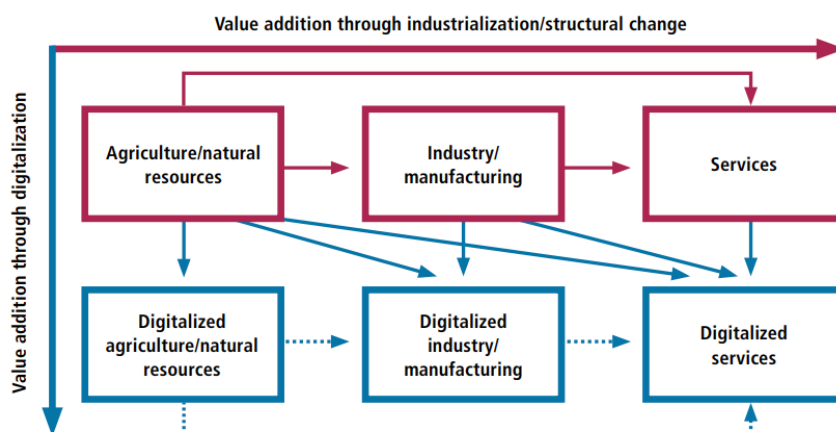
of e-commerce platforms and digital payments solutions during the pandemic has enabled many businesses not only to survive, but to pivot their operations to online platforms to thrive. Online learning also allowed students to continue their studies during lockdowns.

The use of digital technologies cushioned some of the impact of the pandemic lockdowns. Given the estimated 63.6 million internet users in Vietnam and the 20 per cent increase in online shopping as of March 2020¹, e-commerce businesses have served the high demand of consumption during social quarantine. The temporary shift to online learning during the COVID-19 crisis helps to solve disparities in access to learning across the country. E-learning methods have been developed despite infrastructure challenges, especially in rural areas.

IT-based solutions have expanded into the healthcare sector with the development of high-tech apps to help prevent and control COVID-19 and implement telemedicine. This approach reduces treatment-related costs and overcrowding at tertiary hospitals and can be applied to manage other diseases.

It can be seen that, the COVID-19 pandemic has demonstrated the power of digital transformation. Digital solutions have a key role to play in the pandemic response and recovery, as well as in shaping future economic sustainability and resilience. The successful leveraging of the digital economy can generate higher incomes, employment and taxable revenues. Digitalization has the potential to transform industries and add economic value. Data collection, processing, and analysis are part of this process. Figure 2.2 illustrates how the digital economy can open additional paths for value addition.

Figure 2. 2: Digitalization's new dimension for value addition



Sources: Bauer et al., 2014; United States Chamber of Commerce, 2016; Leviathan Security Group, 2015; as cited in UNCTAD 2019 Digital Economy Report, 2019.

The COVID-19 pandemic has fast-tracked digital transformation and the use of digital technology, boosting chances for it now to be harnessed during the recovery phase. Figure 2.3 shows how digital technology can serve as a tool in pandemic preparedness and response in ways that are difficult to achieve manually.

¹ Minh Cuong Duong (2020), The impacts of COVID-19 on Vietnam and ways to move forward, East Asia Forum Quarterly, Immunising Asia, Vol. 12 No. 2.

Figure 2. 3: Digital technology as a tool for pandemic preparedness and response

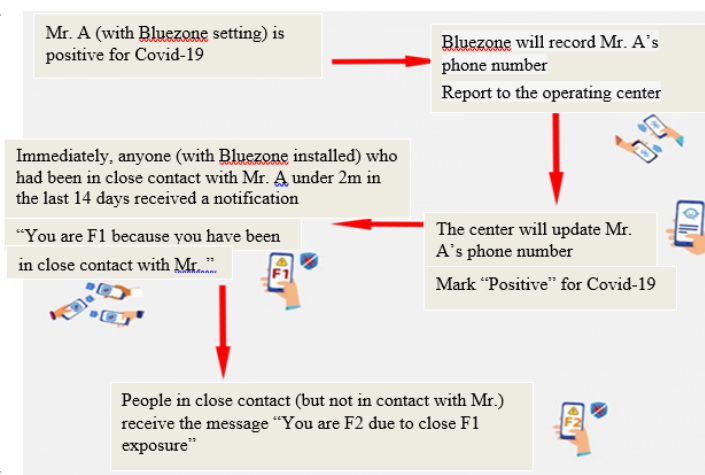


Source: Modified based on Sera Whitelaw and others, "Applications of digital technology in COVID-19 pandemic planning and response", *Lancet Digital Health*, vol. 2, issue 8 (August 2020), e435-e440

Vietnam's on-going regulatory focus on digital transformation has helped the nation navigate this health crisis through its timely and evidence-based information, medical advice and medical supplies. At COVID -19 peak, local authorities used different digital tools (text messages, websites, social media) to send alert notifications. This action not only raised public awareness about the pandemic, but also resulted in a significant rise in online public services.

Right from the very first Covid wave, Vietnam has developed and applied a software to detect close contact called Bluezone, which is an application that uses Bluetooth Low Energy (BLE) technology to record close contact between smart mobile phones with the same setting and using Bluezone users. The application will warn if the user has been in close contact with the case, the suspected case or the person who has been in close contact with the case or suspected case.

Figure 2. 4: Infographic of how Bluezone works



Source: <https://bluezone.gov.vn/>

Bluezone is one of the examples which show the current digital trend of health care system in Vietnam. Riding on this current momentum, the Ministry of Information and Communications launched Zavi, Vietnam's first homegrown video-conferencing platform, in May 2020. Through its support and rollout of Zavi, the government has demonstrated its commitment to developing a local champion to challenge the widespread use of China-based Zoom, and to stay at the forefront of the fast-changing post-COVID innovation landscape in Vietnam.

In the trend of the 4.0 revolution, The Government, individuals and businesses have been rapidly moving online, mainly driven by restrictions on human contact during the COVID-19 pandemic. The pandemic has transformed the way people use digital technologies and digital platforms to teach, learn, conduct businesses, and make transactions online and has accelerated the digitalization of economies. Table 2.1 provides a snapshot of technology use in Vietnam

Table 2. 1: Digital technology used in the COVID-19 pandemic response in Vietnam

Purpose	Digital tool or technology	Examples of use
Survey apps and websites	Symptom reporting	Smartphone app and web-based epidemic intelligence tools
Interruption of community Transmission	Smartphone app, low-power Bluetooth technology	Digital contact tracing; quarantine and self-isolation
Clinical care and management	Tele-conferencing	Telemedicine, referral
Public communication	Social-media platforms	Targeted communication

Sources: *Nature Medicine*, vol. 26 (2020), pp 1183-1192; *Lancet Digital Health*, vol. 2 (August 2020): e435-40, ESCAP, *Promoting meaningful and affordable access to broadband Internet for inclusive development* (February 2021).

- **Digitalization stimulates formalization, social protection and sustainability through digital payments**

Social programs often inadequately cover groups of people receiving the least income in the society. These structural weaknesses are even worse in Vietnam with over three-quarters (76%) of workers are employed in the informal economy¹. The informalities keep a substantial number of workers out of the social safety net and undermining the effectiveness of governmental policies. Even in the formal ones, giving loans or grants to employers so that they can be affordable to pay their employees throughout the pandemic has proved to be a challenge.

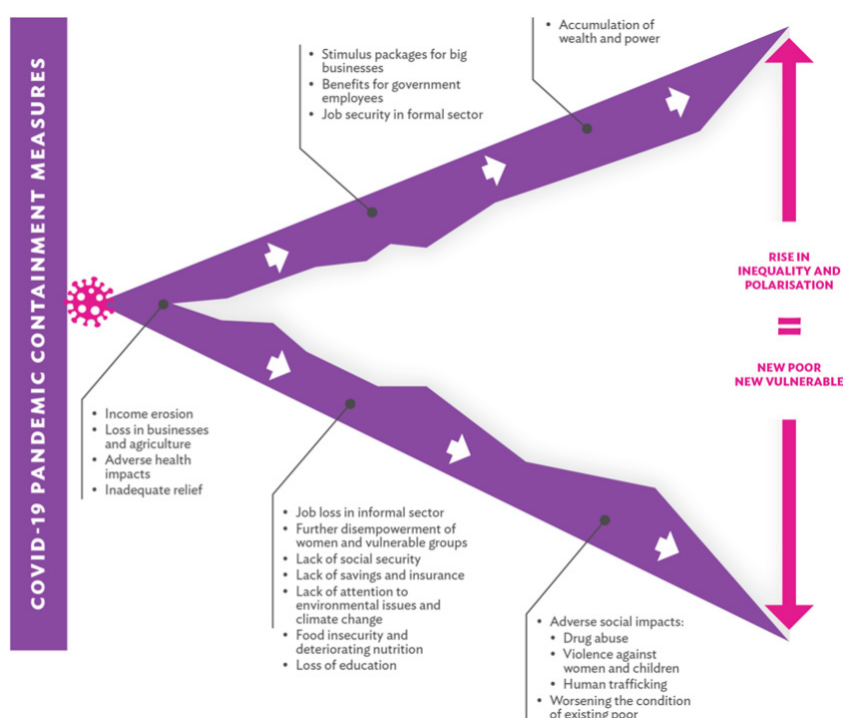
Higher level of formalization can be beneficial both economically and socially. Digitalization makes people and households visible and formalizes many informal businesses. At the micro level, it gives people and households easier access to a bank account and payment systems. This can make all the difference because it allows people to receive and safely store money. At the macro level, formalization and digitalization provides The Government with greater visibility of the needs of citizens and businesses thereby enabling better planning and public service improvements. Formalization also allows the Government to broaden the tax base, and makes tax collection cheaper and more transparent. This is crucial as domestic resource mobilization will gain even more importance in the aftermath of the pandemic.

¹ International Workshop on Informal Workers in Vietnam (2019)

At the regional level, greater formalization can increase cross-border e-commerce, lower informal remittances and reduce remittance fees.

There is still an inadequate social protection in Vietnam, which originates from the nature of the labor market with a high level of informal jobs. A majority of informal employees and their employers are left vulnerable to shocks for lack of social protection schemes. Digital technologies and systems integration can enhance social protection systems and contribute to governments' ability to avoid a K-shaped¹ recovery.

Figure 2. 5: The K – shaped recovery



Source: Adapted from Titumir, Rashed Al Mahmud (2020). *Which recovery path may we pursue?*

The “digital trinity” is a global best practice approach towards delivering more effective, inclusive, and accountable social protection programs. The trinity consists of three components that act as a digital mediator in interactions between the Government and citizens: mobile services, a digital identification system, and digital payment systems.

The components are firmly intertwined and the data generated during these digital interactions can create positive feedback loops in which greater inclusion and interaction between the Government and citizens open up scope for new digital policies and services. Often these opportunities are difficult to seize because too many separate regulatory agencies and service programs are involved. The way around this is a strategic approach based on an integrated platform for service delivery and governance that allows for data sharing, coordination and joined-up action. Such models work best in contexts where people have adequate digital literacy or when gaps in digital literacy can be compensated through citizen facilitation hubs, centres or field workers.

¹ K-shaped recovery is a post-recession scenario in which one segment of the economy begins to climb back upward while another segment continues to suffer.

3. CHALLENGES FOR DIGITAL TRANSFORMATION IN VIETNAM FOR ON-GOING DEVELOPMENT.

The above mentioning has proved that digital transformation has strengthened the socio-economic recovery and resilience and also opened up an array of sustainable growth for Vietnam. Nevertheless, there are major challenges to cope with in the process of digitalization to foster green, inclusive, sustainable and resilient recovery and enable progress towards the sustainable development goals:

3.1. Legal framework

The incomplete legal framework is a major barrier to digital transformation in Vietnam. There has been a widening gap between the velocity of the digital economy and the regulatory change. Although the Vietnamese Government and its regulators are supporting and encouraging industry adoption of advanced technologies, the regulators have elaborated and rigid regulatory systems built in an analog era where everything was paper-based. This system has worked well in the past, but they have been intentionally designed to have features that make them ill-suited to today's challenges. We need to create a digitally-native regulation, in order both to regulate digital markets and to deploy new technology in the regulatory process.

The Government of Vietnam has introduced broader reforms to support the growth of digitalization. To promote e-government development in the context of Industry 4.0, the Government has issued Resolution No. 17 / NQ-CP dated March 7, 2019 on a number of tasks and solutions to focus on e-Government development for the period from 2019 to 2020, with a vision to 2025. The law on Tax Administration No. 38/2019 / QH14 was passed by the National Assembly on June 13, 2019 to create a stronger legal framework to better manage e-commerce activities, combat tax loss, towards building a modern tax management system with increased enhance the effective application of information technology. In order to promote solutions to develop non-cash payments, on May 26, 2020, the Prime Minister issued Directive No. 22 / CT-TTg on accelerating the implementation of non-cash payment development solutions in Vietnam. The legal framework for shared economic activities is also gradually being strengthened. Decree No. 10/2020 / ND-CP dated January 17, 2020, providing conditions for auto transport business. To support the development of artificial intelligence, Directive No. 16 / CT-TTg dated May 4, 2017 of the Prime Minister was implemented on strengthening access capacity to the Fourth Industrial Revolution. In 2018, Decision No. 950 / QD-TTg approved the Project for sustainable smart urban development in Vietnam for the period of 2018 – 2025 and an orientation to 2030.

Although these efforts to retrofit the regulatory system have gained notable successes, Vietnamese digital regulatory frameworks are still lacking coherence, comprehensiveness, transparency, and constructiveness. Several laws are unable to keep up with the rapid transformation of business models in the digital economy. Due to the fast-moving development of science and technology, digital economy, new business methods, and innovative ideas, the state management agencies have been quite confused in managing digital business activities. This is a big challenge for Vietnamese banks to accelerate digital transformation.

3.2. Network security

In Vietnam, along with the rise of digital transformation, there is greater need for cybersecurity as more businesses and consumers engage in the digital economy, and as critical systems such as finance and government are increasingly digitalized. In the 2017 Global Cybersecurity Index,

Vietnam ranked 101 out of 193 nations.¹ As well, in 2016 the proportion of computers affected by dangerous viruses in Vietnam was 63.2%, three times the global average. According to the BKAV Corporation – an IT company and network security experts – the cost of cyberattacks in Vietnam increased by 15% to US\$540 million between 2016 and 2017.²

Apparently, the digitalization process along with the evolution of the payment space and cloud storage means regulators will have to deal with increasingly diverse types of value stores and payments vehicles, many of them exposed to security risks. What we really need is an AI-based monitoring at a minimum on a country-wide basis to keep criminals and terrorists out of the digital system.

Another solution for increasing network security is cybersecurity education. The issue of cybersecurity education is quite new in Asian countries including Vietnam and has not been adequately focused. A 2015 survey by ESET indicated that 78% of Internet users in Asia do not have any formal cybersecurity education.³ Low capability makes the region vulnerable to cyberattacks, especially Vietnam. Cybersecurity training programs should be organized frequently in cybersecurity training centres. Antivirus software for the home, business and smartphones and public digital signature verification services should be strongly developed by IT companies such as BKAV Corporation and CMC.

3.3. Quality of education and training labor workforce.

In the digital society, automation and digitalization is threatening many existing jobs. At the same time, there is a shortage of qualified talent for the new digital economy. Together, these two factors have widened the gap between the employees of the present and the workforce of the future. The shortage of information technology human resources is considered to be one of the major challenges for the development of Vietnam's digital economy. Therefore, along with changing the curriculum to keep up with new technology trends, as well as accelerating the socialization of information technology education by allowing students to approach this field early, it is also needed to change educational methods towards increasing self-study and lifelong learning. Besides upgrading and completing the infrastructure, Vietnam needs to focus on investing in science, technology, and education and focus on the importance of education and training innovation as required by the Industrial Revolution 4.0 and the digital economy. This includes developing a strategy for training and attracting national and international technology talents and developing human resources in technology. Furthermore, there should be promotion of international cooperation in training, educating, and building a workforce for the digital economy to be capable of protecting, supporting, and promoting the interests of Vietnamese enterprises in the environment of international integration into the global digital economy.

CONCLUSION

The COVID-19 pandemic has threatened Vietnam to fall behind on all SDGs and made the situation more stressful economically, socially and environmentally. In that context, digital transformation has played a critical role in responding to the pandemic and will drive the country's efforts to recover and build resilience. For the foreseeable future, scientific and technological innovations are a key means of achieving a sustainable, equitable, and resilient future for both human civilization and the biosphere.

¹ International Telecommunication Union (2017) Global cybersecurity index (GCI) 2017.

² BKAV (2017) Viet Nam cyber security overview in 2017 and predictions for 2018, BKAV Global Task Force Blog.

³ ESET (2015), ESET Asia cyber-savviness report 2015, ESET: Bratislava, Slovakia.

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SOLUTIONS FOR ADJUSTING THE STRUCTURE OF STATE BUDGET REVENUE BY ECONOMIC SECTOR TO IMPROVE THE SUSTAINABILITY OF STATE BUDGET REVENUE IN VIETNAM

Master. Vu Thi Tam Thu¹

Abstract: State budget revenue structure by economic sector includes revenue from state-owned enterprises, non-state economic sectors and foreign-invested enterprises. For many years, these revenues have all fallen short of the assigned plan, showing the limited contribution of the business sector to the state budget, although this is the main motivation of economic development and accounts for a large proportion of GDP (up to 90%). The study analyzes and evaluates the structure of state budget revenue by economic sector, and uses a regression model to analyze the influence of the structure of social investment capital by economic sector on total state budget revenue, thereby proposing some solutions to improve the scale and structure of revenue, and improve the sustainability of state budget revenue.

Key words: State budget revenue structure by economic sector, social investment capital, the sustainability of state budget revenue.

1. INTRODUCTION

State budget is the largest centralized monetary fund of the state, in which, budget revenue is one of the important factors determining the stability and economic development of a country. Ensuring sustainable budget revenue is an essential requirement in maintaining the macro-security of the economy against domestic and foreign shocks, helping to develop the economy sustainably in a prosperous society – environment. In essence, state budget revenue is a system of economic relations between the state and society arising in the process of the state mobilizing financial resources to form a centralized monetary fund of the state, which is the basis for the state to implement development investment strategies and ensure social security. In addition, the implementation of budget collection tasks also influences the behavior of producers as well as consumers in society, therefore, the policy of mobilizing state budget revenues will affect the implementation of economic development goals and tasks in each specific period. The level of economic development, GDP growth rate is an objective premise for the formation of state budget revenues and determines the level of mobilization of revenues into the state budget. The structure of budget revenue is an important factor determining the sustainability of state budget revenue. The budget revenue structure must be suitable to the socio-economic conditions of each country, maintain a stable and sustainable revenue source and be able to promote economic development.

The sustainability of state budget revenue is the combined result of a series of sustainable economic growth factors, in which, the contribution level of economic sectors (including the

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state-owned enterprises (SOEs) sector, non-state economic sector and foreign-invested economic sector) into the state budget is an important content mentioned by many researchers. By economic sector, the structure of state budget revenue is classified into revenue from state-owned enterprises, foreign-invested enterprises, and non-state-owned economic sectors. A reasonable and sustainable structure of state budget revenue by economic sector is when the efficiency of investment capital of economic sectors is maximized, commensurate with the contribution of each region in GDP and commensurate with the proportion of each economic in total state budget revenue.

The structure of state budget revenue by economic sector is an important indicator to assess the sustainability of state budget revenue, and at the same time reflects the operational efficiency and compliance with tax payment obligations of the business sector. In Vietnam, the structure of state budget revenue by economic sector still has paradoxes such as, the foreign-invested enterprises sector, although achieving better production and business results, but the contribution to state budget revenue is less than that of non-state enterprises. Therefore, it is very necessary to study, analyze and evaluate the structure of state budget revenue by each economic sector in order to find solutions to improve the sustainability of the state budget revenue.

2. LITERATURE REVIEW

The structure of budget revenue is a topic that has been widely studied in the world and in Vietnam. Many studies have analyzed the structure of budget revenue, tax structure of one or a group of countries in the world and evaluated the role of factors affecting the structure of budget revenue. Alena A. and Veronika P. (2018) study the relationship between total tax revenue, tax revenue structure of 28 EU countries and macroeconomic indicators including GDP, employment rate, public debt, foreign investment and inflation. The research results show that the factor that has the strongest impact on total tax revenue in EU countries is the employment rate. Foreign direct investment and GDP are the next factors that have a lot of influence on total tax revenue. Aisha Nazir, Sofia Anwar and Samia Nasreen (2020) study 20 Asian countries in the period 1990 - 2017 and conclude that the share of indirect and direct taxes in GDP, investment capital, trade openness, government savings and population are important factors affecting economic growth. Maganya (2020) analyzes the relationship between income tax, consumption tax, foreign direct investment, domestic investment and economic growth of Tanzania, a low-income country similar to Vietnam. The study confirmed the positive influence of domestic and foreign investment on total tax revenue and economic growth. In which, domestic investment has a much more obvious influence.

Studies in Vietnam also pay great attention to the issue of budget revenue structure. Research by Ngo Van Khuong (2016) has analyzed in detail the tax structure by economic sectors in Vietnam in the period of 2005 - 2014 and proposed scenarios for the shift in the structure of social investment capital. Accordingly, when investment capital is shifted from the state economic sector to the non-state economic sector, both GDP and total budget revenue have changed in a more positive direction. Research by Pham Quynh Mai (2019) also demonstrates the influence of investment capital structure on total state budget revenue. The author focuses on assessing the impact of private investment on state budget revenue and concludes that private investment capital is the source of capital that has the most positive influence on the sustainability of state budget revenue.

Inheriting and developing the previous studies, in this article, the author continues to analyze specifically the structure of budget revenue by economic sector in Vietnam in the period 2011-2020. Based on the research model of Maganya (2020) and Pham Quynh Mai (2019), continue to evaluate the influence of the structure of social investment capital on the total state budget revenue in order to find reasonable solutions to improve the state budget revenue structure of Vietnam in a new context.

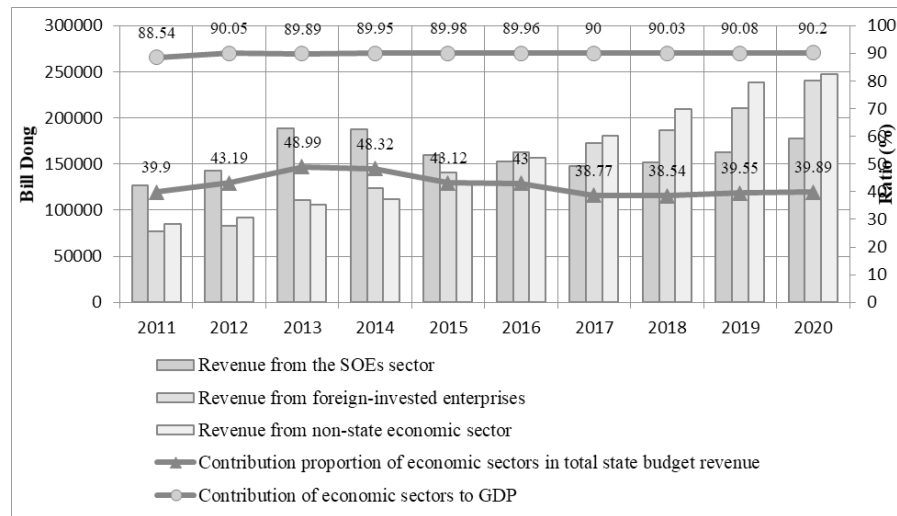
3. RESEARCH METHODOLOGY

In this study, the author uses statistical, comparative and contrasting methods to analyze in detail the current state of the state budget revenue structure by economic sectors in the period 2011 - 2020. Through the collection of data from the annual budget plans and finalization reports of the Ministry of Finance, the author processes the data, makes tables and graphs to find out the changing trends of the budget structure and evaluate the cause.

At the same time, in order to better explain the cause of the situation, based on previous experimental research results, the study builds a research model on the impact of the structure of social investment capital by economic sector to total state budget revenue. The author uses the variable total state budget revenue (SBR) as the dependent variable and regresses according to the investment capital of the state economic sector (SI), capital of the non-state economic sector (PI) and foreign investment (FI) are the independent variables. The regression method used is the OLS least squares method. The study uses secondary data published from the General Statistics Office of total state budget revenue in the period 2000 – 2020, data of social investment capital classified by economic sector in the period 2000 – 2020. SPSS 20 software used to process and analyze the model.

4. ACTUAL SITUATION OF STATE BUDGET REVENUE STRUCTURE BY ECONOMIC SECTOR

In order to accurately assess the contribution to the total state budget revenue based on the internal resources of the economy, within the scope of this article, revenue from the foreign-invested enterprise sector are collected for analysis excluding revenue from crude oil. In the period of 2011 - 2020, although the proportion of contribution to GDP increased steadily over the years (from 88.54% in 2011 to 90.2% in 2020), the contribution proportion in state budget revenue of all three regions is on a downward trend, from 48.99% in 2013 and sharply down to 38.89% in 2020. The main cause of this phenomenon is the impact from the reduction of the CIT rate. The revenue of the non-state economic sector and the foreign-invested enterprise sector both tended to increase in value, while the revenue from the SOEs sector tended to decrease in both percentage and absolute value. The reason is that the number of SOEs has decreased recently due to equitization, and the operating efficiency of SOEs is not high, so the growth rate of revenue from SOEs is lower than the growth rate of state budget revenue in general. In the coming years, the contribution of SOEs will continue to decrease due to the faster equitization progress.

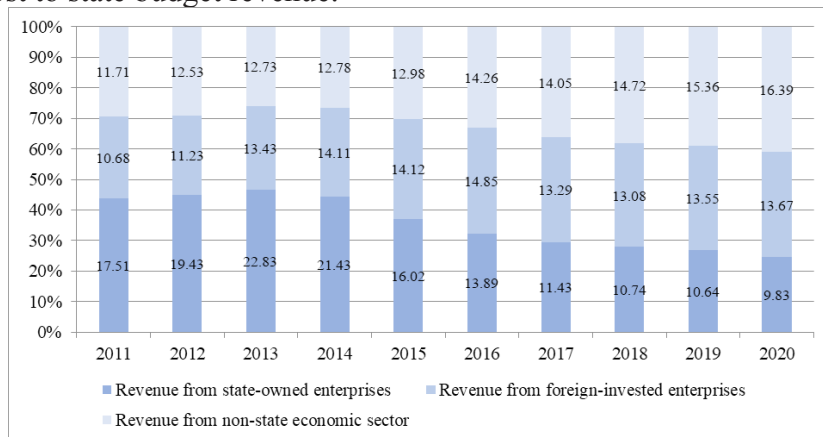


Source: Ministry of Finance, Annual State Budget Finalization

Figure 1. State budget revenue from economic sectors, share of total state budget revenue and contribution to GDP in the period 2011 – 2020

In the context that the economy is suffering great shocks from the Covid-19 pandemic, in 2020, budget revenue from all three economic sectors faced difficulties and was much lower than the plan. In which, revenue from the SOEs sector was reached VND 146,030 billion (VND 31,784 billion lower than the plan), revenue from the non-state sector reached VND 247,104 billion (VND 23,877 billion lower than the plan), revenue from FDI enterprises reached 240,686 billion VND (23,241 billion VND lower than the plan).

In the 2011 – 2020 period, the structure of budget revenue by economic sectors has undergone a great change. Revenue from state-owned enterprises accounted for the highest proportion during the period 2011 – 2015 and the previous periods, and has shown signs of decreasing in value since 2014, becoming the sector with the lowest proportion of contributions to the state budget in the period of 2016 – 2020. In contrast, revenue from the non-state economic sector tends to increase rapidly in both value and proportion (from VND 84,503 billion in 2011 to VND 247,104 billion in 2020; from 11.71% in 2011 to 16.39% in 2020). Since 2017 until now, this is the area that contributes the most to state budget revenue.

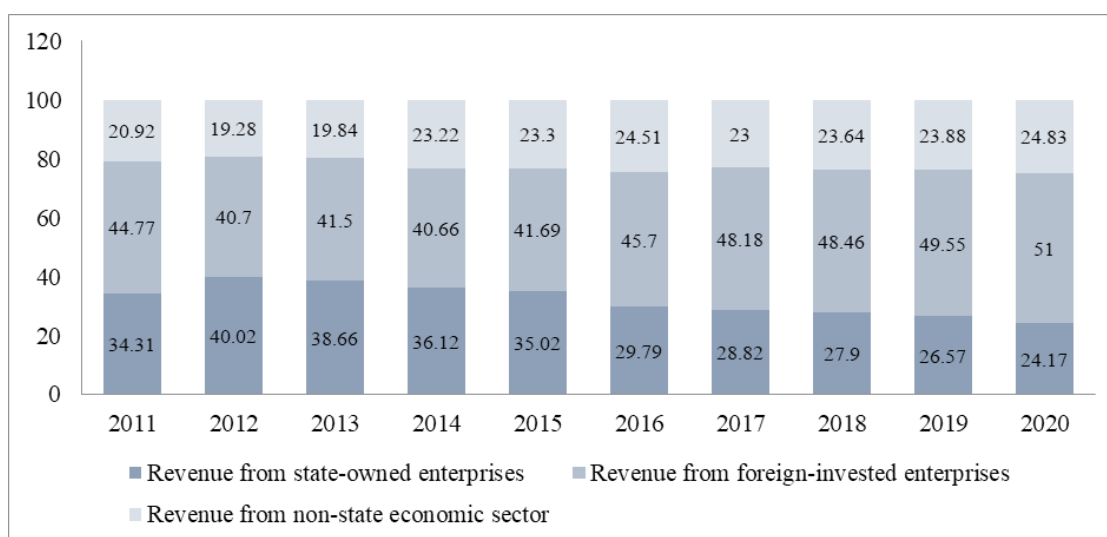


Source: Ministry of Finance, Annual State Budget Finalization

Figure 2. Share of total state budget balance revenue by economic sector (%)

Revenue from foreign-invested enterprises has the second largest proportion, averaging 13.2% of total state budget revenue in the period 2011 – 2020. Although the FDI sector plays an important role in economic growth, but has a rather modest contribution to the state budget. The main reason comes from the fact that FDI enterprises receive many preferential tax policies, in addition to “transfer pricing” activities, which reduce profits and avoid corporate income tax payment in this area is still unregulated.

Accounting for the largest proportion in the current revenue structure by economic sectors is the non-state economic sector. The contribution proportion of this economic sector has increased from an average of 12.55% of total state budget revenue in the period of 2011 – 2015 to 14.96% in the period of 2016 – 2020. However, if further compared with the GDP structure, the non-state economic sector is bearing a much lower tax burden than the FDI sector. Calculation from the data of the General Statistics Office shows that, in 2020, the ratio of budget payment to GDP of the non-state economic sector is 0.09; while that of the FDI sector is 0.18. The proportion of state budget revenue from the non-state economic sector has tended to increase but has not been commensurate with the proportion of this type of economy in GDP, partly because tax evasion in this sector is still occurs.



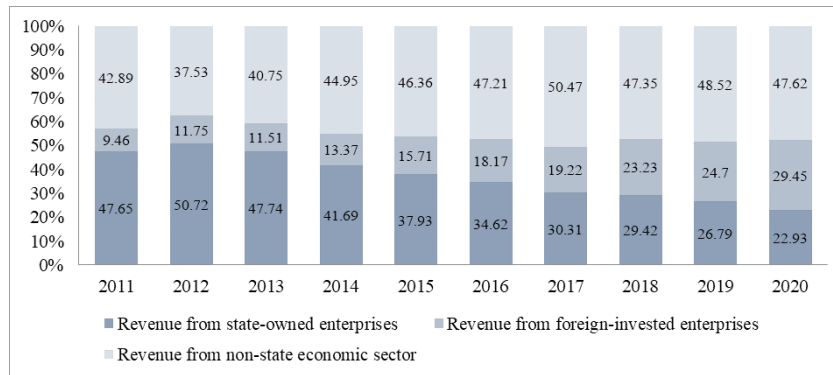
Source: Ministry of Finance, Annual State Budget Finalization

Figure 3. Share of economic sectors in VAT on domestic goods (%)

In VAT on domestically produced goods, the non-state economic sector plays a key role, the proportion of this sector’s contribution increases gradually over the years in the period 2011 – 2020 and accounts for approximately 50% of the years 2019 and 2020. This is a reasonable trend and suitable with the development of the market, the non-state economic sector occupies the leading position in production and business serving the domestic market, especially the superiority in the commercial sector. Meanwhile, the process of equitization of SOEs and the change in consumption habits have led to a sharp decline in the role of SOEs in the domestic market. The contribution proportion of this sector has decreased from 34.31% in 2011 to 24.17% in 2020. The proportion of contribution in VAT on domestically produced goods of the FDI sector has fluctuated slightly with an increasing trend. As of 2020, the share of this sector and the SOEs sector in VAT on domestically produced goods is about the same.

In excise tax, the SOEs sector continued to show a strong decrease in proportion. In the economic period 2000 - 2013, the SOEs sector always occupied an important position, especially, in 2003, this sector accounted for 72.7% of the total excise tax. However, the equitization process

has reduced the contribution proportion of the SOEs sector, and at the same time removed barriers for the non-state economic sector to participate in the fields of production and trading of goods subject to excise tax such as alcohol, beer, tobacco, etc. Accordingly, the contribution rate of the non-state economic sector has grown significantly, from 9.46% in 2011 to 29.45% in 2020. This is an inevitable consequence of the economic restructuring that Vietnam is implementing.

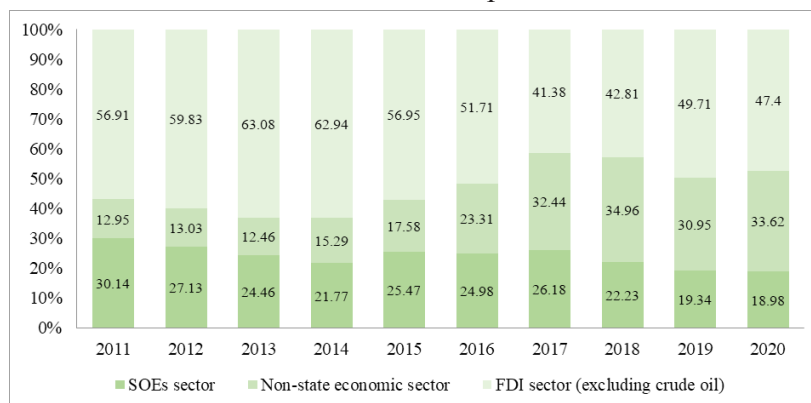


Source: Ministry of Finance, Annual State Budget Finalization

Figure 4. Share of economic sectors in excise tax (%)

However, the economic sector with the largest contribution to excise tax is FDI enterprises. During the period of 2011 – 2020, this economic sector always plays a leading role with the proportion ranging from 42.89% in 2011 to 47.62% in 2020. In absolute value, excise tax revenue of the FDI sector has increased from VND 18,310 billion in 2011 to VND 48,141 billion in 2020, an average growth of 26.3% per year. However, the proportion of excise tax contributions of all three economic sectors in total state budget revenue remained stable at 6.7% in the 2016 – 2020 period and did not change much, because the excise tax revenues depended on on a limited number of items.

The most important tax, which best reflects the operational efficiency of enterprises as well as their real contribution to the state budget revenue is CIT. In recent years, CIT still plays the role of one of the main taxes of the Vietnamese tax system. CIT has contributed to regulating incomes from production and business activities, creating a large and increasingly stable source of revenue for the state budget, contributing to promoting production and business development, regulating the macro economy, gradually improving the business environment and enhancing the competitiveness of both domestic and international enterprises.



Source: Ministry of Finance, Annual State Budget Finalization

Figure 5. Share of economic sectors in corporate income tax (%)

The FDI sector occupies the dominant position in the CIT structure, but during the period 2011 – 2020, the proportion of this sector fluctuated quite a bit. In the period 2011 – 2015, the proportion of contribution of FDI enterprises reached 59.94% on average, then decreased significantly in the period of 2016 – 2020 to only 46.6%. Meanwhile, the contribution ratio of the non-state economic sector has the opposite fluctuation. In the period of 2011 – 2015, the non-state economic sector accounted for only 14.26% on average, since 2016, this sector has had a strong change, reaching an average share of 31.5% in the period 2016 – 2020. Thus, the non-state economic sector has doubled in proportion in two periods. However, the CIT contribution of all three economic sectors averaged only 15% of the total state budget revenue in the period 2011 – 2020, very modest compared with the contribution to GDP of 90%.

5. THE RELATIONSHIP BETWEEN SOCIAL INVESTMENT CAPITAL AND THE SUSTAINABILITY OF STATE BUDGET REVENUE

The proportion of contribution to state budget revenue by economic sectors is only 40% on average, showing that the market economy in Vietnam is still not fully developed, business activities are not really effective despite the increase rapidly growing in number. The proportion of contribution in GDP has increased, but the proportion of contribution to state budget revenue has tended to decrease, showing that the structure of social investment capital by economic sectors is not really reasonable. Social investment capital is a resource and an important factor for economic development. Investment capital of each country in a certain period is limited, therefore, every government must focus on mobilizing and allocating social investment capital according to the most reasonable structure to improve efficiency of economic sectors, thereby increasing revenue for the state budget. Therefore, total state budget revenue has a close relationship with investment capital of the whole society. The restructuring of investment capital of the whole society will have a direct impact on the operation of economic sectors. When the investment capital is allocated to the economic sector that is efficient and has a higher rate of return, the scale of state budget revenue will increase and the structure of state budget revenue will be more sustainable.

* Research models

This study is based on the empirical model of Maganya (2020) and Pham Quynh Mai (2019), which confirms the long-term relationship between social investment capital by economic sectors and total state budget revenue. The study examines the impact of investment capital allocation on total state budget revenue.

In order to find solutions to shift investment capital structure by economic sector in a more efficient direction and improve the size of total state budget revenue, the study examines how the increase in investment capital in the economic sectors affects the state budget revenue. The regression model has the form as follow:

$$\ln SBR = \beta_0 + \beta_1 \cdot \ln SI + \beta_2 \cdot \ln PI + \beta_3 \cdot \ln FI + U_i$$

Of which:

SBR: Total State Budget Balanced Revenue

SI: Investment capital of the state economic sector is the total of public investment capital, investment capital of SOEs and other investment sources of state nature.

PI: Non-state economic sector investment capital including collective economy, private economy, individual economy and households

FI: Foreign investment capital is mainly foreign direct investment capital

β_0 is the intercept factor

β_i are the slopes ($i=1,2,3$)

U_i is the random error of the model.

- Hypotheses: Based on previous research results and qualitative analysis, the author builds a hypothesis for the model: When the investment capital of economic sectors increases, it is the basis for improving social labor productivity, thereby increasing revenue for the state budget. Therefore, investment capital of the state economic sector (SI), investment capital of the non-state sector (PI) and foreign investment capital (FI) is predicted to have a positive impact on total state budget revenue (SBR).

- Results of OLS regression model: The author uses the OLS least squares method to regress the variables in the model. After checking the stationarity and regressing the results of the function representing the impact of investment capital of the state economic sector, investment capital of the non-state economic sector and foreign investment capital on the total state budget revenue, the results are shown in the table below:

lnSBR	Coef.	Std. Error	P> t
lnSI	.236142	.075123	0.000
lnPI	.398921	.0801154	0.000
lnFI	.325174	.0493512	0.000
(Constant)	.44234657	.321417	0.415

Table 1. Results of OLS regression model

Model test results:

- VIF test for the VIF coefficients is 1.412; 3.224; 2.804 are all less than 10, showing that the independent variables do not have perfect multicollinearity.

- White test gives the model result that there is no phenomenon of variance variance

- Autocorrelation test for Prob>0,05 shows that the factors in the model do not have autocorrelation.

Thus, the analyzed model is consistent with the observed data.

Regression results show that investment capital sources have a positive impact on total state budget revenue, in which, through the standardized coefficient β , it is possible to assess the strong and weak influence of the components in the structure of social investment capital to the increase of total state budget revenue. Accordingly, the impact of investment capital from the non-state economic sector is the largest (0.3989), followed by investment capital in the FDI sector (0.325) and investment capital in the SOEs sector (0.236). This shows the increasingly important role of the non-state economic sector in state budget revenue in particular and the economy in general.

In the recent period, the determination to equitize SOEs has brought many opportunities to non-state enterprises. In the period 2016 – 2020, there have been 180 enterprises approved by the competent authority with the equitization plan with a total value of VND 489,690 billion (value of state capital is VND 233,792 billion), of which, implemented divestment of state capital

in enterprises VND 27,312 billion and collected VND 177,397 billion. Therefore, the non-state economic sector has been facilitated for growth and expansion. In 2020, the Covid-19 pandemic began to appear in Vietnam from January 23 and has caused many strong impacts on the overall economy. Accordingly, Vietnam's economic growth reached only 2.91%, the lowest in the past 20 years, a deep decrease compared to the growth rate of 7.02% in 2019. However, Vietnam's economy is still a highlight in the context of the world economy and the region falling into negative growth. Vietnam belongs to the group of countries with the highest growth rate in the world. This result partly comes from the fact that Vietnam's economy is now largely dependent on the non-state economic sector, including small and medium enterprises, and the informal sector as business households, individual businesses. Although these are areas that have been greatly affected by the pandemic, they are also very flexible to adapt to the new situation.

6. SOME SOLUTIONS TO ADJUST THE REVENUE STRUCTURE BY ECONOMIC SECTOR

While the internal weaknesses of the economy have not been resolved, and the motivational basis for state budget revenue is still uncertain, Vietnam has to face the impacts of the Covid-19 pandemic. In that context, in the period of 2021 – 2025, Vietnam sets an average economic growth target of about 6%, the average state budget collection will reach 15-16% of GDP, of which the revenue from taxes, fees and charges will reach 13- 14% of GDP, striving to realize the “dual goal”, fighting the epidemic, recovering and developing socio-economically (Ministry of Planning and Investment, 2021). Regarding the budget revenue structure by economic sector, Vietnam needs to implement a number of solutions to improve the business environment, provide reasonable support to promote the development of enterprises and overcome difficulties, accelerate economic structural reform, adjust the structure of social investment capital to suit the new situation, and at the same time improve the efficiency of tax management measures, towards sustainable state budget revenue, specifically as follows:

Firstly, review tax incentives to encourage innovative start-ups, research, development and application of scientific and technological advances, and increase the localization rate. Given the current characteristics of Vietnamese enterprises, along with the strategy of developing small and medium enterprises, the government should have more specific tax incentives, namely: (1) Applying preferential CIT rates for small and medium enterprises, the common tax rate of small and medium enterprises shall be lower than the common tax rate of other enterprises; In order to avoid the case that small and medium enterprises can take advantage of this incentive to not expand their scale, this incentive is only applicable for a certain period of time. (2) Apply tax exemption and reduction incentives for a limited time to small-scale start-ups and eligible business households to convert into enterprises; (3) Allow micro enterprises to apply simple tax declaration form. Newly established small and micro enterprises have difficulty in applying accounting regimes, complex invoices of enterprises, tax declaration regimes, salary and insurance regimes for employees, etc. increase the cost of doing business. Therefore, in order to develop start-up businesses, it is necessary to simplify the tax administrative procedures, the invoice and voucher regime applied to small and micro enterprises... so that they can see the benefits they will enjoy when transform into larger enterprises; (4) Apply cash accounting to small or micro enterprises. To create incentives to encourage start-ups, it is necessary to change the accounting and tax system to be simple and easy for small and micro businesses. For this type of business, it is possible to study

and apply the simple cash accounting system in calculating and recording books, close to the daily bookkeeping of individual business households so that they can easily manipulate.

At the same time, it is necessary to quickly review and evaluate the effectiveness of preferential policies, tax exemption and reduction for businesses, ensuring a fair and transparent business environment. For policies related to mitigating the impact of the Covid pandemic, the extension of time to pay tax and land rent should be done on the basis of evaluating the effectiveness of the policy in 2020, determining supported by industries and types of businesses to ensure conformity and fairness among stakeholders.

Secondly, in order to reform the state budget revenue structure, it is necessary to focus on the important issue of accelerating economic structural reform towards a highly resilient economy. This is the most basic and important factor to increase revenue and reform the structure of budget revenue. Accordingly, it is necessary to renew the growth model in the direction of relying on technology and innovation, building a developed nation based on science and technology. Improve and promote labor productivity, enhance the competitiveness of enterprises and the economy. In addition to continuing to attract high-quality FDI, it is necessary to create maximum conditions for the domestic private sector to develop at a faster and more uniform rate than at present. Focusing on ensuring equal business institutions for enterprises, protecting the legitimate interests of investors, creating spillover effects, connecting a value chain and creating links between SOEs and non-state enterprises; between large enterprises and small and medium enterprises... to ensure stable and sustainable economic development. Vietnam needs to persistently pursue a growth model based on labor productivity and innovation.

Thirdly, adjust the proportion of investment capital of the whole society, determined to complete the process of equitization of SOEs early, reduce investment capital in this economic sector in order to restructure the economy, and at the same time, encourage the formation and development of large private economic groups with strong potential, and encourage private enterprises to invest in, manage, exploit and operate public services through the method of socialization. It can be seen that the state budget deficit and public debt are having a great influence on the Vietnamese economy, since 2012 until now, Vietnam has come up with a solution that is debt reversal, which means borrowing new debts to pay off for old debts. When the economy cannot create much surplus value, the more debt it has to borrow, the larger the state budget deficit will be to meet the demand for regular spending and the need for debt repayment. Public debt ratio is increasing day by day. Thus, the debt reversal solution is only a temporary solution. In order to avoid the risk of a public debt crisis for Vietnam, it is necessary to have breakthrough solutions to bring the country's economy to GDP growth at a high rate for a long time, creating a lot of surplus value, restructuring the economy and increasing tax revenue, reducing the state budget deficit and reducing the ratio of public debt to GDP.

According to international standards, all debts of enterprises in which the state holds 100% of the charter capital must be counted as public debts. However, according to Vietnam's regulations, only the debts of some state-guaranteed SOEs are public debt. According to data from the Public Property Administration of Vietnam, the debt of enterprises in which the State holds 100% of charter capital, by the end of 2019 is more than 1.9 million billion VND (excluding the debt of state-owned enterprises in which the state holds the controlling power over 51% of the shares).

Facing the current difficult conditions of our country, if we do not really do drastic reforms to restructure the economy, thereby restructuring tax revenues, not only will the revenue for the state budget from taxes be decrease in the future, but also may face the risk of a public debt crisis within the next 10 years.

Fourthly, adjust tax policies to create fairness among economic sectors. In the period 2011 – 2020, foreign-invested enterprises have ratio of tax payment to the state budget compared to development investment capital is much lower than that of non-state enterprises. The cause of this problem is that foreign-invested enterprises have been given preferential treatment by Vietnam in terms of import and export tax, VAT, and CIT. FDI enterprises in industrial parks and export processing zones have zero import-export tax, exempt from VAT for all goods and services, and only have to pay a very low tax rate for CIT (10% in the first 15 years of business establishment). Thus, there was clearly no equality between economic sectors.

Therefore, Vietnam's tax policy needs to change to both harmonize the benefits of attracting foreign direct investment, and at the same time create an equal business and production environment among economic sectors. Moreover, Vietnam's ODA loans to foreign countries have a not small percentage are conditional loans, which means that when borrowing money, it will be accompanied by binding conditions such as appointing contractors, appointing suppliers of machinery, equipment, raw materials, etc. That will create disadvantages for SOEs and non-state enterprises. To some extent, it will also create inequality in business in the three economic sectors.

Fifthly, strengthen revenue management to ensure equality between economic sectors. When an economic sector generates a lot of GDP, it also means that the tax amount that this economic sector contributes to the state budget is higher. However, considering the ratio between the GDP of the creative economic sectors and the tax amount that these economic sectors pay to the state budget, the tax payment rate is not commensurate with the contribution to GDP. Thus, in order to fully and fairly encourage the amount of tax paid to the state budget, it is necessary to inspect and manage tax collection more closely in order to avoid fraud and tax loss. (1) Improve financial discipline, not to let the previous year's tax debt overlap with the next year, depending on the specific business situation of enterprises, the state will offer policies that can prioritize tax cuts or use legal policies that are more deterrent to enterprises that intentionally violate. (2) More closely attaching tax obligations to the state budget and the interests of enterprises: enterprises that do not owe tax can borrow capital to invest in production development, enterprises that do not owe tax can rent land to expand production and business. (3) It is necessary to supplement anti-transfer pricing regulations to ensure compliance with international practices and domestic transfer pricing situation. Narrow tax incentives and move towards transferring tax exemption and reduction incentives for implementing social policies to implementing other financial measures.

7. CONCLUSION

The article has specifically analyzed the situation of the state budget revenue structure by economic sectors, the contribution proportion of each economic sector in the total state budget revenue and for a number of specific taxes such as VAT on goods produced in Vietnam, excise tax and corporate income tax. Accordingly, the structure of Vietnam's state budget revenue has seen many changes in the 2016 – 2020 period compared to the previous period, the non-state economic sector is the largest contributor to the state budget. Combined with the assessment of

the impact of social investment by each economic sector on the total state budget revenue, the author has proposed five solutions to accelerate economic restructuring and social investment capital restructuring; reviewing, adjusting and supplementing tax policies in order to improve the structure of budget revenue and enhance the sustainability of the state budget.

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IMPACTS OF TRADE PROTECTION BY TARIFFS ON GDP, IMPORTS AND EXPORTS: APPROACHING TO NIGEM MODEL FOR THE CASE OF VIETNAM

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Abstract: *International economic integration has brought high growth to international trade while promoting economic development for many countries around the world. However, in recent times, in the world, there has appeared a trend opposite to trade liberalization, which is protectionism. Advocates for trade protection provide arguments for why countries implement trade-restrictive measures. Those causes are related to the national security and defense, solving the trade deficit, creating jobs, protecting the nascent industry and ensuring fair trade. Countries are currently using tariff measures including import and export tariffs, and non-tariff measures. The article studies protectionism, analyzes the impact of trade protectionism by tariffs on Vietnam's GDP and agricultural exports, and makes policy recommendations for the Government of Vietnam.*

Keywords: *Trade protection; Tariff; Vietnam's Exports; International Trade; NiGEM Model.*

1. INTRODUCTION

Trade protection is the deliberate attempt to limit imports or promote exports by putting up barriers to trade. Despite the arguments in favour of free trade and increasing trade openness, protectionism is still widely practiced. Barriers to trade can be used to protect sunrise industries, also known as infant industries, such as those involving new technologies. This gives new enterprises the chance to develop, grow, and become globally competitive. Protection of domestic industries may allow them to develop a comparative advantage. For example, domestic enterprises may expand when protected from competition and benefit from economies of scale. As enterprises grow they may invest in real and human capital and develop new capabilities and skills. Once these skills and capabilities are developed there is less need for trade protection, and barriers may be eventually removed.

Most countries apply protectionist policies and consider it an indispensable part of the country's economic development policy because it brings a lot of benefits. However, protectionist policies do not always bring the desired results. Unilateral protectionist policies cause socio-economic losses, directly affecting consumers and other industries in the economy. If the government implements an unreasonable protection regime, widespread protection, arbitrary protection, and excessive protection for too long, it will not only fail to achieve the purpose but also cause negative impacts. Protected manufacturing industries will not gradually grow stronger, but on the contrary may fall into a state of stagnation, reduce competitiveness, inefficient production, and falsify the comparative advantage of participating partners in the market. Reasonable trade protectionism is not

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only about creating barriers to prevent the entry of foreign goods into one's country, or subsidizing in any form for domestic production, but more importantly, measures such protection must achieve the objective of rational resource allocation, improving the competitiveness of domestic products in domestic and international markets. Countries are currently using tariff measures including import and export tariffs, and non-tariff measures as administrative tools including regulations on export quotas, licensing regulations, measures voluntary export law; economic levers including investment support regulations, preferential credit, price subsidies, import margin, foreign exchange and exchange rate management; technical measures such as regulations on technical standards, quality, packaging design.

Since the end of the Cold War, the world economy has been strongly influenced by the trend of liberalization and globalization of economic and trade relations. Recently, however, a number of new trends have emerged that have changed the world economic order that has existed for the past few decades. The contemporary world is undergoing great changes with many events taking place rapidly, complicatedly, and unpredictably, both bringing about opportunities, opportunities and hope to the nations and peoples in the future; poses risks, challenges and insecurities. The world, the region is facing an unprecedented threat in history, changing the mode of production, business, commerce and all aspects of social life, along with the relationship of forces, which is gradually shifting to a new situation.

Strategic competition between major countries, especially between the US and China, has become fierce, face-to-face confrontation in all fields, focusing on economic aspects, in which attention is paid to international trade and international trade issues. technology. According to Bui Thanh Tuan (2021), from the beginning of 2018 until now, the influence of the US-China trade "war" has spread globally. Faced with the negative effects of this "war", the circulation of goods is blocked, global trade becomes weak, which in turn leads to a decline in economic growth. The US economy is a large economy, each change in US policy, greatly affects other economies, especially small, open economies. Along with many other moves, such as prioritizing bilateral cooperation, withdrawing from a series of multilateral international mechanisms and agreements, to achieve the goal of "America first", "making America great again". The United States is ready to bring protectionism back and disrupt the long-standing international trade order. Many countries such as the EU, Japan, etc. have adjusted their trade policies to adapt to the changes of the US. This will set a precedent for the behavior of other countries in the future and reduce the role of the WTO as well as other multilateral economic and trade mechanisms. At the same time, the move to tighten protectionist measures as part of the "America First" campaign could lead to an increase in trade retaliation, even triggering a trade war on a global scale.

If the US-China trade "war" continues to drag on, it will strongly increase trade protectionism with limited state intervention policies in the economy and globalization. Therefore, the article analyzes the changes in US tariff policy affecting some economies in the world, and especially the Vietnamese economy. The article studies protectionism, analyzes the impact of trade protectionism of USA by tariffs on Vietnam's GDP and exports, and makes policy recommendations for the Government of Vietnam.

2. LITERATURE REVIEWS

Trade protectionism is the foreign trade policy of countries aimed at using measures to protect the domestic market from fierce competition from imported goods on the one hand, and on the other hand to help the State support businesses in the domestic market and expansion into foreign markets (Balassa, 1965). According to Nguyen Mai (2018) and Amadeo (2018), trade protectionism is an economic term, referring to the application of measures to protect the country's production of goods (or services) against competition from other economies around the world.

In favor of trade protectionism, Demir and Sepli (2017) and Amadeo (2018) point out protectionist policies: Applying tariffs on imported products and thereby increasing the prices of imported goods causes they become less competitive than domestic goods. Research by Olga Solleder (2013) and Pham Sy Thanh (2019) on the trade effects of export taxes, based on a new data set of tax rates at the product level, estimates the trade-distorting effects of export taxes. The results, based on a theoretical fit estimate of the structural gravity model, indicate that the export tax burden is shared by exporters and importers and that export taxes play a role in the increase of world prices. Export taxes are associated with a significant reduction in trade, especially when applied to the extractive industries. Research by Antoine Bouët and David Laborde Debucquet (2010) on the economics of export taxes in the context of a food crisis focuses on assessing the reasons for using export taxes, especially in the context of a wage crisis. The study summarizes the effect of export taxes using both partial and general equilibrium theoretical models. Research by William Deese, John Reeder (2007) examines the issue of export taxes on major commodities. It is clear that 40 countries in the world have imposed export taxes in recent years.

Research by Aradhna Aggarwal (2004) quantitatively assesses the likely changes in market access opportunities for Indian exports due to US tariff reductions. The study identifies products specific to India at the ISIC 4-digit breakdown level, which can be considered tariff sensitive. Regression analysis on the relationship between the MFN tariff rate and India's exports to the US was used to quantitatively assess the impact of a possible tariff reduction in the Doha Round. This analysis shows that tariff cuts are hardly expected to benefit Indian exports to the US. With the full implementation of the tariff reduction roadmap, the increase in India's exports to the US will amount to 1.2 or 0.6 depending on the value of the B factor in the formula. These findings are most likely due to the tariff-sharing effect of NAFTA preferences in favor of suppliers in Mexico, a country that competes in many traditional commodities.

Research by Olga Solleder (2013) shows that export taxes are associated with a significant reduction in trade, especially with the horticulture and extraction industries. According to the author, the welfare implications of an export tax depend directly on the market power of countries and whether they are exporters or importers of the goods being taxed. The welfare impact on exporters without market power is ambiguous and depends on the elasticity of supply, demand, and substitution. Furthermore, reductions in taxing on exports may under certain conditions be welfare-enhancing if achieved through the achievement of relevant public policy objectives, e.g. value added, increase domestically, outpacing losses associated with falling exports. Exporters with market power clearly benefit because they can apply welfare-optimizing tariffs, place the tax burden on importers, and enjoy better trade terms.

Fugazza and Molina (2011) use the time required to export as a proxy for export costs and import as a proxy for import costs, investigating the impact of per-period fixed costs to the duration of trade relationships by employing survival analysis. He also mentioned that higher tariff rates accompany lower hazards for the duration of trade relationships because of less competition for incumbent firms; this result is also in line with Besedeš and Prusa (2006b). In other words, they evidence the significant positive relationship between tariff rates and durations of trade relationships.

Similarly, according to Antoine Bouët and David Laborde Debucquet (2010), to limit the impact of export taxes, trading partners can respond by either reducing import duties or increasing export duties, depending on the situation. They are either net importers or net exporters of goods. The results also show that there is an important asymmetry between net exporters and net importers of an agricultural commodity during a food crisis, as net exporters can benefit from increase in world prices while net importers are hurt and unable to retaliate effectively.

Research by Hertel, T, W (1999) and Farzad Taheripour and Wallace E. Tyner (2018) on the impact of China's import tax policy on US soybeans shows that both US and Chinese welfare and global welfare decrease when China imposes taxes. Meanwhile, the country that benefits is Brazil and the rest of South America, soybean exporters have great competitiveness. The combined gains for Brazil and the rest of South America are somewhat smaller than the US losses. On the other hand, the EU will be able to gain benefits in some cases and lose them in others. When the tariffs apply only to soybean products, the EU suffers a small loss in economic welfare; If tariffs were applied to all food imported from the US, the EU would see a modest increase in economic welfare (EU, 2019). The rest of the world has a welfare benefit in any case as some of these countries also export soybeans. From these conclusions, in order to promote exports, the solution drawn is still: (1) to choose export products with great competitiveness or need to improve the competitiveness of export products; and (2) diversify export markets.

Chin-Ho Lin (2015) explores the links between imported trade relationships, duration, and tariff rates. We investigate how the probability of survival of trade relationships affected due to the difference in the tariff rates based on survival analysis. Using ASEAN+6 as the reporter with 89 trading partners on manufactured goods from 1996 to 2011. A series of findings are as follows. First, low-tariff trade survives longer than high-tariff trade on manufactured goods. Second, a significantly negative correlation between tariff rates and duration is evidenced, which increases around 4% hazard ratios. Also, the reduction of tariff rates in intra-regional trade is helpful to prolong the length of trade relationships. Third, low tariff rates have 9.1% lower hazard ratios. The paper also obtains robust results in production networks and Rauch product's classification. Finally, the paper shows these findings could be the references for other economic organizations, which is aimed at the diminution of tariff rates.

Thus, there are many studies that support or oppose trade protectionism, especially the tariff instrument has a great impact on exporting countries of competitive products. Currently, there have not been many research publications related to analyzing the impact of trade protectionism through tariff instruments on Vietnamese exports using the NiGem model. The next content of the article will describe the model and results of studying the impact of tariffs on Vietnam's exports and GDP using the NiGEM model.

3. RESEARCH MODEL AND RESULTS

3.1. NiGEM model

The National Institute of Economic and Social Research (NIESR) is Britain's longest established independent research institute, founded in 1938. NIESR's well-known quarterly economic forecasts are produced using our global econometric model, NiGEM, which is also used by many European Central Banks and international organisations such as the OECD. The model's use within these organisations helps to widen the influence of NIESR's research and allows our expertise to influence policy decisions not only in the UK but worldwide. The model, including the database and simulation software underlying the forecasts, is sold to subscribers to help finance the costs of maintaining and developing NiGEM.

There are also separate models of Bulgaria, Brazil, China, Estonia, Hong Kong, Indonesia, India, Latvia, Lithuania, Romania, Russia, Singapore, South Africa, Taiwan and Vietnam while the rest of the world is modelled through regional blocks. All country models contain the determinants of domestic demand, export and import volumes, prices, current accounts and net assets. Economies are linked through trade, competitiveness and financial markets and are fully simultaneous. A major use of the model is in policy analysis. In policy analyses the model can be switched between forward looking, rational expectations mode and adaptive learning for consumers, firms, labour and financial markets. Policy environments are very flexible, allowing a number of monetary and fiscal policy responses. The model framework can be used by any user to build a bespoke model or to change the existing structure. For a macro-econometric model to be useful for policy analyses, particular attention must be paid to its long-term equilibrium properties. At the same time, it is necessary to ensure that short-term dynamic properties and underlying estimated properties are consistent with data and well-determined. Output is tied down in the long run by factor inputs and technical progress interacting through production functions. As far as possible, the same long run theoretical structure of NiGEM has been adopted for each of the major industrial countries, except where clear institutional, or other factors, prevent this. As a result, variations in the properties of each country model reflect genuine differences in data and estimated parameters, rather than different theoretical approaches.

NiGEM models the national accounts definition of exports and imports of goods and services. Historical trade patterns play an important role in the model equations, with current parameters for a set of key variables derived from a bilateral matrix for goods and services trade in 2010. Other key short-term and long-term elasticities are estimated through econometric techniques. At the global level, trade is driven by the demand side (imports), as no country can export a good unless there is another country willing to import it. At the country/regional level, import demand is modelled as a function of demand total final expenditure) and competitiveness (import prices relative to domestic prices). In the long-run we impose a demand elasticity that is greater than one, to allow world trade to continue rising as a share of world GDP throughout the forecast horizon (globalisation). Import prices are modelled as a weighted average of export prices in the rest of the world, where the weights are derived from the trade patterns underlying the bilateral trade matrix. This ensures consistency at the global level between export and import prices. Long-

run price sensitivities differ across countries, as they are based on econometric estimation. The long-run is estimated within a dynamic error correction equation, so that short-term responses and the speed of adjustment towards the long-run reflect past behaviour in each country. Exports are also modelled as a function of demand and competitiveness. External demand is modelled as a weighted average of import demand in all other countries and regions in the model, where, again, the weights are derived from the trade patterns underlying the bilateral trade matrix. We impose a unit elasticity on demand in all countries, which ensures approximate global consistency in export and import volumes, and also implies that the global trade share for each country is a function of its competitiveness. The competitiveness indicator that we use is the export price of the home country relative to a weighted average of export prices in the rest of the world. Again, the weights are derived from the bilateral trade matrix, and it is assumed that exporters compete against others who export to the same markets. While the model is designed to deliver approximate global consistency in export and import volumes, values and prices, there is still a possibility, particularly over the longer term, of drift away from this balance. In order to correct for any such drift, additional adjustment terms are included in the model to reallocate any discrepancy between export and import values or volumes proportionately across countries. Any historical discrepancy between export and import data is not corrected, so it is the ratio of the two that is held constant over the forecast horizon.

Policy models are ‘aimed at analysing actual macroeconomic policy issues. Models in this class should fit the main characteristics of the data, including dynamics, and allow for policy analysis and counterfactuals. They should be used to think, for example, about the quantitative effects of a slowdown in China on the United States, or the effects of a US fiscal expansion on emerging markets.

Key benefits of global macroeconomic models for forecasting and what-if exercises:

Provide a framework for understanding how economies work and interact.

- Are a tool for thinking about possible identifiable risks, policy responses and wider consequences.

- Can have multiple applications, so don't need to reinvent wheel each time.

- Incorporate key magnitudes and impose consistency make sure things add up.

- Improve over time in reaction to new ideas and events.

- A transparent, peer reviewed global econometric model that has evolved over 30 years of regular use

- Over 60 countries and regions modelled: Detailed country-level models

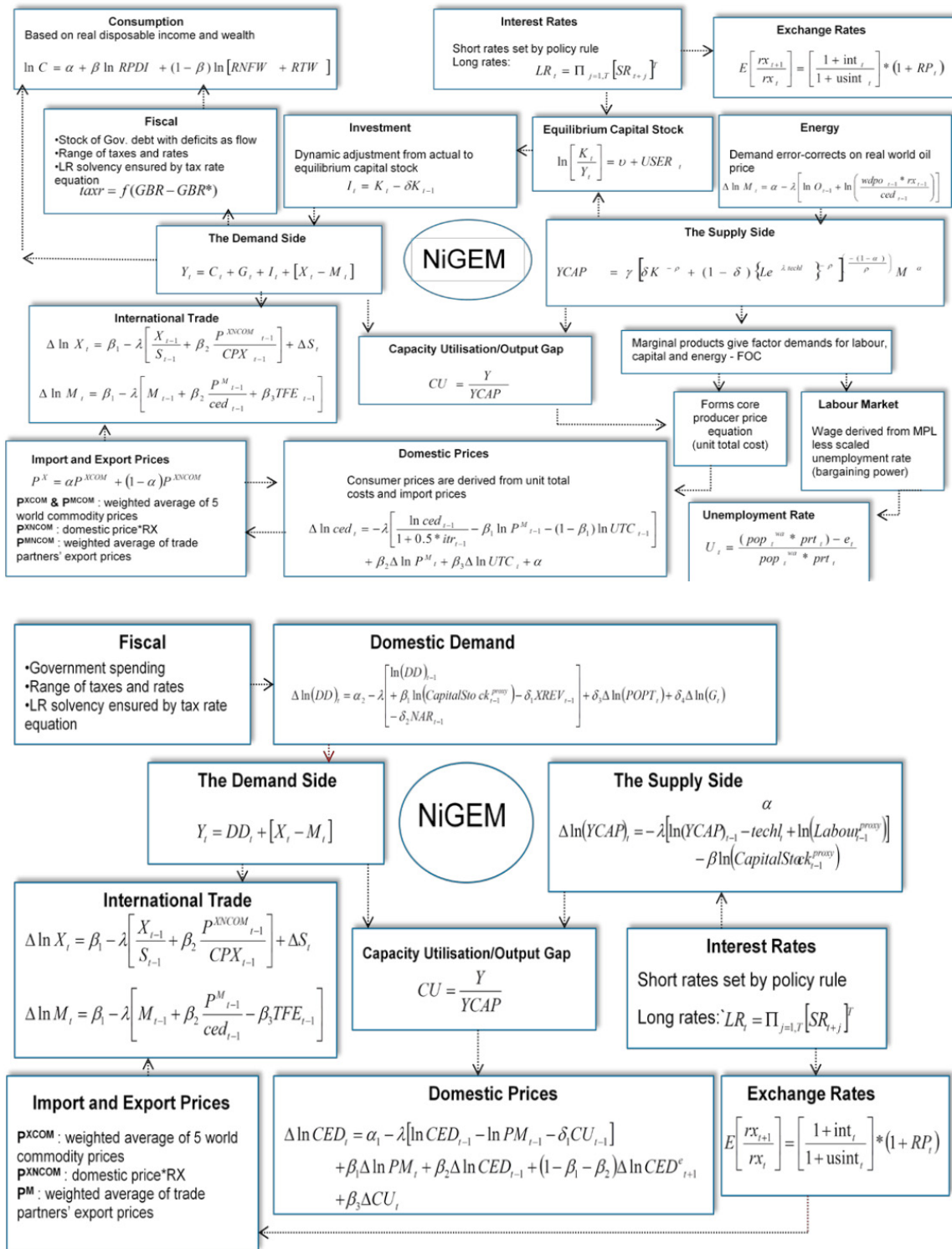
- Provides access to forecasts, scenarios and stochastic output for over 5000 macro variables:

Allows complete replicability of our in-house processes

- Historical and forecast data updated quarterly

- The scenario suite allows users to run simulations for economic shocks: Common shocks include, fiscal, monetary policies commodity prices, labour market; Tariffs, trade and investment; Financial market modelling of risk premia.

Figure 1. NiGEM model structure in most countries



Source: <https://nimodel.niesr.ac.uk/index.php?t=5> (NiGEM)

According to the instruction of NiGEM model, individual country models have following features: Sticky prices; Forward-looking consumption and investment; Taylor rule and other options for monetary policy; Long-run fiscal solvency; Individual countries related by trade relations and asset pricing relationships (UIP etc). In the long run output is determined by potential

reflecting: working age population and equilibrium unemployment and participation; the capital stock, influenced by equilibrium user cost of Capital; exogenous technological capability which is assumed in each country to catch up gradually to that in highest productivity economy.

In major countries, GDP (Y) is driven by demand in the short-run, and is modelled as an identity relationship, summing the components of demand: C (consumption), PSI (private sector investment), GC (government consumption), GI (government investment), DS (stock building), XVOL (exports), MVOL (imports), RES (chain basing residual).

$$Y = C + PSI + GI + GC + DS + XVOL - MVOL + RES$$

These models rely on an underlying constant-returns-to-scale CES production function with labouraugmenting technical progress. This is embedded within a Cobb-Douglas relationship to allow the factors of production to interact with oil usage:

$$Q = \gamma \left[s(K)^{-\rho} + (1-s)(Le^{\lambda t})^{-\rho} \right]^{-1/\rho} M^{1-\alpha}$$

where Q is real output, K is the total capital stock, L is total hours worked, t is an index of labouraugmenting technical progress and M is oil input. This constitutes the theoretical background for the specifications of the factor demand equations, forms the basis for unit total costs and provides a measure of capacity utilization, which then feeds into the price system. Barrell and Pain (1997) show that the elasticity of substitution is estimated from the labour demand equation, and in general it is around 0.5. Demand for labour and capital are determined by profit maximisation of firms, implying that the long-run labour-output ratio depends on real wage costs and technical progress, while the long-run capital output ratio depends on the real user cost of capital.

$$\ln(L) = c_1 + \ln(Q) - (1-\sigma)\lambda t - \sigma \ln(w/p)$$

$$\ln(K) = c_2 + \ln(Q) - \sigma \ln(c/p)$$

where c_1 and c_2 are constant terms related to the other parameters in the model, w/p is the real wage and c/p is the real user cost of capital. The user cost of capital is influenced by corporate taxes, depreciation and risk premia and is a weighted average of the cost of equity finance and the margin adjusted long real rate, with weights that vary with the size of equity markets as compared to the private sector capital stock. Business investment is determined by the error correction based relationship between actual and equilibrium capital stocks. Government investment depends upon trend output and the real interest rate in the long run. Prices are determined as a constant mark-up over marginal costs in the long term.

In reduced models, the short to medium term, GDP is driven by the demand side:

$$Y = DD + XVOL - MVOL$$

In the longer term, GDP is driven by the supply side:

$$\Delta \ln(Q) = \alpha - \lambda [\ln(Q)_{-1} - \text{techl} + \ln(\text{POPT})] - \beta \ln(\text{USER})$$

where USER (long real interest rate plus a risk premium) acts as a proxy for capital stock, techl is trend productivity growth, POPT is population and acts as a proxy for labour input.

Domestic demand depends on the user cost of capital (USER), export income (XREV)

(especially important for commodity exporters), wealth (proxied by net foreign asset ratio) (NAR), population developments (POPT) and government spending (G).

$$\Delta \ln(DD)_t = \alpha_2 - \lambda \left[\begin{array}{l} \ln(DD)_{-1} + \beta_1 \ln(USER)_{-1} - \delta_1 XREV \\ - \delta_2 NAR \end{array} \right] + \delta_3 \Delta \ln(POPT) + \delta_4 \Delta \ln(G)$$

Export and import prices are modelled as a weighted average of commodity and non-commodity prices.

$$px = \alpha_1 * pxcom + (1 - \alpha_1) * pxncom$$

$$pm = \alpha_2 * pmcom + (1 - \alpha_2) * pmncom$$

Where α_1 is the share of commodities in goods and services exports and α_2 is the share commodities in imports (2010 trade patterns)

Commodity import and export prices are a weighted average of 5 commodities

$$pxcom = \beta_1 wdp_o + \beta_2 wdp_{fdv} + \beta_3 wdp_{fld} + \beta_4 wdp_{anf} + \beta_5 wdp_{mm}$$

wdp_{fdv} : global food prices

wdp_{fld} : global beverage prices

wdp_{anf} : agricultural raw materials

wdp_{mm} : global price of metals

So a 1% rise in the commodity price raises export prices by $\alpha_1 \beta_1$ % and import prices $\alpha_2 \delta_1$ (holding RX fixed).

This leads to the following:

- Direct role through import prices
- indirect role through capacity utilisation in marginal cost/producer prices

Empirical evidence applying the NiGEM model in research of Barrell, R., and Sefton, J (1997) shows that although in the long term the level of activity is unaffected, the fiscal restrictions will reduce output and raise unemployment in the short to medium term.

3.2. Analysis of the impact of tariffs on Vietnam's GDP and import and export according to the NiGEM model

The act of imposing tariffs on goods imported from abroad with tariffs and retaliation from the exporting country occurs in three cases: if the tariff is imposed, the other country will either not respond, or retaliate; and if one country subsidizes, other countries take no action. Therefore, for each study of the impact of tariffs, the article will use 3 scenarios corresponding to 3 different cases: (1) The US increases the tax on imports from Vietnam by an average of 5% and Vietnam not apply tax measures to the US; (2) The US increases the tax on imports from Vietnam by an average of 5% and Vietnam also applies the same measure to the US; (3) Assume that the US increases subsidies for exports to Vietnam by 5%. The 5% tariff is the lowest provisional rate, we can infer higher levels like 10%, 15% or 20%. In analyzing models and recommending policies, the article focuses on analyzing the impact of US tariffs on Vietnamese exports to the US, mainly agricultural exports. This is because

Vietnam's agricultural exports to the US and Europe account for a large proportion, which is vulnerable when the US imposes import tariffs.

3.2.1. Impact of tariffs on Vietnam's GDP

After applying and running NiGEM model, the results of scenarios of impacts of tariffs include:

- Scenario 1: The US increases an average of 5% tax on Vietnamese imports from 2021.

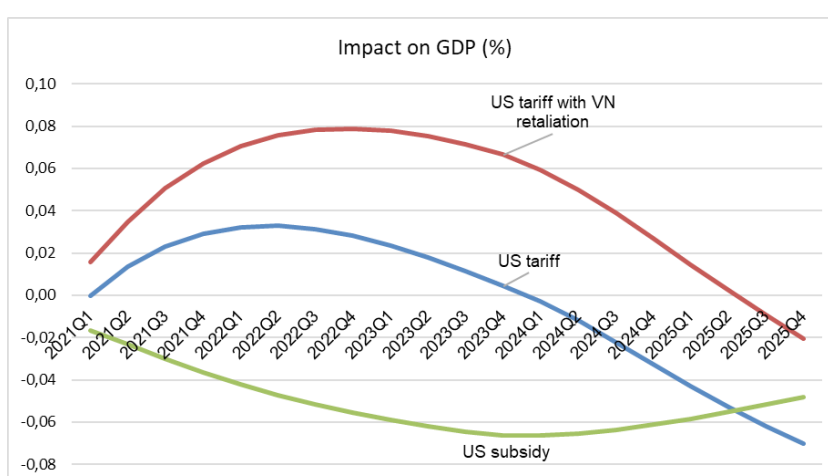
- Scenario 2: The US increases an average of 5% tax on imports from Vietnam from 2021. At the same time, Vietnam also increases an average of 5% tax on imports from the US.

- Scenario 3: The US increases subsidies by 5% for exports to Vietnam.

Figure 2 shows three scenarios as the following:

- Scenario 1: Assume that from 2021, the US increases taxes on imports from Vietnam by an average of 5% and Vietnam does not apply tax measures to the US. Calculation results show that Vietnam's GDP is not affected much but tends to increase by 0.016% in 2021, 0.031% in 2022 and 0.014% in 2023 compared to the scenario without tax increase.

Figure 2. Impact of tariffs on Vietnam's GDP



Source: Calculation results from NiGEM Model.

- Scenario 2: Assume that from 2021, the US increases tariffs on imports from Vietnam by an average of 5% and Vietnam also applies the same measure to the US. Calculation results show that Vietnam's GDP in general will have a positive but insignificant impact. Specifically, Vietnam's GDP may increase by 0.04% in 2021, 0.08% in 2022 and 0.07% in 2023 compared to the scenario where the two countries do not impose taxes.

- Scenario 3: Assume that the US increases subsidies for exports to Vietnam by an average of 5% from 2021. Calculation results show that Vietnam's GDP will be negatively affected, but the magnitude is not too great. Specifically, Vietnam's GDP could decline at -0.03% in 2021, -0.05% in 2022 and -0.063% in 2023 compared to the US Scenario without increasing subsidies.

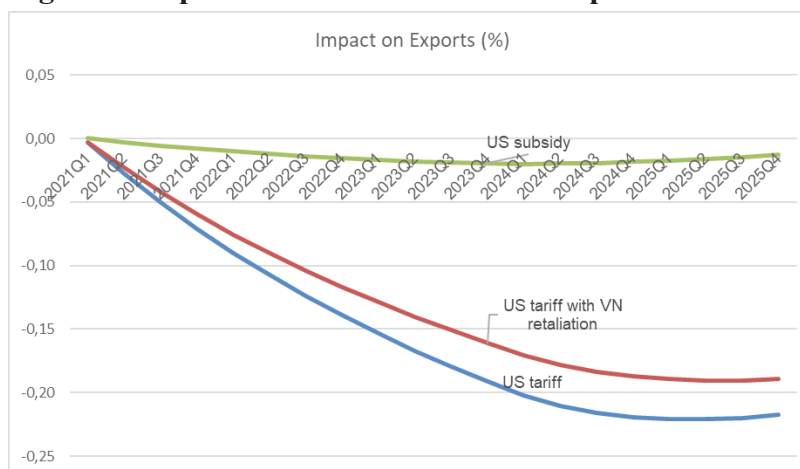
3.2.2. Impact of tariffs on Vietnam's exports

Calculation results show that Vietnam's exports of goods and services are negatively affected in all scenarios, of which the largest reduction is the scenario where the US imposes a 5% tax on Vietnamese exporting products, but Vietnam does not. increase tariffs on American goods; The

lowest impact scenario is that the US increases subsidies by 5% for exports to Vietnam. Figure 3 shows three scenarios as the following:

- Scenario 1: Assume that from 2021, the US increases taxes on imports from Vietnam by an average of 5% and Vietnam does not apply tax measures to the US. Calculation results show that Vietnam's exports of goods and services in general may decline at -0.038% in 2021, -0.11% in 2022, -0.17% in 2023 and -0.21% in 2024 and 2025 compared to the US scenario without tax.

Figure 3. Impact of tariffs on Vietnam's exports to the USA



Source: Calculation results from NiGEM Model.

- Scenario 2: Assume that from 2021, the US increases tariffs on imports from Vietnam by an average of 5% and Vietnam also applies the same measure to the US. Calculation results show that Vietnam's exports of goods and services in general may decline at -0.032% in 2021, -0.097% in 2022, -0.14% in 2023, -0.18% in 2024 and -0.19% in 2025 compared to the US scenario without tax.

- Scenario 3: Assume that the US increases subsidies for exports to Vietnam by 5% from 2021. Calculations show that Vietnam's exports of goods and services in general are negatively affected, but in slight level, namely decrease at -0.004% in 2021, -0.013% in 2022, -0.018% in 2023, -0.02% in 2024 and -0.015% in 2025 compared to US Scenarios no increase in subsidies.

3.2.3. Impact on Vietnam's imports of goods and services

Impact on Vietnam's imports of goods and services (% compared to the base Scenario - no increase in taxes or subsidies). Figure 4 shows three scenarios as the following:

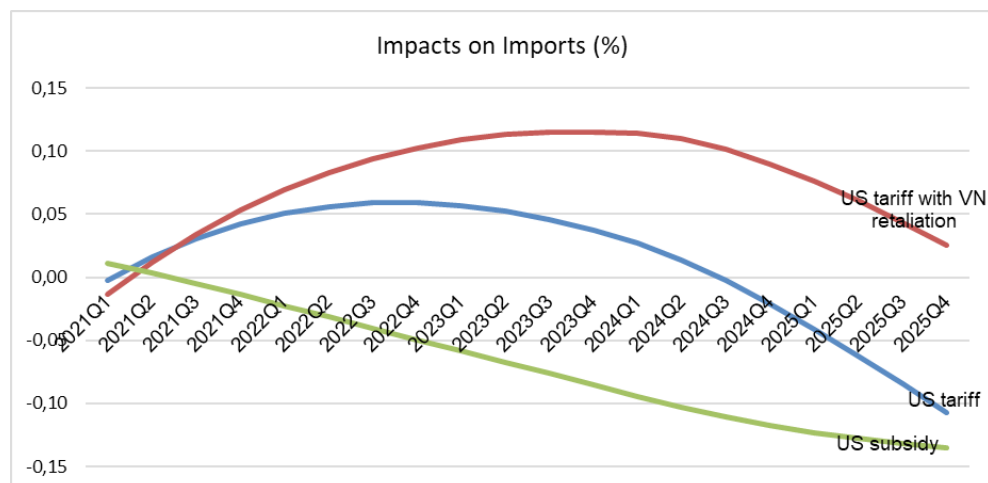
- Scenario 1: Assume that from 2021, the US increases taxes on imports from Vietnam by an average of 5% and Vietnam does not apply tax measures to the US. Calculation results show that Vietnam's imports of goods and services in general tend to increase, but not much. Specifically, imports could increase by 0.02% in 2021, 0.056% in 2022 and 0.048% in 2023.

- Scenario 2: Assume that from 2021, the US increases tariffs on imports from Vietnam by an average of 5% and Vietnam also applies the same measure to the US. Calculation results show that Vietnam's exports of goods and services in general may increase by 0.02% in 2021, 0.087% in 2022, 0.11% in 2023, 0.1% in 2024 and 0.05% in 2025 compared to the US scenario without tax.

- Scenario 3: Assume that the US increases subsidies for exports to Vietnam by 5% from 2021. Calculations show that Vietnam's exports of goods and services in general are negatively

affected with a year-on-year increase, specifically decreasing only at -0.001% in 2021, but then decreasing by -0.036% in 2022, -0.072% in 2023, -0.1% in 2024 and -0, 13% in 2025 compared to the no-subsidy Scenario.

Figure 4. Impact of tariffs on imports



Source: Calculation results from NiGEM Model.

4. CONCLUSIONS AND POLICY RECOMMENDATIONS

The context of trade protectionism is returning after the Covid-19 pandemic, the US-China trade war and the trend of increasing the application of non-tariff barriers, posing many potential risks to Vietnam's exports, especially especially in important markets such as the US, EU, Japan, and China. The above context has brought Vietnam the risk of facing lawsuits and trade protection investigations, especially with seafood and agricultural exports. Therefore, in order to protect exporting enterprises against risks from trade protectionism, the State needs to take measures to support enterprises to raise their awareness and capacity to respond to non-tariff trade protection measures. In addition, strengthen the application of trade remedies to protect domestic production; to step up production in chains, standardize production processes, improve the quality and added value of exported products, to meet the requirements of importing countries; at the same time diversifying markets, promoting exports to other potential markets to achieve a more sustainable export demand. As analyzed above, the article focuses on analyzing the impact of the US imposing tariffs on Vietnam's exports to the US, mainly agricultural exports. This is because Vietnam's agricultural exports to the US and Europe account for a large proportion, which is vulnerable when the US imposes import tariffs on Vietnamese exports. Thus, some policy recommendations for Vietnam to mitigate the negative effects of trade protectionism by tariffs include:

Firstly, make better use of tariff preferences in newly signed FTAs. In the context of increasing trade protectionist trends, joining new generation agreements with major economic partners such as CPTPP, EVFTA and RCEP gives Vietnam many advantages to compete in the markets of other countries. Among the largest agricultural export partners of Vietnam today are the US, China, Japan and Korea, EU and ASEAN, Vietnam has FTAs TAs hina, Japan and Korea, , except the US. The average tax rate in Vietnam's FTA commitments is only from 0.5%, much lower than the average tax rate of 5-25% among WTO members. However, in order to enjoy the preferential tariff rates of the FTA, Vietnam's exports need to meet the rules of origin to determine the eligibility of imports to enjoy the preferential tax rates. Some of the main reasons why businesses have not taken

advantage of tax incentives include: (1) Many businesses do not have a clear understanding of the rules of origin, or have not found a consultant; (2) Difficult to meet the rules of origin because the source of raw materials and accessories depends too much on a few sources outside the FTA; and (3) The procedures at the two ends of export - import are not convenient, not enough to compensate for the costs that businesses spend to enjoy incentives... Therefore, so that Vietnamese businesses can make better use of them. tax incentives, especially in new generation FTAs.

Secondly, ensure the quality requirements of exported agricultural products to enjoy tax incentives in signed FTAs. The US-China trade war has affected the export of Vietnamese goods to the Chinese market in general and agricultural products. Due to difficulties in exporting to the US market, China has boosted domestic consumption. This makes Vietnamese goods not only compete with goods of other ASEAN countries but also compete with domestic goods of China. Therefore, the Chinese market has changed, it is no longer as easy as before. China introduces more and more strict and strict quality criteria, regulations and standards on food safety and traceability for imported goods, causing difficulties for Vietnamese goods. The tariff reduction to 0% for nearly 8,000 product lines under the ASEAN-China Free Trade Agreement (ACFTA) is expected to create a “bump” for Vietnamese agricultural products to grow in exports to China. Therefore, to meet China’s requirements to enjoy tax incentives, Vietnam needs to improve and standardize the production process of agricultural products for export, in addition to meeting the origin of goods.

Thirdly, reduce the risk of tax increases in foreign markets. The escalation of the US-China trade war due to trade protectionism and strategic competition between the two countries can help Vietnam benefit by filling the trade gap in the US after Chinese goods were imposed by very high tax rate in this market. In the context of the US increasing trade protectionism, the rapid increase of Vietnam’s trade surplus with the US also makes Vietnam very easy to fall into the sights of US trade agencies. In the coming time, Vietnam needs to take appropriate countermeasures to avoid being included in the list of currency manipulators by the US in order to avoid trade remedies that the US may apply to Vietnam. First of all, it is necessary to avoid exchange rate interventions that may be perceived by the United States as a currency manipulator. Changes in exchange rate policy could cause a deceleration in Vietnam’s economy, as Vietnam is heavily dependent on exports, while exports are very sensitive to exchange rate fluctuations. In addition, both enterprises and state management agencies must take drastic measures to prevent the evasion of Vietnamese origin from foreign goods that have been mentioned in recent times. Enterprises need to strictly comply with regulations on certification of origin and not abet origin frauds and evade defensive measures. Agencies managing the agricultural sector also need to support businesses with information on how Vietnamese goods in their respective industries are being exported to other countries.

Fourthly, mitigate the impact of tariffs on economic growth and exports. The fact that countries increase trade protectionism in general has a negative effect on Vietnam’s economic growth and exports, not only through measures to impose tariffs directly on Vietnam’s exports, but also on indirectly through imposing tariffs on other countries, such as in the case of the US-China trade war, which reduces the demand for domestic agricultural products of the taxed countries. Therefore, to limit the negative impact of tariffs on Vietnam’s economic growth and agricultural exports, it is necessary to boost exports to markets through other measures such as reducing trade and logistics costs. According to the World Bank (2021), tariffs account for only 1/14 of the average cost of trade, and most trade costs are incurred in transportation and logistics as well as cumbersome trade procedures and processes at the border and behind the border.

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LIGHTING UP NIGHTTIME ECONOMY IN VIETNAM - FROM PRACTICES, PLANS TO POLICY IMPLICATIONS

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Abstract: *A vibrant and mixed nighttime economy can encourage tourism, boost the local economy, and contribute to shaping places where people want to thrive. Nationally, the night-time economy makes a significant contribution both to the economy and employment. Recognizing the necessity and importance of the nighttime economy, The Prime Minister has signed the Decision No. 1129/QĐ-TTg on July 27, 2020, approving the “Nighttime Economy Development Proposal in Vietnam” with the aim of taking advantages the potential for night-time economic development and gathering the most of new economic development opportunities thereby both improving quality of life and promoting safety and equity, supporting business development and recovery...*

Keywords: *nighttime economy, NTE, 24-hour city, 6 pm to 6 am...*

1. INTRODUCTION

Nightlife is one of the most important parts of a city or town’s culture. Captivating entertainment, delicious food and drink, and a thriving arts scene is our vision for nightlife across the area. Previously, the term night-time economy was used to describe a wide range of activities from a trip to the theatre or a family meal to a night out at a club, though there has been unofficial and unidentical concept of nighttime economy. Basically, there are many common points in the national-wide concepts that focus on the time and activities of the night economy.

Across the globe, many cities have planned primarily for their daytime economies. Nightlife management, traditionally, has been done less formally. In recent years, many have now started to take a proactive approach to manage nightlife, including not only its economic effects but also its social and cultural impacts.

In Vietnam, the inevitable initiation of the nighttime economy is set actively in line with international integration trends that offers additional chances of making the most of a day-time economic efficiency, creating new opportunities for economic growth, diversifying economic activities, and better serving the physical and spiritual life of the residents and visitors, especially foreign tourists. By that means, the potential of night-time economy can be making good use of its interest in meeting with both country’s social-economic development, people’s incomes and lives improvement and restricting risks and negative impacts on political security, social order and safety.

2. LITERATURE REVIEW AND PREVIOUS RESEARCH STUDIES

Concept of nighttime economy

^{1,2} Academy of Finance.

The phrase night-time economy or the idea of a city where continuously operates 24 hours has been established since the late 1970s, especially in the European zone such as the Chain of cultural events of summer evening in Rome (Italy) in 1977 which was one of the first initiatives on the 24-hour city. Moreover, several large United Kingdom cities , like London or Manchester, did not only regard the nighttime as a negative space (time for parties, alcohol use, crime, street violence, etc.) from the outset of the 1990s but also has begun to shift towards estimating the value and benefits of the nighttime economy.

However, a determination of the scope as well as the extent of night-time economy activities varies with initiating countries and/or cities . While broad concept of nightlife includes all social, cultural, and productive activities that take place in the nighttime frame (Andy Lovatt & Connor, 1995), restricted one may classify as a collection of activities of the cultural economy that take place at night, mainly on recreation and entertainment , including: bars, floors dancing, karaoke facilities, restaurants, live show music venues and other forms of nightlife (such as: night markets, night malls, etc.) without prostitution. As a matter of fact, night-time economy focuses on amusement and lifestyle, maintaining and developing indigenous culture. In many countries where night-time economy prevails , the full name “night-time entertainment economy” has been named to describe the nature of this economic category.

In a narrowed way of sense, night-time economy images an outstanding indication of the diversity and dynamism of a country’s or region’s culture, society and economy. Theoretically, this paper uses the definition of nighttime economy being widely applied as activities when the daytime activities stops, shifting to nightlife duration when it may start from 6pm the previous day to 6am earlier next morning (Andreina Seijas, 2018), which is defined as leisure and entertainment activity between 6pm and 6am, including food service, bars and clubs, live music venues, arts and theater, and sports and recreation (NYC’s MOME, 2019), or describes the social, cultural and economic activities that take place between 6 pm and 6 am; while this incorporates all the usual economy sectors (such as transport, manufacturing, health and many related services), ‘nightlife’ constitutes a significant part of this mix (Shane Homan, 2019).

Subsector	Industry Sub-Category
Arts	Live theatres and motion picture theatres
	Art galleries
	Other live performing arts
Bars	Bars
	Nightclubs
Food Service	Full-service and partial-service restaurants
	Fast food or fast casual restaurants
	Concessions and other food establishments
Sports & Recreation	Spectator sports
	Experiential activities (bowling, arcades, billiards, etc.)
Venues	Music venues
	Independent spaces

Figure 1: Nightlife Economy Sub-Categories

Source: NYC’s MOME, 2019.

A thriving night-time economy includes vibrant activities ranging from bars, restaurants (even the sale of alcohol for consumption), music festivals, theatres, performances, cinemas, nightclubs, and sporting schedules to shopping, tourism, festivals, family events that attract many tourists and businesspeople, create more jobs, and promote the economic development of cities and countries. It is important to recognize that whilst a distinction is made between the nighttime and daytime economy, these two are highly connected and should be considered in parallel and being integral parts of the economy. In essence, nighttime economy is a form identified by the competent authorities in terms of legality, statistics, and official protection as well as an economic liveness aiming at making a profit. Normally, the nighttime economy is divided into the “evening economy” (from 6:00 pm to 0:00 am) and the “night economy” (from 0:00 am to 6:00 am).

Today the nighttime economy (NTE) is not merely serving the youth, both even middle-aged residents and tourists in urban areas can also benefit from. Businesses and suppliers have been increasingly extending their operating hours over the period to attract more different types of customers. However, along with the bright sides, the above-mentioned prospects, the nighttime economy always has shortcomings and difficulties in management, this paper consequently aims to address concepts, roles and benefits the NTE could bring back to the total economy, with introducing several case studies of distinctive night-time cities around the world and lessons that can be a good practice for a freshly potential NTE in Vietnam.

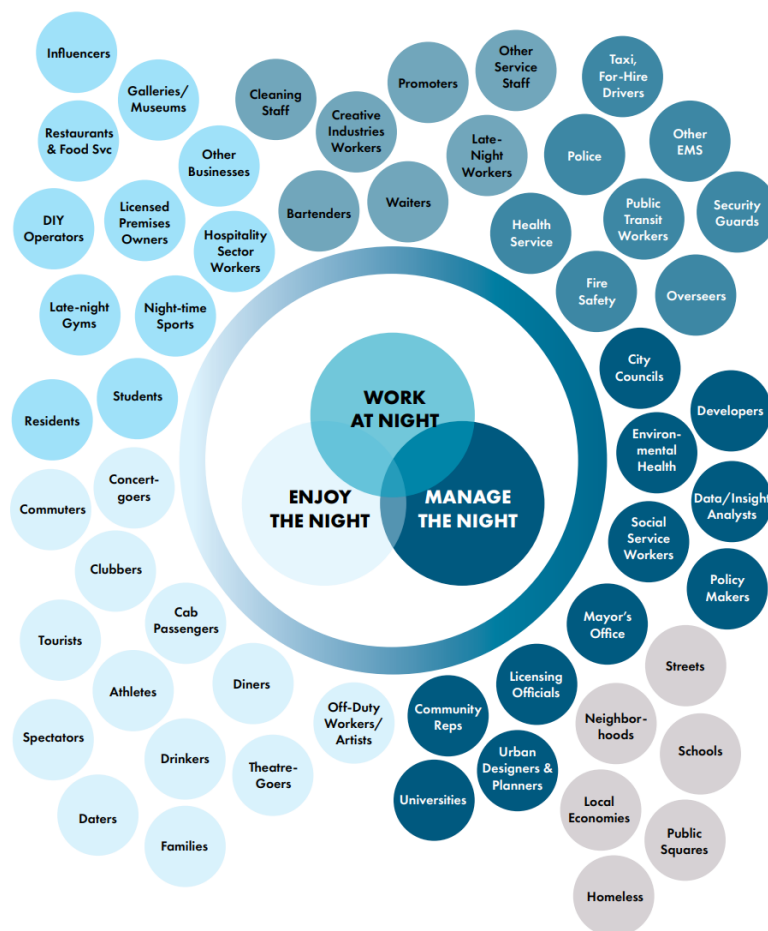


Figure 2: The Nightlife Ecosystem – Any/All Cities (Not Exhaustive)

Source: NYC's MOME (2019).

Nighttime vs. Daytime Economy

Through considering the characteristics of the NTE, it is possible to compare the differences between nighttime and daytime economies, as follows: (1) Operation period varies and being perceivable based upon light and time; (2) scope of activities: NTE only concentrates on a number of services including entertainment, tourism, satisfying spiritual life demand of beneficiaries; (3) participants in the daytime economy and that of night-time are diverse, including enterprises and households; (4) Level of risk: Although NTE has brought many economic and social benefits as commonly demonstrated above, the development of the NTE can be associated with issues, predominantly around alcohol fueled violence and crime, prostitution, robbery and drug problems and anti-social if not well planned and managed; (5) Operation of the “nighttime economy” also requires an appropriate mechanism for infrastructure management, meeting the demand for electricity, gasoline, alcohol, premium beverages, tobacco, and improving management capacity which deals with intercepting social evils, counterfeiting and tax evasion as well as ensuring urban security and safety; (6) operational costs: infrastructure needs to be invested and upgraded to be suitable for the operation of NTE, public services and planning issues...

Roles, Benefits and Potentials of Night-Time Economic Development

NTE conceivably contribute to making the whole economic sectors profitable most time per day, creating new opportunities for economic growth, diversifying economic activities, promoting economic restructuring of a specific city or locality where NTE functions. Additionally, it then caters for a better physical and spiritual life of inhabitants, foreigners especially tourists, bringing new opportunities and motivation to the country’s economy in general (Pham Thi Tuong Van, Nghiem Thuy Hang et al., 2020).

NTE plays a part in adding value to creative industries, assisting the frame of overall cultural value for the locality, and supporting businesses to obtain various opportunities to earn and grow up their profits through participating in the supply chain within NTE flows (NYC MOME, 2021). Adding up to generating and increasing direct revenue for the localities’ budget through taxes, the NTE also promotes the understanding of daytime economic trends and the improvement of local infrastructure.

For society, NTE contributes to creating more jobs for workers, thereby increasing incomes, improving living standards, attracting talents, business investors, tourists and promoting the country’s culture. It becomes apparent that an advantage of the NTE is to attract tourists and address a prominence and tone for every single city or locality. Therefore, a stimulating, vibrant nighttime consumption and influential cultural movements call for a variety of investors to put their capital in entertainment, recreation and shopping establishments from which visitors could find more reasons to stay longer, enjoy and involve better and eventually to spend further. Since then, nightlife is now embraced as a powerful economic engine and job creator, an incubator of local culture, an interest haven for relevant communities and essential to creating a favorable environment for the operation a “24h city” which is now turning into popularity around the world.

Culture and entertainment always develop in parallel with the night-time economy. Therefore, NTE also generates a huge boost for the development of this sector such as: Music, events, street festivals and other forms of entertainment and communication. The more vibrant the nightlife environment and factual needs develop a driving force the more entertainment and recreation industry grows up and bring society and culture about being more sustainable.

With the onset of the COVID-19 pandemic, universal nightlife establishments as well as other businesses have temporarily closed and/or bounded to help slow the spread of the virus. Planning for growth and recovery of the nightlife sector must include policies and services to mitigate potential adverse effects on nightlife's workforce, its consumers, and its neighbors to resolve issues the NTE industry faced before COVID-19 so it can be stronger, more sustainable, and resilient moving forward.

3. CASE STUDIES IN NTE OPERATION AND MANAGEMENT IN MAJOR CITIES WORLDWIDE

Nightlife In New York - Throughout its long history, nightlife has been central to New York City's identity. The "city that never sleeps" is a destination for dreamers and doers and an epicenter of creativity. It boasts something for everyone once the sun sets, including opportunities for dining, dancing, performing, socializing, or building a career. Over many decades, New York nightlife has launched cultural and social movements that resonated far beyond the city's shores: from the social consciousness of beat poetry, folk music, and hip-hop, to the rhythms of jazz, salsa, disco, punk rock, and many more. New York nightlife has inspired artists and entertainers to push boundaries and provided places for people to come together to find community, all of which contribute to the city's distinctive energy.

New York City's nightlife ecosystem has been identified in five broad subsectors, including : (1) Food Service: Food Service encompasses full- and partial service restaurants, cafes, and food trucks; (2) Bars: Bars are defined as drinking establishments that primarily serve alcoholic beverages, as well as nightclubs; (3) Arts: Arts include galleries, museums, live performing arts spaces, movie theaters, and Broadway, has 1,800 establishments; (4) Venues: include concert and entertainment venues, independent venues, and informal cultural and performance spaces Sports and Recreation; and (5) Sports and Recreation includes arcades, amusement venues, billiards, bowling alleys, and spectator and participatory sports (NYC MOME, 2021).

Nightlife is a vital part of this city's economy, culture, and symbol, supporting nearly 300,000 jobs and generating \$35.1 billion in economic impact (NYC MOME, 2021). New York's nightlife has also long been an important incubator of cultural movements and continues to provide spaces for connection, creativity, and personal expression.

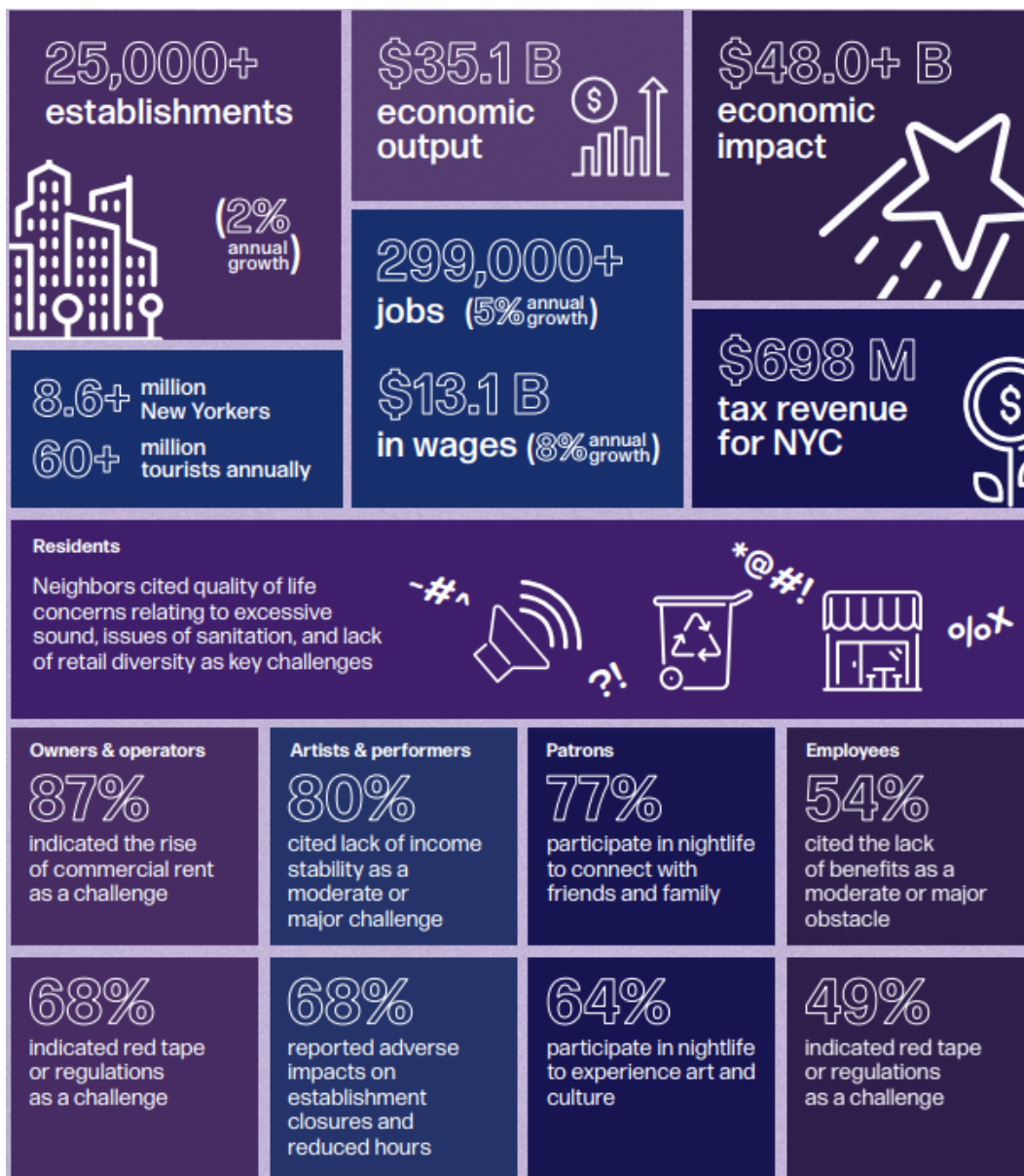


Figure 3: Contribution of night economy to NYC in 2019 (\$ means USD).

Source: NYC's MOME (2021).

Global cities are now looking to New York for guidance and education. Each one has recognized the contribution that restaurants, bars, dance clubs and live music venues provide to the city’s local economy and culture and the need for a dedicated voice to speak for those important businesses. Similar efforts exist in major global capitals such as Amsterdam, London, Paris, and Berlin to support vibrant urban nightlife have improved industry and resident relations, and developed healthier, more productive nighttime economies.

A Vibrant and Mixed Night-Time Economy in the United Kingdom - where the term night-time economy is used to describe a wide range of activities from a trip to the theatre or a family meal to a night out at a club. Night-time economies are an important part of towns and cities and are estimated to contribute about 6% of GDP with an approximate size of 66 billion pounds to the United Kingdom (UK) economy every year, creating more than 1.25 million jobs. In which,

London on its own accounts for about 40% in size, equivalent to 26.4 billion pounds and creates direct jobs for 723,000 workers (London First & EY, 2018). It is projected that London's night economy will contribute nearly £30 billion a year by early 2030, up 15% from today.

Economic activities taking place in London's nighttime has very well supported the job market. The employment structure in the 24-hour economy in London is relatively developed in both breadth and depth, rich and diverse. Specifically, not only restaurant and bar service jobs attract many workers, but a series of other related jobs also show a rapid growth in labor demand, such as: engineer jobs, security guards, nurses, cleaning workers, taxi drivers, technology and information support specialists, performing artists.... contribute to the image of a dynamic, open the UK and one of the most interesting international destinations for tourists.

Sydney After Dark - Sydney has the largest night-time economy and the biggest number of visitors in Australia, as well as the country's densest residential and commercial districts. Sydney's night-time economy is critical to this city's future - it generates more than \$3.64 billion in revenue each year, with more than 4,600 businesses employing more than 32,000 people. Sydney's Central Business District is where all the action happens, the entertainment precinct covers key nighttime activity areas such as George Street, Oxford Street, The Rocks and Darling Harbor. These areas require extra management at night due to the increased number of visitors attending venues such as restaurants, pubs, clubs, and bars. The city council decided to extend hours for unlicensed businesses in which new category of trading hours would be established for unlicensed shops, like bookstores and clothing shops, and businesses like gyms, dry cleaners, and hairdressers. This would allow them to trade up to 24 hours a day in the city center and other busy inner-city areas, until 2am on village high streets, and until midnight in other areas. Later trading hours for these types of businesses would attract a wider range of people out at night for different activities, helping create a safer and more balanced night-time economy (City of Sydney, 2020).

Sydney's city council endorsed a strategy and action plan for the long-term development of Sydney's night-time economy to 2030. Thereby, they hope the night-time economy will be transformed from a focus on younger people and drinking to 40% of people being over 40 and 40% of operating businesses at night will be shops. Additionally, a larger variety of retailers and attractions have been encouraged to stay open late, to broaden people's choices of things to do at night with a goal to reach the city's night-time turnover to \$30 billion and increase night-time employment to 100,000 jobs.

Japan's Capital - Tokyo is home to a 24-hour entertainment economy, with internationally renowned dance clubs and one of the highest numbers of food and drink establishments per capita in the world. The government of Tokyo has explored how to manage their night-time economy better. Moreover, in summer 2019, the Tokyo Metropolitan Government and the Tokyo Tourism Foundation launched their "Nightlife Tourism Promotion Grant," that offers subsidies to nightlife venues and promoters to produce events that start "after sunset" and attract tourists from around the world. This initiative is being tied to an expansion of the Tokyo Metro subway system's operating hours to support tourism when the city hosts the Summer Olympics.

An ASEAN Country - Thailand, has formed a very well-developed tourism model based on events, parties, and nightclubs, attracting a huge number of international tourists to come for relaxation and expenditure. In 2017, Thailand was the world's fourth-largest spending destination

by international tourists, after the United States, France, and Spain, with a total spending about 57 billion USD. The capital city of Thailand, Bangkok, is famous around the world for a booming nighttime economy. Its nightclubs and luxurious rooftop bars atop competing hotels drawn enthusiastic reviews. US media firm - CNN once chose it as one of the world's best party cities, along with Las Vegas and others. Such a reputation helped bring in a trove of foreign currency. It is a major part of the broader tourism business in which Thailand ranked fourth in the world by revenue, while the value brought in per visitor is higher than in Japan. The industry is estimated to be worth an annual 211 billion baht (USD6.52 billion) in 2019 (OECD, 2020).

In China, the nighttime economy with service and business activities from 6pm to 6am the next morning is being developed by the Chinese government with series of strong support measures to boost the nighttime economy have been introduced. Several cities in China have issued policies to advance the nighttime economy which has become a new source of demand for domestic consumption, of which eateries, malls, scenic spots, and other places for entertainment have taken the front seat when it comes to China's robust nighttime consumption. City of Beijing has been planning to launch nighttime activities such as plays, comedy performances, films, operas, and live music. Accordingly, Gui Jie (aka. Ghost Street) is known as a famous overnight food street with more than 150 restaurants on a total length of 1.5km. It is common for visitors to wait in long lines to be served, whether it's 10pm or 3-4am. Along with Beijing, many other provinces and cities also have plans to promote the night economy such as Shanghai, Tianjin, Hunan, Hebei... Shanghai has not only issued specific guidelines to promote it nighttime industry by building a few entertainment areas from 19:00 to 6:00 a.m., but also nominating "nighttime CEOs" to effectively manage (Song Lin, 2019).

Nighttime economic activity also has been witnessed the rapid growth of online activities based on the rapidly developing information technology platform in China, from watching movies, listening to music, reading online stories, e-commerce, video games, a series of shopping promotions. According to previous calculations (pre pandemic), the size of the night economy market in China was previously estimated to reach \$2.4 trillion by the end of 2020 (Xinhuanet, 2019), mainly based on the strong growth of shopping services, online entertainment, and digital content. Electronic and communication services have helped connect the traditional nighttime economy (direct trade) and the online nighttime economy (indirect trade) in this country.

Management Practices

Basically, while above-mentioned countries do not have a common policy on the development and management of the NTE, a decentralization of this responsibility has been assigned to city and local governments due to their important role in regulating the nighttime economy. Depending on the potential and development strategies and a clear vision for the night-time, underpinned by a statement of licensing policy, a city government can go a long way to setting the right tone and implement programs and tools on their own or work with a wide range of partners in innovative and cost-effective ways. Those to promote the NTE and tackle the various issues they have faced in associated with the characteristics and strengths of its culture, art, sports, and cuisine. Nevertheless, policies of managing the night-time economy in individual city show flexibility and diversity, specifically:

First, regarding the model of the organizational management, most countries that encourage NTE have authorized the role in regulating to local government levels (city level), on which

local governments can appoint key positions or administrative boards to run night-time economic activities. An appropriate individual can be appointed as “night mayor” (United Kingdom, Australia) or Executive Director of the Office of Nightlife (NYC)... or a council of executives in France and China, who dedicates to supporting this vital NTE industry while recognizing the importance of this entity or position to those whose lives and livelihoods depend on this industry and what it represented. For instance, Shanghai city of China also released a list of 10 nightlife executive leaders, all of whom have rich management experience in nighttime businesses as a way to support the NTE coordination mechanism of the city. Besides, this enforcement assignment is separate from that of management for daytime economy within local government. Essentially, this apparatus model also involves with a wide range of partners in innovative and cost-effective ways from the local community (from service providers, resident associations, managers, security assurance).

U.S cities such as San Francisco, Seattle, NYC, the approach to nighttime tends to be through the cinemas, music performance, media, and entertainment. Especially in NYC, the Office of Nightlife (ONL) began as a law signed by Mayor Bill de Blasio on September 19, 2017. Local Law 178 of 2017, codified in New York City Charter section 20-d, mandated that the office “assist nightlife establishments navigate city licensing requirements, permits, or other approvals,” and required the Office to “advise the Mayor and various agencies on trends the nightlife industry as well as make policy recommendations on an ongoing basis.” As a newly established voice for nightlife, under the auspices of Mayor’s Office of Media and Entertainment (MOME), the inaugural ONL team has had the responsibility to reframe New York’s relationship to its nightlife. Indeed, ONL is a non-enforcement liaison, a convener between city government and the nightlife ecosystem of operators, performers, workers, patrons, and residents. The office’s purpose is to help establish and coordinate systemic solutions to support the nighttime economy, culture, and quality of life. Its goal is to make nightlife fairer, safer, more equitable and accessible, and to make sure that nightlife works for all New Yorkers, and the city’s millions of visitors each year.

The City of Amsterdam, Netherlands, operates a Host Program in highly trafficked areas of Rembrandt Square and the Red-Light District. In these areas, bars and clubs are open until early morning. The Mayor of Amsterdam and the “Stitching Nachtburgemeester” or “Foundation of the Night Mayor,” launched the Hospitable Rembrandt Square pilot project, in which the municipal government, police, and bars and clubs of the square changed the way the area was experienced through policy and design. Non-enforcement hosts are hired to welcome people, inform them about where to go, and communicate city and establishment rules. The personnel of bars and clubs are trained in hospitality and dealing with intoxicated guests. Hosts are also trained in hospitality and tourism, incident de-escalation, and first-aid and harm reduction strategies. Additional programs and crowd management tactics are being developed to support this initiative, including public lighting, more cleaning services, and prohibiting parking on the square during weekend nights. As a result, approximately 19 million tourists visited Amsterdam, one of the first municipalities to adopt a model for nightlife governance and planning in 2018 (MOME, 2021).

Second, cities having NTE all promote the public transport system with increasing service of public transport services at night such as all-night trams, night buses, public bicycle sharing services. In China, the UK or France, subway lines that pass through busy commercial areas at night are extended to serve both customers and workers. Investment in infrastructure, landscape embellishment, public lighting equipment, and telecommunications such as public Wi-Fi and 5G are also focused on

by these countries in major tourism and commercial areas. Exclusively in China (Xinhuanet, 2019), public transport services such as trains have also been extended service times during the night and local authorities have implemented incentives to extend the operating hours of shopping centers and restaurants in order to increase consumption and expenditure of nightlife visitors and residents (especially for shopping malls, household appliances and means of transport).

Third, for financial support, China and Japan have implemented specific subsidy programs for business activities, goods and services consumed at night. Businesses and households in Beijing could get financial support to boost up business activities during nighttime while the United Kingdom, the United States, France, and Australia have another approach. That deals with assisting construction, infrastructure renovation, and space rental costs, connecting nightlife venue owners, employees, patrons, and residents to services, coordinated city agencies to improve services in areas with a high density of nightlife establishments, resulting in cleaner, quieter streets, especially conducting a survey to evaluate the immediate effects of COVID-19-related restrictions on businesses, workers, and freelancers. In 2020, the New York city (NYC) launched new emergency measures for small business affected by the pandemic (NYC MOME, 2021). This included connecting businesses to direct financing assistance through the NYC Employee Retention Grant Program for small businesses with fewer than five employees, and the NYC Small Business Continuity Loan Fund for businesses fewer than 100 employees, as well as many other assistance programs like Fair Share NYC to connect small business owners to federal relief funds, including the Paycheck Protection Program and Economic Injury Disaster Loans. Yet, many nightlife businesses have still taken on additional debts and other liabilities, placing them at risk.

Fourth, regarding the regulation and licensing policy of commercial centers, convenience stores, supermarkets, restaurants, sports and entertainment centers, these establishments have been encouraged to extend the opening hours till the next morning. Alcohol-related businesses have also been permitted to stay open late over midnight in large cities of the UK and United States. Cities around the world are expanding the way institutions and businesses can operate at night, as limitations on closing hours have pushed late night activity to unlicensed venues, sometimes coming into conflict with residential uses. Uniform closing hours for nightlife businesses can result in groups of people congregating in the street, elevating tensions between patrons and residents. In residential areas, nightlife and music venues can create noise and attract traffic that draws complaints from neighboring residents. Allowing 24-hour use in specified districts, if implemented properly, can help people to move at their own pace and reduce conflicts. Dutch city of Amsterdam began allowing nightlife venues to apply for 24-hour licenses in 2012, developing strict criteria for potential applicants that included cultural significance, accessibility to public transportation, and locations without “inconvenience to local residents”.

Fifth, human resources policies, developed countries around the world have long-term preparation for the quality of the night working environment as well as the skills and abilities of workers when joining for work in this economy sector.

However, in the context of Covid-19 pandemic with complicated impacts on the global economy, governments tend to support businesses, patrons and residents participating in the night time economy to overcome consequent issues and stay active, embracing (i) regulation and monitoring pattern, (ii) reframe of NTE fundamental principles, (iii) determination and planning

for public places and venues, specially the vacant center and/ or separate areas where nightlife can be accessible and enjoyable, and (iv) enhancement of a more comprehensive and safer accession to night time activities (quality and quantity of service and products provided, noise and pollution, space conflicts, crime,...)

4. DISCUSSION

A Brief View of Recent Night-time Economy Status in Vietnam

Nighttime economy is not only responsible for supplementing GDP, but it also prolongs the life of the city. Thus, profit-generating activities at night in Vietnam today are practically an extension of daytime economic behaviors since there has not been an absolute policy to develop the “nighttime economy” other than the establishment of night markets or night walk streets.

In fact, several localities have paid attention to the frame and operation of night walk streets - as a main part of their local NTE with deployments in Hanoi, Ho Chi Minh City and Danang, which have electively experimented and set up in forms of night market, a nightlife street, a 24-hour convenience store chain, or typical streets of entertaining such as Ta Hien (Hanoi), Bui Vien (Ho Chi Minh City) and Ba Na Hills (Da Nang), or the recent opening of “city of sleepless” venue in Phu Quoc island with a hope of being a promising and exciting 24/24-hour destination for visitors.

Bui Vien walking street of Ho Chi Minh City, is a destination for foreign tourists and typical of the city’s night economy, came into operation at the end of August 2017 and is now well-known as a venue attracting a vast number of tourists when darkness falls. Presently, this street has more than 350 business establishments dominating in restaurants, hotels, bars, business establishments of travel and accommodation services, etc. Recreation and entertainment activities have been held regularly at this pedestrian street to promote culture and appeal to tourists such as modern and traditional art demonstrating at the stage on this route. Bui Vien Street has also been a based model that forms other walking and food streets at night in multiple districts of the Ho Chi Minh city, making a joyful and bustling atmosphere of the city at night.

In Hanoi, after city authority’s efforts to eliminate the situation of “dinner then water puppetry” to visitors by organizing walking spaces around Hoan Kiem lake and its vicinity, has been making busy streets with walkers, food, shopping every weekend evening. Also, bars and restaurants in the Old Quarter have been allowed to open until 2 am to keep travelers spending more time possible for enjoyment... showing a proof that emerging nighttime economy is a good way to exploit available potentials. Having initial steps succeeded, Hanoi government has begun to pave the way in promoting the NTE for more.

Central coastal cities of Danang and Nha Trang (Khanh Hoa province) are the localities with the potential for nighttime economic advancement because of available facilities and beautiful landscapes. However, most tourism businesses play a part in small-scale, lack of marking attractions especially entertainment areas, art performances to make diverse nightlife products. Entertainments such as bar, pub, karaoke... just legally open until 12 midnight or 1 am next day so thriving needs of tourists have not fully met leading little impression on visitors out of beautiful landscapes. There is no tool supporting trends of nightlife tourism making none of distinguished effects in long-term stability of earliest NTE launching.

Besides, the night economy also faces many risks related to security and order, infrastructure pressure, social evils, noise pollution, garbage... A few events and establishments stay mixed with residential areas or utilize public spaces that affect residents and living routines. Meanwhile, public transport and sanitary structure have been inconvenient in the nighttime frame for visitors.

Causes

One of the main causes why nighttime economic activities in Vietnam have not latterly boomed is the inadequate awareness of the importance/role of the NTE. The fact is that the understanding in NTE appears to be quite new in Vietnam that the legal and policy framework on promoting night-time economic development is almost nonexistent in Vietnam. While destinations around the world have earned billions of dollars from the promotion of the nighttime economy, it seems still quite fragmented and exiguous in scale in Vietnam. Perception and innovative thinking of the NTE have been obstructed by inconsistency, traditionally cultural opinions and fear of negative issues arising from this sector. As a result, there are existing barriers and regulations that prohibit or hinder this form of business from developing.

Vietnam government also does not have a financial support policy for NTE businesses and service providers. The current tax and fee policy mechanism has been imposed equally to all economic sectors and yet there is no distinction between NTE and the daytime economy. Tax incentives by law are only applied according to main two criteria, namely: incentives according to geographical areas (in difficult and extremely difficult conditions) and by preferred industry or fields of investment. Several financial policies have been enacted to assist businesses and trading majors affected by the recent Covid-19 pandemic, expressly: income tax reduction, extension of time for paying taxes and land rents; reduction of lending interest rates...of which it is not specific for supporting businesses, organizations, households, individuals... doing business during the daytime or nighttime.

Most cities/provinces do not yet have their own attractive financial mechanisms and policies to encourage businesses, organizations, and households to participate in providing nighttime services. Currently, the main relief of each locality can be named as follow: accelerating the implementation of projects to renovate and decorate the area planned for NTE development; deploy a more distinctive lighting system; assist businesses and households in the night walk street to conduct their free of fees and charges (for a certain period).

The development of programs/plans for the development of the NTE or the planning of separate areas and vacant space for nightlife zones has been insufficiently addressed in many localities. Therefore, the ability to encourage the participation of businesses and investors in the development of NTE is still limited. Even in provinces that have developed and promulgated projects/plans for the development of NTE infrastructure (such as Hanoi, Danang, Thua Thien Hue, Ninh Binh...), city's authority do nothing for more rather than provide solutions to the orientation of the spatial planning for the development of nightlife operations, serving products and the responsibilities of the relevant state agencies in the field.

Access to public services (such as buses, clean public toilets, banking POS, communication...) is also inconvenient and yet no mechanism to control risks possible of occurrence. The status of infrastructure in cities with nighttime economic activities in Vietnam is mainly based on taking use of existing daytime infrastructure in organizing nighttime being active.

NTE can become an environment to result in crimes and lead to other social issues such as noise, waste, prostitution, drugs, gambling... which creates struggles and difficulties for social managers and city agencies. A popular method applied to ensure a safer nightlife has been proved to be effective is to install security camera systems in places the NTE operates. However, current public security camera system in Vietnam has been used for patrol and traffic. Establishing a new set of AI-integrated cameras ensuring security and safety and managing the NTE activities must be expensive and cost-ineffective in comparison with local budget criteria.

On July 27, 2020, Prime Minister of the Vietnam Government promulgated the Decision No. 1129/QĐ-TTg in relation to approving the Proposal of the Nighttime Economy Development in Vietnam, which aims at two main goals: promoting domestic consumption and developing economic growth through focusing on developing the fields of cultural services, entertainment, food, shopping services and tourism, takes place from 6 pm to 6 am. According to approved plan, the Government allows a pilot in extending the time of organizing nightlife activities to 6 am the next morning at some attractive tourist spots and resorts with favorable conditions for risk management in 10 major cities and centers with many tourists such as: Hanoi, Ho Chi Minh City, Danang, Quang Ninh, Hai Phong, Hoi An, Hue, Can Tho, Dalat, Phu Quoc. At the same time, it is required to research and propose to prioritize investment in building a few of separate nightlife complexes in Hanoi, Ho Chi Minh City and Danang in the period of 2021 - 2025. On that basis, a calculation and consideration to the balance of resources to make investment initiatives in a synchronic manner should be supposed to appeal investors from the private economic sector to NTE as well as to train qualified human resources being ready for the NTE.

Recommendations on NTE Policies in Vietnam

The contribution and development potential of the nighttime economy cannot be deniable, but it may take steps to move forward and likewise has many socially hidden challenges in company. The Proposal of nighttime economy development in Vietnam approved by the Prime Minister at Decision No. 1129/QĐ-TTg of July 27, 2020, also indicates that NTE is not a separate part of the economy, for which the development in the short term aims to promote domestic consumption and tourism expansion, through a focus on boosting cultural, entertainment, food catering, shopping and tourism services that take place from 06:00 pm to 06:00 am.

As for Vietnam, the NTE however poses requirements to resolve local social order and security, complaints of noise, light and waste pollution, flammable risks, illegal occupation of public space for business activities as well as to provide essential infrastructure systems like electricity and water supply, transport accessibility, quality control, and prices issues... Having mentioned above empirical practices in NTE operation worldwide, a group of recommendations below could be then useful suggestions to NTE policymaking in Vietnam, especially in regions/cities where they may be applicable:

(1) The model of night economic management maybe follows the trend of establishing a Management Council or appointing the position of Night Mayor in localities. This agency needs to coordinate and connect well with all departments, sectors, and communities in the fields of planning, renovation, tourism and culture, environment, security, and health services, thereby creating create practical values for the community through night economic activities.

(2) With regards to quality, safety, and enforcement: resources must be put in for nightlife performers, entertainers, and employees to identify work opportunities, legal assistance, and other

best practices. Employee and patrons' safety need to be improved through campaigns or training to prevent gender-based harassment and sexual violence and encouragement to harm reduction policies around drug and alcohol use. In any case, it is compulsory to promote nightlife within areas where establishments can operate without disturbing neighboring residents and to establish different mechanisms, strategies, and guidelines in terms of period of time, nightlife space and participants to reduce stipulations that cut business operating hours. An identification of potential and appropriate areas with low residential density where a limited 24-hour program might be tested, allowing late-night activity to operate free from nuisance complaints or other conflicts. It is recommended to divide agenda of the NTE activities based on specific locations and settings where nightlife can be adapted. It is therefore suggested not to publicize nighttime activities after 10 pm in a mass way but to initiate with a selective emphasis and spaces in cities or major tourism centers where events and performances at night are experimentally licensed toward a latter streamline process.

(3) Creation of online repository of information including industry updates and best practices help opening and growing businesses, directing them to information; providing user-friendly graphical resources that integrate agency guidelines, forms, permits, regulations, and deadlines; offering guidance for identifying locations conducive to nightlife; liquor licensing; mediation advice. Other regulatory issues such as an amendment of the Law on Land 2013 is necessary to promptly revise inadequacies, overlaps and inconsistencies of the Land on Law 2013 in a way of supplementing regulations on land planning for the implementation of NTE. To the field of health sector, it is necessary to improve financial autonomy policies for medical examination and treatment establishments at nighttime.

(4) It is necessary to take survey, select, organize events that make most use of available areas and capacity offering for the NTE on the principle of ensuring traffic connection, beauty preservation, security and order, and environmental sanitation; to minimize impacts on people's lives and goings-on; to improve the business environment for existing and prospective operators by creating resources to assist businesses understanding of regulatory processes, and coordinate efforts of cities agencies involved in managing, regulating, and promoting nightlife. Preserve and protect venues that foster connection, creativity, and personal expression. Strengthen relationships between venues and communities through programs and policies for sound management; reduce traffic congestion, improve waste collection, litter removal, and mediate conflicts; promote opportunities in nightlife for people to look out for each other through campaigns and workshops; promote harm reduction, bystander intervention, mental health awareness, and worker and patron safety.

(5) Products and services for NTE may embrace cultural and entertainment performance; catering trade; shopping spots; night sightseeing... which are characterized by motion as: recreation, night walk streets, shows, bar activities, discos, restaurants, sea sports, seafood markets, bars, riverside pubs, seaside, coastal culinary space. In addition, nighttime period also aims to form night markets with typical regional identities, open sightseeing trips at historical and cultural spots,... It is essential to build specific regulations for the management and the making of cultural features, relics, and art performances regularly more useful and productive at nighttime.

(6) As the COVID-19 pandemic has placed challenging financial burdens on nightlife operators, many businesses and commercial forms catering for NTE bearing liabilities have

grown as restrictions to slow the spread of the Corona virus through social distancing have greatly affected to their ability to generate revenue. City committees and competent agencies should be working on to identify ways to help reduce the costs of doing business for those most affected, possibly a program that would grant a tax abatement or other incentives to for property owners who offer favorable lease terms and extensions for legacy businesses; or would give grants to legacy businesses to make more time being adaptable to unexpected increases in the cost of doing business; or would focus on implementing preferential interest rate loans for households, businesses, enterprises taking part in NTE suffering loss during the Covid-19 outbreak with a specific maturity and in a transparent manner. Likewise, a mechanism for improving affordability for small and medium businesses for programming or capital repairs in accession to credit guarantee provided by Credit Guarantee Funds should be shaped. Furthermore, a vital aid or favors for electricity and water cost in the time frame from 10pm to 6am must be taken into consideration.

5. CONCLUSION

A decline in global economic growth rates, strategic competition between major countries and trade conflicts are becoming complicated and unpredictable. Together with climate change and especially the outbreak of epidemic on worldwide scale, are the main causes that negatively affect the economic growth of countries around the world. The consequence of the Covid-19 pandemic will probably last for many years and have effects that reshape the economic structure of the world and regions, in which the division of labor and production chains in the global market will also bear strong adjustments and even reform economic growth models to limit excessively external impact and threats.

Much work remains to be done to concretize the policy and procedures for lightning up nighttime economy in Vietnam. This process could be disturbed but does not stop even if the tourism industry is now under difficulties and nearly closed because of the unexpected epidemic disease. Nevertheless, the opening for the nighttime economy in Vietnam is unalterably implemented in line with international trends and is the treasury unexposed to the tourism industry, not only helps to draw and retain visitors but also, importantly, contributes to the local and even national economy sustainability.

Once the Covid-19 pandemic lessens and being under control and social distancing measure ends up, Vietnam, where has been long still considered as a dynamic destination, attractive sceneries, and a promisingly thriving nighttime economy, may flourish and prosper in the coming time.

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DEMAND FOR HIGH QUALITY HUMAN RESOURCES IN BANKING AND FINANCE SECTORS AND SOME SUGGESTED TRAINING SOLUTIONS TO MEET THE NEEDS OF INDUSTRIAL REVOLUTION 4.0

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Abstract: *The study focuses on analyzing the role of high-quality human resources in the banking and finance sectors in the development of the country under the impact of the 4th revolution. The study mentions the reasons why high-quality human resources in the banking and finance sectors can help promoting socio-economic development with the explosive trend of Industry 4.0. The study also shows a forecast picture of the current demand for high-quality human resources in the banking and finance sector and then suggests some solutions to achieve the development goal of the banking and finance industry in the next period.*

Keywords: *human resources, finance and banking, training*

1. INTRODUCTION

In the years of renovation, Vietnam's economy has achieved lots of great achievements in many aspects. However, due to the long-term maintenance of the broad-based growth model that relies too much on investment capital, unskilled labor and exploitation of natural resources, the momentum of development has tended to decrease so far. In recent years, our country's economy has begun to reveal many weaknesses, repeated macroeconomic instability, even in some areas where the level is quite serious: credit and savings are always fluctuating; large investment, scattered investment structure, low investment efficiency; interest rate inflation fluctuates; currency is under pressure to depreciate; budget deficit, large trade deficit, high public debt, increasing bad debt, existing real estate bubble ...

Besides, industrialization and modernization of the country is taking place in the context of the scientific and technological revolution developing like a storm. The 4th Industrial Revolution (Industry 4.0) emerged and was built on the digital revolution, characterized by the increasingly ubiquitous and mobile Internet, by smaller and more powerful sensors at a cheaper price, by artificial intelligence and machine learning. Digital technologies with computer hardware, software and networks are becoming more and more complex, more integrated and they are actually transforming society and the global economy. Human resources, in general and qualified human resources in the banking and finance sectors, in particular have become more and more direct productive forces, having a strong impact on all areas of life, economy and society, but science and technology cannot replace the subject position of human resources, because human resources are the factors that receive the transfer, application and creation of science and technology. Thus, in order to successfully implement economic development in the trend of Industry 4.0, one of the keys is to quickly develop human resources, especially high-quality human resources in the banking and finance sector and put the development of high-quality human resources in association with the

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development and application of science and technology to meet the diverse and multi-layered requirements of technology and the development level of the fields and industries.

2. RESEARCH METHODS AND DATA

2.1. Research method: The authors use the method of analysis, synthesis, comparison and contrast to clarify the role of high-quality human resources in Vietnam today and forecast demand trends in the industrial revolution 4.0. From there, the authors propose solutions to exploit the strengths of high-quality human resources in Vietnam in practice

2.2. Data: Secondary data is obtained from many sources, mainly from reports of the World Economic Forum on labor capacity requirements in the context of industrial revolution 4.0, from scientific researches at current state level of Vietnam, from articles published in specialized journals on the quality of human resources in Vietnam today and from a number of research works published through electronic news sites.

3. CONTENT

3.1. Related concepts

“High-quality human resources” is a term of development and there are still many different opinions. According to Marx, “Industry, which is carried out by the whole society in a collective and planned manner, requires even more people who are capable of comprehensive development, capable of mastering the entire production system.” [1; p.47] and “complex labor who are trained labor, is a multiple of simple labor” [1; p.59]. Although the term “high quality human resources” has not been clearly stated here, it can be understood that Marx focused on people with comprehensive development capabilities, sufficient mastery and quickly grasping the entire production system in practice [1; p.474] when emphasizing the efficiency of production and the ability to apply scientific and technical achievements to human production.

In recent years, Vietnamese scientists have put forward a number of concepts about high quality human resources. Typically, Prof. Dr. Pham Minh Hac believes: High quality human resources is a team of highly qualified and capable human resources, a shock force to receive advanced technology transfer, effectively implement the application in the condition of our country, and the nucleus of bringing our field into industrialization, modernization expanded in the form of an “oil slick”, by leading the class with lower capabilities to work up at a rapid rate” [5]. Dr. Nguyen Huu Dung said that “Quality human resources” refers to a person, a specific worker with a skilled level (in terms of expertise, technique) corresponding to a specific profession according to the criteria of labor classification in certain professional and technical skills (universities, colleges, skilled workers’ [3]. Dr. Tran Van Hung said: “Quality human resources are those who have the ability to complete assigned tasks in the most excellent, creative and perfect way, and make really useful contributions to work and society”. [6]

From the above assumptions, it can be understood in two ways: (1) in a qualitative way, qualified human resources are considered as a part of the labor force, capable of meeting the complex requirements of the job; thereby creating high productivity and efficiency at work, making significant contributions to the growth and development of society. (2) If the quantitative approach is to be taken, qualified human resources include trained workers, that is, workers who are trained in the unified national education system (the vocational education and training system, technical workers and the education system of colleges, universities, graduate schools, specialized labor training) and are granted degrees and certificates of training levels. This division of labor is often referred to as technical and professional labor. Therefore, searching for high quality human

resources is not only Vietnam but all countries in the world, from developed countries to developing countries, are also particularly interested in this important work.

3.2 The role of high-quality human resources in the banking and finance sectors and the 4th revolution

Industry 4.0 is having a far-reaching impact on all industries, and banking and finance is not exception. In the future, the most obvious consequence of the impact of Industry 4.0 on the financial sector is that traditional banking systems will gradually be replaced by modern technology banks, as well as financial implementation methods. There is also a major change. In the context of accelerating industrialization, modernization and international integration, especially when Vietnam is in the period of the Fourth Industrial Revolution, the issue of human resources is considered a breakthrough, developing the human resources is the foundation for sustainable development and it helps increase the national competitive advantage.

According to the report of the International Labor Organization (ILO), Vietnam's demand for new training of human resources in the financial services sector in the 2016-2020 period is over 1.6 million people and by 2020, the total number of human resources working in the field of banking will be about 300,000 people. The major and existing challenges of the banking industry prior to Industry 4.0 are the scarcity of high-quality human resources - a decisive factor for success, and competition for high-quality resources is the key to successful integration.

3.3 Forecasting the demand for high-quality human resources in the banking and finance field until 2035

According to the research results of the project "Developing high-quality human resources to meet the requirements of transforming the economic growth model in our country" of the Institute of Development Strategy, Ministry of Planning and Investment in 2016, the project based on the elasticity between growth and used labor demand, and using the extrapolation of the proportion of trained laborers to 2035 to forecast the results of labor demand in the field of finance and banking as follows:

Table 1: Labor demand, trained workers, high-quality human resources in the fields of finance and banking

Unit: thousand people

Targets	Year 2020	Year 2025	Year 2030	Year 2035
Total labor	300,8	347,3	391,2	431,5
1.Untrained	48,2	43,0	38,0	32,1
2.Trained	252,6	304,3	353,2	399,4
Elementary occupations	22,3	26,4	29,9	33,1
Vocational	13,2	17,4	22,0	26,9
Professional Range	27,7	34,1	40,8	47,6
Vocational college	1,9	2,6	3,3	4,2
College	15,0	19,5	24,3	29,5
University and above	172,6	204,4	232,9	258,2
3.High quality labor	195,6	234,1	269,9	303,0
Labor structure (%)	100	100	100	100
1.Untrained	16,0	12,4	9,7	7,4
2.Trained	84,0	87,6	90,3	92,6
Elementary occupations	7,4	7,6	7,7	7,7
Vocational	4,4	5,0	5,6	6,2
Professional Range	9,2	9,8	10,4	11,0
Vocational college	0,6	0,7	0,9	1,0
College	5,0	5,6	6,2	6,8
University and above	57,4	58,8	59,5	59,8
3.High quality labor	65,0	67,4	69,0	70,2

Source: [9; p.259]

It can be seen that the demand for untrained workers in finance and banking sectors will decrease from 48.2 thousand people in 2020 (equivalent to 16.0%) to 32.1 thousand people in 2035 (equivalent to 7.4%). Meanwhile, the demand for trained labor forces increases from 252.6 thousand people in 2020 (equivalent to 84.0%) to 399.4 thousand people in 2035 (equivalent to 92.6%). Especially, the index of high-quality workers in the financial services industry is also at a high level of about 195.6 thousand people in 2020 or 65%, up to 303.0 thousand people in 2035 (equivalent to 70.2%). In order to meet the needs of Industry 4.0, it is essential to promote the training of high-quality human resources in the fields of finance and banking.

4. SUGGESTIONS

With the issuance of many relevant documents, it shows the determination of our Party and State in training high quality human resources for national development. Specific programs and policies have contributed to creating breakthroughs in human resources, which are strongly supported by businesses, organizations and employees. However, the limitations in the policies on training high quality human resources are still a controversial issue. The recent political report of the Party Congress pointed out: “The quality of education and training has not yet met development requirements, especially training high-quality human resources is still limited; has not yet strongly shifted to training according to the needs of society”.

The relationship between increasing quantity and scale and improving quality as well as between teaching literacy and teaching people has not been well resolved. Programs, contents, teaching and learning methods are outdated, slow to innovate, unreasonable educational structure among training fields and profession, the quality of comprehensive education has declined, therefore, failing to meet the needs of industrialization and modernization. Slow and low efficiency solutions given to the trend of commercialization and moral decline in education is becoming a pressing concern of the society. In order to take advantage of opportunities and overcome challenges from Industry 4.0, banks have been developing strategies and implementing digital transformation towards digital banking based on the application of digital technology, technology and creative modes of the 4.0 era. The ultimate goal of this process is to help banks do business, manage and operate the system, provide products and services on a digital platform, increase revenue, reduce costs, and improve operating efficiency, deliver superior customer experience and increase customer engagement.

In that context, the quality of human resources is considered as the core issue that determines the success and sustainable development in the face of the changes of Industry 4.0 and the current integration process of the banking industry. The quality of human resources is not only about banking professional qualifications, but also the skills in digital technology operation, compliance with the process of operating and providing banking products and services in the IT environment. In the coming time, in order to ensure sustainable development, associated with the development trend of the banking industry in the Fourth Industrial Revolution, to improve the quality of human resources in the banking sector in Vietnam, it is necessary to create more solutions related to training high-quality human resources, especially high-quality human resources in the fields of finance and banking. Specifically:

- Improve the quality of labor training in the period of Industry 4.0. Accordingly, it is necessary to invest in an appropriate ecosystem, train and develop human resources in the context of Industry 4.0. The curriculum needs to change more to be ready for human resources to meet the needs of the finance and banking industries, avoiding brain drain. Besides, it is necessary to focus on interdisciplinary training within the university such as: IT in finance - banking, business analysis,

financial technology, e-commerce, digital banking, IT administration... Universities also need to clearly show their role in research and technology transfer with businesses.

- Schools not only need to innovate training programs, teaching methods also need to be drastically innovated. In the current digital era, universities also need to research and add more specialized training courses in information technology, blockchain, and artificial intelligence to meet the human resource needs in the world. Industry 4.0... At the same time, focus on equipping students with soft skills, foreign language skills, teamwork, IT skills and creativity to serve their future jobs.

- Schools that train human resources for the financial sector need to build enrollment quotas in line with market demand, should not train students in large quantity but ignore training quality, which leads to a situation of larger supply than demand for labor of society.

- In the face of the wave of Industry 4.0, which is showing signs of having a stronger impact on the banking sector today, students majoring in finance and banking sectors need to have a clear orientation for their job positions after graduation. Accordingly, positions in the IT department, network infrastructure architect, or software development engineer can be considered. These are jobs that will develop stably in the future in the context of changes caused by industrial revolution 4.0. Therefore, right from the lecture hall, in addition to the professional knowledge of banking, students should also prepare the necessary knowledge and skills in the field of modern banking technology, have an understanding of IT. This will be an important advantage and plus point for students to have more chances of success in applying to work at commercial banks in the future.

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EXPLORING FACTORS INFLUENCING EMPLOYEES' PERCEPTION OF PAY EQUITY IN VIETNAM'S SOES

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Abstract: *This paper explores factors influencing the employee perceptions of pay equity during compensation reform in Vietnamese SOEs since Doi moi started. A qualitative approach is used to uncover the factors by conducting 36 interviews from 12 SOE cases in Hanoi and Ho Chi Minh City. The findings show that in the case of the Vietnamese SOE reform, the perceptions are influenced by both SOEs' compensation policies and practices and the contextual factors. This study contributes to improving the efficiency of the SOEs management by suggesting suitable compensation policies to enhance employees' satisfaction with their salary and job and increase their productivities. The study's findings also enrich the literature on compensation reform under the context of a transitional economy.*

Keywords: *Perception of pay equity; Vietnam; State-owned enterprises; economic transformation.*

1. INTRODUCTION

Vietnam has transformed from a planned economy that had strong control by the government to a market-oriented economy since 1986. During the economic reform, SOEs in Vietnam have no longer get subsidies from the government and have to act based on market rules. Both internal and external requirements of the economy have forced SOEs to transform. Recently, the Vietnamese government has been running a transforming program for SOEs to improve their efficiency. This transforming process has resulted in significant changes in SOE types, management and compensation policies and practices, as well as the employees' perception of pay equity in these companies.

However, since *Doi moi*, SOEs have been continuously performing inefficiently. Compensation policies and practices have been blamed for the situation. It has been criticized that SOEs' compensation has failed to encourage their employees to improve performance and productivity due to employees perceiving their compensation to be inequitable. There is a lack of study about compensation components as antecedents of pay equity perceptions, especially in the Vietnam context. Therefore, this study explores factors influencing employees' perceptions of pay equity in Vietnamese SOEs to enrich the relevant literature and provide recommendations for improving employees' performance in the SOEs.

2. LITERATURE REVIEW

Equity theory

The perception of pay equity is a personal sense of equity when an employee compares their contribution to their reward or compares the ratio with others (Adams, 1965; Scholl et al., 1987).

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The literature on compensation has shown that, in evaluating the fairness of a compensation system, equity theory proposed by Adams (1963, 1965) is a crucial theoretical foundation (Milkovich et al. 2011). Equity theory suggests that employees will always seek fair treatment (Adams, 1963, 1965); in which notions of pay equity are based on perceptions about the justness of compensation allocation and on processes of comparison with others in which the justness of actual pay and actual pay distributions are assessed. As a natural response, a person will be motivated to eliminate a sense of discomfort caused by the perception of inequity. According to equity theory, Adams (1963, 1965) predicts the reactions of individuals when they perceive equity or inequity. He presents that employees respond to inequitable situations in four ways: 1) if feeling overpaid, they can decrease their inputs brought to work; 2) if feeling there to be inequity, they can psychologically distort their inputs and outcomes, or those of the referents, to rationalize the differences between these two elements; 3) they might choose a new referent other; or 4) the persons can quit their jobs to remove themselves from the inequitable situation (Adam, 1963, 1965). The four reactions to perceptions of equity or inequity clearly show a linkage between a sense of equity and the fairness objective of a compensation system by which employees' attitudes and behaviors at work are strongly influenced (Walster et al., 1978).

Proposal factors influence the perception of pay equity

The research examines factors impacting the perceptions of pay equity is fragmented. Studying the impacts of compensation in cash is the most popular. They state the linkages between the level of payment to pay satisfaction, absenteeism rates, burnout, emotional exhaustion, and turnover rates, acts of stealing and theft (Telly et al., 1971; McFarlin & Sweeney, 1992; Heneman, 1985; Summers & DeNisi, 1990; Greenberg, 1990; Carson et al., 2010). More recently, Kumari (2016) reviews online research publications on employee pay perceptions which indicate that employee perceptions of pay equity are strongly related to whether the payment is adequate to their skill, efforts, and performance brought to the work. If the employees see that their current compensation is competitive in the labor market, they will tend to perceive it as equitable.

Besides pay as cash compensation, Romanoff et al. (1986) state several non-monetary benefits are influencing the perception of pay equity. Studies show that workers often rank job security, working conditions, advancement opportunities, management appreciation, relations with co-workers, and flexibility of hours or job assignment, ahead of pay. Studies were done by Davis and Ward (1995) and Martin and Bennett (1996) indicate that the perception of fairness in benefits provided by the firm was related to the fairness of the total amount of compensation. Jawahar and Stone (2011) emphasize that the employees' satisfaction with value and administration of benefits will result in satisfaction with the overall compensation system.

The empirical studies also indicate other factors including personal background, firm's management, government policies, and culture apart from compensation components as contributors for the perception of pay equity (Berkowitz et al., 1987; Buick et al., 2015; Heneman et al., 1997; Isaac, 2001; Sturman, 2006; Tekleab et al., 2005; Wu et al., 2013; Blackman et al., 2017). Employees' cultural background influences their view in judging compensation fairness. Deutsch (1975, 1985) and Leung and Bond (1984) indicate that employees in groups, concerning harmony, tend to accept equal reward distribution more than others did who were not in groups. Hundley and Kim (1997) found that college students in America perceived reward allocation

fairness if it was based on individual performance, as they were strongly influenced by an individualistic view. In contrast, seniority and education attainment were criteria for assessing the fairness of pay among Korean students, as they had a collectivistic view. Chatterjee and Pearson (2002), in a study of variations of work-goal preferences in Asian countries, state that contextual factors of culture and economic conditions significantly affect the individuals' favoured choices of work-goals. For example, they found that, after the financial crisis in 1997, of the compensation components, promotion was more favourable and desirable than other benefits. In addition, they also indicate that strong social, philosophical and religious ideology creates norms for obligations and entitlements of management of work goals. Chatterjee and Pearson (2007), examined the Meaning of Working with a large sample size of 2,466 managers in ten Asian countries, state that those managers from different national cultural backgrounds have differently emphasized expected outcomes from work. They point out that managers from poorer economies such as India, China, and Mongolia might pay more attention to economic rewards. Managers from collectivist societies such as China and India might place harmonious goals as the most important in the workplace. Hundley and Runde (2008) also confirm that cultural effects were predictive of pay fairness evaluation among employees and the pay determinants of compensation systems.

Research on compensation factors influencing the perception of pay equity poses a direction for studying the impacts of compensation components on the perception of pay equity. Since 1978, Carrell and Dittrich (1978) were concerned that research on pay equity should include the systemic dimension of compensation components in the research design. However, this issue has not been well investigated. Gerhart and Rynes (2003) emphasize that numerous factors have been identified as influencing individual pay equity. Some factors that have yet been explored include pay, benefits, and personal characteristics; but the effects of all compensation components on pay equity have not been explored well. A list of individual-level factors that affect pay is useful, but to substantially advance the field, research needs to develop models incorporating numerous factors, rather than just adding other individual factors to the list (Werner & Ward, 2004). Similarly, Williams et al. (2006) point out that the literature on attitudinal reactions relating to compensation and fairness perceptions still has to be conducted independently. More recently, Jawahar and Stone (2011) emphasise that, even though most would readily acknowledge that fairness is important to compensation decisions, research examining how fairness perceptions relate to reactions to components of pay is relatively scarce. Thus, this literature gap provides a significant rationale for conducting a study examining the roles of whole compensation components as antecedents of perception of pay equity.

In Vietnam, studies of compensation and perception of pay equity have been majorly conducted in two separate fields of compensation and equity. The studies on compensation mainly focus on presenting changes in compensation systems before and after *Doi moi* (Collins 2009), and relationships between compensation and firms' efficiency (Zhu & Fahey, 1999; Thang & Quang, 2005a). The majority of research on pay equity in Vietnam is conducted at the macro level, which focuses on wage inequality in the labour market. Gallup (2002) shows that wage inequity in the Vietnam labour market has been caused by differences in education level, gender, and region. He points out that women face substantial wage discrimination despite their schooling and work experience; but that this also fell by half throughout his study. Therefore, there is a lack of comprehensive studies about the relationships between compensation and pay equity perceptions

at the individual level in Vietnamese SOEs. This presents a need for conducting a study to address both practical and theoretical issues of compensation fairness.

The literature review suggests two groups of propositions on factors impacting the perception of pay equity in Vietnamese SOEs, including the participants' compensation factors and cultural background. The paper, therefore suggests propositions to explore factors influencing the employee perceptions of pay equity in the SOEs as follows:

Proposition 1: the SOEs' compensation policies and practices have impacts on the employee perceptions of pay equity.

Proposition 2: the Vietnamese traditional culture impacts employee perceptions of pay equity in Vietnamese SOEs.

3. QUALITATIVE RESEARCH APPROACH

This research uses a qualitative approach through semi-structured in-depth interviews to answer the research question. This qualitative method is suitable for exploring new research themes that have not been done. To ensure its trustworthiness, this study uses a triangulation of data sources and triangulation of informants' participation. This strategy utilizes a convergence of multiple perspectives on data to ensure a phenomenon has been investigated in all its aspects (Krefting 1991).

For semi-structured in-depth interviews, the study selected 12 State-Owned Enterprises (SOEs). The participants for the interviews are from joint-stock SOEs (Js SOEs) and one-member limited liability SOEs (Ltd SOEs). The research conducted a total of 36 interviews from SOEs, including managers, workers, and trade union officers. 12 policymakers who directly related to issuing policies on compensation was interviewed. Besides this primary data source, the study uses additional secondary data sources from the companies documents and the relevant government documents to validate and support the interviewing information.

This study employs thematic analysis to analyse qualitative data collected. The themes were developed by using both a theory-driven approach and a data-driven approach. Nvivo 8 software is used to analyse the qualitative data set from the interviews.

Ethical issues have been carefully considered in this study to protect the participants' privacy, rights, and safety before collecting data. Participation in this study was strictly voluntary. To protect interview respondents' privacy and safety, pseudonyms were used to provide and analyse the interview data. All interviewees were named from S1 to S36 for the SOE participants, and NS1 to NS7 for policymakers and specialists (*see Table 1 and Table 2 in the appendix for detail*).

4. QUALITATIVE FINDINGS

Proposition 1: the SOEs' compensation policies and practices have impacts on the employee perceptions of pay equity.

Regarding the development of the company's salary system, the SOE salary system consists of two key parts: *Luong co ban* (the government set-wage scale) for calculation of social insurance; and *Luong mem* (the company's self-designed wage scale), which part companies are free to develop to fit with their financial budget. *Luong co ban* is standard across all cases and is set out in the government scales. The differences between cases were in *Luong mem*, where

individual cases have their approach to and design philosophy. All six joint-stock companies have built their *Luong mem* based on individual employee performance and company outcomes. To measure employee performance, three joint-stock cases used common performance appraisal methods such as ranking, supervisor feedback, or comparing to planned production; while the other three companies (J3, J5, and J6) have developed Key Performance Indicators (KPIs) to measure their employees' performance, which significantly improves their employees' perceptions of equity. Commenting on this new management approach, a Vice Director from J3, S17, stated that '*KPI helps the performance appraisals to be specific, measurable, achievable, realistic, and time-bound to ensure the transparency and fairness of human resource management, especially of the compensation practices*' (Interview S17). Most employees in the joint-stock cases employing KPIs perceived that this indicator measures their performance equitably.

On the other hand, limited liability cases, in general, are slower compared to the joint-stock cases in terms of adopting new management tools to increase their efficiency because limited liability cases are more under the direct management of the government. S2, a CEO from L1, one of the limited liability cases, stated that the company is facing '*difficulty in reforming the firm's management as important decisions needed to have the agreement and approval from the relevant government units. This process is often time-consuming as it involves multiple approval levels by a collective decision-making process*' (Interview S2).

Some SOEs used timesheets recording employees' attendance in the workplace every day and considered this as a criterion to calculate *Luong mem* and other benefits. This led employees to feel they were being compensated unfairly. According to S1, a worker in L1, '*this does not reflect the employee performance. It is unfair*' (Interview S1). Interview findings explore that, in almost all limited liability cases and some joint-stock cases, performance appraisal has been employed to score the level of task completion among employees. Similarly, S29, an employee in a joint-stock company, J4, in Ho Chi Minh City, said that she was not happy with her salary and bonuses because her company was using group performance-based pay to calculate individual salaries. She said that sometimes she did not have bonuses due to her team not finishing its plan: '*In this case, we all have to be deducted salary and bonuses, but actually, some of us worked very productively, only others do not finish their targets*' (Interview S29). These findings also show that if the performance-pay base is applied improperly, this might cause the perception of pay inequity.

The qualitative study indicates that benefits, one of the key compensation components, have influenced employee perceptions of pay equity. Benefits contain compulsory types of insurance (social insurance, medical insurance, and unemployment insurance), and individual SOE benefits. Decree 959/QĐ-BHXH regulates that the cost of compulsory insurance be equal to 32.5 % of the employees' salary, in which the company contributes 22% and the employee contributes 10.5% (Vietnam Social Insurance 2015). The government designed the compulsory insurance components and consistently applied to all organisations across the country to secure employees' retirement, accident, illness, or loss of job. On the other hand, individual company benefits are optional for a firm depending on their financial conditions and their demands.

Interviewing data shows that most of the participants expressed their feelings of unfairness in buying this insurance. Interviewees indicated that the actual benefits they received from these insurances were low and unable to secure their future lives, thus raising doubts about the fairness

of these benefits. S11 said: ‘This pension is not fair comparing to a period of 20 years my mother had committed to that company’ (Interview S11). Besides this, S1, working for 15 years in L1, commented that the proposed unemployment benefit was only equal to 60 percent of the minimum wage. The current minimum wage is already meager and actually can only support about 75 percent of an individual’s basic needs: ‘how can a person survive with such a small amount of money (Interview S1). This inadequate insurance benefit has made employees feel that it is inequitable compared to the actual living standard.

Moreover, most employees claimed they were not satisfied with medical insurance services due to the low-quality services for members covered by this insurance. These low quality and insufficient services have brought negative feelings about these insurance schemes, and in turn, have caused an overall perception of unfairness toward these benefits from employees. These findings imply that the perception of pay equity has been influenced not only by the compensation practices of these companies but also by the insufficient compensation policies of the government.

In contrast to the compulsory insurances, other benefits provided by individual companies such as paid holidays and ad hoc financial support for special occasions, lunch allowances have enhanced perceptions of pay equity among employees. Interviewees expressed their feelings of being treated equitably by their company regarding these benefits. S13, a worker from J2, said that he had received many benefits from his company’s trade union unit. For example, when he became sick, he received small financial support from his company’s trade union unit. On Children Day, trade union officers gave gifts to his children. In addition, the company’s trade union unit organized a paid holiday for all employees once a year. He felt satisfied with these benefits (Interview S13). Similarly, S26, a worker from L6 said: ‘Every year, the company gives me a sum of money for a holiday, and I can organize it by myself. If I do not go on holiday, I can use the money for other purposes’ (Interview S26). According to S26, his company provided obvious instructions on his welfare package, such as for paid holidays and sickness financial support. The instructions detailed levels of sickness and monetary support for each level; thus, S26 said that: ‘welfare is similar to everyone. I am very satisfied with these benefits’ (Interview S26).

In summary, the qualitative study found that benefits influence employee perceptions of pay equity. Ineffective benefit packages and inefficient services provided by the Social Insurance Scheme are the main causes of negative perceptions of equity among employees. The findings also indicate that individual companies that provided extra benefits beyond the insurance for their employees were able to increase perceptions of fairness of their compensation system.

Moreover, a proper performance appraisal is the core factor enhancing employee perceptions of pay equity. The qualitative data presented a few different performance appraisal methods being used in the SOEs cases to calculate performance-based salary. The findings emphasize a vital role in the fairness of salary procedures in creating a fair performance-based pay system that enhances perceptions of pay equity in SOE cases.

These findings support Proposition 1, that the SOEs’ compensation policies and practices impact employee perceptions of pay equity. To some extent, both salary-based pay and benefits schemes have together influenced the perceptions of pay equity.

Proposition 2: the Vietnamese traditional culture impacts employee perceptions of pay equity in Vietnamese SOEs.

The qualitative study findings demonstrate significant impacts of Socialist ideology and collectivism on the perceptions of pay equity of both leaders and employees in SOEs cases.

Socialist ideology

Firstly, the four CEOs in this study all expressed their awareness of political responsibilities to help the government in ensuring its socialist orientation of equal distribution. S32, a CEO from J5, stated that the company maintains a mixed pay system of both traditional criteria and modern ones help everyone to feel they are being treated equally and to keep the company operating smoothly (Interview S32). According to S32, if the company only used a performance pay basis, this might not be equitable for the senior employees who have been working for the company for a long time and in the final stage of their working life, because *'they are too old to adapt to pressures under the new pay base'* (Interview S32). Similarly, S25, a CEO from L6, highlighted that: *"This combination of both on the traditional pay determinants and on employees' performance base is to make everyone perceive that they are compensated well."* (Interview S25).

However, the findings on the effects of salary on perceptions of pay equity indicate that these parallel compensation systems have made it easier for employees to recognize the inequity of traditional pay determinants, which in turn has raised their feelings of inequity. Moreover, as mentioned before, employee perceptions of pay equity have changed towards a performance pay base; thus, maintaining traditional pay determinants in these companies has contributed to perceptions of inequity among employees of the payment systems.

Secondly, benefits provided by individual companies are strongly influenced by the socialist ideology, which contributes to enhancing the employee perceptions of pay equity. NS7, a trade union officer from Ho Chi Minh General Confederation of Labour, said: *'As being state companies, they sometimes care for their employees on behalf of the government. Generally speaking, employees working for SOEs have enjoyed huge benefits that others in private sectors rarely do'* (Interview NS7). In addition, according to S28, a CEO of J4, a state company does not dismiss its employees easily like a private company can because one of its compensation objectives is to care for every employee's living. S28 said: *'We would not dismiss them (the senior and unskilled employees) because they have been devoted almost their whole life to this company. So we are trying to arrange other suitable jobs that allow them to work until their retirement age'* (Interview S28).

Almost all employee respondents stated that they are satisfied with the benefits provided by their companies. S29, a sales assistant from J4, explained that it had been rarely seen there is any dispute in the companies because the company has cared about the employees' spiritual life. Benefits provided by the company such as paid holiday and birthday gifts have engaged every employee to the company as in a family (Interview S29). Similarly, S4, a technical worker from L2, said that every year, the company paid around 7-8 million VND per employee to arrange a holiday for the staff. The paid holiday has encouraged them to work harder, especially developing the company's collective spirit (Interview S4).

Collectivism

For the employees, the interview findings present strong influences from the traditional culture of employees' attitudes to pay inequity. All interviewees had perceived the conventional criteria of seniority to be inequitable. However, instead of raising their voices to oppose it, they all accepted this as a part of the collective spirit. S4, a young worker from L2, said that he felt uncomfortable if

he complained about the lesser productivity of the old workers in the company. This might break confidence in the collective engagement that was very good in his department. He, therefore, thought that *'everyone should not concern too much about the individual benefits. The whole group performance is more important than the individual performance'* (Interview S4). Likewise, S29, a sales assistant of J4, was impressed that her company strongly encouraged co-operation among employees. It therefore usually calculated bonuses based on group performance. She thus did not complain about inequity in salary between the old and the young workers. She highlighted:

'I know I am working harder than the old people here, but my salary has not been as high as theirs. I sometimes concern about this, but if I complain about this, my department might be considered as having internal conflicts and will not get the bonuses. I do not want to be seen as a selfish one' (Interview S29).

These findings strongly support Proposition 2 about the effects of Vietnamese traditional cultural values on relationships between compensation and employee perceptions of pay equity in Vietnamese SOEs. These findings indicate that the parallel effects of the traditional culture and changes in the employee perceptions of equity have created an insight conflict between the collective spirit and a wish to be treated equitably based on performance. This conflict has not been resolved so far. This situation is silently demotivating employees. Consequently, they may not have tried their best at work, because they have understood that these efforts would not be compensated equitably. They always keep their performance at the average level, which is similar to others, and maintain a cooperative face.

5. DISCUSSION

This finding is similar to that of research conducted by Scott et al. (2011), about the perceptions of reward fairness around the world. These authors highlighted the most important criterion affecting perceptions of pay equity is individual performance. The findings in the study indicate that if pay differentials within a firm are not able to be explained by management, it will cause dissatisfaction among employees. In addition, the results of this study expand Adams' equity theory by identifying other factors, which are contextual factors significantly affecting employee perceptions of pay equity beyond the employees' inputs and outputs. This study shows that the context in which the SOE cases studied are operating has strong influences on the compensation practices and, in turn, impacts employee perceptions of pay equity. The contextual factors, including social norms and socialist values, management structure, and leadership competency, significantly influence how the compensation system was developed and the employees' perceptions of pay equity. The socialist ideology has driven SOE managers in designing their compensation schemes at the company level, to ensure that SOEs carry out the government's socialist principle of equal distribution in the society. The SOEs' management structure still follows centralized management that allows the government to maintain their sole power of control over all areas of business decision-making, including compensation schemes. With socialist norms, the collectivist value has made employees accept the equal distribution rules that have not been based on their performance and effort at work. Both management approach and employees' accepted behaviours have led to maintaining traditional compensation practices in the SOE sector, which have been found to increase employee perceptions of pay inequity.

As the effects of these contextual factors on both compensation practices and the perceptions of pay equity can be significant, this study, finally, includes these three additional factors to develop

a model examining the relationships between compensation components and the perceptions of pay equity in the context of Vietnamese SOEs.

In practice, this study suggests some key solutions to improve the employee perceptions of pay equity in SOEs. Firstly, SOE management should focus on the fairness of the compensation procedure, especially the salary procedure. Practicing managers should increase employee perceptions of procedural compensation fairness by clearly informing them how their compensation is decided and how their salary corresponds to their efforts and performance or contributions. The performance pay base should be a key determinant in calculating salary. The compensation practices should be open and transparent. This is more important than other factors because this study's findings indicate that employees negatively perceive closed and centralised compensation management in SOEs. Besides this, SOE management can encourage employees to develop systems that allow them to evaluate each other and have feedback on their performance. These activities can help to strengthen perceptions of equity regarding compensation procedures.

Secondly, adopting effective communication with employees should be seen as a central approach in SOE management. The qualitative study presents that managers in SOE cases have not been aware of the vital role of communication with their employees. This poor awareness of communication has significantly contributed to perceptions of inequity. SOEs need to establish an open communication channel with their employees, in which the managers inform employees about compensation issues such as changes in business strategies that cause revisions of compensation practices or the compensation policies. Frequent communication with employees will improve their performance. Simultaneously, this would allow employees to give their feedback and comments on the compensation, which would assist managers in understanding the employees' needs. Based on this information, the management could adjust compensation practices to fit employee expectations better where possible, helping to increase positive perceptions of the pay system.

Thirdly, this study finds that increasing interpersonal trust in leaders is vital in improving employee perceptions of pay equity in the context of centralized management in Vietnamese SOEs. The leader can significantly influence employees' feelings by providing them with support and care. More importantly, leaders need to ensure that their directions and decisions are consistent, unbiased, and ethical, to create trust for the employees. On top of formulating employee perceptions of pay equity, leaders should ensure that they are always being seen as fair leaders by their employees.

6. CONCLUSION

It is acknowledged here that, to design a suitable compensation model aiming at equity, SOEs have to consider influences of contextual factors beyond compensation components because these all contribute to impacting their employees' perceptions. The marketization process in Vietnam has brought major changes in government policies, especially in terms of SOE management. The government has been trying to establish a legal framework to ensure fair competition for all types of enterprises. This means that SOEs will gradually lose their monopolistic advantage, and operate under the conditions of competition with other enterprises in other sectors, following market rules. This is an unavoidable trend that all SOEs have been facing. Improving performance and efficiency is most important to them to exist in such a competitive market. This study has found that Vietnamese SOEs need to be concerned to create positive feelings for employees about their compensation practices, to improve performance and efficiency. This study argues that paying

more attention to the fairness of salary and its procedures will positively influence employee perceptions of compensation and improve their performance. SOEs should also learn and adopt modern management methods, especially compensation, to improve fairness in their decision-making processes, as employee perceptions of equity have changed toward the modern ideology of distribution and management.

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APPENDIX

Table 1: Characteristics of the SOE participants

Firms code	Participants Code	Gender		Seniority (years of working)	Position	Qualification
		Female	Male			
L1	S1		V	15 years	Worker	Undergraduate
	S2	V		25 years	CEO	Master
	S3	V		18 years	Trade union officer	Undergraduate
L2	S4		V	5 years	Technique worker	TAFE
	S5	V		26 years	Line manager	Undergraduate
	S6		V	20 years	Trade union officer	Undergraduate
L3	S7		V	16 years	Head of Financial Department	Master
	S8	V		16 years	Sale assistant	Master
	S9	V		10 years	Trade union officer	Undergraduate
J1	S10		V	20 years	HR manager	Master
	S11	V		7 years	Sale assistant	Undergraduate
	S12	V		15 years	Trade union officer	Undergraduate
J2	S13		V	6 years	Worker	TAFE
	S14	V		22 years	Line manager	Undergraduate
	S15	V		25 years	Trade union officer	Undergraduate
J3	S16		V	12 years	Finance officer	Undergraduate
	S17	V		16 years	Vice director	Master
	S18		V	10 years	Trade union officer	Master
L4	S19	V		18 years	Head of Financial Department	Master
	S20		V	4 years	Accountant	Undergraduate
	S21		V	14 years	Trade union officer	Undergraduate
L5	S22		V	10 years	Line manager	Undergraduate
	S23		V	7 years	Worker	Undergraduate
	S24	V		12 years	Trade union officer	Undergraduate
L6	S25		V	17 years	CEO	Master
	S26		V	11 years	Worker	TAFE
	S27	V		16 years	Trade union officer	Undergraduate
J4	S28		V	23 years	CEO	Master
	S29	V		8 years	Sale assistant	Undergraduate
	S30	V		10 years	Trade union officer	Undergraduate
J5	S31		V	9 years	Finance officer	Undergraduate
	S32		V	22 years	CEO	PhD
	S33	V		20 years	Trade union officer	Master
J6	S34		V	24 years	Chief Accountant	Master
	S35		V	16 years	Technique staff	Master
	S36	V		20 years	Chief Accountant	Master

Table 2: Non-SOE participants

Coding	Gender		Seniority (years of working)	Institution	Qualification
	Female	Male			
NS1	V		29 years	National Salary Committee	PhD
NS2		V	20	The Ministry of Labour Invalid and Social Affairs of Vietnam	Master
NS3		V	18	The Ministry of Labour Invalid and Social Affairs of Vietnam	Master
NS4	V		30 years	Ho Chi Minh National Academy	PhD
NS5		V	32 years	Ho Chi Minh National Academy	PhD
NS6	V		18 years	Hanoi General Confederation of Labour	Master
NS7	V		20 years	Ho Chi Minh City General Confederation of Labour	Master

THE IMPACT OF FINTECH ON FINANCIAL AND BANKING SECTOR IN INDUSTRIAL REVOLUTION 4.0

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Abstract: *This article is intended to analyze the opportunities and challenges of the Finance-Banking industry in Industry 4.0 before the Fintech wave and then propose recommendations and solutions for the existing limitations. At the same time, helping policy makers to build, supplement and complete the legal corridor for Fintech company's activities in general and cooperate with agencies and units of the financial - banking industry in particular smoothly and in accordance with international practices.*

Keywords: *Fintech, financial – banking*

1. RATIONALE

The 4th Industrial Revolution (revolution 4.0) which is formed on the basis of linking the real and virtual world, everything is connected by the internet, 3D printing, big data, artificial intelligence AI ... is taking place worldwide. This affects almost all areas of life, economy and society on a global scale and Finance – Banking is one of the sectors most strongly affected by this revolution.

In the context of rapidly evolving technology increasingly creating a dramatic change in businesses doing in all fields, Fintech is a place where financial services and technology intersect, where businesses leverage the power of technology to create change, a whole new shopping experience for customers about products and services of the financial service providers. The emergence of Fintech has changed the landscape of the financial services industry due to its advantages of speed, simplicity and efficiency in financial transactions and investment activities. Regarding to this, the article studies the impacts of Fintech on the Finance - Banking industry to outline the problems that need to be solved and some solutions to help the financial - banking industry take advantage of opportunities for cooperation and effectively apply the achievements that Fintech brings in the coming time. Besides, it helps policymakers to build, supplement and complete the legal corridor for the activities of Fintech companies in general and cooperate with agencies and units of the financial - banking industry in particular smoothly and in accordance with international practices.

2. METHODOLOGIES

2.1. Research method

The study was conducted with the employment of research methods, including: data analysis, data synthesis, comparison and contrast to clarify to clarify the current situation of Fintech in Vietnam as well as evaluate the role of this activity. From there, propose solutions to exploit the strengths of banking and finance before the fintech wave in Vietnam in practice.

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2.2. Data

Secondary data was obtained from reliable sources, mainly from Fintech Vietnam 2020 reports on the current status of this activity in the context of the industrial revolution 4.0, state-level scientific research works, articles published in specialized journals on Fintech activities and a number of research works published through websites.

3. CONTENT

3.1 Introduction

The term “Fintech” has been widely used since the global financial crisis of 2008. However, the combination of information technology and banking and finance has started since the 19th century. when information is transmitted by Morse code and information infrastructure is developed between the center of commodity trading large that need fast and secure inter-regional payment. Payments via the communication system were first believed to have been made by Western Union in 1872 based on the telegraph network. This period is known by some scholars as Fintech 1.0 [1] symbolized by the development of transmitting information signals from electromagnetic signals, radio signals, telex, and analog signals.

From 1987-2008, when the Internet developed strongly, allowing digital signals to be transmitted and accessed almost unlimitedly, many financial and banking services were performed via the Internet. This period is called Fintech 2.0.

However, despite many advances, the operation of the financial and banking industry still has some traditional limitations from the perspective of customers:

- (1) Financial intermediaries remain in transactions;
- (2) The cost of these organizations has remained roughly 2% over the past 130 years [2]

(3) Transactions have been performed faster but have not met the expectations of customers, which is real-time transaction. For governments and policymakers, financial intermediaries and banks are the elements of economics that needs strict administration with laws and mechanisms separately. The major financial crises are believed to have started from a lack of transparency, loosening financial rules in lending from internal decisions of these institutions. In addition, these organizations, given the perspective of economics tend to grow into natural monopolies, so they have market power from high prices for services and its impact on social life and even politics. Therefore, the balance between encouraging development and reducing the influence of these organizations on economic and social is a consequent need of governments, politicians and policy makers.

After 2008, Fintech is said to be a breakthrough step that can contribute to reducing the above limitations while still helping the banking and financial industry increase its competitiveness. Specifically, the combination of new achievements in information technology allows the birth of financial products, insurance, etc., as well as new methods of providing and communicating with customers, according to the criterion of “better, faster” more, cheaper”. The period from 2009 to the present is called the Fintech 3.0 era, which is currently being applied in banking and financial services in three groups:

- (1) Loans/deposits/capital raising;

(2) Payment (wholesale, retail);

(3) Investment management.

Compared with traditional methods, Fintech has more advantages:

- Easy access to users: Currently, the use of smartphones and internet services is very popular in society. Therefore, financial technologies (Fintech) such as payment and money transfer via apps are quite easy, especially for young people.

- Low cost: The cost of online payment (cost of maintaining the website, creating a card, the internet) is much cheaper than the cost of labor, renting premises, creating cash, etc. by normal manual payment method.

- Fast speed: Fintech is extremely fast, almost immediately, while manual payment and transfer takes a long time due to cumbersome and complicated procedures.

- High security: The use of fintech is also as high as security as traditional manual services. Users will have to enter their ID, password or signature of the account owner to make payments. Therefore, customers will rarely have to worry about the security of services provided by fintech.

3.2 The impact of Fintech on the Financial - Banking sector

3.2.1. Current status of fintech application in Vietnam's finance and banking industry

According to data in 2020, Vietnam's fintech companies operate in the following main areas:

Table 1: Number of operating fintech companies in Vietnam in 2020

Ordinal	Field of activity	Number of companies	Rate (%)
1	Payments	38	31
2	Crowdfunding	6	4
3	Bitcoin/Blokchain	16	13
4	Wealth Management	9	7,5
5	POS Management	9	7,5
6	Data Management (Data/ Creadit/ Scoring Management)	7	5
7	Lending (P2PLending)	18	17
8	SMEs Financing	3	2
9	Digital Banking	4	3
10	Insurtech	5	4
11	Compare information (Comparion)	8	6
Plus:		123	100%

Source: [6; p.6]

According to a report by Fintech News Singapore, there is a total of 123 fintech startups in Vietnam. the representatives of the top 5 sectors have taken 76% of the total number (Payments, P2P Lending, Blockchain, POS, Wealth Management), while 38 Payments and 18 P2P Lending startups together make almost a half (49%) of all market players [6; p7]

The growth of Vietnamese Fintech startups over the past 5 years is remarkable. In 2015, there were a total of 39 startups in Vietnam. The report does not say how many of these were actually founded in 2015 or earlier. But in 2019 and 2020 had a total of 123 startups were established [6; p8]

However, most of the Fintech companies in Vietnam are active in the B2C payment sector, B2B Fintech has not yet had many exciting activities and some fintech founders (Fintech Founder)

are looking for a niche market (Niche Market Fintech). This sector has covered 33% of all Fintech startups in 2020. The most active sector next to that is P2P lending with 17% of startups. Other sectors account for between 2% and 13% of the startup context in 2020 [6; p8]

In Vietnam, payment- startups have grown strongly in recent years and they mainly do business in the payment sector thanks to the State Bank's policy of allowing pilot payment intermediary services, in order to create a legal corridor to promote the development of payment intermediary businesses.

Besides, successful business models in the world have been introduced in Vietnam such as: peer-to-peer lending, credit appraisal based on social media behavior, crowd funding, robo invest, bitcoin platform, block chain ...

Compared to the world and in the region, the fintech sector in Vietnam is still quite young, but the number of enterprises operating in this field is increasing day by day. Currently, all payment centers licensed by the State Bank of Vietnam are cooperating with the BANK to provide products and services to consumers, namely: Vietnam Prosperity Joint Stock Commercial Bank (VPBank) is currently cooperating with Fintech Timo company in providing digital banking services. , cooperating with Moca company in providing digital payment services; Military Commercial Bank (MB) in partnership with a Fintech company creates technology that allows users to make transactions in Facebook's Messenger app; The small value remittance service model of Vietnam Foreign Trade Joint Stock Bank (Vietcombank) is based on cooperation using the network of telecommunications agents information of Online Mobile Joint Stock Company (M_Service) in countryside; MB Bank's remittance service model is based on cooperation using the network of Military Telecommunication Corporation (Viettel) in countryside, mountainous, island areas [4] ...

There are about 50 Fintech companies that have been licensed by the State Bank of Vietnam- in terms of financial investment in human resources, in management with new business models, product design and electronic process policies to create popularity for customers. Some banks have started researching and applying Big data such as Vietnam Industry and Trade Joint Stock Bank (Vietinbank) with the enterprise data warehouse project (EDW) to support improving the efficiency of risk management, supervision and management according to international standards, providing data information to operate customer behavior analysis models, risk forecasting. VP Bank also cooperates with IBM to build Big data for customer research, grasp customer selection trends, market forecasts, develop business plans ... MB is also partnering with Infosys, migo to implement a centralized data warehouse project and an administrative reporting tool to meet information and data requirements for risk management, monitoring and management...

In the field of public finance, Vietnam has applied information technology to most professional activities such as: Information system for management of Budget and treasury, electronic payment and Government bonds. Implementation of e-tax, e-customs, management of public debts, public assets, supervision of financial markets and state reserves. Currently, the State Treasury is implementing the project "*Modernizing the process of tax collection and payment between tax authorities - Customs - State treasury - Financial Agencies*" in order to connect, exchange and unified data on State budget revenues among agencies in the financial system, ensuring data is imported in one place and used in many places. Currently, the Insurance Administration has also initially applied information technology in the following areas: receiving and exploiting the

database of compulsory insurance for civil liability of motor vehicle owners, coordinating with the Department of Information Technology and Financial Statistics to build and exploit the online public service system.

3.2.2. The impact of Fintech on finance and banking

Fintech's diverse applications are impacting almost every sector of the banking and finance industry, in which, the biggest impacts are:

- Change distribution channels and traditional financial products and services:

The wave of fintech has changed quite the way they do business with the rejection of the traditional connection model, creating many options for fund raising, payment, buying and selling at the lowest cost. Fintech crept into the areas of money funding, lending, payments, asset and investment management, data collection, evaluations, credit ratings, e-money, working capital management, ... The impact of fintech can be clearly seen in recent years through the strong development trend of sales channels via the Internet, Mobile banking, Tablet Banking, social networks, development of digital banking, paperless transactions ...

- Fintech with high-tech applications that change the function of the financial market:

Big data will help financial institutions to collect inside and outside data for analysis of customer behavior at low cost. At the same time, it supports decision-making processes and improves service quality bringing added value as well as more satisfaction to customers. The appearance of e-money Block-chain chains, e-wallets, e-money transactions allows the use of e-money to replace real money in e-commerce. Block-chain technology allows users to access historical information of all transactions while ensuring information security to prevent fraud in financial transactions. In addition, the application of Block-chain technology in banks also allows to simplify transnational transactions, reduce transaction time and costs, thereby increasing the efficiency of banking system and financial institutions.

- Trend of "paperless banking":

This will be a popular trend and a significant challenge for the financial services industry in gradually reducing the role of branches. Competition through expanding branch network will gradually cease due to high operating costs. Instead, modern fintech competition has also become more intense in financial institutions.

According to a survey by PwC in the Global Fintech report in 2017, the percentage of customers willing to cooperate with Fintech companies in the payment sector accounted for 84%, e-banking accounted for 68%, personal finance was 60%, personal loans accounted for 56%, followed by savings, insurance and asset management hours. In the banking sector, the transferwise method of money has changed the traditional banking solutions with high cost, helping individual customers access services quickly. Currently, P2P lending companies, which directly connect borrowers with lenders on the internet, have been operating quite efficiently, helping to shorten the approval period for loans from a few weeks in traditional banks to just a few hours.

- Fintech re-shapes market demand and changes the market share of financial market

Fintech has made traditional financial intermediaries obsolete. Their activities are gradually replaced by financial service business models based on digital technology, traditional financial

services will shift to payment services, community fundraising, asset management, fintech lending and the inevitable consequence is that the market share of banks in general and financial institutions in particular tends to decrease due to having to “share” with Fintech companies.

Fintech companies can reap large savings by operating more flexibly than banks. Fintech not only stops at checking online accounts or setting up online portfolios, but also helps to handle financial activities quickly and conveniently. According to the Global Fintech Survey Report by Pricewater house Coopers, 23% of traditional financial services companies (including banks) fear that their business operation may fall into the hands of independent fintech enterprises, the percentage of banks sectors participating in the survey is 24%. Fintech companies confidently say that they can capture 33% of the business of traditional banks.

- Changing the demand and structure of the labor market in the Financial and Banking sector

The strong development of technology can replace the large number of employees of banks who are working directly at traditional counters. The trend of “paperless banking”, “paperless financial institutions”, artificial intelligence, robots will become more and more popular. Branches and transaction offices of banks are increasingly shrinking in both size and quantity. Hopefully, it is difficult for employees to maintain a competitive advantage in terms of cost and efficiency, technology can replace a large number of employees who are working at banks, financial institutions, securities, insurance companies, etc, ... resulting in a decrease in the number of employees in the financial and banking sector. However, the demand for high-quality human resources (good both in terms of professional knowledge of Financial and Banking Sector and information technology) tends to increase. Since then, changing the labor structure in the Financial and Banking sector in the direction of reducing the proportion of low-qualified workers (administrative work, paperwork management, data preparation ...), increasing high-quality labor to meet the requirements in the new context.

4. ISSUES AND SOLUTIONS

4.1. Issues

Currently, fintech is considered to be an inevitable development trend in financial and banking activities on a global scale. Fintech is forecast to bring opportunities for development cooperation, but there are still many issues to be resolved in order to promote the positive impacts of fintech on the economy in general and the operation of the banking and financial sector.

Firstly: The legal corridor is incomplete and has not really motivated the development and application of fintech in the operation of the finance - banking industry.

One of the major issues that need to be resolved is a new legal corridor for the creation and development of fintech and digital banks, as well as the cooperation between banks and fintech. Currently, the legal regulations for the operation of fintech companies are just initial simple regulations, there is no official legal document and mainly focus on payment. There are no specific mechanisms and policies in the implementation of “digital finance” and “digital banking”. The detailed policies and regulations on applying fintech in the financial - banking sector is incomplete. Incentive policies, supporting the application of achievements of the 4.0 revolution in general and fintech in particular are still lacking, impractical and scattered in many fields without uniform regulation, such as: The cooperation between fintech companies and banks still has many shortcomings, “up to 80% of

banks said that they are facing difficulties in the process of realizing the goal of digital ecology - the foundation of the smart banking system". Currently, for new solutions of fintech companies that are not regulated by law, the SBV applies the management under the framework of "experimental legal". However, there are still no clear regulations on the field, scope of activities, as well as the level of testing, causing difficulties in the implementation process.

Regulations on network information security have not been completed. There are no specific regulations on the collection of user information, as well as ensuring that the information is accurate, legal and not modified or destroyed.

In addition, the financial support policies are not really clear and create favorable conditions for the investment, research and application of fintech in the operations of enterprises and banks.

Secondly: Information security and confidentiality

Under the impact of the Industrial Revolution 4.0 in general and fintech in particular, it is extremely important to establish new tools for security and become a security network. The increasingly sophisticated development of digital technology and the gradual shift to cloud computing have increased security vulnerabilities and created new threats, which has raised increasingly serious concerns about the risk of hackers' attacks (it becomes easier to penetrate and pass security systems with 3D print technology. IoT connectivity increases the risk of criminals controlling connected devices in the financial and banking sectors, infiltrating, taking control and infringing upon the interests of financial intermediaries). In addition, the cooperation between banks and fintech in sharing customer information, risks, and responsibilities between parties with customers with strongly digitized models and transactions through an unlimited network environment in terms of space and time will be a great challenge for tax authorities and protect consumers against increasingly sophisticated and complex risks. Also, due to the diversity of financial-banking services, business risks are also more complicated, leading to risk control in traditional ways that are difficult in and no longer suitable for the new situation.

Thirdly: The quality of human resources in the financial-banking industry is still inadequate, not meeting the requirements of the new technology era.

In recent years, human resources in the financial - banking industry are constantly increasing in number. In 2019, The number of employees in the finance - banking industry was 508,900 employees and the average growth rate was about 8.5%/year (2015-2020). However, the number of employees with expertise in finance and banking sector accounts for less than 50%. In addition to the quality of human resources in the financial-banking industry are limited to professional, low professionalism, lack of confidence, low level of information technology, not meeting the requirements in the new context, especially the impact of the Industrial Revolution 4.0 and its applications growing fintech. Vietnam has a poor level of technology use and innovation (ranked 90/100), human capital factor (ranked 70/100). In particular, specific indicators such as: knowledge of employees ranked 81st, quality of vocational training ranked 80th, quality of universities ranked 74th, quality of engineers and scientists ranked 70th [7]

4.2. Solutions

Firstly: to create a full legal framework and in the direction of creating favorable conditions for the development and application of fintech in financial and banking activities.

It is necessary to resume a legal basis for the operations of these companies. The problems associated with the legal record research, completing the ecosystem and recommending the regional management of Fintech in Vietnam need to make sure the principles of consistency, efficiency and high consensus. According to that, assigning the focal point to conduct research on specific Fintech contents is the job that should be assigned by the standing agency to the steering committees. In addition, the standing agency is also the point of receiving comments from members of the Fintech Community in Vietnam and coordinating with the international Cooperation Department of the State Bank and the Ministry of Finance for international cooperation activities on Fintech in the context of fintech activities in Vietnam are integration with the region and the world.

Supplementing regulations on new means of payment services, payment intermediary services, e-money... on the basis of applying best international practice and standards for a number of payment instruments and systems is also important.

Secondly: Enhance the effectiveness of measures to ensure safety and security of information

The financial and banking system needs to pay more attention to ensure the safety and privacy of customers' information systems and take new defenses to secure information. Accordingly, financial institutions and banks need to equip themselves with new security tools, pay more attention to building backup databases, upgrading security systems and raising security awareness, ensuring information security throughout the system. Promote communication of new dangers and risks through online sharing to prevent and minimize losses for related objects.

Deploy information security infrastructure services: deploy the industry cloud at the general infrastructure and cloud level, ensuring information efficiency and security in a comprehensive way; Building an integrated platform to sharing service data, ensuring smoothness and cohesive cohesion between inside and outside systems of the industry; Connecting network security operations centers, providing information on information security events and incidents. to serve the management, supervision and administration activities to ensure information security for the whole industry.

The State Bank and the National Financial Supervisory Commission need to innovate the inspection and supervision of financial and banking activities in the direction of increasing the application of smart monitoring technologies, building an online warning system, and supervising payment activities in accordance with modern international standards. Promote the application of technology in the struggle to prevent and handle illegal actions in the finance and banking sector, especially for payment methods applying high technology. At the same time, actively coordinate with technology companies and use appropriate financial resources to invest in security technologies to ensure network security such as: Technology to detect and patch technical vulnerabilities, firewalls to prevent the ability of hackers to attack.

Commercial banks need to understand the new factors in operational risks when implementing cooperation with fintech enterprises, additional functions to address risks to ensure security in banking operations.

Each organization and unit needs to focus on developing good data centers and enterprise networks to actively store information, in case of bad cases when a cyber-attack occurs.

The Government also needs to widely publish information in the main mass media to help people have a certain awareness of Fintech, how to secure personal information, regularly update

about products, services and newly licensed Fintech businesses to both limit criminals taking advantage of the ignorance of the people and create conditions for Fintech to develop.

Thirdly: Improving the quality of human resource banking and financial sector

There should be close coordination between schools, training institutions and employers. The relevant units need to connect, order to share information and take responsibility in providing high-quality human resources to meet the requirements of the new technology era. Universities and training institutions with majors related to finance and banking need to focus on intensive training in digital banking, e-commerce, and information technology management to equip them with the necessary knowledge for future human resources to catch up with modern banking technology trends.

Leading agencies, such as: the Ministry of Finance, the State Bank of Vietnam, the National Financial Supervisory Commission, the State Treasury, etc. need to innovate and strengthen training and human resource development in the direction of approaching qualifications and standards of modern economies, in order to build a workforce with sufficient qualifications, professional capacity and ability to apply high technology. At the same time, strengthen training and fostering of information technology staff at credit institutions and financial institutions, in order to improve their professional qualifications and professionalism, meet the needs of operating and mastering the system. Besides, it is necessary to strengthen domestic and international training linkages. In addition, it is necessary to strengthen domestic and international training linkages, simultaneously with satisfactory remuneration for experts to promote learning, foster and improve, attracting talent work and dedication to the activities of the sector.

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ASSESSMENT OF CUSTOMER'S SATISFACTION TOWARDS THE USE OF ATM CARDS AT SAI GON THUONG TIN COMMERCIAL JOINT STOCK BANK

PhD. Pham Hai Nam¹

Abstract: *The study focuses on determining the factors affecting customer satisfaction with ATM cards based on survey data with 250 regular customers using ATM cards at Saigon Thuong Tin Joint Stock Commercial Bank in Ho Chi Minh City (Sacombank). Research results show that there are only three factors affecting customer satisfaction in using Sacombank's ATM cards, including Tangible means, Assurance, and reliability. The study also proposed some solutions to improve the quality of ATM cards for Sacombank.*

Keywords: *ATM card, satisfaction, Sacombank.*

1. INTRODUCTION

In recent years, along with the outstanding development of the world economy, trading activities, services and goods are taking place more and more excitingly, surpassing the limit of distance. This development requires new means of payment to ensure transaction safety, speed, and efficiency (Mwatsika, 2016; Hossain et al., 2015). For a long time, cash has appeared an indispensable means of payment in any country, and a payment intermediary in the economy. Along with the development of modern science and technology, banks have launched a non-cash payment method, in which the ATM cards is known as an effective non-cash payment method, with outstanding features such as being fast, convenient, efficient, cost-effective (Goet, 2020; Islam et al., 2007). ATM cards have created a revolution in banking technology.

In Vietnam today, there are many banks; each bank creates separate ATM card products to serve its customers, leading to competition between banks in this type of service increasingly. Therefore, in addition to continuously applying technological achievements and improving the convenient features for card services, banks must also find ways to make customers satisfied when using ATM cards that they provide (Nguyen & Ha, 2020). Determining the factors affecting customer satisfaction and measuring the influence of these factors on customer satisfaction when using ATM cards is a key point in business activities of banks. Up to now, there have been many studies on determining the factors affecting individual customer satisfaction to the quality of ATM card services at commercial banks in the world as well as in Vietnam, such as research by Mwatsika (2016), Goet (2020), Hossain (2015), Lwin (2019), Tran (2014), Nguyen and Ha (2020), Bui et al. (2016)...The results of these studies show that there is a close relationship between factors belonging to the independent group such as trustworthiness, customer empathy, service efficiency, service capacity of the bank as well as the impact of tangible means, which have a significant influence on individual customers' satisfaction with ATM card services. Currently, Vietnam's economy is growing strongly; the workforce is young with good skills and increasing income. Therefore, this is

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a potential market for the development of banking services, including Sacombank. However, in the context that the number of branches and transaction offices of commercial banks is increasing with strong competition to survive and develop, Sacombank needs to improve its customer satisfaction for the services provided to be able to compete better and attract more customers. Therefore, the study of factors affecting individual customer satisfaction with ATM card service quality at Saigon Thuong Tin Commercial Joint Stock Bank in Ho Chi Minh City, serves as a basis for proposing solutions to improve customer service quality for ATM card services at Sacombank are very urgent and have high practical significance. The research results are the basis for the bank's leadership to develop with effective solutions, better serve customers, improve the bank's competitiveness and financial efficiency.

2. LITERATURE REVIEW AND RESEARCH MODEL

2.1 Literature review

Zeithaml (1987) argues that service quality is the assessment of service customers, who are provided with the service, of the overall excellent or perfect level of an entity; it is a form of attitudes and results from the comparison between what is expected and perceived by the customer. Kotler and Keller (2006) argue that customer satisfaction is the level of emotional state derived from the comparison between product perception and customer expectations when using the service. Parasuraman et al. (1988) argue that customer satisfaction responses to the perceived difference between the known experience and the customer's expectations of the service. Because of its importance to business organizations, customer satisfaction is a fundamental goal of business organizations because there is a positive relationship between organizational performance and customer satisfaction. (Anderson et al., 2004). Therefore, customer satisfaction is a topic that many researchers are interested in implementing in many different fields. Studies often use SERVQUAL, SERVPERF scales proposed by Parasuraman et al. (1988), Cronin and Taylor (1992) to perform quantitative measurements of customer satisfaction in different fields (Goet, 2020; Hossain, 2015; Lwin, 2019; Nguyen & Ha, 2020; Pham & Pham, 2017).

2.2 Research model

Customer satisfaction research is an issue that researchers are particularly interested in. There are many studies on different issues for satisfaction; each problem is directed to ways to overcome limitations, capture customer psychology and find out the factors affecting the level of customer satisfaction. The factors affecting satisfaction from the perspective of each researcher have their views and research methods. Based on the theoretical foundation in the model of Grönroos (1984), Parasuraman et al. (1985) built a mixed measurement tool, called SERVQUAL, used to measure perceived service quality. The SERVQUAL measure contains 22 pairs of Likert scale items to separately measure customers' actual expectations and perceptions of service quality. Specifically: Service quality = Perceived level – Expected value. This is one of the most commonly used models to evaluate service quality in many different fields. The SERVQUAL model consists of 10 components: (1) Tangible means; (2) Trust; (3) Respond; (4) Service capacity; (5) Access; (6) Kindness; (7) Information; (8) Trust; (9) Safety; (10) Understanding. Parasuraman et al. (1988) revised down to 5 components, this is the most popular and applied service quality research model in the research. According to Parasuraman et al. (1988), service quality cannot be determined in

general, but depends on customers' perceptions of that service, and this perception is considered on many factors. SERVPERF model (Cronin & Taylor, 1992) and SERVQUAL model (Parasuraman et al., 1988) are two models that are mainly used by researchers to measure customer satisfaction (Jain & Gupta, 2004). In this study, the author proposes to use the SERVPERF scale, which is a variant of the SERVQUAL scale, because the SERVPERF scale overcomes the disadvantage of the SERVQUAL scale that only measures perceived value, not including expected value, to measure the factors affecting customer satisfaction with the bank's services, including customer satisfaction with the bank's ATM cards. Thus, the dependent variable in the research model is customer satisfaction with the bank's ATM cards; the independent variables include: reliability (TC), responsiveness (DU), assurance (DB), empathy (DC), tangible means (HH).

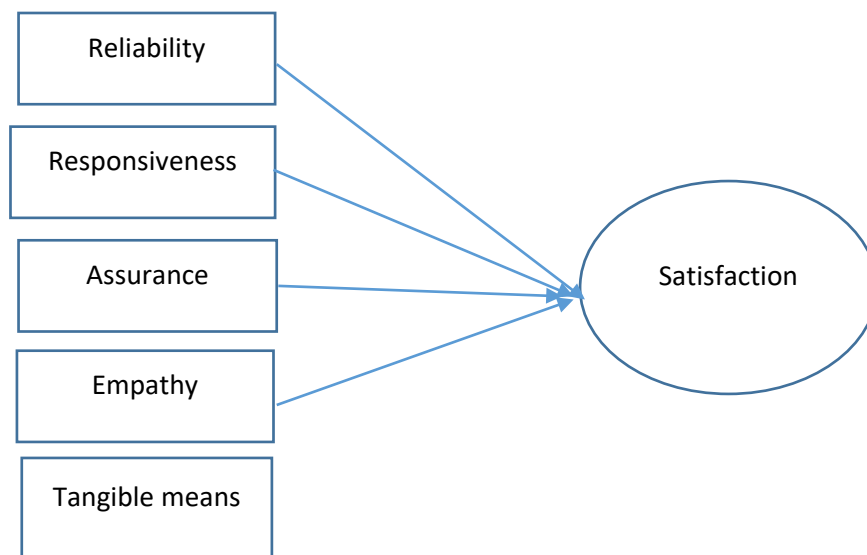


Figure 1: Proposed research model

In which, the hypotheses of the research model are as follows:

Hypothesis H1: Reliability has a positive impact on customer satisfaction

Hypothesis H2: Responsiveness has a positive impact on customer satisfaction

Hypothesis H3: Assurance has a positive impact on customer satisfaction

Hypothesis H4: Empathy has a positive impact on customer satisfaction

Hypothesis H5: Tangibles have a positive impact on customer satisfaction

3. DATA AND METHODOLOGY

In this study, primary information is collected from 1) Direct discussion with some managers and customers to determine the factors that are likely to affect customer satisfaction with quality of ATM cards at Sacombank in Ho Chi Minh City and at the same time adjust the variables in the research model as well as the scale accordingly; 2) Survey by questionnaires for a number of customers who are using ATM cards by convenient random sampling method at branches/transaction offices of Sacombank in Ho Chi Minh City. During the current Covid-19 pandemic, information collection is done on the basis of online platforms.

Survey data is collected directly from customers using ATM cards at Sacombank's branches and transaction offices in Ho Chi Minh City through questionnaires with convenient sampling method.

According to Hair et al. (1998), representativeness of the number of samples selected for research is appropriate if the sample size is 5 observations for a variable. The research model in the study includes 05 independent factors and 01 dependent variable with a total of 28 observed variables. Therefore, the minimum number of surveys required should be at least 5 times, equivalent to 140. 280 questionnaire has distributed and expected 250 of the total of 280 respondents. This study was carried out from July 8, 2021 to August 12, 2021 at Sacombank's branches and transaction offices in Ho Chi Minh City.

The research process was carried out in two phases. The first phase is preliminary research using qualitative methods and the second stage is formal research using quantitative methods.

A preliminary study (Expert discussion): Discussion of 5 experts who are management level of the bank, longtime employees of the bank and experts who have studied this issue and group discussion of 10 customers who have been using the bank's ATM cards. The purpose of the scale discussion is to adjust the scale appropriately. Then, an interview with a group of customers (estimated 50 customers) with a preliminary questionnaire is conducted to detect errors in the design of the questionnaire and check the reliability of the scale. The official research model takes 28 observed variables, in which 24 variables measure five service quality components and four variables measure customer satisfaction.

Quantitative research: Data and sample size collection methods were carried out from July 8, 2021 to August 12, 2021. The survey sample in the study was carried out by convenient sampling method, by interviewing the customers through survey questionnaires. The selected sample size is 250 customers who are using ATM cards at Sacombank. The study is based on the SERPERF model combined with a five-level Likert scale to measure customer satisfaction with Sacombank's ATM cards.

To evaluate the reliability of the scale and the observed variables, the study carried out the Cronbach's Alpha reliability test using the Exploratory Factor Analysis (EFA) method. For the scale to be accepted, it is necessary to remove the variables with the item-total correlation coefficient less than 0.3 and the Cronbach's Alpha coefficient less than 0.6. In addition, in EFA exploratory factor analysis, variables with factor loading coefficient (Factor Loading) less than 0.5 will be excluded from the scale because of poor correlation with latent factors. The last step is to test the model using multivariable regression with a statistical significance level of 5%.

Cronbach's Alpha reliability analysis results for the components of reliability, responsiveness, assurance, empathy, tangible means are all greater than 0.6, and the total correlation coefficient is greater than 0.3. Therefore, the scales are qualified to be included in the formal study and included in the factor analysis. Thus, the final accepted official research scale has 24 observed variables of five factors affecting customer satisfaction and four observed variables measuring customer satisfaction.

4. RESULTS AND DISCUSSION

Factor analysis is considered appropriate when the value of KMO coefficient (Kaiser-Meyer-Olkin) is greater than 0.5, Factor Loading coefficients less than 0.5 will be rejected. The eigenvalue is greater than one, and the total variance extracted must be greater than 50% (Hoang & Chu, 2008). The above analysis results show that $KMO = 0.806 > 0.5$, so factor analysis is the

appropriate method, Bartlett's test has significance level $\text{Sig} = 0.000 < 0.05$, so factor analysis to group variables with each other is suitable. Because the Eigenvalue criterion must be greater than 1, the result of factor analysis with five factors extracted at Eigenvalue is $1.355 > 1$ and the total variance extracted to explain the factor is $69.75\% > 50\%$, meeting the requirements. Then it can be said that these factors can explain 69.75% of the variation of the data, thus satisfying the conditions of factor analysis.

Table 1. Results of rotation matrix of factors

	1	2	3	4	5
DB1	0.725				
DB2	0.688				
DB4	0.748				
DB5	0.652				
DB3	0.697				
HH1		0.884			
HH2		0.853			
HH4		0.784			
HH3		0.858			
HH5		0.745			
DU4			0.681		
DU2			0.795		
DU1			0.711		
DU5			0.735		
DU3			0.632		
TC1				0.887	
TC2				0.789	
TC4				0.698	
TC3				0.622	
DC2					0.678
DC1					0.722
DC4					0.758
DC3					0.684

Source: Results of data analysis

The results of EFA factor analysis for the independent variables of the factor rotation matrix from Table 1 show that the factor loading coefficients of 23 observed variables are all satisfied with the factor Loading, which are greater than 0.5 and the number of factors generated when factor analysis is 5 factors.

Regression analysis and hypothesis testing

To test the model, the F-test in the ANOVA analysis of variance was performed to assess whether the dependent variable and the independent variables have a linear relationship or not.

Table 2: ANOVA test results

ANOVA					
Model	Sum of Squares	df	Mean Square	F	Sig.

1	Regression	53.216	6	13.211	34.548	0.000
	Residual	16.137	167	0.455		
	Total	69.353	173			

Source: Results of data analysis

The results from Table 2 show that the multiple linear regression model fits the dataset and can be used for analysis.

Multivariate regression analysis

To evaluate the factors affecting customer satisfaction with the quality of ATM cards of Sacombank, the overall regression model has the form:

$$HL = \alpha_0 + \alpha_1 DB + \alpha_2 HH + \alpha_3 DU + \alpha_4 TC + \alpha_5 DC + \varepsilon$$

Where:

α_0 : Constant

α_i (i=1,5): Coefficient

ε : Residuals

Table 3: Regression results

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	Beta	Std.	Beta			Tolerance	VIF
Constant	0.779	0.024		9.548	0.000		
DB	0.154	0.044	0.542	5.148	0.004	0.548	1.189
HH	0.658	0.054	0.898	6.114	0.008	0.745	1.568
DU	0.475	0.089	0.215	2.148	0.153	0.458	1.458
TC	0.544	0.028	0.745	4.658	0.045	0.841	1.245
DC	0.311	0.035	0.688	3.154	0.245	0.654	1.354

Source: Results of data analysis

In this study, the author tested with 95% confidence, so the significance level of the model below 5% is accepted.

Multivariate regression results from Table 3 show that there are 3 factors that have a positive impact on satisfaction: DB, HH, TC. The DU and DC factors are excluded due to the Sig. value greater than 5%. In addition, the model does not have multicollinearity because the VIF coefficient and the acceptance level are both less than 2. When comparing the impact of the factors on satisfaction, the results show that the factor HH has the strongest impact with standardized beta coefficient of 0.898, followed by TC and DB with standardized beta coefficients of 0.745 and 0.542, respectively.

5. CONCLUSION AND POLICY IMPLICATIONS

The research results show that the factors affecting customer satisfaction with Sacombank's ATM cards in Ho Chi Minh City are tangible means, assurance, and reliability. Therefore, to improve customer satisfaction for payment card products and services as well as increase competition and attract customers, Sacombank needs:

First, tangible means have the strongest impact on customer satisfaction. Therefore, it is necessary to focus on developing the number and convenience of ATMs, such as ATMs that must show all the necessary items, enabling customers to transact directly on the machine automatically. It takes a lot of time to go to the bank to ask the bank staff to process, can connect to many different banks. In addition, to ensure that ATMs are always in a state of smooth operation (24/24), Sacombank needs to strengthen the arrangement of staff to monitor the operation of the ATM system through software connected to the ATMs, especially during the holidays, quickly overcome problems that occur. In addition, it is necessary to arrange for employees to take turns checking ATMs periodically to take timely measures to overcome possible problems.

Second, assurance is the second factor that has a positive impact on customer satisfaction. The bank must always ensure the safety of customers by clearly and carefully instructing customers on the regulations as well as how to use the card, warning of possible risks, and how to avoid them. Continuing to invest in technology and application of management software, upgrade the card service processing system. In addition, it is necessary to continue to maintain the advantages of the current staff while paying attention to employee training and retraining. When installing ATMs, it is necessary to carefully study the parking space, have a convenient and safe parking location, and have a camera system to record images and carefully secure them.

Third, reliability is the factor that increases customer satisfaction when using Sacombank's ATM card services. Therefore, it is necessary to continuously train and foster the staff, focusing on the necessary qualities of bank employees such as carefulness, hard work, and speed to process transactions correctly, and to comply with their responsibilities., assigned tasks to achieve peace of mind and trust of customers.

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FACTORS INFLUENCING THE DEVELOPMENT OF THE CIRCULAR ECONOMY FOR ENSURING THE SUSTAINABLE DEVELOPMENT IN VIETNAM

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Abstract: *The development of the circular economy is an objective trend in Vietnam, which needs to be clarified for more detail, either in its essence or its practical aspects. This study aims to contribute to make more clearly about the status and influence factors of the circular economy in Vietnam. Among those, there are currently 4 most important factors: 1) Government awareness and policy; 2) Scope and development level of the economy; 3) The awareness, commitment and capability of the business communities and 4) The national scientific- technological capacity and the ability of realising technological progress into praxis.*

Key words: *Circular economy, sustainable development, wastes processing industry*

1. INTRODUCTION

Circular economy is an economic development model, which deals, however, not only with the economical, but also comprehensively the social life. The model doesn't appear suddenly, but in a long time, from small steps and actions. In Vietnam, the process starts with separate elements and activities since decades, but stays currently behind many countries, including industrial developed countries, but also developing countries internationally and regionally. That is the result of diversified, widespreading effects of different influencing factors, which need to be studied carefully and comprehensively.

Developing the circular economy will be surely an objective trend in Vietnam in the near future. However, the topic was previously not researched much in Vietnam. Basic issues, such as the essence and characteristics of the circular economy, the ways of its establishment, factors influencing its development, appropriate development conditions and objectives in each concrete period, etc. are differently understood among officials, managers and researchers.

In the situation mentioned above, more and deeper research on this topic will be one of focus points. This study try to clarify briefly the factors influencing the appearance and development of the circular economy, which is the first step of a broader research on their impact on the circular economy in Vietnam.

2. LITERATURE REVIEW AND PREVIOUS RESEARCH STUDIES

Even elements and ideas of the circular economy were discussed since decades [9, 10, 16], this economic development model as a complete concept economy was firstly debated officially

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by the EC in 2014 in its document titled “Towards a circular economy: A zero waste programme for Europe” [3]. The direct objective of the economic model is, as indicated in the title of the report” the maximal reduction of wastes to “zero”, which should contribute to achieve a “smart, sustainable and inclusive growth”. The concept will help to ensure the sustainable development in 2 ways: improving the resources efficiency and reducing the amount of natural resources for current use in the economy and social life. The Commission described the circular economy as a repeating business cycle (see figure 1) and propose to consider wastes from the production as well as from the consumption as resources for the human life in a large scope.

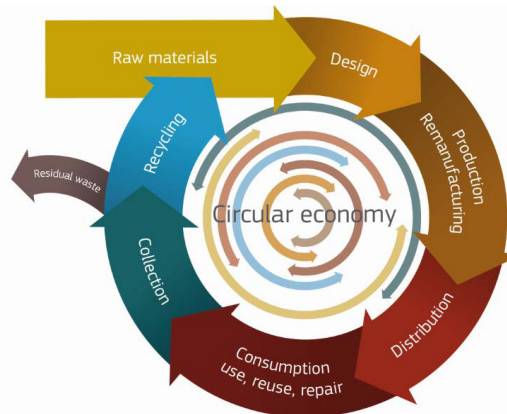


Figure 1: The circular economy as a cycling business process according to the EU

Following the concept, in order to launch the concept of circular economy into real life, experts of the Collaborating Centre on Sustainable Consumption and Production (CSCP) want to set up a business model, which enable “ensure sustained economic development; minimise environmental impact and maximise social welfare” [11]. In a same direction, Ellen MacArthur Foundation determined three principles of the circular economy : i) design out waste and pollution; ii) keep products and materials in use; and iii) regenerate natural systems [5].

Furthermore, researchers tried to clarify concreter aspects of the real life of circular economy. In a literature review conducted in 2021, a research group summarised clusters, which were mostly researched in the last few years, where “each cluster corresponds to a different approach: (1) Strategic alliance for innovation in the circular economy; (2) innovations in circular economy transition business models; (3) factors influencing eco- innovation- and circular economy-focused implementation; (4) dynamic company dynamics and circular economy implementation, value creation in the Indian fashion sector, and transformational agents; (5) technology and waste management; (6) transition to the circular economy, the necessary resources and internal capacities, and benefits of clusters; and (7) biological cycle and competitive advantage in clusters” [20].

Govindaraju also concluded that the “circular economy operates within the realm of: (1) minimising resource use, 2) optimising resource yield, and (3) fostering an effective system by minimising negative externalities” [8].

Opinions of researchers and practical experts come step by step to common understanding about the contents and key issues of this concept. According to the newly published research reports, the circular economy comprises of following pillars:

- Economic design of products and technology;
- Efficient use of natural resources;

- Expanding the product lifespan, including the repair, refurbishment and modernisation of products during their normal, standard use;
- Reuse of products after their normal use;
- Remanufacturing wastes from the production and consumption process.

The idea could be described in a model constructed by a researcher group of European Institute of innovation and technology (see the figure 2) [25]. In fact, there is another more important pillar of the circular economy: the efficient design and realisation of a healthy life style, which bases (and focus) on the efficient consumption of natural and human resources.

Approaching the circular economy from a practical aspect, many researches and studies in the recent year focus on the questions: What are barriers and drivers factors of the circular economy? The list of the factors is lengthened after each studies, because there are common factors, but also sector and region specific ones. The OECD Survey on the Circular Economy in Cities and Regions let identify major divers of the transformation of the linear to the circular economy: climate change and requirements on environment protection, global agendas and changes in economic conditions as well as requirements on job creation, private sector initiatives, new business models (especially the set up of creative and innovative business), technical developments and research and development (R&D) [15].

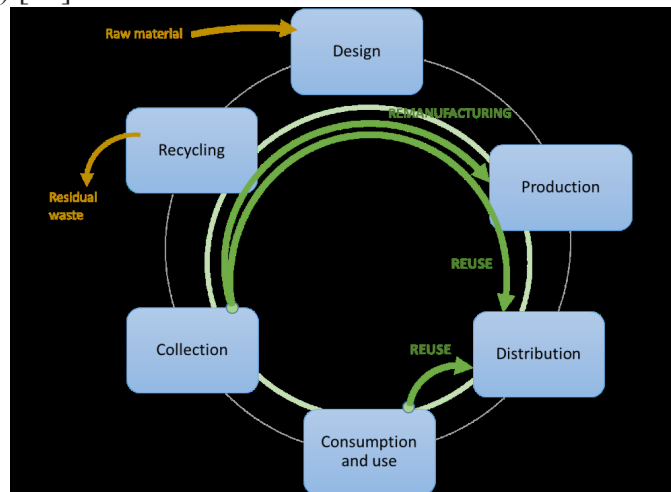


Figure 2. Elements of circular economy

For the quantitative assessment, EASAC indicated some indicators, which reflect/ measure the level of economy’s circularity (see table 1) [25].

Table 1: Indicators of circularity in an economy

Scope	Indicator
Resource productivity	GDP per kilogram domestic material consumption
Circular activities	Recycling rate
	Eco-innovation index (index from green investment, employment, patents, etc.)
Waste generation	Amount of waste per GDP output
	Amount of municipal waste per capita
Energy and greenhouse gas emissions	Share of renewable energy
	Greenhouse gas emissions per GDP output

3. METHODOLOGY AND PROPOSED MODEL

The paper is a result of a desk study. The authors reviewed and assessed secondary sources of data and research reports conducted in Vietnam and overseas on the circular economy. Based on the overall understandings on the appearance and development of the concept as well as its reality, the researchers clarified the issues of the circular economy in Vietnam. Data and information for this session are official statistics published by the Government's General Office of Statistics as well as researches of independent national and international researchers. Researches and investigations of media reporters are also used as supporting information, especially for the comparison of official reports and research reports, which contain different, even opposite opinions and assessments.

4. RESEARCH RESULTS

In recent years, circular economy is discussed more and more among scientists and experts in Vietnam. However, in official economic development strategy and orientation, the related issue discussed is the sustainable development, not the circular economy. In fact, there are factors, which stimulate and encourage the forming and developing process of the circular economy, especially:

- The continuous economic development with a high growth rate for a long time.
- The maintained impacts of traditional reuse of goods in a long time under the poverty and lack of consumption goods.
- The increasing pressure on the satisfaction of needs on resources and from the increase of the production and consumption wastes.
- The need of changing the economic development model, from the traditional resources based extensive economic development model to an intensive, knowledge based sustainable development model.
- The intensification of positions and improvement of the role of many Vietnamese companies in lots of international value/ manufacturing chains.
- The pressure of international economic integration and globalisation on the national in term of matching with international standards and economic development model.
- The climate change and their impacts on the socio- economic development.

Under impacts of those factors, elements of the circular economy has been formed and is developing in Vietnam and consists currently of 1) wastes processing industry; 2) replacing traditional non- renewable materials and energy by renewable ones; 3) innovating technologies and improving product/ service design for material and energy saving in production and consumption.

The wastes processing industry started soonest and could maintain a high growth rate for decades. The figure 3 demonstrates the annual growth rate of recycling industry (mainly wastes processing) of Vietnam between 1996- 2019. In 1996 and 2008, it achieved the highest increase with nearly 40% and about 30%. However, the share of this industry on the total industrial production Vietnam's is still very low, around 0.278% in 2010.

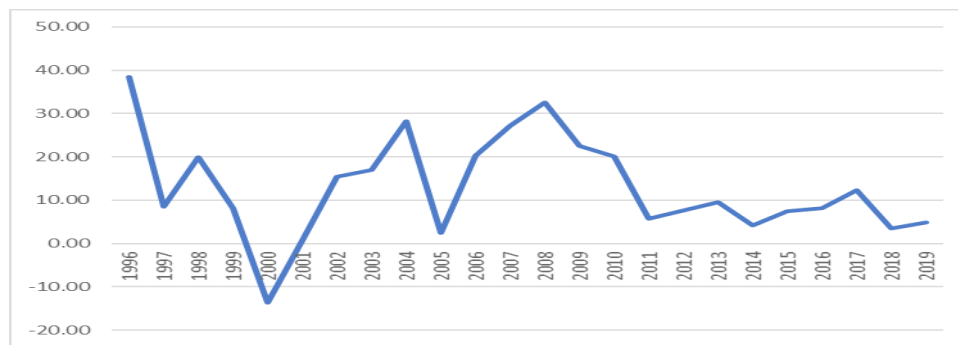


Figure 3: Annual growth rate of the wastes processing industry in the period 1996- 2019 [6]

The wastes processing industry Vietnam's focus currently on reprocessing metallic, plastic paper/cellulose and glass wastes. Textile wastes and used products reprocessing play also an important role in the whole branch. Waste foods and waste agricultural products began to be reprocessed at increasing scope in the last decades. In July 2021, the Prime Minister Vietnam's issued the Decision 1316/QĐ-TTg approving the national programme on managing the plastic wastes in Vietnam, which aims to achieve important targets for 2025, including the collection, reuse and reprocess 85% of plastic wastes, reduction of plastic wastes on the sea by 50%, reduction 100% of non-biodegradable plastic bags in resorts and tourism areas as well as replacement 100% of plastic bags and packaging materials by environment friendly ones [4]. World Bank reported, in 2015, 80% urban wastes were collected, while the rate in the rural area was only around 40%. Statistics showed that only 22% of collected solid wastes were in 2018 reprocessed, in which 10% were recycled, 4% composted and 14% incinerated [1]. In June 2021, a scientist of the Institute for Urban and Industrial Environment informed, too, that only 11- 12% of plastic wastes and nylon wastes could be reprocessed and the rest should be fired, goes to landfill or thrown out freely to the environment [17].

In term of replacing traditional materials and energy, central efforts of Vietnam focus on the use of renewable energy (solar, wind electricity and electricity from bio- energy) and new material (composite, light materials, ceramics and construction materials). At the end of December 2020, there are 135 solar electricity projects with a capacity of 8,935 MW and other ongoing 260 projects with the planned capacity of 28,300 MW. At the end of June 2019, there were 9 wind electricity stations with a capacity of 304.6 MW and at the end of 2020, the capacity could be about 22,000 MW [22]. In the first half year 2021, the renewable energy contributed 11.4% of the total electricity balance of Vietnam [18].

In term of technology development and innovation, the Government issued several related decisions, especially the newly announced Decision 118/QĐ-TTg on 25/ 01/ 2021, Decision 130/QĐ- TTg on 27/ 01/ 2021. In March 2021, the Minister of Science, Technology and Environment decided to launch 6 national focus research programmes. Two of them are the Research programme on creative innovation, designing and manufacturing professional equipment's for basic investigation on natural resources and environment, processing wastes in the period 2021-2025 (Programme 3) and the Scientific and technological research programme for rational use of renewable resources; efficient reprocess and reuse of wastes aiming to the circular economy in Vietnam in the period 2021- 2025 (Programme 5).

Internationally, the level of circular economy in Vietnam is behind many countries. Govindaraju (2020) clarified the policy readiness for launching the circular economy, one of key factor influencing this process, in some countries, which is described in the table 1.

No	Country	Sustainability Scores	Ecological Sustainability Scores
1	Cambodia	10.8	0.0
2	Indonesia	0.0	33.2
3	Malaysia	51.4	45.8
4	Philippines	37.8	61.3
5	Singapore	54.1	100.0
6	Thailand	59.5	26.6
7	Viet Nam	13.5	14.8
8	Japan	70.3	93.0
9	Germany	100.0	87.1
10	United States	70.3	45.0

Table 1: Policy readiness for the circular economy in some countries [8]

Govindaraju also clarified that Vietnam is only better than Cambodia in term of sustainability and readiness for matching the industry revolution 4.0 and circular economy (see figure 4).

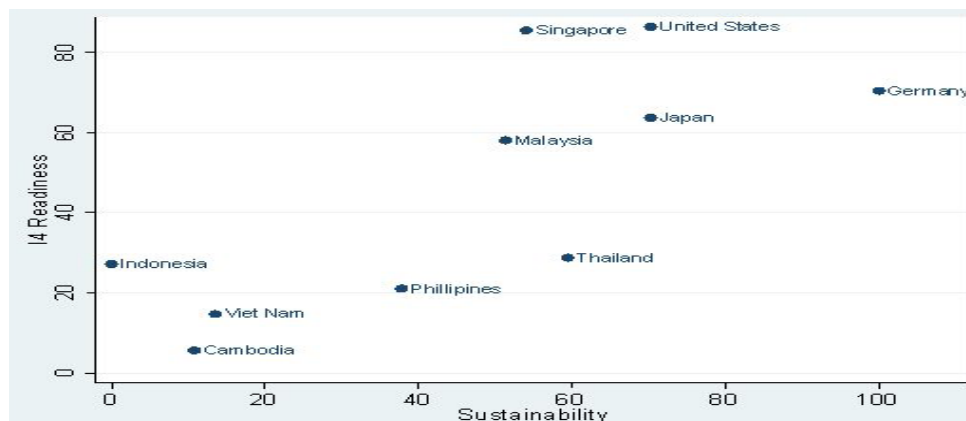


Figure 4: Matching Industry 4.0 Readiness and Circularity [8]

5. DISCUSSION AND CONCLUSION

As other new concept, the circular economy faces lots of barriers. In the recent years, researchers clarified such problems. Kirchherr *et al.* (2018) identified five main barriers for the circular economy: The lack of consumer interest and awareness, hesitant company culture, operating in a linear system, low virgin material prices and high upfront investment costs [14]. De Jesus and Mendonça added some other factors, i.e. 1) technical barriers, 2) inappropriate institutional/ regulatory, 3) unfavorable economic/ financial/ market conditions and 3) social/ cultural barriers [13].

Sooner or later, the development of circular economy will be debated and officially integrated in the official socio- economic development strategy and plan of Vietnam. The Socio- economic development strategy for 10 years 2021- 2030 requests to “promote new economic development models”. The Strategy set a target for processing and reusing the waste water as well as reducing the greenhouse gas [24]. The Plan and Orientations for the 5 years plan on socio- economic development 2021- 2025 also clarified a target rate of collecting and processing urban solid wastes in that period [23]. From 2020, the topic “circular economy” becomes more and more hot

on different platforms. Related government agencies at ministerial level spend more efforts on programmes and concepts on developing the circular economy.

The forming and developing process of the circular economy in Vietnam will be affected by several factors with different scope and directions, which are discussed in the following session.

1. Government awareness and policy

The circular economy could form and develop only sustainably, if it bases on the need of the market and society but the government could play the stimulating role. Herysson and Nuur consider the circular economy as “a top-down approach adopted by national and supranational institutions” and recognised that the governments play a very important role as a stimulating and pushing factor [9]. Whalen, Milios and Nussholz (2018) also suggested that the governments, could (and should) encourage and support the circular economy [26]. In fact, all the Government’s policies will affect the development of the circular economy, including direct investment and trade or indirect through its policies on related areas/ sectors. The government could and should play a double role either as the “midwife” or the role as a promoting/ supporting body for the circular economy. International studies showed that governments usually used many tools for influencing the economical development, including circular economy, such as [2]:

- Regulatory instruments including laws and directives.
- Economic instruments, including environmental taxes, fees and user-charges, certificate trading, refunded emission payments, environmental financing, green public procurement, deposit and refund schemes and subsidies.
- Research and educational instruments, including funding or incentives for research and development, and education and training.
- Cooperation instruments, for example technology transfer and voluntary agreements.
- Informational instruments, including eco-labelling, sustainability reporting, supply chain reporting, environmental profit and losses labelling, natural capital reporting, information centers, consumer advice services, environmental quality targets and environmental monitoring.
- Direct investment on the infrastructure. The circular economy is usually combined with a highly specialised production. The sufficient infrastructure will enable an economic exchange of semi- products, which helps to ensure the business efficiency and stimulating the business community to join more and deeper the cycling process.
- Competition policy and the control of “unhealthy” competitions by companies doing business belonging to the linear economy.
- Environment and environment protection policy/ strategy.

In its programme, for example, EU focused on overcoming influences of factors, which keep “the linear economy being linear” [2], i.e.:

- The true costs of the company’s operations (negative environmental and social impacts of operations or financial costs associated with compliance-environmental and social externalities) are not captured or made transparent.
- Ignoring the potential impact of cumulative effects of production and consumption (such as resource depletion, pollution, and climate change) on the firm itself.

- Market priorities for *short*-term profits and dividends to shareholders make it difficult to take the *long*-term perspective required for investments into resource efficiency and other aspects of circularity.

- Lack of indicators and targets at EU/national level, and lack of a coherent policy framework and supportive regulation. Such uncertainty on the scale and direction of future regulations may be a particular barrier for entrepreneurs. And clear ‘game rules’ for markets are a priority in any transformation towards a circular economy.

- Existence of skills gaps in the workforce and lack of circular economy programmes at all levels of education;

- Lack of investment and long pay-back periods;

- Collection and local recycling facilities in rural areas, where inefficient systems can carry high energy and resource penalties; this may therefore require very different approaches to those used in urban areas.

Houston et al indicated a very important role of the government in term of developing KPIs reflecting the development of the circular economy at the macro level, at community as well as at company level [11]. Teuvo Uusitalo and the research group, however, paid especially attentions to 3 issues, which could hinder the operation of the circular economy [25]: 1) the lack of social awareness and uncertainty of consumer responsiveness and demand, 2) the possible conflicts between stakeholders during the forming and developing process of the circular economy and 3) the potential conflicts between the new ways of doing business with existing business culture, which would lead to lack of company internal and external cooperation. The authors commended that the Government should play an active role and contributes effective efforts to help related stakeholder solving problems and directly solve problems, if needed/ related stakeholder showed that they are unable to solve the problems.

The term “policy” is discussed very much in the current literature on the circular economy. However, it is to mention that there usually are not a clearly defined “policy on circular economy”. It consists, in fact, of packages of policies, which are described in several regulations from all levels of the government and business system as well as community. Therefore, the government has to paly the role as a “policy coordinator”, which harmonises thee partial policies of all stakeholders related to the circular economy.

2. *Scope and development level of the economy*

Theoretically, the circular economy could be launched in all countries, not depending on their scope and development level. However, the scope and development level of a national economy could create favourable conditions or challenges and barriers for the circular economy in all forming, developing and operating phases of this model. A national economy with a large scope and high development level usually faces problems of fully utilising development room and operates under higher pressure of finding and applying new economic development model, which they could find in the circular economy. On the other hand, an economy with a large scope and high development level usually have better capacity in research and development as well as higher financial capacity, which is important for investments in building facilities of a newly forming circular economy. In addition, in those economies, the demands are often very diversified,

consumption power is usually sufficient for new products and services, which create favourable conditions and opportunities for the business following the model of the circular economy. Otherwise, the awareness of the circular economy related stakeholders in a economy with large scope and high development standard is often more convenient for new economic development model likes the circular economy. The influence of this factor could be explained from an other aspect: A national economy with a large scale and in a high development level usually consists of a wide range of sectors/ subsectors and branches, which could cooperate with and support to each other ones by innovating their production and business chain. With a complex and comprehensive structure, the national economy could create a wider portfolios of alternatives for the application of technologies and products/ services. Such economy could also provide more rooms for reuse of old products. Lastly, a highly developed economy owns a high potentials for restructuring itself in the direction of the circular economy. It has suitable resources and reserves for correcting possible mistakes and failures in the transition from the linear economy into the new economic model. It's not random that the circular economy as a concept is firstly discussed and launched in the real life economy of developed countries.

The development of the economy influences the level and scope of the circular economy through:

- The current economic development model and room for further economic development as well as challenges of the economic development. Highly developed economies usually explored fully their potentials, so that the room for the further development on the base of traditional sources is narrowed more and more. In such cases, they undergo a high pressure to change the development concept and model. That is why researchers of the developed countries spent lots of efforts to find out and test new development concepts, including the circular economy. On another aspect, a large scale economy enables the government better room for testing their transformation promoting/encouraging policy.

- Human capital and a highly qualified labour in a mobility network. Human resources play dominant role in the innovative economic development model likes the circular economy. A national economy with large scale and high level of development usually has advantages from a workforce with high performance, better professional awareness and disciplines, who works in a favourable environment with highly developed mobility.

- Technological capacity and development within the economical life. A highly developed economy usually consists of entities with different technological and technical levels, which enable the application of different kinds of technologies and techniques. Opportunities of national internal technological and technical transfer between business entities enables to explore different form of doing business according to the concept of circular economy (reuse or extension of life cycle of technologies and products).

- Financial capacity, which is needed for investments in facilities used for the circular economy and for the transition process from the traditional linear economy to the new economic model. Lack of investment capital was the reason why Vietnam had to export lots of wastes for overseas wastes trading and processing companies.

- Material demand and resources for the operation of the circular economy. A waste processing factory could operate sustainably only, if it has sustainable, sufficient and economic sources of inputs, at least key materials. In the last years, Vietnam built lots of small solid wastes

processing facilities, but most of those ones in rural regions could not achieve their designed capacity utilisation and efficiency because they couldn't get enough wastes for their operation.

While recognising the influence of the scope and development of an economy on the transformation of a national economy from the traditional, linear economy to the circular one, it doesn't mean that a under developing small scale economy could not move to that economic model. It implies only, that those economies should analyse and evaluate the success chances and challenges of each sectors/ subsectors of the economy, develop an appropriate strategy for step-by-step change of the economic development model.

In term of the scope and development of a transactional economy, an diversified economy with wide range of development could also create favourable conditions for the development of the circular economy in the way, that goods and products (either consumption products or equipment and machines) from a more highly developed sectors could be transferred to less developing sectors for reusing purpose. In the opposite direction, wastes could be reprocessed differently through technologies and techniques at different level. The situation also could be observed in Vietnam in the past and even today.

3. The awareness, commitment and capability of the business communities

This factor is raised especially by Houston [11], Superti [21] and their research groups. Another study conducted in the construction industry of Switzerland in 2020 also confirmed that different groups of stakeholders/ actors play different role and have different impacts on the transformation of the linear to the circular economy. Each of these stakeholder group play their role under impacts of different factors, which should be analysed carefully in order to choose and practice measurements to stimulating them to promote the transformation process [21].

Houston's group clarified the of related stakeholders of the circular economy in each country (see figure 5).

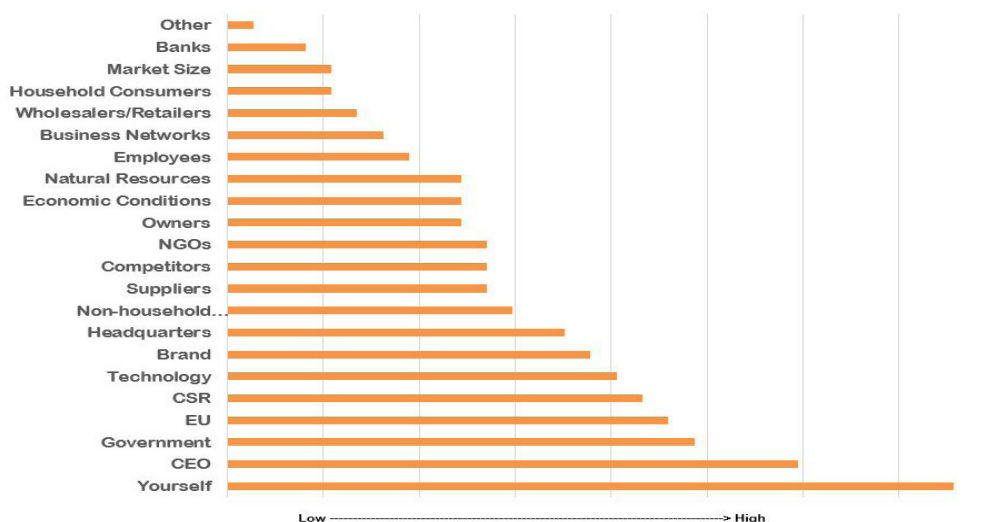


Figure 5: Influence of key Stakeholders and Considerations on Environmental Activities [11]

The circular economy affects all stakeholders, from the government, business community, research and development community as well as workforces and consumers. Its development, on the other aspect, requires the acceptance and supports of all these stakeholders. The more stakeholders are committed to develop the circular economy, the more they are already to share

resources and information as well as knowledge related to the circular economy and possibilities as well as abilities to develop it.

On the other hand, the development of the circular economy is not a daily business. It is usually a long term process and need a long term strategy, which consists of carefully designed and consistently implemented business flow with logical steps. Therefore, key stakeholders, especially business people should be highly committed not only with words and promises, but also long term perspectives/ plans and research, development programmes as well as appropriate investments.

The current level of international economic integration requires business entities linking together within national and international value/ manufacturing chains. The situation happens for the circular economy, too. It requires related business entities finding appropriate partners and developing/ maintaining sustainable business relationships, which are usually crossing different networks. Many researchers consider the abilities to set up and develop business networks within and crossing supply chains as a success factor for doing business in the framework of the circular economy. Through the globalisation and participation on international supply chains, business entities of a country could have chances to learn, to practice and to apply new business/ production concepts in their system, including the concept of circular economy. Furthermore, they could learn how to make use the concept to expand their business in a sustainable and efficient ways.

It's to mention that the concrete stakeholders and their concrete role may differ from a supply chain to another supply chain. Thus, it's important for policy makers as well as practical people that they have to clarify clearly these concrete figures and their role in concrete cases/ policy, so that appropriate solutions and measurements could be applied concretely.

4. The national scientific- technological capacity and the ability of realising technological progress into praxis

The science and technology become a factor, which play a comprehensive and decisive role for the development of the whole society, including for the economical development following all concepts.

All phases of the circular economy require strong and effective contribution of the science and technology. All the key pillars of the circular economy could be practiced only through realising the technical- technological progress, through R&D and the application of their results. Eglantina Hysa, Alba Kruja, Naqeeb Ur Rehman and Rafael Laurenti (2020) concluded that the circular economy is, in fact, the economy of innovation, which could not become real life praxis without scientific- technological progress and their application in the praxis [12]. The scientific- technological capacity doesn't only serve the transition of the linear economy into the circular one, but also the sustainable economic development and in a broader context- the development of the whole society.

Considering the application of scientific- technological progress as the most important source for business development as well as the most important way to solve problems and challenges should be the dominant behaviour of the community, especially business people and government officials. This requires a very basic transition of their approach.

The circular economy requires changes in business cycle as well as ways of doing business. R&D as well as the scientific- technological capacity should be developed not only in production

and service providing sectors, but also in all sectors and aspects of the economy, and more, in all aspects of the society.

The scientific- technological capacity to be developed consists of:

- Research and development capacity. By emphasizing the “circular thinking”, Mohamed Sameer Hoosain, Babu Sena Paul and Seeram Ramakrishna (2020) recommended that the development of the R&D capacity is very important, but it’s more important that the capacity should be a “living capacity”, meaning that the capacity should fully explored and the results of the R&D activities should transferred on time into the real life.

- Technical and technological capacity in the business sectors. This component of the scientific- technological capacity deals directly with the concrete operation of the circular economy. It’s usually developed and explored by the private sector. The government could play an active role by stimulating efforts of the sector through its policies, which should be comprehensive and consistent.

- The innovation capability and the capacity for transferring and receiving new, innovative technologies. Hoosain and his team commended that the abilities of developing and receiving, adapting new, high tech, such as digital technologies and other technologies typical for the industrial revolution 4.0, would have decisive impacts on the success of the transformation to the circular economy [19].

The relationship between the scientific- technological capacity and the circular economy of a country is a two ways relationship: The scientific- technological capacity is a condition for the development of the circular economy, but the development of the circular economy also enable and create favourable condition for a quick, diversified and effective development of the scientific- technological capacity.

Currently, science and technological capacity becomes a key component building the strength and power of a nation. Results of scientific- technological activities, especially the results of R&D activities, are not only tools for solving problems occurring in the production, in the business and in the social life. They already become a kind of “intelligent commodity”, the direct object of business.

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THE SITUATION OF AGRICULTURAL PRODUCTION - PROCESSING - CONSUMPTION BY VALUE CHAIN FOR SUSTAINABLE DEVELOPMENT IN VIETNAM

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Abstract: *Building value chains for agricultural products is one of the important solutions to achieve sustainable development goal of the entire agricultural sector. Over the past time, a number of value chain models have been formed and proven to be effective, however, there have not been so many of these models and they have not evenly been distributed across fields and professions. The reason is that agricultural production in many regions across the country is still small and fragmented, making it difficult to form concentrated production zones to apply science and technology as well as to control issues related to food safety and hygiene. Therefore, in the upcoming time, it is necessary to promote the formation of value chain models in the following forms: Co-operatives/co-operative groups associate with enterprises; Manufacturing enterprises associate with distribution enterprises; Enterprises implement all stages in the chain... To do so, localities need to plan early concentrated agricultural production areas, as a basis for the formation of value chains. The article reviews the current situation of production and consumption of some agricultural products along the value chain in order to contribute to sustainable economic development in Vietnam following the integration trend. The article also evaluates the advantages and disadvantages to find solutions for sustainable development.*

Key words: *agricultural products, value chains, sustainable development, agriculture, cooperatives.*

1. INTRODUCTION

Linking production with consumption of agricultural products plays a very important role in agricultural development. Therefore, in recent years, localities in the province have been promoting the development of linkage chains, consuming agricultural products, contributing to improving productivity, quality and value of agricultural products, at the same time, increasing the scale of commodity production, applying modern production processes, improving the capacity of management, operation and production organization for the associated enterprises, cooperatives and the level of the people. In agricultural production, linkage is the key to the development of a modern agriculture, ensuring the harmonization of the interests of the participants. That linking process has its own characteristics and plays an important role: Contributing to ensuring mutual benefits for all parties; increasing efficiency in agricultural production; contributing to improving the efficiency and role of the state in economic management. Linking production with consumption of agricultural products plays a very important role in agricultural development, helping to improve the benefits of actors participating in the value chain, especially for farmers. From there, it contributes to

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increasing the scale of commodity production, applying modern production processes and improving the capacity of management, operation and organization of production under contract to avoid the situation of “good harvest but depreciating”. Especially, in the context of current global economic integration, farmers must be the pioneering force in production innovation. Farmers are the subjects of the chain linking the production and consumption of agricultural products. Therefore, their initiative in jointly building link chains is particularly important. However, in order to have that initiative, besides equipping knowledge, it is necessary to have impacts for farmers to see and get benefits from chain production. Enterprises and cooperatives are two economic sectors that play a huge role in linking with farmers to build closed production chains. However, through actual implementation, as well as feedback from farmers, the process of linking with agricultural product consumption between enterprises, cooperatives and farmers is facing many difficulties and obstacles. In fact, while farmers are still passive, many cooperatives and enterprises in the production and consumption chain have the thought of relying on the support of the State, without a clear strategy and specific orientation. The price of agricultural products has fluctuated continuously in recent years, so the purchasing enterprises have not boldly applied the price insurance policy.

It can be said that the production chain has just initially formed, so it is not tight and the implementation process is still awkward. Affiliate contracts still have many shortcomings, there are no sanctions to deal with contract violations. The content of the product offtake contract is a guiding contract, not an economic contract, so the legality is not high; Therefore, the parties are easy to breach the contract and the farmers often face disadvantages...

In the linkage chain, the role of producers and farmers is very important - the link determines the success. In the market economy of the integration period, production must follow the standards and order process of the market, producers who are not aware of this will find it very difficult. On the other hand, reality shows that farmers often associate unsuccessfully because of limitations in size, capacity, qualifications... Therefore, farmers must actively equip themselves with knowledge about production and markets, and gradually convert to large-scale production...

At the same time, farmers need to equip themselves with legal knowledge to actively protect their interests in the process of association. In particular, farmers need to give up the mentality of “living by makeshifts”, they need a strategy and jointly bear the risks with the associated subjects...

2. RESEARCH METHODS

The article researches the current situation of production and consumption of some agricultural products along the value chain in order to contribute to sustainable economic development in Vietnam following the integration trend. The article also evaluates the advantages and disadvantages to find solutions for sustainable development.

3. CURRENT SITUATION OF AGRICULTURAL PRODUCTION - PROCESSING - CONSUMPTION ALONG THE VALUE CHAIN IN VIETNAM

In the field of production and consumption of agricultural products along the value chain in Vietnam, there are many industries with a number of major commodities including rice, coffee, rubber, tea, cashew, cane sugar, vegetables, fruits, pepper...

The situation of production and consumption of agricultural products in the value chain in Vietnam for some key commodities in recent years is as follows:

❖ *Coffee*

In terms of production, Vietnam is the world's second largest coffee producer after Brazil and the world's largest producer of Robusta coffee. Vietnam accounts for nearly 20% of total global coffee production. Vietnamese government's aim is to maintain the coffee growing area of 680,000 hectares in 2020, down about 2% compared to 2019. Entering 2021, the Ministry of Agriculture and Rural Development believes that the area will still decrease to about 675,000 hectares, and produce 1.8 million tons of coffee annually, currently there are about 100 export enterprises in operation, led by Intimex, Simexco and Tin Nghia.

According to the Agro Processing and Market Development Authority, this year's coffee crop in Vietnam has been lost and harvested later than in previous years, so it has not put pressure on the market. Accordingly, this year's crop, post-harvest picking and drying techniques have been paid more attention, creating a driving force to push up coffee prices. According to the United States Department of Agriculture (USDA), as a rule when coffee prices are low, people tend to switch to growing pepper. However, in recent years, the pepper industry has also suffered a crisis of oversupply when the area is 3 times larger than planned, so the price has dropped to a record low. Therefore, coffee growers have switched to intercropping with fruit trees such as mango, durian, etc. Although the area decreased, this number still exceeded the plan in the project "Sustainable development of coffee industry in the period 2015-2020". According to this project, by 2020, the total area of coffee in the country was 600,000 hectares and the total export turnover reached about 3.8 - 4.2 billion USD.

Regarding processing, coffee is mainly processed in 3 areas: Small-scale and craft households; green coffee processing factories; powdered coffee processing factories. Currently, about 80% of coffee output is preliminarily and fully processed in the household area. The industrial-scale processing part includes green coffee processing factories, mainly processed from raw materials such as parchment coffee, green coffee beans that are purchased and collected from agents through milling, sorting, and polishing into finished green coffee. For raw materials which are fresh coffee berries, processing plants apply two methods: dry processing for Robusta coffee, wet processing for Arabica coffee and a small amount of Robusta coffee. Currently, the whole country has more than 100 green coffee processing factories, with a capacity of 5000 to 60,000 tons/year, which are enough for processing requirements of 1,000,000 tons/year.

Regarding coffee consumption: According to estimates by the Agro Processing and Market Development Authority, coffee exports in December 2020 were estimated at 85 tons with a value of 170 million USD, bringing the whole year 2020 coffee export volume and value to 1.51 million tons and 2.66 billion USD, down 8.8% in volume and 7.2% in value compared to 2019. Germany, US and Italy continued to be the three largest coffee consuming markets of Vietnam in the first 11 months of 2020 with market shared respectively: Germany reached 319.2 million USD, up 12.8%; The US reached 230.6 million USD, up 9.3% and Italy reached 208.2 million USD, up 8.4%. Coffee export value increased sharply in the following markets: Poland reached 36.5 million USD, Japan reached 170.3 million USD, up 15.4% and Malaysia reached 65.3 million USD, increased 15.2%. According to calculated data from the General Department of Customs, the export of Robusta coffee in November 2020 reached 70.78 thousand tons, worth 111 million USD, down 25.1% in volume and 22.1% in value compared to November 2019. In the first 11 months of 2020,

Robusta coffee exports reached 1.22 million tons, worth 1.82 billion USD, down 2.9% in volume and 3.9% in value over the same period in 2019. In particular, exports of Robusta coffee to many main markets decreased, such as: Germany, United States, Spain, Russia, Belgium, Thailand. On the contrary, Robusta coffee exports to other major markets increased, such as: Italy, Japan, Algeria, Philippines. The export turnover of processed coffee in November 2020 increased by 0.3% compared to November 2019, reaching 46.14 million USD. However, in the first 11 months of 2020, the export turnover of processed coffee decreased by 0.5% over the same period in 2019, reaching 524.84 million USD in which processed coffee exported to the Philippines and China markets decreased, while exported to Russia, USA, Japan, Spain, Germany increased.

Vietnam mainly exports coffee which is not roasted and decaffeinated to Sweden, Denmark and Norway, about 6.8 million USD in 2019. Meanwhile, each year, these countries import about 455 million USD and mainly from Brazil, Honduras. Nordic countries mainly import Arabica coffee beans and only a small amount of Robusta coffee. Meanwhile, Vietnam mainly exports Robusta coffee, accounting for about 95% of Vietnam's coffee exports. In addition, environmental issues are also paid special attention. European-Vietnam Free Trade Agreement (EVFTA) took effect from August 1st, 2020, in which coffee products enjoy 0% tax. This will help Vietnamese coffee having a competitive advantage compared to competitors in this region and this is an opportunity for Vietnamese businesses. To promote coffee exports to this region, the Ministry of Industry and Trade recommends that businesses focus on cultivation and production development associated with a sustainable environment to attract consumers.

❖ *Rice*

In the face of complicated weather changes and the stalled business situation due to the global outbreak of the COVID-19 epidemic, the agricultural industry in general and rice production in particular have faced many difficulties and challenges. However, thanks to the initiative in appropriate response plans and efforts in agricultural restructuring, Vietnam's rice production in 2020 achieved positive results, marking a year with many victories.

With regard to production: According to the General Statistics Office, the area of rice cultivation in the autumn-winter season in 2020 was estimated at 724 thousand hectares, decreased 0.2 thousand hectares compared to the autumn-winter crop of the previous year. The rice cultivation area nationwide reached 1,584.6 thousand hectares, a decrease of 27 thousand hectares compared to the 2019 crop. The area of autumn-winter rice cultivation decreased in some localities due to the conversion of rice land to fruit trees and the chain effect from the late summer-autumn crop. The area of autumn-winter rice cultivation in some provinces was decreased compared to the previous year due to the switch to fruit trees, such as Tien Giang, which decreased by 24.3 thousand hectares; Ben Tre reduced 14.5 thousand ha; Tra Vinh reduced 10.1 thousand hectares. In addition, due to the late summer-autumn crop, some localities which had land area with sufficient production season temporarily let the land rest, however, some other localities increased the production land area again in some states last year, carried out periodic flood discharge and expanded the area outside the dike area such as An Giang, increasing by 14.3 thousand hectares; Kien Giang increased by 11.4 thousand hectares; Soc Trang increased by 13 thousand hectares. These reasons led to the fact that the cultivated area of the whole autumn-winter rice crop in 2020 had not changed much compared to the autumn-winter crop of the previous year. By the end of December 2020, rice yield

was estimated at 58.7 quintals/ha, an increase of 0.5 quintals/ha; rice production was estimated at 42.69 million tons, a decrease of 806.6 thousand tons. The production result of the whole country's winter-spring crops this year was good with a yield of 65.7 quintals/ha, an increase of 0.2 quintals/ha compared to the 2019 winter-spring crop; output reached 19.9 million tons, decreased 593.5 thousand tons. The summer-autumn rice crop in 2020 achieved high yield results compared to the previous year's summer-autumn crop, however, due to the effects of drought, salinization and the change of purpose on rice land, the cultivated area decreased, reducing the total yield results. The summer-autumn rice growing area nationwide this year reached 1,945.1 thousand hectares, down 64.5 thousand hectares compared to the summer-autumn crop in 2019; productivity reached 55.2 quintals/ha, increased 0.7 quintals/ha; output reached 10.74 million tons, decreased 205.4 thousand tons. In which, Mekong River Delta had an output of 8.46 million tons, dropped 219.1 thousand tons compared to 2019.

Regarding preservation and processing: The field of rice preservation and processing has initially been established and stabilized, contributing to making rice become a key export commodity, ensuring national food security. In terms of processing technology equipment, large-scale enterprises and processing facilities have basically been mechanized, many of which have reached the medium advanced level compared to other countries in the region. Rice quality in general and preservation quality in particular has gradually been improved.

With regard to rice consumption: According to statistics of the Agro Processing and Market Development Authority (Agrotrade), the export volume in December 2020 was estimated at 443 tons with a value of 240 million USD, bringing the total volume and value of rice exports in 2020 reached 6.15 million tons and 3.07 billion USD, down 3.5% in volume but up 9.3% in value compared to 2019. In the first 11 months of 2020, Philippines ranked first in Vietnam's rice export market with 32.2% market share, reached 1.94 million tons and 910.16 million USD, decreased 1.7% in volume but increased 11.8% in value over the same period in 2019. In the first 11 months of 2020, the markets with strong increases in rice export value are: Indonesia (up 2.8 times, reaching 88.3 thousand tons and 47.8 million USD) and China (up 91.6%, reaching 752.3 thousand tons and 431.7 million USD). In contrast, the market with largest decrease in rice export value in the first 11 months of 2020 was Iraq (down 65.6%, reaching 90 thousand tons and 47.6 million USD). Regarding export categories, in the first 11 months of 2020, the export value of white rice accounted for 32.5% of the total turnover; jasmine rice and fragrant rice accounted for 32.9%; sticky rice accounted for 29.6%; japonica rice and Japanese rice varieties accounted for 4.8%.

❖ **Rubber**

With regard to production, the positive point is that Vietnam continues to maintain the second place in terms of orchard productivity, third in output, and fourth in export in the world. In 2018, Vietnam continued to maintain this position, with an output of 1,142 thousand tons on an area of 965,400 hectares. Along with the increase in production, the productivity of rubber trees in Vietnam also increased significantly, thanks to the application of high yielding varieties and advances in planting and care techniques. Vietnam has kept an average yield of 1.6 - 1.7 tons/ha/year, the highest level in Asia, ranked second in the world in recent years. High productivity is one of the important factors to help rubber growers in Vietnam withstand and respond flexibly when low prices have persisted from 2012 to now.

Regarding processing, the rubber processing industry in our country is mainly preliminarily processed for export. The processing industry of rubber products accounts for a small proportion, consuming about 20% of the domestic rubber output.

Regarding consumption, the value contributing to the total export turnover of the Rubber industry is not only from natural rubber raw materials, but also from rubber products and rubber wood products of Processing industry. Vietnam exports rubber to more than 60 markets in countries around the world. However, China, India, and South Korea were the three largest rubber consuming markets of Vietnam in 2019, accounting for 66.5%, 8.3% and 3% market share respectively. According to the AgroTrade (MARD), the export volume of rubber in 2018 was 1.56 million tons, equivalent to a value of 2.09 billion USD, with an average export price value is 1,338 USD/ton, increased 13.3% in volume and 7.0% in value compared to 2017 due to the decrease in export prices. By 2019, export output increased more than in 2018, reached 1.68 million tons, equivalent to 2.26 billion USD, up 7.7% in volume and 8.0% in value compared to 2018. In 2018, the average export price was 1,343 USD/ton.

4. CURRENT SITUATION OF PRODUCTION - PROCESSING - CONSUMPTION OF AGRICULTURAL PRODUCTS ALONG THE VALUE CHAIN

❖ Current situation

Over the past time, Vietnam's agricultural industry has made efforts to participate in the global agricultural value chain with many products with high export value such as coffee, pepper, seafood, fruits... Vietnamese agricultural products have been exported to more than 100 countries around the world, export turnover has increased over the years. Despite facing many difficulties due to the COVID-19 pandemic, Vietnam's agricultural export value in 2020 was still growing, with the total export value of agricultural, forestry and fishery products in the past 3 quarters of the year reaching more than 30.05 billion USD, up 1.6% over the same period in 2019. It is forecasted that for the whole year, the whole agricultural industry would bring in 41 billion USD from exports.

In terms of ranking criteria in exporting countries, some agricultural products of Vietnam have a large market share and high rank. In 2019, 450 thousand tons of cashew kernels were exported, with a value of 3.6 billion USD (ranked first in the world); pepper reached 284 thousand tons (ranked first in the world); coffee reached more than 1.6 million tons, worth over 2.85 billion USD (ranked second in the world); rice reached 6.37 million tons, worth 2.81 billion USD (ranked second in the world); natural rubber reached 1.7 million tons, valued at 2.3 billion USD (ranked fourth in the world).

The agricultural sector has been reorganizing production in the direction of cooperation, associate with the value chain, linking raw material production with processing and consuming products according to the value chain, connecting with the global consumption system. The increased processing and added value of products have created more jobs and higher incomes for Vietnamese farmers. Thereby, a number of Vietnamese agricultural products and particular value chains of enterprises have been able to participate in high value-added stages in the global value chain. Coffee is one of the most successful products. Vinacafe's coffee chain, Binh Thuan dragon fruit chain, ... and especially the chains of foreign-invested enterprises such as Néscafé, Metro... bring agricultural products with Vietnamese origin to the overseas retail system. Coffee consumption in the domestic market has achieved strong growth, mainly due to the positive

results of marketing strategies from big brands such as: Highlands Coffee, Gloria Jean's, The Coffee Bean, Tea Leaf, Trung Nguyen and Illy, ... Although Vietnam has not built strong brands in the international market, some companies have initially reached out to the world market with Vietnamese coffee brands. In addition, more and more multinational companies are interested in investing in Vietnam's coffee industry, contributing to strengthening Vietnamese coffee's ability to participate in the global value chain. More and more Vietnamese exporters are participating in sustainable coffee development programs.

The process of reform, improvement of institutions and business environment has contributed to improving the participation capacity of Vietnamese agricultural products in the global value chain. The accession to the WTO in 2007 and then 13 bilateral and multilateral free trade agreements (FTAs) were signed, including a number of FTA's new generations, notably CPTPP and EVFTA, which have been continuing to pave the way for Vietnamese agricultural products to penetrate the world market. Policies on agriculture, trade, science - technology... have been promulgated and implemented, contributing to improving productivity and quality of agricultural products, promoting processing value and increasing the turnover of agricultural products export. The status of Vietnamese agricultural products in the global value chain has been raised to higher level.

However, according to experts, up to 85% - 90% of our country's agricultural products to the world market must go through intermediaries with foreign "brands". Therefore, being sold at low prices and being coerced are still common stories for Vietnamese goods when being exported to other countries. Not to mention anti-dumping barriers, environment, technical barriers, etc.

Many products are sold to the world market without brand names, labels, or must use foreign brands. This is a big disadvantage, affecting the process of participating in the global value chain of Vietnamese agricultural products. Meanwhile, supporting activities such as providing credit in chains, policies to attract investment still have many shortcomings; the stage of forecasting and warning market signals has not yet met the requirements. Along with that, the impact of climate change is fierce, creating risks and great damage to agricultural production, income and life of farmers and rural areas.

❖ *Overall assessment*

Firstly, about advantages: In recent years, the value chain of Vietnamese agricultural products has increasingly gained strength and competitive position in domestic and foreign markets. In the value chain of agricultural products, farmers organize group activities according to the common production process associated with the large field model. Farmer households link together by joining cooperative groups and cooperatives. Production in large sample fields, in cooperative groups, farmers can reduce labor days and reduce production costs because all are mechanized. Moreover, farmers can also improve their production skills through training sessions, sharing production experiences... Since then, the bond between farmers and farmers is getting stronger. Thanks to the association, new farmers have the ability to build and manage collective brands, proceed to build brands for products, manage product quality to add value, and meet increasing demands of the market for clear origin products, ensure safety and quality. Many agricultural products of Vietnam are increasingly gaining a foothold in domestic and international markets.

In parallel, the connection between farmers and businesses has been formed and consolidated, thereby building a new consumption channel in the value chain through eliminating intermediaries

between producers and businesses, shortening the length of agricultural product consumption channels. Large production creates a basis for farmers to link up with businesses who are capable of deep processing, selling products directly and having brands to consumers through domestic and foreign distribution systems; or associate with businesses that prove they have linked and are an organic part of a certain chain of goods in terms of quality, brand, risk... There have been many rice consuming and exporting enterprises associated with farmers, building raw material areas through consumption contracts, supplying materials and providing technical support. This connection, which begins to expand with many other crops such as green vegetables, fruit trees and industrial plants, has cooperated, linked, transferred science and technology, provided public services, especially trained farming. Many enterprises are reputable not only in the country but also in the international market.

Secondly, about disadvantages: Besides the achieved results, production - processing - consumption according to the value chain of agricultural products in our country is still limited, the success rate in production - processing - consumption according to the value chain of agricultural products of our country is still low. The value chain of agricultural products from input, production, post-harvest, processing to export has certain limitations.

At the input stage, costs are still higher than volatile prices. At this stage, there is also the overuse of fertilizers, pesticides and excessive use of water. Next to the production stage, the scale is quite small, fragmented and lacking in connection. Furthermore, wrong technical process, using too many workers and inconsistent quality are also typical limitations. Most of the farmers lack the capacity to access the market and produce according to experience and reliance on subjective calculations about the market. Vietnam's agricultural products can only participate in the following stages: cultivating, collecting, preliminary processing and exporting raw products are the stages with the lowest added value in the value chain of agricultural products. At stages with high added value such as: research and development (R&D), processing, distribution (retail) and marketing... we are still not participating or the level of participation is still very low.

In the production of agricultural products, farmers also suffer from many disadvantages. Among the three subjects participating in the export value chain (farmers, traders, exporters), farmers have to pay the highest cost, then traders and exporters, but they enjoy the lowest benefits. In the rice production and export chain, the most beneficial part belongs to the suppliers and distributors of fertilizers and pesticides, followed by the rice exporters, then the purchasing enterprises, processors and traders. Business lines bring about over 70% profits, meanwhile, farmers often benefit less than 30%. For the coffee value chain, farmers only benefit about 10% of the total added value of coffee products.

At the post-harvest stage, losses are still high, there is a lack of standard storage, poor transportation and packaging, and too many intermediaries. In the processing stage, the limitations shown are low technology, low added value, small and fragmented scale. Notably, current processing lacks intensive processing and by-product processing. The linkage relationship between enterprises and cooperatives/cooperative groups, public-private partnership in the field of infrastructure investment, the reform of associations and industries is still loose and ineffective. Agricultural value chains are facing difficulties due to the lack of key enterprises of the chain that are strong enough to undertake the preliminary processing and packaging of finished products to supply goods to supermarkets, convenience stores, and collective kitchens.

Reasons for the limitations: (1) Vietnam's agricultural products have low competitiveness. Over the past years, Vietnam's agricultural sector has had many policies to promote effective participation in the global agricultural value chain for sustainable development. However, the outdated farming habits of most farmers remain unchanged. The land area is still fragmented, which hinders the application of science and technology to production. Large production models in agriculture are only the first step, very early step, leading to difficulties for rapid transition to high value-added commodity agriculture. Besides, meeting the quality requirements of clean agricultural products from farming to have a large source of processing materials, good quality and uniformity for Vietnamese agricultural products is still very weak. Not to mention, Vietnamese agricultural products are always of lower value than similar products in other countries, because they are too focused on quantity, so they neglect to build brands to meet output required for farmers. Low product quality, which is one of the reasons leading to the popular value chain model for most agricultural products with export strengths of Vietnam such as rice, coffee, vegetables..., follows the third model. Vietnamese agricultural products are often exported in raw or semi-processed form, leading to very few foreign consumers who do not even know they are Vietnamese agricultural products. In fact, as long as this agricultural value chain exists, Vietnam's agricultural products cannot escape the bottom position in the world agricultural value chain. (2) The linkage in the value chain of agricultural products is still loose. The formation of a linkage chain to strictly control from production, processing to product consumption on the basis of the overall agricultural development planning, with the active participation of 4 households (enterprises, farmers, scientists and government) has not been effective. The connection in the value chain is still weak, especially the one between businesses and farmers to create value chains of large agricultural products. The main reason is the limited financial potential of both enterprises and farmers. Farming households often have a situation of snatching and not long-term production. Enterprises lacking the necessary capital to invest in agriculture, especially in the production stage, which is mainly involved in the stage of collecting, preliminary processing and consumption, do not pay attention to the production chain. In addition, the construction of a distribution system for agricultural products is always the weakest stage, due to the lack of linkage between farmers and purchasing and distribution enterprises. Currently, domestic exporters rarely organize formal distribution networks, but often rely on the purchasing network of private traders, leading to the fluctuating prices of agricultural products. (3) The role of the government in production - processing - consumption in the value chain of agricultural products is still weak. Over the past time, localities have signed and implemented many cooperation programs, but the results are still limited due to many reasons such as the lack of a clear legal mechanism and the ineffective model of regional coordination and direction; the new connection mainly between the government and the government, through the signing of cooperation programs, lack of binding legal responsibility; the link between production - processing - consumption of agricultural products is still limited. The value chain is extremely important in agricultural production, especially our country in the period of intensive integration. Agricultural products are mainly exported, therefore, if farmers or cooperative groups, enterprises...do not linked, it is very difficult to compete. The Government has policies towards the production of agricultural products along the value chain such as Decision 62, Decision 210, Decision 889, Decision 55... However, the policies also have many shortcomings and do not appropriate when deployed in the field.

5. SOME SOLUTIONS TO DEVELOP THE PRODUCTION - PROCESSING - CONSUMPTION OF AGRICULTURAL PRODUCTS ACCORDING TO THE VALUE CHAIN FOR SUSTAINABLE DEVELOPMENT

On the side of agricultural product manufacturers and exporters

When participating in the global value chain, businesses need to clearly define their participation right from the beginning, since they are still in the market product development stage. They should optimistically and actively participate in the global value chain on the basis of right selecting the priority stages in order to exploit comparative advantages, develop quickly, have effective and sustainable export activities in the world market. They also need to promote joint venture and association activities to increase their strength and economic efficiency when participating in the global value chain, quickly overcome the small and fragmented situation and the lack of connection between subjects (from producers to collectors, processors, exporters, retailers) in the chain.

Moreover, they should focus on selecting agricultural products in which Vietnam has comparative advantage and the world has high demand for restructuring production and export. At the same time, enterprises need to rearrange production and processing facilities in the direction of establishing large production and processing facilities with modern equipment and technology to create products that have high added value and are competitive in the international market. They also need to gradually reduce small production and processing establishments with low productivity and quality, which do not ensure food hygiene and safety. Furthermore, businesses should strengthen the capacity of industry associations. This is the unit that gathers and strengthens the association of agro-business enterprises with comprehensive advantage potential, promotes brand building and development, and exploits geographical indications for agricultural export products... It is necessary to have an overall solution to ensure food safety and hygiene in accordance with international food safety standards. Currently, some clean and organic agricultural products of Vietnam have a foothold in the world market such as: Tea, coffee, vegetables, fruits... However, green and clean agricultural products still account for a very small proportion of total agricultural output and have great potential for growth in the future.

Due attention should be paid to the building of a brand name for Vietnamese agricultural products. Vietnam's agricultural products are always priced lower than those of other countries with the same products. In the past time, we have been successful in exporting a number of agricultural products (coffee, pepper, cashew, seafood, fruit...) to the European and American markets. However, due to focusing too much on quantity, the brand issue has not been paid attention to. To overcome this situation, associations of Vietnamese agricultural and forestry products should organize the introduction of their industry's products to consumers in localities of some countries where Vietnamese goods are exported to, in order to build consumer confidence in Vietnamese branded agricultural products. With brands, our country's agricultural products can participate intensively in the world agricultural product chain.

On the side of the Government

In order to increase the added value of exported agricultural products, the Government has a particularly important role. Given the current situation of agricultural production and export along with Vietnam's current international economic integration process, the State needs to focus on specific policies and efforts as follows:

Continuing financial support. Supporting businesses to access financial sources is an important factor affecting their ability to participate in global value chain. Although the priority has been given to capital investment in agriculture and rural areas, however, businesses still face many difficulties in accessing capital sources to invest in high technology for production.

Promoting human resource training. Currently, human resources have not met the development needs of the industry and enterprises operating in the agricultural sector. In the context of globalization and the influence of the Fourth Industrial Revolution, many necessary knowledge and skills need to be supplemented agricultural workers.

Investing in logistics infrastructure. In the global value chain, production stages are geographically fragmented, which requires fast and cost-effective movement of goods across national borders. Thus, inefficient logistics activities will increase transaction costs and reduce the competitiveness of domestic enterprises. On the other hand, the issues of preservation, warehousing, etc. also need attention, investment and business support by the Government.

Also, it is necessary to gradually adjust and change strategic orientation from developing production and export of agricultural products according to the current quantity and high speed to developing towards attaching importance to quality, competitiveness and efficiency. In order to implement this policy, in addition to encouraging investment and strongly developing the processing industry, the Government needs to strengthen and attach importance to the planning of farming and growing agricultural products on the basis of promoting comparative advantages and towards large production and modern agriculture; at the same time, develop and manage the production, processing and preservation of agricultural products for export according to the standards of quality, hygiene and food safety, which are suitable for import market.

It is crucial to review and re-evaluate the scale and level of processing technology of all existing agricultural product processing facilities. On that basis, there is an appropriate incentive and support mechanism to increase and expand investment, linkage and technology transfer in the direction of forming large-scale processing facilities with modern technology, thereby increasing processing capacity, increasing the rate of deep processing, creating quality products, meeting the high demand of the world market. There should be orientations and policies to encourage manufacturers and exporters to build and develop value chains of agricultural products with high competitiveness in the country as the premise and conditions for participating in the global value chain.

It is necessary to create favorable conditions for Vietnamese agricultural product producers and exporters to participate in non-production stages, to get closer to foreign consumers, especially to support information on market demand, trade promotion of agricultural products in key markets, opening distribution bases abroad. Attention should be given to the creation of favorable conditions to attract foreign direct investment (FDI) in the agricultural sector, thereby accessing capital, technology as well as participating in the global distribution network of agricultural products. We should create a connection for domestic and foreign businesses to join, share information, deploy efficient and low-emission production and business linkage models, develop green and sustainable agriculture./.

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SOME EVALUATIONS ON THE IMPLEMENTATION OF UNEMPLOYMENT INSURANCE POLICY IN VIETNAM

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Abstract: *Unemployment insurance is a social security policy to compensate a part of the employee's income when the employee loses his/her job and at the same time to support them to participate in vocational training insurance and find jobs so that they can rapidly return to the labor market, earn income and stabilize their lives as soon as possible. In Vietnam, the unemployment insurance policy has been effective from January 1, 2009 according to the provisions of the Social Insurance Law No. 71/2006/QH11. This is a policy with great social security significance and great agreement of employees. The author's article focuses on analyzing the implementation of unemployment insurance policies with the achievement; At the same time, it also identifies limitations affecting this policy's objectives and propose key solutions to improve the effectiveness of unemployment insurance policy implementation in Vietnam in the near future.*

Keywords: *unemployment insurance policy, social security, employees, unemployment benefits, employment, vocational training*

1. INTRODUCTION

Unemployment is an inevitable and objective phenomenon of the market economy. However, unemployment will negatively affect socio-economic development in each country if it exceeds the allowable rate. Due to the negative impact of unemployment, governments have to use many policies and measures to deal with it. One of the policies used by many countries, including Vietnam, is the unemployment insurance policy. During the implementation process, Vietnam's unemployment insurance policy has timely changed to match the Party and State 's orientation. Based on the provisions of the Employment Law No. 38/2013/QH13 (replacing the unemployment insurance provisions - Social Insurance Law No. 71/2006/QH11), unemployment insurance set up the goal: to provide financial support for unemployed people to stabilize their personal and family lives, to create conditions for them to participate in the labor market and maintain jobs and have new employment opportunities. In the condition of business activities and jobs being seriously affected by the current COVID pandemic, unemployment insurance clearly showed the role of a social security policy.

2. THE IMPLEMENTATION OF UNEMPLOYMENT INSURANCE POLICY IN VIETNAM

Unemployment insurance policy is a very important policy in ensuring social security in Vietnam. Unemployment insurance policy in Vietnam ensures four contents: unemployment benefits; job consultancy and introduction; Vocational training support; Health Insurance. With

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the goal is to pay allowances, ensure employees' incomes when they are unemployed and support unemployed employees to return to the labor market, there are a lot of achievements after more than 12 years of implementing the policy:

Firstly, the number of participants in insurance has been growing significantly

The coverage of a social security policy is an indicator to evaluate its success. The results of the unemployment insurance policy implementation from 2009-2020 showed that the coverage of the policy is always improved.

Table 1: Number of participants in unemployment insurance

Year	Number of participants (millions of people)	Increase/Decrease (%)	Density in the labor force (%)
2009	5.9	-	11.7
2015	10.3	74.5	19.1
2016	11.6	12.6	20.3
2017	11.77	1.4	21.4
2018	12.68	7.7	22.9
2019	13.4	5.6	27.5
2020	13.27	-0.09	24.3

Source: Vietnam Social Security, Department of Employment

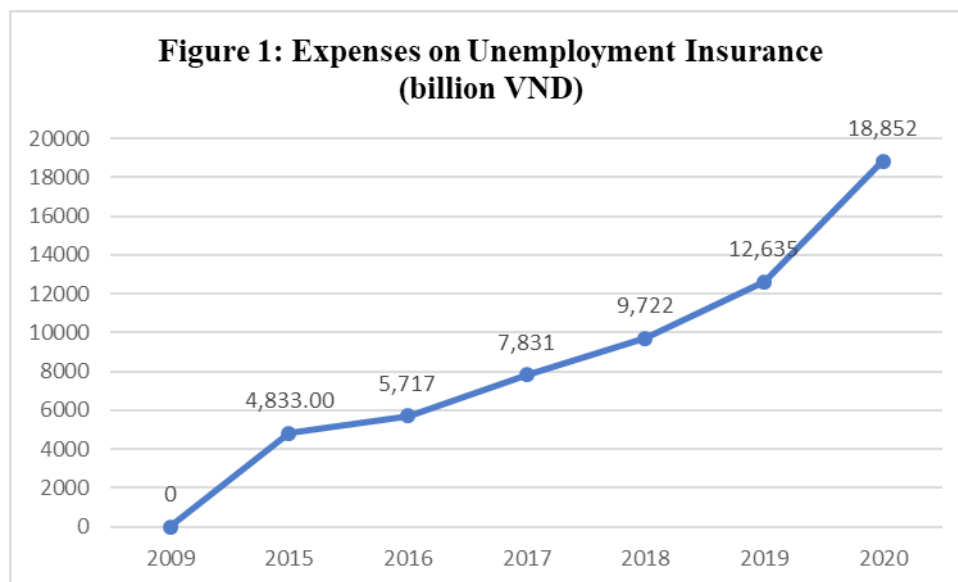
The number of participants in unemployment insurance was 5.9 million people, accounting for about 11.7% of the labor force) in the first year of implementing unemployment insurance (2009). The number of participants in unemployment insurance was 10.3 million in 2015, an increase of 74% compared to 2009, accounting for 19.1% of the labor force. The large change in the number of unemployment insurance contributions at this stage is due to the change in the mandatory conditions for participating in unemployment insurance under the Employment Law, effective from January 1, 2015. According to the provisions of the Employment Law, the subjects required to participate in unemployment insurance are expanded - not only employees with labor contracts of indefinite term, labor contracts of full 12 months above but also employees with labor contracts from 3 to under 12 months are also required to participate in unemployment insurance; and at the same time the regulation that only enterprises with 10 or more employees must participate in unemployment insurance, is removed. Due these changes, there is a large increase in the number of participants in unemployment insurance in 2015 compared to 2009. From 2016 to 2019, there is increase in the number of participants in unemployment insurance as well as the percentage of participants in unemployment insurance. In 2020, the number of participants in unemployment insurance was reduced compared to 2019 due to the impact of the COVID-19 pandemic. However, unemployment insurance has demonstrated a positive development when it is trusted by employees to participate in insurance.

Secondly, the social insurance agency always ensures the participants' benefits when they are unemployed which contributes to stabilize the lives of employees and their families.

Ensuring the unemployment rights of employees is an obligation of the social insurance agency with specific regulations. In order to receive unemployment benefits, employees must ensure the following conditions: (1) termination of labor contracts or work contracts that are not unilaterally terminated or unlawfully terminated by employees; (2) have paid unemployment insurance premiums

for full 12 months or more before the contract termination, for labor contracts with definite and indefinite terms, or have paid unemployment insurance premiums for full 12 months or more for a seasonal labor contract or a certain job with a term from full 3 months to less than 12 months; (3) have registered for unemployment and submitted a request for benefits at the Employment Service Center; (4) Haven't found a job after 15 days from the date of filing for unemployment insurance.

Along with unemployment allowances, employees are also supported on employment consultancy and introduction, and one-time support to learn a profession at a training institution when meeting the regulations of the social insurance agency. This service is provided by Employment Service Centers under the management of the Ministry of Labor and Social Affairs. In the period from 2015 -2020, the amount of vocational training support, specified in Article 3 of Decision 77/2014/QD-TTg, is maximum 01 million VND /person/month and the specific support amount is calculated on a monthly basis, depending on the actual training time as prescribed by the vocational training institution.



Source: Vietnam Social Security, Employment Department

With its efforts in changing legal regulations, management organizational chart and the process of handling benefit requests, the social insurance agency always ensures the responsibility for unemployed employees when paying benefits.. The amount of unemployment insurance expenses is changed according to the unemployment insurance coverage, the number of unemployed employees and the bases for determining the level of unemployment benefit payment and vocational training support. In the period from 2015 to 2020, unemployment insurance expenses was increased gradually over the years, especially in 2020 - the year that was greatly impacted by the COVID pandemic. The number of people submitting unemployment insurance claims in 2020 is 1,123,546 people, an increase of 32.2% compared to 2019. This is the reason why the amount of payments from the unemployment insurance fund in 2020 increased by 49, 2%.

Thirdly, the inspection and examination work has been enhanced in terms of scale and quality.

The function of unemployment insurance inspection and examination is performed by the social insurance agency for the purpose of inspecting the unemployment insurance policy implementation

at enterprises and organizations participating in insurance; detecting violations in order to take timely handling measures in the process of organizing the implementation of unemployment insurance. The inspection and examination of social insurance agencies at all levels is increasingly being carried out methodically, and the qualifications of staff are always focused on improving. Therefore, through the inspection and examination, many violations of unemployment insurance policy have been identified. During the 2016-2020 period, Vietnam Social Insurance conducted the inspection at 52,408 units; coordinated interdisciplinary inspection and examination at 23,310 units to check compliance with social insurance, health insurance and unemployment insurance policies. Through these inspection, the amount recovered to the unemployment insurance fund was 21.2 billion VND from 3,553 people receiving unemployment benefits in violation of regulations.

Fourthly, the government has policies to support businesses and employees related to the unemployment insurance policies implementation in the working conditions affected by the COVID-19 pandemic.

Due to the serious impact of the Covid pandemic, the Government has taken a number of measures to support employers and employees. Specifically, according to Resolution 42/ND-CP dated April 9, 2020 and Decision 15/2020/QD-TTg dated April 24, 2020: (1) the terminated employees who are not eligible to enjoy unemployment benefits will be supported 1 million VND/month, up to 3 months (applicable period from April 1, 2020); (2) Allow employees to submit their application for unemployment benefits by post, send monthly job search notices by email, fax or post during the pandemic; (3) Support the employer to borrow capital to pay the employee's stoppage if they meet the prescribed conditions.

Due to the complicated developments of the COVID-19 pandemic, this support is continued in accordance with Resolution No. 68/NQ-CP dated July 1, 2021. These policies are practical support for businesses and employees to have more resources to fight the pandemic and continue production and business activities.

3. LIMITATIONS IN IMPLEMENTING UNEMPLOYMENT INSURANCE POLICY IN VIETNAM

Although the unemployment insurance policy has achieved many successes, the implementation process still reveals the following limitations:

Firstly, unemployment insurance coverage is still low. Although the number of employees with unemployment insurance has increased over the years, the insurance rate is still limited compared to the number of labor force. According to the data in the Table 1, this rate in the years from 2015 to 2020 is 19.1%, 20.3%, 21.4%, 22.9%, 27.5%, 24.4%, respectively. Compared with the target of Resolution 28/NQ-TW - Vietnam strives to reach about 35% and 45% of the working-age participants in unemployment insurance, it is a difficult problem for Vietnam in implementing unemployment insurance policy in the coming years. This limitation is due to: (i) there is still a situation where the employer avoids participating in unemployment insurance for employees (ii) The large proportion of workers included informal ones (farmers, small business household... who sign oral contracts) and short-term contract ones (from 1 to 3 months), are not subject to unemployment insurance contribution, as stated by current regulations.

Secondly, the goal of vocational training to support employees to quickly return to work has not been done well. In 2015, the number of people receiving vocational training support was 24,360

people, by 2019, the number of people receiving vocational training support was 41,906 people, it's an increase of 72% compared to 2015. The rate of people receiving unemployment insurance in the period 2015- 2019 is average 4.66%. The year 2020 is affected by the COVID pandemic, many localities have implemented social distancing, so the number of people receiving vocational training support dropped sharply to only 26,507 people, reaching 2.44%. The percentage of people receiving vocational training support among those receiving unemployment benefits is still low.

Table 2: Percentage of unemployment insurance beneficiaries receiving vocational training support 2015-2019

Targets	2015	2016	2017	2018	2019	2020
Number of people entitled to unemployment insurance (1)	526,309	614,800	706,500	740,744	835,922	1,087,480
Number of people supported for vocational training (2)	24,363	27,660	28,537	37,990	41,906	26,507
Percentage (2/1)	4.63%	4.50%	4.04%	5.13%	5.01%	2.44%

Source: Vietnam Social Security, Department of Employment

According to the Department of Employment's assessment, this situation persists for many years for a number of basic reasons: (i) employees receiving unemployment benefits are mainly unskilled employees in industrial zones with difficult life and they are only interested in unemployment benefits but not interested in vocational training or they find a job right away; (ii) The level of support for vocational training is low, so it is not possible to meet vocational training at intermediate level or higher; (iii) The list of vocational training in some localities is not diversified, the infrastructure for vocational training is poor.

Thirdly, unemployment insurance fraud is still occurred. The practice of unemployment insurance implementation showed that, although the authorities always try to detect and prevent violations, the unemployment insurance fund fraud is still occurred with the following basic forms: (1) The employee found a job but they do not inform to the Employment Service Center and they both receive unemployment benefits and receive wages; (2) The employees are actively resigned to register for unemployment benefits. (3) The employer avoids paying unemployment insurance premiums. Intentional violations or lack of knowledge of the participants on unemployment insurance policy, gaps in the regulations on receiving insurance benefits are leading to the continuing fraud situation.

4. SOLUTIONS TO IMPROVE THE EFFECTIVENESS OF UNEMPLOYMENT INSURANCE POLICY IMPLEMENTATION IN VIETNAM

- Continuously improving unemployment insurance policy: In order for unemployment insurance to truly become an effective management tool of the state for the labor market, the unemployment insurance policy first needs to be completed with the following basic contents:

+ Compulsory regulations for employees who have signed labor contracts with a term from 1 month to less than 3 months.

+ Research volunteer unemployment insurance policies for informal workers who are at high risk of losing their jobs, especially in the event of economic downturn or pandemic

+ There should be regulations to support vocational training institutions in investing in technical facilities, diversifying training lists to attract participants.

+ Unemployment insurance policies must be linked to the labor market such as employment, training and retraining programs. At that time, with the change in the level of vocational training

support increased from May 15, 2020 according to Decision 17/2021/QĐ-TTg, employees will increase their chances of returning to the labor market with new suitable jobs.

- *Improve the operation quality of Employment Service Centers:* Job introduction and consulting activities require Employment Service Centers to ensure infrastructure and human resources to handle large and complex workloads. In order to effectively organize the implementation of job counseling and introduction activities, the Employment Service Centers need to focus on ensuring the quantity and quality of human resources. At the same time, job placement centers must promote information technology application, build a synchronous labor market database, equip computers and support tools to ensure continuous connection of enterprises and employees.

- *Strengthen communication to improve understanding and compliance of employees and employers about unemployment insurance policy*

Propaganda work requires coordination between the system of social insurance agencies and the system of Employment Service Centers, diversifying in communication methods so that a large number of employees and employers know, understand and abide by the rules.

- *Continue to promote database sharing between Vietnam Social Security and the Ministry of Labor, Invalids and Social Affairs.* This coordination is the basis for improving the quality of unemployment insurance implementation management, detecting and preventing unemployment insurance policy fraud.

5. CONCLUSION

Difficulties in production and business activities, an increase in the number of people losing their jobs in 2020 and certainly in 2021 will be a problem forcing the government to continue implementing support plans for businesses and workers, especially completing unemployment insurance policies. Overcoming limitations in the implementation of unemployment insurance policy in Vietnam so that it is not only solutions to deal with consequences through payment of unemployment benefits and vocational training, job introduction, which should pay due attention to solutions to prevent and reduce unemployment.

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EXPERIENCE OF DEVELOPMENT THE DIGITAL ECONOMY IN SOME COUNTRIES AND IMPLICATIONS FOR VIETNAM

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Abstract: *The article's purpose is to introduce and analyze the process of formation and development and the government's policies to grow the digital economy in countries and regions around the world, such as the European Union (EU), Korea, Singapore, and china. These countries and regions have many years of experience and a developed digital economy, bringing many valuable experiences to help Vietnam acknowledge and learn valuable lessons towards creating a dynamic and effective digital economy. At the end of the article are some policy suggestions to promote the development of the digital economy in Vietnam in the 4.0 era related to: (1) the legal framework; (2) human resource management; (3) breakthrough industries, and (4) building infrastructure for improvement.*

Keywords: *Digital economy, information and technology, Vietnam*

1. INTRODUCTION

Nowadays, many countries worldwide are aiming to build and develop a new economic model, which is the digital economy. They consider this model as an effective solution to promote economic growth and help the country keep up with the progressive changes of modern society. The digital era is changing everything from our businesses to our personal lives, forcing us to adapt and master the change if we do not want to fall behind.

If the development of information technology is considered a necessary condition, the current Covid-19 pandemic is a strong motivating factor for the digital economy model to be born and quickly deployed in many economies. The transformation to the digital economy means changes in the way goods and services are produced, supplied, and consumed in an increasingly digitalized market. Driven by technology and social trends as well as changes in the global environment, the digitalization of the economy is changing the way economic subjects behave. Not long ago, most people used to visit travel agents to book a vacation or go to a “traditional” store to purchase a new pair of shoes or rent a DVD to watch the latest movies. Nowadays, we can efficiently perform those activities from our own homes. We can search the Internet ourselves and compare hundreds of hotel rates, rent someone’s house for our vacation, purchase products from all over the world, and endless stream videos without leaving home. While the end products have not changed drastically, a movie is still a movie, digital technology and new business models are changing the way goods and services are distributed and consumed.

Thus, what is the digital economy? Currently, there are many different concepts, and there is no universally accepted concept of the digital economy. In literal meaning, the digital economy is

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the proportion of the information and communication technology sector contributing to a country's GDP. In the broad sense, it can be understood that the digital economy is all sectors where its operations are based on the Internet Protocol.

In Vietnam, at the “*Vietnam Private Sector Economic Forum 2019*”, the digital economy is understood as all economic activities based on digital platforms, and the development of the digital economy is the use of digital technology and data to create new business models. In the digital economy, enterprises shall change their traditional production and business processes to an ecosystem-based model that connects from production, trading to use, which shall increase productivity and labor efficiency.

Recognizing the importance of technological innovation under the Industrial Revolution 4.0, the Government of Vietnam issued Directive No. 16/CT-TTg dated May 04, 2017 of the Prime Minister on enhancing capacity to approach the Industrial Revolution 4.0; The Party Central Committee issued Resolution No. 23-NQ/TW dated March 22, 2018 on orientations for building national industrial development policies to 2030, with a vision to 2045. Recently, Directive 01/CT-TTg dated January 14, 2020 of the Prime Minister on “Promoting the development of digital technology in Vietnam” made the following statement: “Based on the foundation of many new technologies whose core is digital technology (artificial intelligence, big data, blockchain, cloud computing, internet of things, etc.), digital transformation is creating a new development space - digital economy, digital society, e-Government. In particular, digital transformation opens up great opportunities for Vietnam to break through and quickly catch up with developed countries that had just started the digital transformation process.”

2. EXPERIENCE IN BUILDING AND DEVELOPING THE DIGITAL ECONOMY IN SOME COUNTRIES

2.1. Experience of the European Union (EU)

The EU is one of the regions which takes an interest in developing the digital economy early on, consisting of leading countries such as Germany, Britain, France, etc. In 2017, 87 percent of households in the EU could access the Internet, only 70 percent higher than that in 2010. Such proportion in urban areas was 90 percent, higher than the proportion of 82 percent in rural areas. In the corporate sector, accessing and transacting on the Internet was integral to their daily activities, and most used high-speed broadband connections. In 2020, it was estimated that the digital economy created one million jobs and contributed more than EUR 500 billion to the economic growth of the EU.

Supportive initiatives for the birth of the digital economy in the EU include a Digital Agenda for Europe (DAE) that was launched in August 2010. It consists of seven backbones with nearly 120 measures being developed to ensure the increase in access to broadband networks for both citizens and enterprises, enhance e-government services and reduce the digital gap through education while increasing the number of IT and communication professionals, standardizing information and communication technologies, enabling e-commerce, data protection, and cloud computing.

In 2016, along with modernizing current policies, the EU issued a policy of “*digitizing European industry*” with a focus on developing in the fields of cloud computing, information and communication technology, Internet of Things, and e-Government, which was the origin for the birth of the Industrial Revolution 4.0. Germany, as well as many developed economies in

Europe, operated smart production systems, intelligent factories using the Internet of Things, and automated production technology. In the smart production system and intelligent factories, goods and services inside and outside the factory, stages of the production process such as product value chains, design of production facilities, production, maintenance were standardized and linked together. With this linkage, the whole production area acted as a sizeable smart factory.

The EU has developed a series of strategies, proposed regulatory frameworks, and financial instruments to increase the competitiveness of the digital sector and the digital economy with other economies in the world, such as copyright issues, Internet access rights, new rules of e-commerce.

The EU is particularly interested in building a data economy because it believes that data is the lifeblood of the digital economy, an asset, and a driver of innovation. The judicious use of data might have a transformative impact on all sectors of the economy and create new opportunities for economic growth, including small and medium enterprises. The EU aspires to become the only market globally that sells vast data sources to the world.

In addition, the EU also focuses on investing in research and development, promoting the development of digital skills, and pursuing technological leadership in emerging digital technologies.

In short, it can say that in the formation and development of its digital economy. The EU pays special attention to the pillars of the industrial revolution 4.0 (cloud computing, big data, information and communication technology, internet of things, e-government) along with policies on copyright issues, rules in transactions to create fair competition in the digital environment.

2.2. Experience of Korea

The Government is aware of the importance of science and technology development, especially the Industrial Revolution 4.0 and the digital economy, which is considered a top and crucial task to promote economic growth and development.

Firstly, Korea took an interest in developing high-quality human resources in the digital sector.

In the early 60s of the last century, Korea's science and technology could be considered lagging and stagnant; moreover, the accumulation of scientific and technological knowledge was almost zero, investment in research and development was meager (about USD 9.5 million). Human resources for science and technology in both the public and private sectors were relatively modest, less than 5,000 people, of which there were only 79 PhDs. However, after a period of time, by promulgating and implementing policies that were suitable to the actual conditions of each period, Korea has promoted its potential, advantages and overcome challenges to have a high-qualified human resource contributing to accelerating industrialization and becoming a developed country in Asia and the world. Currently, Korea has an advanced science and technology background, an intense research and development workforce with nearly 500,000 people (more than both Britain and France); its national investment in research and development (2016) was USD 77 billion, ranking 5th in the world.

- The Korean government encouraged and supported enterprises to invest in research and development (R&D), especially developing human resources in science and technology. Korea issued many preferential tax policies such as land tax exemption, corporate tax reduction, the import tax on raw materials as well as tools for research and human resource development,

preferential policies on finance and credit such as the establishment of organizations: Technology Development Bank, Nonprofit Guarantee Agency, and Technological Financial Institutions specializing in providing and supporting enterprises with favorable financial loans to promote the development and commercialization of technology. In addition, Korea also amended the Local Tax Law, the National Tax Exemption and Reduction Law, etc., to create the most favorable conditions for enterprises to invest in technology.

- Korea trained science and technology human resources in its own ways, which separated from the high school and university education systems. If students studied information technology, they would receive incentives from schools such as exemption from military service, scholarships for excellent students, and free boarding for students, and especially there was a link between enterprises and institutes and universities of technology to train following market demands and create jobs after graduation for students.

Secondly, Korea developed and implemented projects and programs for science and technology development, operated large-scale, medium, and long-term national R&D programs.

To enhance national S&T capacity and core industrial technologies, Korea has planned and operated national R&D programs in areas where it was difficult for private enterprises to develop. In national R&D programs, government research institutions played an important role as operators, innovators, and collaborators. Private companies participated in programs through a combination of public and private investment funds. Organizations were established in the period of 1960-1999, such as Korea Institute of Science and Technology (KIST) in 1966, the Ministry of Science and Technology (MOST) in 1967, implementation of the Science and Technology Promotion Act of 1967; the Korea Advanced Institute of Science and Technology (KAIST) in 1971 and many other government research institutions.

Thirdly, Korea focused on transferring advanced and modern technologies from industrialized countries through foreign debt (1960-1999) rather than foreign direct investment (FDI). Korea restricted FDI to ensure independence from multinational companies. The Korean government has adopted foreign loans as a pivotal instrument to encourage local enterprises to acquire, assimilate and improve advanced technologies. As a result, local companies had time to build their technological capabilities without direct competition from multinationals. Nowadays, Korea has passed the stage of technology import and application of outsourced technology, become one of the world's leading countries in technology creation and technology export based on strong development, reached a high and advanced level of scientific research (both basic research and applied research, technology development), taken the lead in creating and applying many new technologies of the industrial revolution 4.0 and implemented digital transformation into its key economic sectors and products.

With the focus on investing in high-quality human resources along with the transfer of modern and advanced technologies from industrialized countries in the world and the implementation of science and technology programs and projects, Korea has been affirming determine its growth in building a digital economy.

2.3. Experience of Singapore

Intending to become the world's leading digital economy, Singapore has built a class infrastructure system, a high-qualified workforce, and a stable government. Singapore is strategically

located in Asia as the region's financial hub, ranking 1st in the Global Fintech (financial technology) announced by the IFZ, surpassing traditional financial markets such as Zurich and New York.

The first was regarding building digital infrastructure

Singapore is famous for being an early country to build and develop digital infrastructure. In order to strengthen capacity and expand digital applications in households and enterprises, Singapore has developed fiber optic systems and 4G networks, and recently 5G networks, so that information transmission speed was accelerated. With the increase in transmission speed, households and enterprises in Singapore have gradually moved their activities into the digital space. According to the Information and Communication Development Authority of Singapore, the number of participants in cyberspace, such as online shopping and online financial transactions, has increased significantly from 2010 up to now. Investments in digital properties to strengthen the digital capabilities of enterprises have been increasing. Accordingly, enterprises actively use digital tools in daily business activities such as e-payment, e-banking, and mobile business services.

The second was information technology development

In 2014, Singapore launched the "Smart Nation" program, established a "Smart Nation" program office to coordinate efforts from various government agencies towards the ambitious goal of becoming the world's first innovative country. With the "Smart Nation" project, Singapore aimed to solve five significant challenges that countries around the world were facing: high urban population density, aging population, and increasing health care demand, difficult urban traffic, and lack of energy. Singapore hoped its "Smart Nation" model could become a model for other countries by applying digital technologies to solve these problems. The Singapore Smart Nation model aimed to include the following contents: greener, cleaner and safer living environment for urban residents; more choice of means of transportation, better home health care for the elderly; more convenient public services, and better living opportunities for citizens.

Information technology (IT) was identified as the core to realize the "Smart Nation" goal, which focused on three priorities: society support technology, intelligent mobility and transportation, and a secure data environment. In addition, Singapore also paid attention to developing the information and communication technology (ICT) industry to facilitate the application of digitalization between enterprises and consumers.

The third was the e-payment market

Among ASEAN countries, Singapore was the country with the fastest-growing e-payment market with an e-payment index of about 60% of transactions (2015). This is also one of the first countries to apply e-payments in the world. With the policy of turning Singapore into a cashless economy, the Monetary Authority of Singapore has implemented the initiative with thousands of POS systems (machines accepting payments by customers' cards) as well as other payments software services such as e-wallets, using QR codes, etc.

In particular, the Singapore Government was interested in preparing conditions and supportive factors (financial support, information support, etc.) for enterprises, especially human resources. Singapore paid attention to train and develop digital technology experts and a team of digital leaders in enterprises. With the existing unskilled workforce, Singapore actively built training programs, advanced training, equipped this workforce with digital skills. Singapore also increased

support, opened many courses and programs to foster new skills for workers who lost their jobs and those at high risk of losing their jobs due to digital transformation. The country was also adding programs and subjects for students on digital platforms at schools, from coding to design thinking and digital skills needed for the future.

In summary, Singapore has invested adequately and is now known as the country with the modern digital infrastructure in the world. Along with that, Singapore focuses on developing information technology - this is considered the core point for the growth of the digital economy. In particular, this country focuses on modernizing the financial market, including applying advanced technologies in the digital environment such as electronic payment services, e-banking.

2.4. Experience of China

China has achieved remarkable success since its reform and opening-up in 1978. In 2010, China surpassed Japan to become the world's second largest economy in terms of GDP after the United States and is expected to overtake the US in terms of GDP by 2030. According to the OECD, China has currently spent more on R&D than that of Japan, Germany, and South Korea in combination, and only less than that of the US. Regarding funding for R&D, China has made efforts to promote the role of enterprises in promoting innovation. In 1997, the private sector contributed only 42.9 percent of national R&D spending, but this proportion increased sharply to 60 percent in 2003, 72 percent in 2010, and 76 percent in 2018; while direct R&D funding from the Government has been reduced to the level of the US and Korea.

In the development strategy of the digital economy, China initially applied the digital technology market protection policy to nurture and facilitate domestic enterprises to grow. Then China had open policies to attract FDI. With an enormous market advantage, China acquired foreign technology by establishing joint ventures with local companies and actively required the effective transfer of foreign companies' technology to Chinese companies. At the same time, they encouraged private companies to participate in reducing the technology gap with advanced countries. Innovation funds were established in 1998 to enable R&D support in technology-based SMEs.

Nowadays, Chinese digital companies are active in driving global M&A activities. Over the past two years, China's top three internet companies made 35 overseas deals, compared with 20 by the top three US internet companies. Tencent struck a high-profile deal to take a majority stake in Supercell, the developer of the popular Clash of the Titans computer game; the deal valued Supercell at \$8.6 billion. Tencent now generates more than 10 percent of global gaming revenue, making it the largest gaming company in the world. In 2016, Alibaba invested \$1 billion to acquire a controlling interest in leading e-commerce platform Lazada -with 550 million customers in six Southeast Asian countries. Traditional companies are also expanding rapidly and developing an international presence in digital technologies. For instance, telecommunications equipment and services company Huawei spent \$192 million in December 2016 alone on acquiring two Israeli startups focused on the cybersecurity of database technology and the software-based system and chip-design technology.

Regarding the development orientation of digital technology industries and sectors, China has taken firm steps. First, China focused on digital technology sectors that required moderate technology, such as e-commerce, then moved to develop more difficult digital technology sectors

such as artificial intelligence, robotics, etc. They focused on developing methods and transactions in the economy to use digital technology and developing e-government, e-banking, e-transactions, and e-commerce.

Recently, China announced a policy of breakthrough in the new normal of low growth economy through digital innovation. China has one of the most active digital investment and startup ecosystems in the world. Its growing venture capital industry is increasingly focused on digital. Overall, China's venture capital sector has been multiplying, from just \$12 billion in 2011-2013, or 6 percent of the global total, to \$77 billion in 2014-2016, or 19 percent of the worldwide total. The majority of venture capital investment is in digital technologies such as big data, artificial intelligence (AI), and financial technology (fintech) companies. China is in the top three in the world for venture capital investment in key types of digital technology, including virtual reality, autonomous vehicles, 3D printing, robotics, drones, and AI.

The government has been a policymaker and an investor, innovator, and consumer in an effort to support digitization. The Chinese government has advanced several policies designed to strengthen the digital economy as a new engine for economic growth. In 2015, the government unveiled the concept of "Internet Plus" and followed up with a detailed action plan to integrate the internet, cloud computing, big data, and the internet of things with traditional manufacturing and consumer industries. Over the past two years, the government has led the implementation of Internet Plus in various sectors, including logistics, social security, and manufacturing. The government has also actively facilitated investment in digital. Since 2016, the National Development and Reform Commission of China, the government's economic planning agency, has announced its "Three Year Action Plan of Internet Plus Artificial Intelligence" that aims to build an AI application market valued at more than 100 billion renminbi (\$15 billion) by developing nine major AI ecosystems, including smart home appliances, intelligent automotive, wearable devices, and intelligent terminals. The plan stipulates that various government institutions can provide funding for specific projects from budgets controlled by central and regional governments.

In addition, the government provides funds to new internet businesses. Since 2014, the state has encouraged citizens to participate in mass entrepreneurship and innovation using measures such as tax deductions and state-endorsed startup funds. At least 2,500 tech incubators in China have passed the government's registration requirement. Many municipal governments have set up incubators and offered generous funding. In August 2016, the government approved the establishment of a state-owned \$30 billion venture capital fund in Shenzhen, home to many digital startups. Beijing Zhongguancun Inno Way, a high-tech community, known as China's Silicon Valley, launched its first 500 million renminbi (\$74 million) venture capital fund targeting AI-related startups. Zhongguancun alone has incubated 1,900 startups in the past three years. The government has also shown itself to be willing to pilot the commercialization of new technologies through state-owned enterprises, including China Mobile, China Unicom, and China Telecom. The plan is for these companies to spend up to \$180 billion over seven years on building the infrastructure for what is envisioned as the world's largest 5G mobile network.

The Chinese government itself has been an ambitious innovator of high-tech R&D. Its successful launch of Micius, the world's first high-security quantum satellite, signaled its ability to lead innovation and experimentation. The satellite is China's first successful venture in quantum

technology. If the technology is fully commercialized, China could potentially offer the world's safest and fastest internet. The government has also acted as a consumer of new digital technologies. China's high-speed rail project is an example of the government playing a central role in creating a new market, facilitating technology transfer, and encouraging innovation. Local leaders are already adopting the latest technologies to improve the management of urban areas. For example, facial-integration technology using AI is being deployed to influence citizens' behavior. For instance, in some districts of Shenzhen, photographic images of jaywalkers are taken and then displayed on video screens installed above streets. Anhui province worked with an AI company to identify phone scammers by analyzing voiceprints created using biometric and behavioral characteristics. Growing markets can help to enable the commercialization of such technologies, although there may be some social discomfort about the use of such solutions by policymakers to scrutinize citizens' behavior.

Thus, China has taken firm steps to promote the formation and development of the digital economy. The government is willing to provide capital or become an investor for businesses operating in digital technology to nurture these businesses to grow and compete with foreign enterprises. The government creates favorable conditions for mergers between domestic and foreign digital enterprises to create super-businesses of international stature.

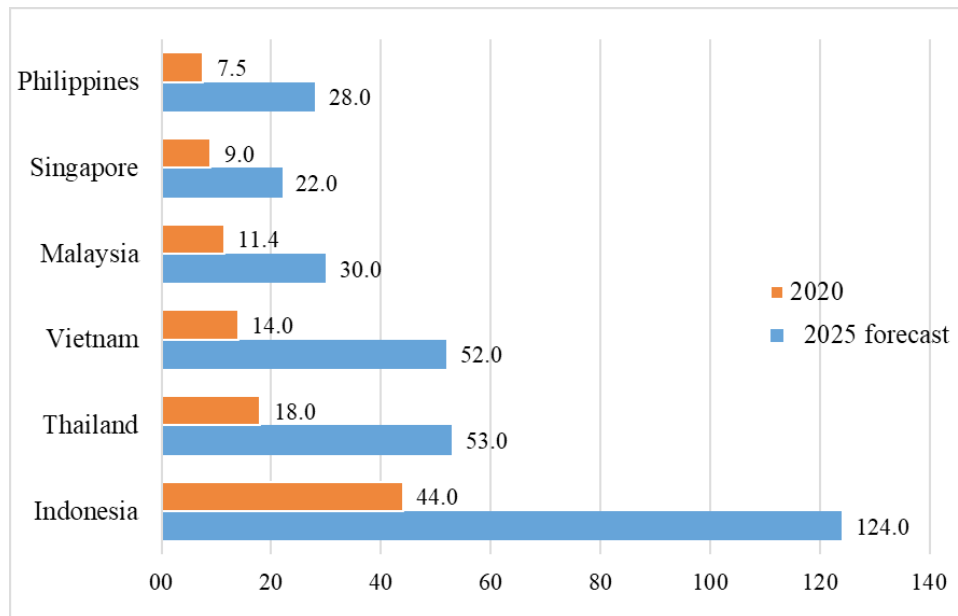
3. POLICY IMPLICATIONS FOR VIETNAM

3.1 Features of Vietnam's digital economy

According to the “*Digital Economy in Southeast Asian 2019*” report conducted by Google, Temasek, and Bain, Vietnam's digital economy in 2019 was worth USD 12 billion, four times higher than the value of 2015, and is expected to reach USD 43 billion by 2025. Thanks to the digital economy, business lines are more vibrant, from e-commerce, online advertising on social networking sites (Facebook, Instagram), entertainment (Netflix, Pinterest), transportation (Uber, Grab, GoViet) to distribution, wholesale, and retail (Lazada, Shopee). Specifically, the scale of the e-commerce market is about USD 5 billion, while online travel is about USD 4 billion, online communication is USD 3 billion, and ride-hailing technology is about USD 1 billion. Our country has also become the third largest recipient of investment capital in the region in companies operating on information technology and internet platforms, with USD 0.35 billion for 137 deals in 2018 and USD 0.26 billion for 54 deals in 2019. Many investments in MoMo, Sendo, and Topica from international investors have made Vietnam an attractive destination for domestic and foreign investors.

This rapid growth is underpinned by a broader digital transformation in the country. Vietnam's National Programme for Digital Transformation ensures that more than 80 percent of households have access to fiber-optic infrastructure by 2025. The program also entails that the digital economy forms 10 percent of every sector, resulting in annual productivity increases of 7 percent.

Unit: Billion dollars



Source: 2020 report by Google, Temasek and Bain & Co

Figure 1: Major Southeast Asia digital economies by value*Sub-sectors in Vietnam's digital economy***) E-commerce*

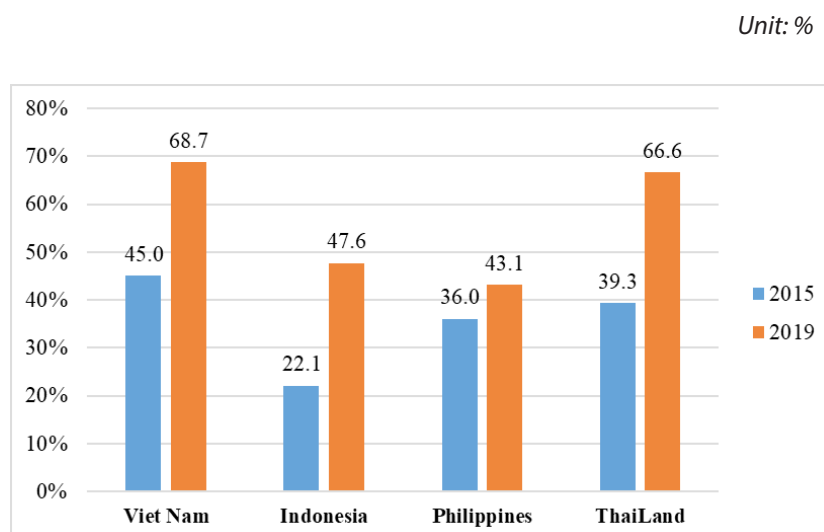
A study found that Vietnam's e-commerce market is likely to reach \$15 billion by 2025, up from 2.8 billion in 2018. This growth is motivated by increasing internet access, a relatively young population, and an expanding number of local businesses opting for e-commerce as a distribution channel. COVID-19 has accelerated the adoption of e-commerce solutions for businesses and consumers alike.

According to a recent market survey, online shopping frequency increased by 14 percent in 2020, indicating that a growing number of consumers are shifting their consumption patterns. The rise in the proportion of online consumption is highest in food and beverage, cosmetics, sports goods, fashion, and stationery. Popular e-commerce channels include Shopee, Lazada, and Tiki.

**) Digital financial services*

Cash payments remain the mode of choice in Vietnam. In 2019, just 41 percent of adults in the country had bank accounts, most of them located in cities. However, there are indicators that the demand for digital financial services is likely to rise. According to World Bank data, only 45 percent of the Vietnamese population had access to the internet. This figure rose to 68.7 percent in 2019.

In August 2020, Timo Plus, Vietnam's first "digital bank", announced that it would invest in digital financial services through credit and savings products in a bid to attract depositors who wish to shift away from traditional banking services. Demand for payments also increased in response to COVID-19, with a 76 percent increase in digital payments in the first quarter of 2020.



Source: World Bank

Figure 2: Internet Access Rate

These changes in financial services consumption have prompted an interest in Vietnamese fintech firms. Fvndit, Kim An Group, Timo, and NextPay are among those that have secured new capital injections from domestic and foreign investors in 2020. Fintech revenues in 2020 are expected to reach \$7.8 billion.

The Party and State have outlined plans to build policies and programs to join Industry 4.0, focusing on applying and developing science and technology, promoting innovation, and improving the quality of human resources. Then Former Prime Minister Nguyen Xuan Phuc, on December 30, 2020, issued the National Strategy on Industry 4.0 by 2030 to fulfill the goals set in a Politburo resolution which outlines policies guiding VietNam's active involvement in Industry 4.0.

The strategy's objectives are to take full advantage of opportunities presented by Industry 4.0 and fundamentally master and broadly apply advanced technologies in different social and economic fields. Under the strategy, VietNam will aim to enter the top 40 performers in the Global Innovation Index (GII), the top 30 in the International Telecommunication Union (ITU)'s Global Cybersecurity Index (GCI), and the top 50 in the United Nations' e-Government Development Index (EGDI) by 2030.

**) IT-enabled services and Industry 4.0*

Vietnam's internet economy could witness a 29 percent growth over the next five years. The central pillar underpinning this trend is a digital ecosystem of firms and consumers. Thus, firms that provide IT services to businesses will be key to a successful digital transformation in Vietnam, and the digital transformation, in turn, will create opportunities in IT-enabled services and Industry 4.0.

Vietnamese policymakers have emphasized a focus on Industry 4.0. The goal of improving Vietnam's ranking in the Global Innovation Index through productivity growth in production processes has sparked policy reform in recent years. A national strategy on Industry 4.0 was released in 2019, which focused on R&D investments, connectivity infrastructure, and digital governance.

However, the degree of active participation in the development of the digital economy in our country is still limited and somewhat spontaneous. Institutions and policies have many

shortcomings. The structure and quality of human resources have not met the requirements. Science-technology and innovation are not really driving forces for socio-economic development, and the newly formed national innovation system has not been synchronized and effective. The process of national digital transformation is still slow and lacks initiative due to limited infrastructure for digital transformation; many enterprises are still passive, the capacity to access, apply and develop modern technology is still low. The digital economy is small in scale. Fighting crime and ensuring network security still have many challenges.

3.2. Policy implications for Vietnam

From the experiences in developing the digital economy of some countries in the world and the specific conditions in Vietnam, the following policy implications can be drawn in the development of the digital economy:

First, regarding the legal framework

Promulgation and perfection of institutions, laws, and policies create a framework for developing the digital economy. Vietnam may establish a specialized, competent, and highly responsible agency and institute in the development of the digital economy; this agency is usually under the Government with the participation and coordination of relevant ministries and industries. In order to support entities in the economy to access the digital economy, some countries have developed detailed plans and guidelines on digital transformation for enterprises; these plans are associated with financial sources and annual funding to facilitate access to the digital economy.

Promulgation of the National Strategy on digital transformation and digital economy shall be conducted soon. It is also necessary to develop and publicize the sector planning on information technology development and application. On such a basis, promulgate standards for information exchange among agencies and entities to create linkages and synchronization in the process of investment and infrastructure development based on information technology application. Steeping up the E-Government Program in all sectors, including transport and tourism, shall promote the application of information technology in all sectors. In addition, it is necessary to build an e-payment infrastructure with solutions to limit the use of cash and support the development of e-commerce, e-contracts, digital signatures.

In addition, similar to other countries, Vietnam should continue to supplement and perfect regulations related to cybersecurity, information security, develop policies on standards, and standardize production stages and processes to increase the connection and interconnection among entities in the economy.

Second, regarding human resource development.

In developing the digital economy, countries worldwide have focused on developing human resources because the digital economy is an economy based on the application of digital technologies and knowledge, where the role of intellectuals is considered a resource for the development of the economy. That requires digital human resources to be well-trained, professional, ethical, capable of mastering technology, creative, and especially capable of mastering digital technology devices in the interactive process of economic activities.

In order to develop digital human resources, Vietnam should pay attention to the following issues:

- Employment and attraction of experts in digital technology and digital entrepreneurs by using regimes and policies such as salary, bonus, allowance, and facilitation of working environment for this team.

- Update of IT training curricula in association with new technologies trends such as the Internet of Things (IoT), AI, and robotics technology, facilitation of students to access this sector as soon as possible, and promotion of the training and practice linkage among schools and enterprises in IT application.

Third, identifying breakthrough industries and sectors to develop the digital economy based on their strengths and characteristics.

Countries around the world fully determine and identify digital economic sectors that help accelerate market expansion and promote consumption such as digital information, digital communication, digital entertainment, e-commerce. Fundamental sectors of the digital economy such as digital infrastructure, digital resources, digital services, digital market, important and core sectors that need to be grasped and mastered in technology and engineering such as digital data, intelligent materials, next-generation robots, artificial intelligence, smart vehicles, and smart energy intelligence to have reasonable policy solutions in development.

Regarding Vietnam, first of all, it is necessary to focus on developing digital economy sectors to help expand markets and promote consumption because these sectors help Vietnam take advantage of the opportunities of international integration, especially new-generation free trade agreements that Vietnam has signed (CPTPP, EVFTA, EVIPA), but do not require a high level of technology. At the same time, Vietnam must vigorously develop the entire sectors of the digital economy, such as digital infrastructure, digital resources, digital services, and digital markets, and have a methodical plan and strategy to access and master essential and core technologies of the digital economy through supportive policies in cooperation and attraction of foreign investment.

Fourth, supporting to accelerate the process of building information technology infrastructure, the foundation of the digital economy development.

The process of building a digital economy also means that the State increases investment in factors related to technological and technical infrastructure. In recent years, the Government has implemented many solutions to support and build technological and technical infrastructure in many aspects such as telecommunications and internet infrastructure, payment infrastructure (digital payment), express delivery infrastructure, and achieved specific results. However, there are still many limitations; therefore, in the coming time, Vietnam needs to implement the following solutions:

- Regarding telecommunications and internet infrastructure: it is necessary to vigorously develop the coverage of 4G/5G networks, as well as terrestrial mobile broadband networks.

- Regarding the payment infrastructure (digital payment): it is necessary to propagate and encourage people to use e-payment services and to limit the use of cash in transactions.

- Regarding fulfillment of last-mile delivery: it is necessary to improve, innovate and enhance this service (including logistics) because the development of e-commerce causes this service to be in great demand. It is necessary to increase the quality of transportation, reduce the transit time, and quickly and accurately track the transported goods (in case something goes wrong).

CONCLUSION

The rapid development of information and communication technology has been contributing to the formation of the digital economy. As a latecomer, Vietnam can refer to and learn from experiences in development policies of the digital economy of other countries in the world, from which it can be creatively and selectively applied in line with the actual conditions in Vietnam in order to soon to turn the Vietnamese economy into a developed digital economy.

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CIRCULAR ECONOMY DEVELOPMENT: INEVITABLE TREND FOR SUSTAINABLE DEVELOPMENT IN VIETNAM

PhD. Do Thi Nang¹

Abstract: *Since the renovation of economy and the expansion of international economic integration, Vietnam has made great achievements in economic growth, but conversely, the development of a linear economic model has led to great consequences, such as environmental pollution, resources depletion and shortage, biodiversity loss, etc. By using qualitative research methods, this paper aims to provide evidences on environmental pollution and natural resource depletion in Vietnam, evidences on positive results from circular economy development around the world and from some pioneer enterprises in Vietnam as well. Further more, this paper presents discussions on opportunities, challenges, and solutions to develop circular economy in order to achieve sustainable development goals in Vietnam in the coming years.*

Key words: *Environmental pollution, resource depletion, transformation, circular economy*

1. INTRODUCTION

Since mid-20th century, many achievements of economic growth have been recorded throughout the world, in both developed and developing countries. Though this undoubtedly contributed greatly to people's physical and spiritual life, human beings have to face a series of more and more serious natural disasters. Global warming is also leading to extreme consequences of climate change that severely affects many regions of the world, especially developing countries, alongside with the depletion of natural resources, environmental pollution, and loss of biodiversity that can be seen. Such environmental degradation, consequently, becomes a threat, a great challenge to human life, socio-economic development and other lives on earth. Vietnam is also part of that situation, so in order to approach sustainable development goals, moving towards the development of a circular economy has become an indispensable choice to solve the challenges of shortage of natural resources, environmental pollution, climate change, as well as improving the competitiveness of products, businesses, localities and the country in the coming years.

Since the economic reform in 1986, along with deeper and deeper integration into the world economy, Vietnam has achieved remarkable growth. Annual GDP growth has had ups and downs in each period, but still achieved a high level: In the period 1986-1990, GDP growth averaged 4.4%/year; while that in 1991-2001 reached 7.5%/year, and 7.8%/year in 2001-2006, 6.6%/year in 2007-2011, 5.67%/year in 2011-2015, 6.8%/year in 2016-2019 and in 2020, despite being heavily affected by the epidemic, GDP growth still reached 2.91% - one of the countries with the highest growth rate in the region and around the world^{[1], [4], [5], [15]}. Along with the achievements of economic growth, there are increasingly negative impacts on the environment, such as biodiversity loss,

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land degradation, natural forest area, the increase in plastic waste, etc. that affects people's lives, increases the damage as well as the remedial cost of environmental consequences. Therefore, in order to achieve the sustainable development goals, Vietnamese economy cannot continue to develop the linear economic model - a model with the characteristics of 5 steps of exploitation - production – distribution – consumption - disposal, but needs to shift to circular economy model - a model that has been practiced by many countries and showed evidences of its superiority which is achievement of economic growth while minimizing hazardous waste into the environment, avoiding resource depletion and shortage.

Therefore, this study aims to systematize theoretical and practical basics on circular economic development model in order to provide evidences and benefits of the transition to circular economic model. Moreover, this research aims to provide evidences of Vietnam's current environmental problems which are the result of the development of linear economic model, from which to discuss, analyze and evaluate the opportunities and challenges, and suggests some solutions for Vietnam to shift into a circular one in the following years.

2. LITERATURE REVIEW AND PREVIOUS RESEARCH STUDIES

Literature review on linear economy and its consequences

DeCoursey (2016), Nam et al (2019), and some documents has shown that *Linear Economy* is defined as an economy starting from exploiting natural resources as inputs to the economic system, putting into production of goods and products and then putting them into circulation, distribution, consumption, and finally disposal of waste.

This concept is based on one principle: “Take, make, consume, dispose”(Figure 2.1). The economic approach toward the linear model, along with a significant increase in demand for economic growth in general and consumer demand in particular, has skyrocketed the exploitation of natural resources, leading to rapid depletion of natural resources, and at the same time producing a huge amount of waste dumped into the environment. In other words, the development follows this model is a process of turning resources into waste .

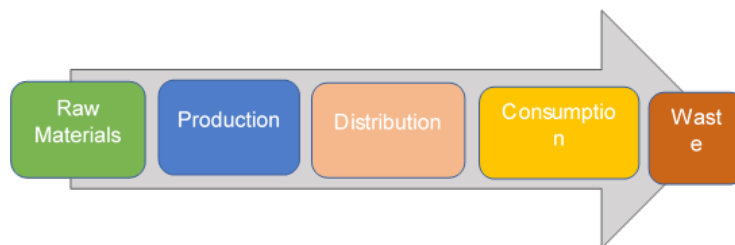


Figure 2.1: Linear economy model

Source: DeCoursey (2016), Nam et al (2019)

The quantity and resilience of resources, as well as self-cleaning capacity of the environment have limitation, it inevitably leads to resource depletion and environmental pollution. According to a WWF report (2018)^[24], from 1970 to 2014, the number of vertebrate species decreased by 60% (more than halved in less than 50 years). The decline in numbers and stocks of species is most clearly visible in tropical regions, such as South and Central America losing up to 89% of

species stocks compared to 1970. The number of freshwater species also decreased significantly by 83% compared to that of 1970; 75% of amphibians, reptiles, birds, and mammals have gone extinct due to overexploitation or agriculture, or both. Marine and freshwater ecosystems are also facing great pressures with nearly 6 billion tons of fish and invertebrates being taken from the oceans since 1950. In addition, this report cites Ecological Footprint that the world's resource consumption nowadays has increased by 190% compared to that in 50 years ago. Prior to the explosive population growth of the 20th century, human consumption has far exceeded what the earth could provide. Global Footprint Network (GNF) estimates that current demand for natural resources for economic activities exceeds

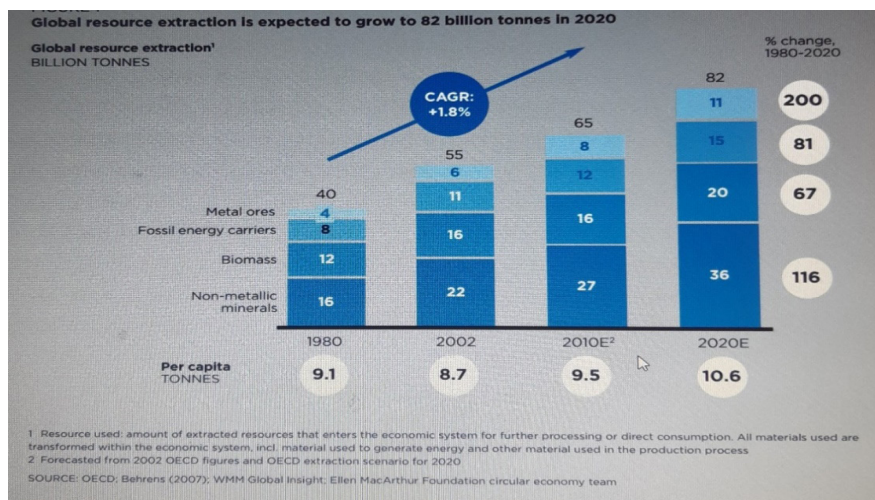


Figure 2.2: Global resources extraction

Source: Ellen MacArthur Foundation, 2013

1.7 times the earth's supply capacity^[21]; and it is expected to triple by 2030. According to Ellen-MacArthur Foundation's report^[16], in terms of volume, some 65 billion tonnes of raw materials entered the global economic system in 2010—a figure expected to grow to about 82 billion tonnes in 2020 (Figure 2.2). In Europe, 2.7 billion tonnes of waste was generated in 2010, but only about 40% of that was reused, recycled, or composted and digested.

Regarding waste disposal volume around the globe, according to a report of the World Bank, the amount of waste every day globally is estimated at 3.5 million tons, equivalent to about 1.3 billion tons per year. The World Economic Forum Conference in January 2017 in Switzerland made the conclusion that without urgent action, by 2050, the oceans will be heavily polluted. Considering plastic waste alone, researchers estimate that there are at least 5,250 billion pieces of plastics with total weight of roughly 268,940 tons currently floating in the oceans, which means the amount of plastic waste nowadays is 48 times more than that of human has ever had. It is predicted that by 2050, there will be more plastic waste than fish in the oceans. According to a study by Greenpeace Organization, oceans have become massive landfills in which nearly 6.5 million tons of waste contained. About 40% of global total waste ends up in unregulated "open locations" such as riverbanks or coastlines^[12]. Furthermore, World Bank's experts indicate that the total volume of solid waste will increase by 70% by 2025: from 3.5 million tons/ day in 2010 to more than 6 million tons/ day in 2025. Hazardous waste from cities has already been

enough to fill a 5000-kilometer line of freight cars everyday. The World Bank also said that the growing volume of waste from urban areas is a challenge as great as climate change, and the cost of waste treatment will be a burden for poor countries. It is believed that global budget for waste treatment would increase from 205 billion USD/ year in 2010 to 375 billion USD/ year by 2025. In developing countries, solid waste management can cost up to 20-50% national budget. In September 2015, The International Solid Waste Association (ISWA) released a report stating that the “global state of emergency” is affecting millions of people in developing countries by the lack of sanitation and hygiene infrastructure. The report also indicated that waste-related problems in developing countries were caused by unprecedented problems, such as: uncontrolled accumulation of electronic waste, food waste and medical waste. According to the World Health Organization (WHO), pollutants can cause asthma, allergies, respiratory diseases, cardiovascular diseases and especially cancer. WHO estimates more than 2 million people die each year from breathing indoor and outdoor air pollution; about 40 million children suffer from waste-related diseases; 23% of deaths in developing countries are caused by environmental factors.

As a result, severe consequences of linear economic model have posed urgent need of changing the form of development in order to avoid resource depletion and to protect natural environment, ensuring sustainable development. Cited from a Dutch government’s report: “to ensure that in the future there are enough raw materials for food, shelter, heating and other necessities, our economy must become circular. That means preventing waste by making products and materials more efficiently and reusing them. If new raw materials are needed, they must be obtained sustainably so that the natural environment is not damaged”^[11].

Literature review on circular economy development

Concept of circular economy was first brought about in 1960s by economists like Bouling (1966), by Pearce and Tuner (1990) to talk about a new economic model based on the basic principle that “everything is an input to other” and then developed and improved gradually through time. According to the OECD overview, there are about 100 definitions of the circular economy. However, the basic assumption consists of designing out waste and pollution of the economic system. The circular economy avoids materials being used once and forever gone, through: *closing* the loops by recycling and remanufacturing; *slowing* loops by increasing the working life of goods and products; and *narrowing* loops by using natural resources and goods more efficiently within the linear system (e.g. buildings and cars) (McCarthy, Dellink and Bibas, 2018)^[21].

Up to now, the most widely recognized and applied concept of circular economy is that of the Ellen MacArthur Foundation^[8]. According to it, “the circular economy refers to an industrial economy that is restorative by intention; aims to rely on renewable energy; minimises, tracks, and eliminates the use of toxic chemicals; and eradicates waste through careful design”^[14]. “The circular economy takes production processes into consideration and outlines how to reuse, repair, and recycle items, thus increasing sustainable manufacturing and consumption. This way, in addition to reducing waste, saves energy and helps avoid irreversible damage caused in terms of climate and biodiversity, as well as in terms of air, soil, and water pollution, owing to the use of resources at a rate that exceeds the Earth’s capacity to renew them”^[24].

From a linear to a circular economy

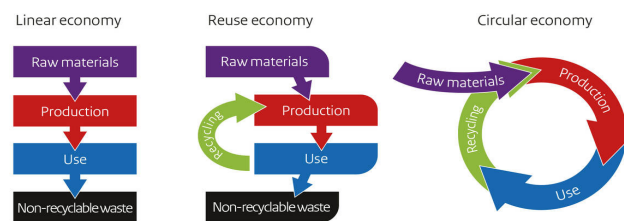


Figure 2.3: From a linear to a circular economy

Source: Government of Netherlands^[25]

A circular economy is based on the principles^[19]: (1) Designing out waste and pollution: By changing our mindset to view waste as a design flaw and harnessing new materials and technologies, we can ensure that waste and pollution are not created in the first place; (2) Keeping products and materials in use: Products and materials must be kept in the economy through designing some products and components that can be reused, repaired, and remanufactured; (3) Regenerating natural systems: In nature, there is no concept of waste. Everything is food for something else – a leaf that falls from a tree feeds the forest. Instead of simply trying to do less harm, we should aim to do good. By return in valuable nutrients to the soil and other ecosystems, we can enhance our natural resources.

Thus, it can be seen that circular economy model operates in a closed circuit, in which the materials considered as waste of the process will become the input of the next new process, thereby new values are made instead of creating burden to environment or causing harm to people. In order for this standpoint to lead the economy, it must be taken into account right from the product design stage to ensure that used products can be put back into a new production cycle instead of being discarded. This is undoubtedly a preminent economic development model because environmental benefits are achieved in both aspects, which are minimizing the natural resource exploitation and eliminating waste produce. In other words, the circular economy is a model that combines economic development and environmental protection, thus achieving sustainable development.

- *Benefits of transitioning to a circular economy:*

Researchers as well as practical experiences of developing economy based on circular ideology around the world have shown that it brings great benefits to socio-economy and environment. Circular economy is a prerequisite for achieving sustainable development goals through ensuring sustainable production and consumption, specifically the following benefits:

- Environmental benefits:

- + Better response to climate change: Climate change nowadays is mainly caused by massive greenhouse gas emissions from industrial, agricultural activities, as well as deforestation, ocean pollution, etc and by consumption and post-consumer disposal. When transitioning to circular economy, production and consumption are designed from the ground up to be capable of being reused for a new process, along with proper awareness and intentional implementation of reusing,

recycling activities will help reduce emissions by a great amount. According to calculations by the European Union (EU), the circular economy through measuring and controlling activities from the demand side can help reduce emissions from industries by more than half. Harald Friedl, Executive Director of Circle Economy commented that effective use of materials from waste would support accomplishing the key goal of the Paris Agreement on climate change, which was to keep global temperature rise no more than 20oC above pre-industrial times. The Ellen MacArthur Foundation^[18] found that if Europe moved toward circular economy, it could halve carbon dioxide emissions by 2030, relative to today's levels; the U.K. could reduce greenhouse gas emissions by 7.4 million tonnes per annum by keeping organic waste out of landfills.

+ Reducing natural resource shortage and depletion, reserving natural resources for future generations : Economic growth, raising incomes and improving material lives are always legitimate goals of every individual, locality and country while natural resource supply for socio-economic development is limited, even with renewable resources. Therefore, it is clearly that sorting, reusing, recycling expired products and waste from production and consumption through proper processes to become the input materials for a new cycle will help reduce new exploitations of natural resources and the burden of resource needs, thereby creating opportunities to protect and increase resource reserves for future generations. Research by Ellen MacArthur Foundation (2015) indicated that a circular economy development path could result in a reduction of primary material consumption by 32% by 2030 and 53% by 2050, compared with today; systematic use of available organic waste could help regenerate land and replace chemical fertilisers 2.7 times over.

+ Reducing waste helps protect the environment and ecosystems: Environment in general and each particular ecosystem are composed of closely linked components that interact, depend and regulate each other. Excessive human influence on a certain component all leads to changes in other components and even the whole system^[8]. For example, over-exploitation of forest increases land degradation, landslide, loss of water and biodiversity, reduce CO2 absorption capacity, etc; Discharging too much detergents into rivers pollutes water source, which leads to the loss of aquatic species as well as water sources for economic activities, etc. Thus developing circular economy is to increase recycling, reusing and to reduce disposing, which will significantly lower the discharge of harmful pollutants into the natural environment. This will protect the components in natural environment, especially life forms, as well as their links, thereby protecting the diversity of ecosystems, protecting the habitats of life forms, including humans.

- Economic and social benefits:

+ Stable and efficient economic growth, creating added value:

Economic growth is measured by GDP. GDP growth can be achieved through increasing production value and cutting intermediate costs. Production according to the circular economy model is an eco-friendly production model that helps products sell at a higher price, thereby increasing production value, and at the same time decreases production cost through efficient use of inputs or easier access to lower cost inputs which is the waste of previous process. These interactions create a positive change in GDP. According to research of Ellen MacArthur Foundation (2015, 2019) has shown that under circular economy scenario, Europe's GDP could increase by 11% in 2030 and 27% in 2050 compared to 4% and 15% as current development model continues

[18], [17].

+ **Creating jobs:** Reports by Ellen MacArthur Foundation^[18] has shown that “existing studies point to the positive employment effects occurring in the case that the circular economy is implemented”. It is estimated that in Europe, the circular economy helps create 580,000 new job opportunities.

+ **Promoting technological innovation:** Technological innovation plays a crucial role in circular economy, such as improving materials, creating new environmentally friendly products, using energy, materials and labor resources more efficiently. In other words, demand from the implement of circular economy poses urgent requirements for technological innovation in production, economic management as well as in business and consumer management. For example, industrial factories and agricultural farms need to establish new equipment, manufacturing techniques and new creation and design of eco-friendly products,...; in the socio-economic management of locality, the application of information technology (IT) in industrial and resource management helps to ensure that decision-makers have fully transparent information about the movement of material flows in economic sectors, thereby serving the classification, reuse and recycling,...

+ **Benefits for businesses:**

Enterprises that practice circular production model are more likely to benefit from more efficient cost savings, better product quality, thereby improving business credibility and profits. According to evaluation by environmental experts, if countries successfully apply the circular economy, it can promote the use of high-tech products and services to optimize the use of resources. This application will help reduce business operating costs, increase competitiveness and lead to a global development opportunity worth up to \$4.5 trillion by 2030. The Ellen MacArthur Foundation report^[18] gives an example of mobile phone industry: The cost of remanufacturing mobile phones could be reduced by 50% per device if the industry improved the technology so it would be easier to assemble and disassemble and encourages users to return the phone no longer used.

+ **Benefits for individuals and households:**

In terms of economical benefits: Individuals and households gain more profits in practice of circular economy, especially in current context of global integration and increasing competition. They will have wide selection of goods: such as a variety of products with better and better quality, as well as cleaner and even cheaper food. Moreover, the development of circular economy eliminates pollution so that there are no external costs that may be borne by citizens, such as the cost of illness due to the use of contaminated water, property damage due to natural disasters caused by climate change, etc.

In terms of environmental and social benefits: Circular economy is an opportunity for each individual to raise awareness about the environment and sustainable development, increasing human connection with nature, and to improve knowledge and eco-friendly living skills; and at the same time, it also helps creat a safe and convenient living environment for each individual and community.

- *Levels of circular economy development*

There are many ways to approach circular economy, according to Nguyen The Chinh (2019), circular economy development can be divided into 3 levels^[5]:

At low level (micro: manufactures, business, consumers): circular economy focuses on the production process of enterprises and production of agricultural products, manufacturers are

encouraged and required to adopt cleaner production methods and ecological design; consumers are encouraged to consume and practice eco-friendly lifestyle.

At medium level (middle level): circular economy includes the development of eco-industrial areas and other agro-ecological systems;

At high level (macro: cities, regions, country, and more): all stages of the production process are designed with no waste released into the environment. Waste is minimized and reused.

Nowadays, developing a circular economy has become a trend globally, especially when the world's resources are increasingly depleted. In recent years, several countries have pioneered the efficient reuse of resources through circular economy development such as: Sweden, UK, France, Canada, Netherlands, Switzerland, Finland, China, Korea, Singapore, Malaysia, etc. In Europe, in order to implement the "circular economy", the European Commission has called for the participation of all stakeholders from government agencies, mining enterprises, manufacturers, distributors, retailers, consumers, garbage collectors, etc. to participate in this type of economy^[9].

3. METHODOLOGY

In order to implement this research, the author based on sustainable development approach and used comprehensively qualitative research methods such as dialectical materialism, historical materialism, inheritance method, and descriptive statistics. Research was implemented mainly by desk study method to collect published data in order to systematize theoretical basic of circular economy development, to find out evidences of consequence of linear economy model as well as advantages of circular economy development in the world in general and in Vietnam in particular.

4. RESEARCH RESULTS AND DISCUSSIONS

4.1. The inevitability of shifting to circular economy of Vietnam

In terms of waste and environmental pollution:

According to data from moitruongxanhvn.com, in recent years, along with the acceleration of economic growth, the rate of waste generation in Vietnam has increased to an alarming level of 0.5-1kg/person/day, which heavily affects waste management and treatment in Vietnam. According to the Ministry of Natural Resources and Environment, in 2009, solid waste generation was 28 million tons/year, and increased to 35.7 million tons/year in 2015. On national scale, solid waste is generated at a rate of 10% per year^[8]. Also according to the report of the Ministry of Natural Resources and Environment (2019), the whole country generates 61 thousand tons of domestic solid waste per day, including 31 thousand tons of solid waste in urban areas and 24 thousand tons in rural areas. The volume of waste that is taken to concentrated landfill only accounts for 62-90% in urban areas and 45-60% in rural areas, while the rest is thrown into ponds and lakes, roadside causing heavy air and environmental pollution. Especially, Vietnam is now facing the white pollution - the consequence of people's habits of using too many plastic bags in daily living. According to statistics, the average plastic consumption in 2019 was 41 kg/person, 10 times higher than that in 1990 (3.8 kg/person). The amount of plastic that the country discharged into the sea is estimated at 0.28-0.73 million tons/year (accounting for 6% of the world's total amount of plastic discharged into the sea), ranking 4th among the countries with the largest amount of plastic disposed into the sea^{[2], [3]}.

Air pollution: In the annual report on the environmental performance index (EPI) conducted by the US environmental organization, Vietnam is among the top 10 air polluters in Asia. Notably, the total amount of dust in Hanoi and Ho Chi Minh City is constantly increasing at high rate, making the air quality index (AQI) always at an alarming level. According to the Vietnam Environmental Administration, from March 13 to 20, 2020, the capital of Hanoi had 4 out of 7 days polluted with PM2.5 fine dust and many days AQI exceeded the allowable limit set by National Standard QCVN 05:2013/BTNMT^[11].

Water pollution: According to World Bank, air pollution alone caused Vietnam to lose 5.18% of GDP in 2013 and water pollution can also cost Vietnam up to 3.5% of GDP^[8]. Furthermore, resource depletion, rapidly increasing energy consumption, pollution and land degradation, especially climate change are seriously affecting Vietnam's economic development.

In terms of natural resource depletion and shortage:

Forestry: According to the General Department of Forestry of Vietnam and experts' comments, the forest coverage in Vietnam is now nearly 42% of total land (Table 3.1) - a remarkable number, but the area of primary forest is only accounting for about 10%. In 1945, most were natural forests while currently, out of the total 14 million hectares of forests today, only 2.15 million hectares are special-use forests, 4.6 million hectares are protected forests, and more than half are forests for production. The area of natural forests in Vietnam is decreasing at a rapid rate, especially in the central region. According to Prof. Nguyen Ngoc Lung, an expert in the forestry industry in Vietnam, planted forests are only 20-25% as effective in preventing floods and retaining water as that of natural forests. Therefore, the loss of natural forests is the cause of increasingly serious floods and landslides.

Table 3.1 : Changes in forest coverage of Vietnam

Year	Forest area (million hectares)	Coverage (%)
1943	14,3	43,8
1976	11	34
1985	8	28
1999	10,88	33
2011	13	39,7
2020	14	42,01
2020 – 2030 (aimed)	13-14	42-43

Source: Vietnam Administration of Forestry

Land resources: Currently, the whole country has about 9.34 million hectares of degraded land, accounting for 28% of total land area. Out of 5.35 million ha of unused land, only about 350,000 ha is flat land while the remaining 5 million ha is degraded hilly land. Heavily degraded land in Central Highlands is about 547,800 ha (accounting for 10%); heavily degraded soil due to salinization and alum in the Mekong Delta accounts for 14% and that in the South Central Coast is 21% while in the Red River Delta it is 4%.

Water resources: In order to ensure sustainable use of water resources, the exploitation level must not exceed 30% of water sources, but most rivers in the Central, Southeast and Central Highlands have been exploited over 30-50% of the flow. Vietnam is currently in the group of

countries with “water shortage issue” because the amount of surface water per capita is only 3,250 m³/year, lower than the target of the International Water Resources Association (4,000 m³/person/year). Moreover, the total amount of surface runoff in Vietnam’s territory is about 830 billion m³, of which about 63% of the flow originates from other countries. Flow is unevenly distributed by season and region, in which 70-80% of the total flow is concentrated in flood seasons while dry seasons which last from 6 to 9 months have only about 20-30% of total flow. As a result, many river basins are already in a state of water scarcity in the dry season. Minister of Natural Resources and Environment Ministry Tran Hong Ha commented that Vietnamese people are wasting water, not considering water as a special resource, while by 2030 the demand for water will increase drastically. Regard the situation, Vietnam has to face the challenge of water resource security. Water directly affects the stability and development of society. Vietnam is currently a poor country in terms of water but it is wasteful and inefficient in water management.

The loss of biodiversity: : By 2017, Vietnam had identified 1,211 species of wild animals and plants that are threatened and proposed to be included in the Red Book of Vietnam in the coming time, including 600 species of plants and 611 species of animals (an increase of 329 species compared to the 2007 Vietnam Red Book, including 136 plant species and 193 animal species). About 100 species of plants and nearly 100 species of animals are in danger of extinction.

Depletion of mineral resources in Vietnam: The country has up to 40 types of minerals, but most of them have small reserves, and are unevenly distributed around the country. According to data from the Ministry of Natural Resources and Environment, Vietnam has exploited 42.6 million tons of coal, 3 million tons of iron ore, 3 million tons of Appatite, 193,000 tons of Manganese and many kinds of other minerals with large amounts in 2013. With such mining scale, many kind of minerals of Vietnam will be exhausted in near future. According to the General Geological Association, the number of remaining exploitation years of petroleum is 56 years, barite is 21 years, tin is 19 years, lead-zinc is 17 years and gold is 21 years.

Thus, it can be seen that Vietnam is facing great challenges in terms of environmental pollution and resource depletion. The damage caused by environmental pollution and pressure due to the shortage of natural resources are proof that we need to change into a new eco-friendly economic model. Minister of Natural Resources and Environment, Mr. Tran Hong Ha said that we needed to change our approach which was making the transition from “traditional economic models” to “circular economy”.

4.2 Opportunities and challenges of developing circular economy for Vietnam

Opportunities:

First, the situation of environmental pollution is getting worse, the risk of natural resources shortage, the unpredictable developments of climate change which have caused great damage to the life and socio-economy of each individual, locality are practical evidence that makes more and more people, governments and industries clearly aware that we cannot continue to maintain the “exploit-produce-consume-dispose” production model, and that it is necessary to switch to a more environmentally friendly production model. Therefore, if Vietnam shifts to circular economy, it will certainly receive great consensus from society.

Second, Vietnam has the opportunities to learn from previous countries that have already made the transition to circular economy model in both theory and practice. There are many countries such

as Sweden, Denmark, Finland, Canada, Japan, China, Singapore... have succeeded, showing positive expectations from the implement of the circular economy model. It is estimated that in Europe, circular economy can benefit of around 600 billion euros per year, create 580,000 new jobs and help reduce greenhouse gas emissions. For example, Sweden has recycled 99% of its waste into electrical energy. Its greenhouse gas (GHG) emissions fell 22% in 2013 compared to 1990, while GDP grew by 58% during this period. In Netherlands, the circular economy model created more than 50,000 jobs, reduce waste disposed into environment by 10%, saved 20% of industrial water usage, reduce imports of basic resources by 25% and gained 7 billion euros for national economy. In China, thanks to the implementation of the circular economy, within the period of 1980-2010, China's economic scale expanded 18 times but energy consumption only increased by 5 times. It is estimated that by 2040, China will be able to reduce greenhouse gas emissions by 23%,...

Third, Vietnam has had evidences of the success of the application of circular economic models in various fields in recent years, such as the collecting and recycling of scrap metal and paper; cleaner production model in small and medium scale industrial manufactures. Many businesses have been very successful, such as: Eco-industrial zone model in Ninh Binh, Can Tho and Da Nang, saving up to 6.5 million USD/year; Packaging Recycling Organization of Vietnam (PRO Vietnam) with 13 businesses participating in building recycling chains, sorting waste, as well as strengthening the existing package collecting system in 2019. Also in 2019, Heineken Vietnam purchased 40,000 tons of rice husks and agricultural products and by-products to serve production, bringing in the income of 52.6 billion VND for the people. Heineken has almost no landfill waste, as 99% of the waste has been reused or recycled during the production cycle^[5]. According to World Economic Forum (WEF), Vietnam ranks 77/140 in terms of competitiveness. But also in 2018, Vietnam ranked 54/162 countries in the top 30% of leading countries in sustainable development.

Fourth, in recent years, The State has issued many guidelines and policies on transforming the growth model towards sustainable trend; strengthening the management of natural resources, protecting the environment in response to climate change; as well as increasing recycling and reusing^[10]. In 2017, Prime Minister approved the Project of developing Vietnam's environmental industry to 2025 in order to form an environmental industry that can meet the contents of the circular economy.

Fifth, the context of international economic integration creates increasing competitive pressure, making it a crucial motivation for countries, businesses, farmers, etc. to find ways to improve their product quality and competitiveness. The pursuit of circular economy development facilitates the improvement of competitive capability, therefore it will be an inevitable choice for Vietnam on both national, local, enterprise, household or individual levels sooner or later.

Sixth, the 4th industrial revolution is based on digital technology and integration of all smart technologies to optimize production processes and methods; Emphasizing technologies that are and will have the greatest impact, which are 3D printing, biotechnology, new material technology, automation technology, robotics, etc. Therefore, production, consumption, business management and economic management working on the basis of technology, especially digital technology are inevitable trends, thereby facilitating the design and implementation of circular economy at all levels: micro (individual consumer, producer, enterprise, households), middle level (province, city), high level (national, international).

Challenges:

First, limited legal provisions facilitating the transition to circular economy: Vietnam still lacks policy mechanisms to promote the development of circular economy, such as: Regulation of enterprises' responsibilities for recovering resources from used products; economic tools and policies such as natural resource tax, environmental protection fee, etc.

Second, limited awareness of sustainable development in general and circular economy development in particular: Many individuals and businesses still give more importance to immediate tangible benefits, personal interests leading to environmentally unfriendly behaviors in production and consumption such as non-compliance with standard production regulations, overusing plastic bags, not sorting garbage, etc.

Third, limited capital and technology: While most of Vietnamese enterprises have small production scale and outdated technology, circular economy is associated with scientific and technological innovation, which requires certain capital sources for research, development and technology application in production as well as management. Therefore, the lack of capital of enterprises as well as of the economy is a great limitation for promoting the implementation of circular economy in business and the whole country.

Forth, Vietnam still lacks enterprises that are capable of technology in recycling and reusing used products; lack of planning for recycling and reuse areas in particular and for the transition to circular economy model in general.

4.3 Suggest some solutions to develop circular economy in Vietnam

First, at the national scale, it is necessary to build and complete a clear legal framework for the formation and development of circular economy, which is a system of strategies, policies, legal systems as well as economic tools and sanctions such as natural resources tax, environmental pollution tax, deposit-return solutions, environmental deposit, eco-label, etc. These tools have the role of both guiding, monitoring and encouraging socio-economic development activities in direction of circular economy development.

Second, perform extensive research on circular economy development: Research according to the global, industrial, field, and local approaches to choose and build a circular economy model that suits Vietnam's conditions, as well as each locality and each industry conditions in order to save money, improve the efficiency of implementation of circular economy development.

Third, implement the circular economy development plan: In the development planning of the country or of each locality, it is necessary to take into account the criteria of facilitating the development of the circular economy, such as land planning; industry planning; job planning and plans for exploitation and use of natural resources, etc. Planning to facilitate the development of circular economy will help the country, provinces and cities to have proper directions and development plans towards circular economy in order to proactively make the most out of both economic growth and protection of natural resources and environment.

Forth, increase investment and application of science and technology for circular economy development: There should be regulations to mobilize investment capital as well as encourage investment for research and application of science and technology in the fields of exploitation, production, processing, trade and consumption. The State needs to build a proper legal framework to

promote science and technology markets, so that it will be further integrated into production and life practice. It is also necessary to build a material flow management system of products based on a digital platform to perform the fastest, safest and most effective product recovery and recycling after use.

Fifth, raising awareness of people, businesses and leaders of all levels about circular economy: It is necessary to diversify forms of raising awareness such as: Including in educational programs at all levels; using communication measures such as using media, internet, etc in order to spread to knowledge and skills of practicing circular economy. In addition, it is important to invest in building a team of experts on managing circular economy, a team of technical experts in the fields of circular economy development, etc.

5. CONCLUSION

Practical evidences show that Vietnam's economy is facing the challenges to achieve sustainable development goals. The wasteful use of natural resources for economic development for a long period is thought to be the cause of today's environmental challenges, such as increasing environmental pollution, biodiversity loss, water pollution and shortage, land degradation, etc. To achieve the sustainable development goals, Vietnam needs to gradually transform from linear economic model to circular economy model. The transition to circular economy will bring advantages such as Vietnam's opportunities to learn from previous countries, improvement gained from the 4th industrial revolution, etc. as well as challenges such as limited legal provisions facilitating the transition to circular economy, limited awareness of sustainable development in general and circular economy development in particular: limited capital and technology, ... To transition to a circular economy model, Vietnam needs to step by step need to seize opportunities as well as adequately address challenges at all levels, from individuals to households and businesses. , locally, and nationally. Few solutions are to build and complete a clear legal framework for the formation and development of circular economy; perform extensive research on circular economy development: Research according to the global, industrial, field, and local approaches to choose and build a circular economy model that suits Vietnam's conditions; implement the circular economy development plan; increase investment and application of science and technology for circular economy development; raising awareness of people, businesses and leaders of all levels about circular economy

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THEORY ON SOCIAL RESPONSIBILITIES OF FDI ENTERPRISES AND PROMOTION OF CORPORATE SOCIAL RESPONSIBILITIES OF FDI ENTERPRISES IN VIETNAM

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Abstract: *This article aims to summarize theories on corporate social responsibility of corporations in general and in particular FDI enterprises. By using qualitative research methods, the authors have clarified the general background of the corporate social responsibility concept; Social responsibility content of FDI enterprises includes the responsibility to the host country's Government; responsibility towards employees; responsibility to customers, and responsibility to the community. The authors have analyzed several international social responsibility models, summarized regulations related to CSR in the FTAs that Vietnam participates in; to finally propose three groups of recommendations on the implementation of FDI enterprises' social responsibility in Vietnam.*

Keywords: *FDI enterprises, foreign direct investment, corporate social responsibility.*

1. INTRODUCTION

Since 2005, Vietnam has had the award “Corporate social responsibility towards sustainable development” organized by VCCI, Ministry of Labor - Invalids and Social Affairs, Ministry of Industry and Trade, and associations to honor the businesses performing well in social responsibility work. Especially in recent years, when Vietnam signed and implemented new-generation free trade agreements such as CP TPP, EVFTA... with extensive commitments, high standards, and expansion in many fields, the implementation of corporate social responsibility (CSR) in general and FDI enterprises, in particular, is considered as one of the important requirements. The article analyzes some theoretical issues, explores international experiences, and suggests some proposals to promote the implementation of social responsibility of FDI enterprises in the current context.

2. LITERATURE REVIEW

The term social responsibility first appeared in 1953 when H.R. Bowen published the study “Social Responsibilities of the Businessmen”. Later, the theory was supplemented by other studies such as “*The Social Responsibility of Business is to Increase its Profits*” by Friedman.M (1970), *The Case for and Against Business Assumption of Social Responsibilities* by Davis, K (1973). ... Then, along with the realization that besides economic factors, the demand for corporate responsibility for society is increasing, many international organizations such as the World Bank and the European Union have also conducted studies related to this issue. In Vietnam, research done by Tran Hoang Hai (2016); Tran Dinh Phung et al (2019) or Phung Thi Yen (2019) have contributed to additional theories on this issue. However, there has not been a study to fully evaluate

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the social responsibility models said as well as no in-depth studies on the social responsibility of FDI enterprises in the condition that Vietnam implements new generation FTAs.

3. MATERIALS AND METHODS

To clarify the concept, content, and supplement the theoretical issues of social responsibility of FDI enterprises, the paper uses qualitative research methods which includes analysis, synthesis, and systematization. Research results mainly use secondary data collected through reports, books, specialized journals, and inherit from previously published studies.

4. RESEARCH RESULTS

4.1. Theoretical issues of corporate social responsibility

a) *Perspectives on corporate social responsibility*

Corporate social responsibility (CSR) has become a topic of research in the past few decades; however, there are still different opinions on this issue. Therefore, there is currently no single concept about CSR.

The term corporate social responsibility officially appeared when H.R. Bowen published the study “Social Responsibilities of the Businessmen” (1953) to encourage business owners to avoid harming the rights and interests of other enterprises and compensate for the damage they cause to society. In the 1970s, there were many different views on this concept, for example, Milton Friedman said that the only CSR of a business is to maximize profits and increase business value in a real, fair, and competitive market. Therefore, CSR belongs to the State enterprises. In contrast, Keith Davis (1973) argues that corporate social responsibility is the concern and response of the businesses to issues that go beyond meeting legal, economic, and technological requirements. Meanwhile, Carroll (1979) argues that corporate social responsibility has a broader scope, including not only economic responsibility but also ethical, legal, philanthropic, and other areas of responsibility that society expects from business in a given period.

In recent times, CSR studies are often carried out by large organizations. According to the World Bank (2003), corporate social responsibility is the commitment of businesses to contribute to sustainable economic development, through activities to improve the quality of life of workers and members of their families, for the community and society as a whole, in a way that benefits both the business and the overall development of the society. OCED (2009) reported that corporate social responsibility is the contribution of enterprises to sustainable development, not only the responsibility of enterprises in ensuring income for shareholders, salary for employees, products and services for customers, but also responsibility for the values of society and the environment. The European Union (2011) considers that corporate social responsibility is a concept in which businesses voluntarily include social and environmental issues as one of the concerns of their activities as well as the interrelationships of the business with related objects.

From the comments and views of experts and international organizations, it can be seen that the views of social responsibility have common foundations, according to which it can be understood that *enterprises need to be responsible for the impacts generated from their activities on society, the environment, and other related subjects. These responsibilities are the responsibility of the enterprise itself, which are self-perceived and proactively implemented by the enterprise, becoming an essential activity of the enterprise.*

b) *Contents of social responsibility of FDI enterprises*

According to the definition of OECD, FDI enterprises are enterprises with direct investment capital from abroad. The FDI enterprise establishes the rights and obligations of the investor to the country/territory where it is invested and establishes ownership and management rights over the invested capital. Nowadays, in Vietnam, in the system of legal documents on enterprises or investment, there is no concept of FDI enterprise, but in Clause 22, Article 3 of the Law on Investment 2020 stipulates that “Economic organizations with Foreign investment capital means an economic organization with a foreign investor as a member or shareholder”. This definition does not fully express the nature of foreign direct investment activities, which must be accompanied by the right to own and manage the object to which the investor contributes capital.

From the perspective of social pressure, in developing countries, FDI enterprises often come from developed countries, so the host country often has high expectations and tends to set higher standards for the activities of FDI enterprises. From an economic perspective, FDI enterprises are always expected to transfer technology as well as modern advanced production management and organization processes and contribute more to the economic development of the host country. Therefore, it can be said that the social responsibility of FDI enterprises involves many entities in the host country, which can be summarized in Figure 1.

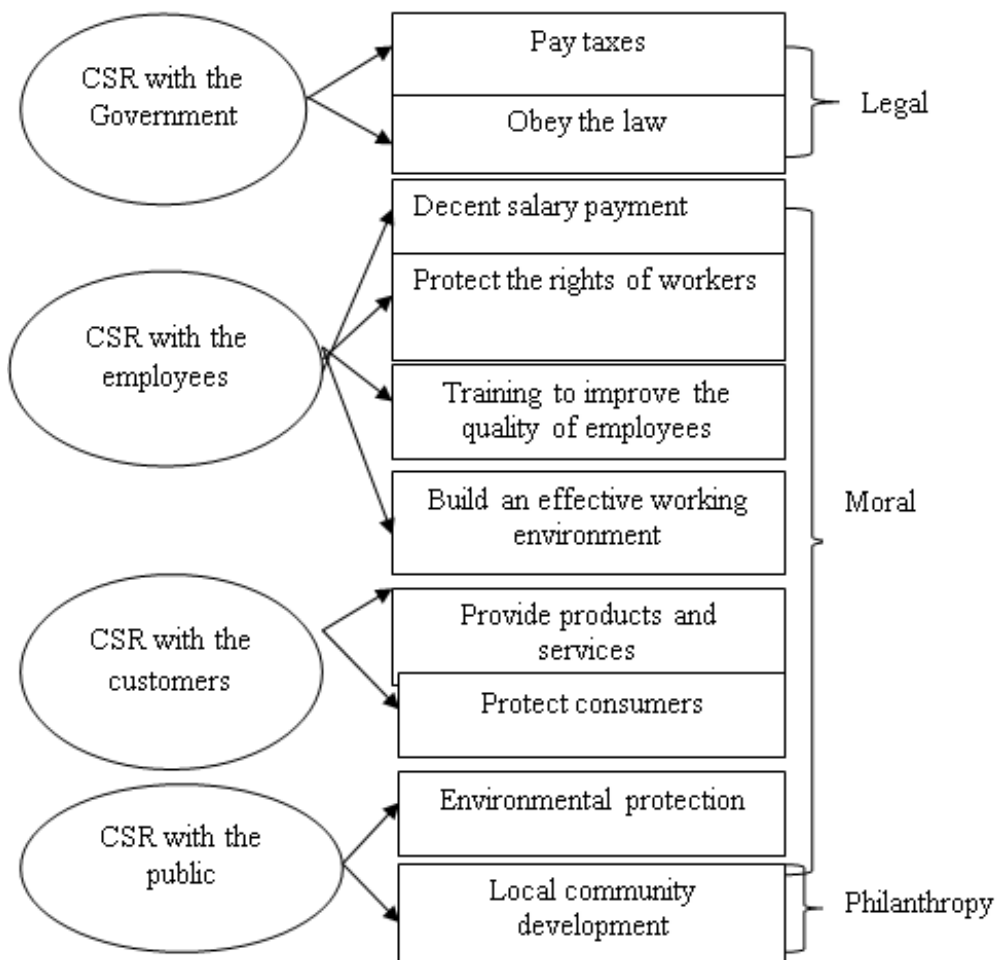


Figure 1: CSR content associated with stakeholders of FDI enterprises

Firstly, the social responsibility of FDI enterprises to the Government of the host country:

- Responsibility to comply with legal regulations: FDI enterprises are equal to domestic enterprises and must comply with the laws of the host country. This requires FDI enterprises themselves to have a proactive approach and comply with regulations during the construction and implementation of FDI projects following the provisions of the law on labor and environmental protection, construction, resources, consumer protection policies and so on.

- Responsibility to comply with tax obligations: Basically, tax obligations belong to the responsibility of complying with the provisions of the law, but for FDI enterprises, especially in developing countries, this is very important to be emphasized. Tax revenue has a close relationship with the operation of society as well as directly affects the interests of enterprises, so it requires businesses to be responsible for paying taxes according to the “compliance” and “appropriateness” criteria. “Compliance” represents the legality of tax laws; “appropriateness” represents the preferences, priorities and issues related to international taxation under bilateral and multilateral agreements that the Government of the receiving country has signed and participated in.

Secondly, the responsibility of FDI enterprises to employees:

The operation of FDI enterprises depends a lot on the workforce, especially when there are differences between the foreign investors and the workforce in business culture, labor discipline and so on. When FDI enterprises implement CSR for employees, they will create conditions for employees to develop comprehensively physically and mentally, and at the same time ensure the regimes, labor rights as well as the working environment. Those are the factors that promote the improvement of labor morale as well as the cohesion of employees with the enterprise, accompanying the enterprise. The content of CSR for employees includes 3 contents: Fair remuneration (income); Protect the rights of workers; Build a safe working environment and support the development of employees.

Third, the social responsibility of FDI enterprises towards customers:

CSR of FDI enterprises towards customers is shown by identifying customers as the driving force of the business, so this responsibility includes creating products and services that comply with the provisions of the law as well as satisfy the requirements of customers; At the same time have an honest sales policy. Honest sales policy includes providing full information about goods, services, after-sales policy...

Fourth, the social responsibility of FDI enterprises to the community:

In developing countries, this is a commonly used criterion to assess the social responsibility of enterprises in general and FDI enterprises in particular. However, in essence, corporate social responsibility to the community manifests itself in two aspects:

- Responsibility to protect the environment: Enterprises need to ensure that their production and business processes are environmentally friendly, do not cause harm to the environment, and at the same time effectively use resources as well as other factors of production and business inputs.

- Responsibility for community development: Businesses contribute to the improvement and development of community life, firstly through creating jobs for local people, creating the premise for services accompanied by development conditions. At the same time, FDI enterprises also have the responsibility to contribute to the sustainable development of economic and social factors

in general. This responsibility is expressed through voluntary activities such as: Contributing to building stability and security, contributing to infrastructure development, participating in charity activities, sponsoring activities for the community. education, health, social security policy...

4.2. CSR model and experience in implementing CSR in some countries around the world

In the world, there are many views on CSR; hence there are also many different models. However, there are models that are widely applied, including:

First, the American model

The American model is widely adopted in the United States, Latin American countries, and English-speaking African countries. This model emphasizes the human factor, the key orientation is to develop human capacity, both in the business and in the community. Since then, CSR aims to ensure safety for workers, ensure life so that employees have high motivation and work performance; at the same time emphasizes the close relationship between labor discipline and labor productivity, between labor quality and income. In addition, the Government often develops appropriate support policies for businesses that perform well in CSR, which are incentives in paying income tax (corporate income tax); CSR implementation costs are determined as reasonable expenses when calculating corporate income tax. Therefore, businesses applying this model consider the implementation of CSR as an investment that will then be received back from the Government.

Second, the European model

If the American model considers CSR mainly as voluntary activities of businesses, the European model has the outstanding feature that it does not consider this to be a voluntary responsibility of businesses but has deep intervention from the Government. In other words, CSR is required by law. Therefore, in the countries of the European Union, the issues of social insurance, unemployment insurance, and worker's health are regulated very closely. This is a closed model, but businesses in Europe themselves, besides performing the mandatory responsibilities prescribed by the Government, also actively and voluntarily carry out other social activities.

Third, the Japanese model

Japan does not apply American or European standards yet builds regulations following the traditional characteristics of Asian countries. Japan emphasizes on the issues including encouraging business voluntariness in implementing CSR to bring benefits to the community; promote responsibility for environmental protection through propaganda of national cultural traditions and efforts to realize gender equality in employment.

Fourth, the experience of some developing countries in Asia

- Thailand: the Securities and Exchange Commission of Thailand develops the concept of CSR based on the views of the United Nations Global Compact UNGC, OECD and international standards on Corporate Social Responsibility ISO 26000-2010. Accordingly, the Government of this country has made considerable efforts to build CSR awareness among businesses. The government and leadership of the Thai Chamber of Commerce have promoted the implementation of CSR through community participation programs such as social activities; thereby helping businesses to realize CSR and increase the identity and reputation of the business.

- China: since December 2008, according to the regulations of the Government of China and the State Asset Supervision and Administration Commission of China SASAC, listed companies

are required to include CSR content in annual reports; and encourage other businesses to voluntarily comply with this regulation. Several Chinese ministries and sectors have also developed guidelines and policies to promote CSR in various fields, for example the Ministry of Commerce of China in 2014 issued official documents to promote implementing CSR in the enterprises. In 2015, SASAC released the second set of guidelines to guide businesses on how to ensure CSR practices through an effective management system.

4.3. Regulations related to CSR in the Free Trade Agreements that Vietnam participates in

In recent times, Vietnam has been actively globalizing comprehensively and effectively, especially participating in new generation free trade agreements such as CPTPP and EVFTA. In many new generation FTAs, the provisions on CSR are expressed directly or indirectly through the requirements to be fulfilled on environmental and labor commitments.

CPTPP is a new generation free agreement with many issues mentioned, in which besides the goals of sustainable development, protection of cultural diversity, protection of human rights, protection of traditional knowledge, since the Preamble to the Agreement, member countries have “reaffirmed the importance of corporate social responsibility”. In addition, commitments on CSR implementation are concretized in some chapters of the CPTPP such as chapters 19 and 20, which clearly show that CPTPP countries will make efforts to encourage businesses to apply innovative initiatives and principles on corporate social responsibility for labor and environment based on initiatives, principles on corporate social responsibility for labor and environment based on initiatives as well as set of internationally recognized or applied code or code of conduct.

Regarding environmental issues, the content of environmental or sustainable development mentioned in FTAs is based on the concerns, interests as well as economic, political and social conditions of the participating countries. Two typical agreements of Vietnam with a high degree of binding are CPTPP and EVFTA. For CPTPP, contents/topics related to “environment” are included in specific commitments including Multilateral Environmental Agreements (MEAs), biodiversity and exotic animal diversity, conservation of wild plants and animals, climate change, protection of the ozone layer, protection (prevention of pollution) of the marine environment from ships, fishing, cargo and environmental services, corporate social responsibility and voluntary mechanism for environmental protection. In the EVFTA, the contents/topics related to “sustainable development” are included in specific commitments including: MEAs, biodiversity, conservation of wild animals and plants, climate change, forestry and forest products, marine resources and aquaculture products, corporate social responsibility and eco-labels. In addition, the new generation FTAs also require higher requirements than the traditional FTAs in terms of transparency in compliance and implementation. In recent new generation FTAs with environmental content or sustainable development such as CPTPP and EVFTA, all use the consultation mechanism, while the CPTPP uses a dispute settlement mechanism (with the application of trade sanctions).

5. DISCUSSION

Some recommendations on implementing social responsibility of FDI enterprises in Vietnam

To ensure the good implementation of CSR following the provisions of the new generation FTAs to which Vietnam is a member, as well as linking the development of FDI enterprises with the sustainable development of the country, under current conditions in Vietnam. Now it is necessary to emphasize the role of the State with specific notes including:

- It is necessary to strengthen propaganda for FDI enterprises about the obligations and benefits of implementing CSR. The 2015 Global CSR Study found that 91% of global consumers expect businesses to act responsibly to address social and environmental issues voluntarily. In Vietnam, according to a survey by VCCI in 2019, 46% of FDI enterprises carry out social and charity activities not for business purposes. This is a fairly high rate, but it only stops at one aspect of CSR. Therefore, the Government should continue to carry out propaganda activities in many forms such as through the mass media, dissemination sessions to business owners, organizing seminars and scientific conferences, etc. At the same time, developing the content of CSR implementation, promoting the research and application of ISO 26000 as well as studying the experience in regulations of other countries in the world.

- Promulgating policies to encourage and support enterprises to carry out social responsibility; besides, there is a monitoring mechanism in the process of implementing CSR of enterprises. With the current conditions of Vietnam, in addition to propagating and guiding FDI enterprises to implement CSR, it is also necessary to have strong enough sanctions to handle violations of enterprises on acts such as transfer pricing, tax evasion, producing and trading in unqualified goods, affecting consumers and polluting the environment. At the same time, it is necessary to continue to reward businesses that actively perform through social responsibility awards, awarding certificates of sustainable development or green production.

- State management agencies need to strengthen the appraisal and issuance of investment certificates and construction permits for FDI projects. The appraisal needs to be carefully selected, resolutely rejecting projects with high consumption of raw materials and energy, occupying large premises and using outdated technology. In particular, it is necessary to promote the autonomy and position of the landlord to detect and resolutely eliminate projects that may pollute and destroy the environment. With the increasing position in attracting foreign direct investment, Vietnam needs to set up barriers to prioritize good technology in attracting FDI, preventing investors from coming to Vietnam to make the most of it like using the cheap labor market, low utility costs. Moreover, the state management agencies should not let Vietnam be a destination for foreign investors to spread risks in the trade war, especially in the current context.

6. CONCLUSION

Building a socially responsible business model is very important for any business. Particularly for FDI enterprises, this also affects the long-term survival and development in a country. CSR was introduced into our country through the activities of FDI companies. These companies often develop codes and standards of business ethics that are universal to apply in many different regions and markets. In Vietnam, in recent years, there are FDI enterprises that have been carrying out methodical and highly effective social activities and contributing to the development of the community. However, there are also FDI enterprises that only run after profits, causing negative impacts on the economy, environment and society. This requires Vietnam to research and solve theoretical issues on CSR. At the same time, Vietnam needs to learn from international experiences in implementing social responsibility of enterprises in general and FDI enterprises in particular.

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ECONOMIC DEVELOPMENT OF COUNTRIES IN GLOBALIZATION

PhD. Ho Thi Ha¹, Junior. Phan Thanh Huyen²

Abstract: Globalization is the inevitable process, an objective trend that all countries around the world heading towards. This process has a strong impact on many aspects: economics, politics, culture,...; is the result of social development. More than that All countries hope want integration, globalization in the direction of rapid economic growth and scientific development technology. For Vietnam in the process of doi moi, the socialist-oriented market development, globalization is still a trend Our party attention, attention. But in addition to positive effects, it also creates many risks, challenge to the tax; the economy requires us to continue research, analysis to get more objective view

Keywords: trend, globalziation, economic growth

1. OVERVIEW AND RESEARCH METHODOLOGY

a. The necessity of research content

Globalization has become an objective trend, it is both a condition and a necessary result for all processes of social development. Studying the topic will show us the pros and cons of other countries and economies, thereby learning many lessons for Vietnam's economy in the process of joining globalization. Therefore, the study and in-depth understanding of this topic are not only theoretically significant but also practical.

b. Research objectives

Researching the development of globalization of countries to understand the impacts of globalization on different economies, thereby helping Vietnam promote integration

c. Subjects and scope of the study

Research subjects: The article focuses on studying the trends of economic globalization and Vietnam in the context of globalization

Scope of the study:

- Space: study the trend of globalization in countries around the world
- Time: From the mid-20th century to the present

2. INTRODUCTION

Globalization is a big development of the world today. It is a common term that scholars, politicians use to describe the characteristics of the time. We can have different ways of understanding, but it can be understood.

^{1,2} Academy of finance.

Globalization is the concept that describes changes in society and the background economic the world, created by a growing bond and exchange between country, organizations or individuals in the cultural, economic corners... on the global scale.

Economic globalization is one of the three main aspects of globalization that are often seen in countries GIA, academic literature, two other aspects political globalization and cultural globalization. Globalization refers to a large international movement of goods, capital, services, and services technology and information. In essence, globalization is a rapid increase in economic activity across the borders of countries and between regions, creating interdependence between economies in movement and development towards an integrated and integrated world economy.

3. METHODOLOGY AND PROPOSED MODEL

The issue to be mentioned is the effect of economic globalization on countries in general and companies in particular, more specifically its advantages and disadvantages to these economies.

First, we talk about the globalization of economic globalization to countries that have specific advantages and disadvantages.

On the positive, we can see rapid globalization of the world economy has achieved impressive results, significantly improving the macroeconomic efficiency of most people.

A specific example according to statistics from Worldmeters.info, the average life expectancy of the world's population in 2020 is 73.2 years (both male and female), in which women were 75.6 and men were 70.8. The average life expectancy of the world population is continuously increasing in the last 70 years, as shown in the diagram below. In which the average lifespan of the Vietnam population in 2020 is 73.7 years old (0.1 year from 2019: 73.6).

In addition, globalization has eliminated border distances, which are connected to each other, helping services such as capital investment, goods trading, labor, technology that is often traded and easier. Therefore, countries participating in international business will promote greater economic and social growth.

For developing countries, globalization has created conditions for countries to quickly participate in international labor assignments. Thus, a reasonable, effective, and competitive economic structure, to shorten the modernization process. At the same time, the freedom of trade makes the countries less developed, such as goods, services that other countries create. Every country has its own strengths^V; so, Vietnam, for example, is strong about food exports, food such as rice, coffee, fruit,...but our machines are less modern, we need to enter machines from other countries.

Furthermore liberalization of global financial markets is associated with the liberalization of the open investment for the flows of capital flowing freely from one country to another. "FDI in developing countries in Asia rose 3.9% in 2018, to \$512 billion, inclusive of global FDI (2017). FDI's prospects in this region are optimistic, thanks to the improved economic and investment growth rate. FDI in Southeast Asia reached record highs in 2018 with \$ 149 billion, up 3%, which Singapore, Indonesia, Vietnam, Thailand have a high rise¹. Manufacturing, service, wholesale,

¹ Foreign direct investment 2019, forecast 2020 and long-term (2020), <https://www.idico.com.vn/en/dau-tu-truc-tiep-nuoc-ngoai-2019-du-bao-2020-va-dai-han.html>

retail, digital technology are the ones that attract the most FDI in ASEAN countries. However, in 2019, FDI fell because a lot of U.S multinational companies from foreign countries enjoy government tax incentives. And for 2020 the report on international investment in United Nations Conference on Trade and Development (UNCTAD) announced the epidemic warning Covid - 19 forced to tighten Foreign direct investment (FDI). Developing economies will have the most impact.”¹ Extraction: IDICO investment for development

Besides the positive factors, we must also mention the disadvantages of the trend of economic globalization. First, globalization has created a bitter conflict between developing countries and developed countries in the process of opening up and integrating. Developing countries are now facing increasingly fierce competition in economic and trade relations. Participation in trade liberalization forces all countries to accept freedom of competition, that is, to open markets, lift tariff barriers and non-tariffs on foreign goods and services, remove investment restrictions e.g. developing countries, when joining world economic organizations, often facing competition for products from abroad, with good quality, eye-catching packaging and affordable prices, causing domestic enterprises to make efforts to develop products, while trying to lower costs, That way we can compete with foreign enterprises.

Second, the outrageous polarity into rich and poor countries, extremely wealthy countries and miserable countries that come to the extreme with debts piling up cannot be paid. This is the idea of economic capitalism in the era of globalization. More specifically, it is not only the differentiation between countries, between blocs, economic regions.

It is noteworthy that inequality is not only expressed between developed and developing countries, i.e. between wealthy Western countries and the rest of the world. Inequality is also expressed among developed countries, as well as among developed countries, but it also appears between different regions within a country or between peoples in a country of many peoples. “In the EU, about 25%, or 119 million people, are living in poverty and the top 20% of the richest earn five times more than the top 20% of the poorest. In Viet Nam, in 2020, inequalities in per capita spending per month are observed between the richest and poorest groups, up to 3.5 times, with per capita expenditure per month in rich households of VND 4.6 million/person/month compared to nearly VND 1.4 million/person/month in poor households.”²

Third, globalization leads to the race for export advantages between countries by lowering the value of that country’s local currency. For example, at the end of July 2018, the People’s Bank of China (PBOC) lowered the renminbi price for the seventh day in a row, pushing the currency’s price to a one-year low against the USD, or 6.7671 renminbi for one USD. After the above information, the renminbi price in the international market fell another 0.7%, before recovering again. As such, it reduces the competitiveness of many economies in the region while the renminbi de-prices too quickly, investors will lose confidence in China and massively withdraw capital. They may want to move to other assets, such as USD or other foreign currencies.

¹ Prof Nguyen Mai (2019). Vietnam to attract FDI: New milestones 2019 and forecast 2020, <http://baohinhphu.vn/Utilities/PrintView.aspx?distributionid=383537>

² General Statistics Office (2021), Press release on the results of the 2020 residential living standard survey, <https://www.gso.gov.vn/du-lieu-va-so-lieu-thong-ke/2021/07/thong-cao-bao-chi-ve-ket-qua-khao-sat-muc-song-dan-cu-nam-2020/>

In addition, economic globalization has adverse environmental and social consequences for countries, regions and the world. Regarding environmental pollution, it can be mentioned that the sea is polluted when there is waste from cargo ships to foreign countries, or oil spills or smog from production plants. As for social security, it can cause excessive foreign affairs, forgetting the culture of the country,....

To clarify the problem we are analyzing, the article goes after the specific audience of companies and businesses under the impact of globalization.

First, the company's participation in the globalization process will promote the company's ability to compete more effectively. When participating in this process, the company will enter the wider market, helping the company have a stable business environment in both the domestic and world markets. Entering a new market, having more competitors makes the company more motivated to innovate management, improve production, update new technologies to improve business efficiency. As SUNHOUSE enterprises officially embarked with ITG Technology to implement the smart factory solution "make in Vietnam" - 3S iFACTORY. One of the solutions that meet international standards, serving customers and markets well in the Industry 4.0.

Integration and globalization will help businesses lower production costs. The reduction of production costs is since companies and enterprises have reduced the cost of input materials, business transaction costs and invest in machinery and equipment. This is due to the reduction of import duties on materials and services and also the reduction of export tax on products and goods abroad.

In addition, globalization increases opportunities and overcomes the limitations of the domestic market. For example, the price of materials is more expensive, production technology is more modern and learning more about how to manage foreign enterprises.

Besides the advantages, there are also disadvantages that globalization can cause to companies and businesses. First, businesses will have to compete more in foreign markets, which means more risks because businesses must actively understand the tastes of customers, product distribution channels, traditional culture of each country or laws and conventions of the home country, ... There are many issues that businesses need to pay attention to, especially each region, each country has its differences that make it difficult to penetrate different countries.

Secondly, enterprises are also under pressure from the domestic market, increasing the competitive pressure of imported goods. Because foreign goods are more diverse, have more quality and cheaper prices. At the same time, most people tend to be foreign. This puts many domestic businesses at risk of losing market share, even bankruptcy.

Both disadvantages occur because many domestic businesses have limited resources, not enough experience, nor modern technology as well as modern technology to improve products, which make product quality, difficult to compete with.

4. RESEARCH RESULTS

Through analysis of the economies of other countries, we can relate to the problems in the Vietnamese economy, we also have our strengths and weaknesses.

As for Vietnam, a country that is in the process of making efforts to participate in integration, globalization, the national economy in general and business companies in particular face opportunities and challenges.

On the positive side of globalization, Vietnam will be more favorable in the import and export market. We enjoy preferential tariffs, the removal of non-tariff barriers and other remuneration benefits that make it possible for Vietnam to reach more foreign users. Along with the growth of our business and our country's economy, we can expand our business, create a better income for everyone and solve the employment problem for workers. In the context of the Covid-19 epidemic, there continue to be complicated developments, spreading to many provinces and cities across the country, affecting the production and business activities of enterprises.

Year	Export		Import		Balance of trade (Millions Dollars)
	Export turnover (Millions Dollars)	Export growth (%)	Import turnover (Millions Dollars)	Import growth (%)	
2010	72.737	26.5	84.839	21.3	-12.602
2011	96.905	34.2	106.749	25.8	-9.8444
2012	114.530	18.2	114.347	7.1	183
2013	132.134	15.4	132.125	15.6	9
2014	150.220	13.7	147.850	11.9	2.370
2015	162.020	7.9	165.570	12	-3.550
2016	176.581	8.9	174.804	5.6	1.777
2017	215.119	21.8	213.007	21.9	2.112
2018	243.697	13.3	237.182	13.5	6515.3

Table 3.1. Data on import and export of Goods of Vietnam in the period of 2010-2018

However, export and import turnover activities in the first 6 months of 2021 still maintained a high growth rate compared to the same period last year. According to the General Department of Customs of Vietnam, the total import and export turnover in June 2021 was estimated at 54 billion USD, up 25% over the same period last year. In the first 6 months of this year, total import and export turnover reached 316.73 billion USD, up 32.2% over the same period.¹

Moreover, the integration of globalization will help attract more foreign investment. We have been and will attract more foreign investment. At the same time, with the efforts in the process of controlling the Covid-19 epidemic, foreign businesses have the attention and desire to invest in the Vietnamese economy. Besides, Vietnam has many open-door policies, incentives and an attractive business environment, along with stable security, politics, stable geographical location, making our country's total foreign investment stable. As of May 20, 2021, including newly registered capital, adjusted registered capital and the value of capital contribution and share purchase of foreign investors still reached USD 14 billion, by 0.8% over the same period last year. There were 613 projects issued new licenses with the capital registered to \$ 8.83 billion, down by \$ 1.422 on the number of projects and increased 18.6% on the capital registered with the total capital of \$ 1.31 billion, with a total of \$ 1.31 billion in capital contribution by the total capital of \$ 1.31 billion. In total capital contribution, the purchase of shares of foreign investors with 430 capital contributed to the enterprise's charter capital for the value of \$ 807.8 million, and 992 foreign

¹ Ministry of Industry and Trade's website (2021), Import and export activities are expected to continue to flourish, <https://moit.gov.vn/tin-tuc/thi-truong-nuoc-ngoai/hoat-dong-xuat-nhap-khau-du-bao-tiep-tuc-khoi-sac.html>

investors purchased the domestic charter capital at \$ 807.2 million. Foreign direct investment carried out the first 5 months of 2021 estimated at \$ 7.15 billion, up 6.7% from the same period last year.¹

It is an impossible benefit not to mention, international integration will enhance Vietnam's position in the international market. The Diplomat on March 30 reported that Vietnam has an increasing voice in international issues, potentially participating in rebuilding a global governance system that has been crippled by tensions between the powers and the outbreak of the pandemic. Vietnam also achieved a fairly high growth rate compared to its neighbors and is forecasted to recover quickly after the pandemic.

In addition to economic development, participating in the process of globalization creates conditions for us to absorb advanced science and technology; at the same time, it creates conditions for the development of science and technology in the coming time. In the context of economic globalization, with the way of multilateralization and diversification of international relations, our country has the opportunity to receive capital, absorb knowledge, science and technology, as well as experience in enterprise management. These are the factors that Vietnamese enterprises lack. This is an opportunity to help us quickly complete the process of industrialization and modernization of the country. Globalization helps us access available scientific and technological achievements, thereby leverage of those technologies to shorten the process of industrialization, modernization as well as shorten the development gap compared to previous countries.

However, with innovation and slow starting points, Vietnam faces great challenges that globalization brings.

Firstly, competition becomes more fierce. Competition is not only between foreign enterprises and domestic enterprises, it is also a competition between domestic enterprises in terms of both goods and services. Specifically, such as Hanoi city or Ho Chi Minh City, there are many shopping centers such as Vincom, Aeon Mall, Mega Market, BigC,... ready to meet everyone's needs. So the small business will compete fiercely to survive, otherwise it will even go bankrupt.

Secondly, the level of technology and equipment and machinery of backward enterprises. In 2020, machinery and equipment are being used in Vietnamese enterprises with only 10% modern, 38% on average and 52% are backward and very backward; the rate of high technology use is only 2%; Vietnamese enterprises investing in technological innovation are very low, only about 0.2% - 0.3% of total revenue ... The level of technological equipment in small and medium enterprises outside the state is only 3% of the level of technical equipment in large enterprises ...²

Thirdly, the ability to update market information and adaptability to new markets is weak. Due to limited knowledge as well as technology, it is difficult to learn or investigate a new school.

Fourthly, international economic integration is placing urgent requirements for the addition and improvement of institutions. Despite many efforts in improving and supplementing the legal system and economic policies, there is still a lot of work to be done.

¹ General Statistics Office (2021), Foreign investment situation in the first 5 months of 2021, <https://www.gso.gov.vn/du-lieu-va-so-lieu-thong-ke/2021/06/tinh-hinh-von-dau-tu-nuoc-ngoai-5-thang-dau-nam-2021/>

² Van Anh (2020), The competitiveness of Vietnamese enterprises, <https://tapchitaichinh.vn/tai-chinh-kinh-doanh/tai-chinh-doanh-nghiep/thuc-trang-nang-luc-canh-tranh-cua-doanh-nghiep-viet-nam-324447.html>

The year is a lack of a strong and experienced state management team and a team of entrepreneurs. Along with that, the opening of the market will also expand exchanges between countries, thus requiring leaders, managers and people to improve their political bravery, preserve the national cultural identity.

5. DISCUSSION AND CONCLUSION

Because of the above factors, we have specific ways and measures to promote the advantages and confront the challenges set.

First of all, it is necessary to continuously improve the business environment to attract investment and promote all potentials of all economic sectors. At the same time, it is constantly improving competition regulations to ensure a healthy and fair competitive environment when integration such as building lower facilities used to attract foreign investment; applying technical science technology to production to overcome backwardness and stagnation in production in enterprises; change legal corridors such as the innovation and stability of the legal system to still international regulations and practice, and supplement laws that can meet the needs and development directions of enterprises

Viet Nam needs to devise the right policies to enhance macro control, improve the capacity of rapid adaptation of the economy together with the development of the policies on economic development associated with social security, environmental protection, and the development of social security, poverty reduction, and the development of social - poverty reduction mechanisms, and the development of social security policies, and the development of the social security policies, and the development of the social security policies, will be improved.

We continue to develop a strategy of economic integration, identifying concrete and clear steps and implementation plans. We must have a clear roadmap by reaching agreements with international economic organizations, while also enhancing the competitiveness of the economy at all three levels of state, enterprise and industry. Along with that, it is necessary to make the most of the opportunities brought by the globalization process in terms of capital, knowledge, technology, technology, experience,... to be able to promote the development of key industries such as processing and textile industries; gradually moving from a labor-heavy industry to a sector that uses many machines, actively applying new and modern technology

In particular, the human element is the key and very important. It is necessary to enhance the training and improve the quality of managers, civil servants, public employees, entrepreneurs and workers, meeting the increasing needs of the international economic integration process, especially foreign affairs and enterprise managers to be strong enough, brave enough to promote the spirit of independence, autonomy, self-strength, with the motto of proactive, effective and flexible.

From the study, we have the conclusion. Thus, globalization is an inevitable trend, which will continue to create great opportunities and challenges for countries, companies, businesses and the development of Vietnam's economy in the coming years. Through our research, we see the importance of globalization. From the advantages and disadvantages of analyzing in the economies of countries, we partly identify the opportunities and challenges of vietnam's economy. This is also the basis for the Party, State and people of Vietnam to resolve to seize opportunities, learn more lessons and strive to overcome challenges, continue to promote the cause of innovation, rapid and sustainable economic

development in the socialist direction, successfully implement the goal of building Vietnam into a developed country, high income. At the same time, we strive to go hand in hand between economic development and the completion of the Party and State's policy of "Rich people, strong countries, civilized fair societies", striving to become a modern industrial country by 2030.

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EXAMINING THE ACCOUNTING FOR LAND: IMPLICATIONS FOR THE HARMONIZATION OF IFRS IN VIETNAM

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Abstract: *This paper re-considers the notion of 'the harmonization of ifrs' as it has been applied to the accounting standard harmonization project and its implications for accounting practices that are emerging in Vietnam. There exist some challenges in the process in Vietnam, in terms of land accounting regulations. In order to explore this, given the unique legal status of land in Vietnam, we consider how it is classified and represented in Vietnamese financial reports. This example shows that there are still significant challenges that need to be overcome in order to implement IFRS in Vietnam and there are still substantial comparability problems for cross-border users.*

Keywords: *IFRS; accounting; land ownership; Vietnam.*

1. INTRODUCTION

Based on the goal of the International Financial Reporting Standard - IFRS, regulations are issued to improve the usefulness, comparability, and consistency of financial reporting information. To achieve those criteria, accountants are required to report one economic situation in different contexts in similar manners. For financial statement information users, comparing the financial statements of Vietnamese companies presents a significant challenge because of an important class of assets of the company, land, which has a very different legal status from similar assets in accordance with international practice. We believe that accounting standards should be flexible enough to allow different reporting of these assets in different social contexts, yet recognized and presented in the financial statements in a consistent principles to ensure comparability among enterprises in the world.

From the perspective of corporate accounting, the research team proposes a number of contents related to the principle of recording and presenting financial statement information for land in Vietnam.

2. LITERATURE REVIEW

Much of the literature that raises the issue of harmonization is connected with the internationalisation of accounting standards. Many researchers supporting harmonisation through international accounting standards have referred to 'accounting uniformity'. According to Zeff (2007) "there are those who believe, and many have believed this for a long time, that comparability is promoted, or assured, by all companies being required to use the same accounting methods, that is to say, 'standardisation' or 'uniformity' of method." Early researchers (see Wilkinson 1965, Morgan 1967, Bromwich 1980, Fitzgerald 1981, Dopunik 1987, Goeltz 1991, Wallace 1990, Schweikart et al. 1996) indicated a strong

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interest in the achievement of greater levels of international harmonisation, with the eventual goal of achieving uniformity in accounting practice. Wilkinson (1965) even suggested that “each company presents only one set of accounts for all investors, of whatever nationality”. Along with the accelerating trend of convergence toward International Financial Reporting Standards (IFRS) since the late 1990s, one of the primary arguments for IFRS, on the ground of economic rationality, was to achieve a global accounting uniformity which brought about an open and accountable world (Lehman 2005). Saravanamuthu (2004) argued that “the IFRS projects an aura of objectivity by transcribing complex local reality into universal recognisable and acceptable information”. A major assumption of these arguments, as indicated by the IASB (2008), is that accounting uniformity leads to comparable financial information across international boundaries.

On the other hand, many have questioned the possibilities of a single regulatory framework that could meet the financial reporting needs of all societies. There have been considerable counter-arguments that have focused on environmental factors, such as difference in culture (Violet 1983, Riahi- Belkaoui and Picur 1991, Belkaoui 1983, Taylor-Zarzeski 1996), economic factors (Gray 1988, Chow and Wong 1987, Ampofo and Sellani 2005, Chand and White 2007) and political systems (Luther 1996, Chandler 1992, Ahadiat and Stewart 1992, Craig and Diga 1996). Some of these studies have raised issues such as the impact of language; the historical development of a nation; the different legal systems; the different nature of property rights; the size, structure and complexity of the economy within a nation; the education system; the social stabilities; and differences in capital markets – all of which present challenges to the development of uniform accounting practices.

The research shown above has been largely descriptive in arguing that international differences in reporting and disclosure has been attributed to the different economic and political environment of each country and has consistently presented challenges to the globalisation of accounting standards. This prior research has not actually provided evidence of the perceived costs or benefits of harmonisation by concrete cases or empirical analysis of real data. Further, the major weakness of the existing literature, in the context of this paper, is that they have not explained specifically the underlying assumption of how the definition would influence any studies on the topic of global harmonisation of accounting standards.

3. RESEARCH METHODOLOGY

This paper follows qualitative research. Short interviews were carried with 5 specialists in the Accounting and Auditing Supervisory Department, the results show the challenges of Land- use rights accounting in terms of VAS and Vietnamese financial Regime. Furthermore, past literature and research findings are used to gather information on a global perspective. Textbooks, journal articles and websites are also used for collecting information.

Research Questions:

- a. How current situations of accounting treatment for Land in Vietnam?
- b. What are challenges for IFRS harmonisation in terms of Land- use rights accounting?
- c. What are the solutions for Land- use rights accounting to aim to IFRS harmonisation?

4. FINDINGS - CURRENT STATUS OF LAND ACCOUNTING REGULATIONS

Currently, in Vietnam, there exist accounting treatments for Land-use rights as tables belows:

4.1. Land-use rights is intangible fixed assets or prepaid expenses

Topic	VAS 04	IAS 38	Vietnamese financial Regime	Remark
Initial recognition	Under Vietnamese law, entities and individuals are not permitted to own land but only land use rights. Land use rights are recognized as intangible fixed assets or long-term prepaid expenses in accordance with prevailing regulations (VAS04.18).	Under IFRS, land use rights are considered to be within the scope of IAS 17 – Leases and are classified as finance or operating lease as appropriate.	According to Article 4.2d of Circular 45, a land use right which is recognized as intangible fixed assets comprise: +those granted by the State for which land use levy is collected; + those acquired in a legitimate transfer; + and rights to use leased land obtained before the effective date of Land Law (2003) for which payments have been made in advance for more than 5 years and supported by land use right certificate issued by competent authority. +Land use rights which are not recognized as intangible fixed assets comprise: + land use rights granted by the State without collecting land use levy. +land lease payment paid one time for the entire lease term (the land lease date is after the effective date of the Land Law 2003 and therefore certificate of land use right is not granted).	In accordance with IFRS, land use rights may be classified as finance lease or operating lease depending on each circumstance. + In case of operating lease, land lease payment paid for future lease period will be recognized by lessees in long-term prepaid expenses similarly as according to VAS; + In case of finance lease, lessees will recognize a finance lease asset.
Subsequent measurement - Amortisation	x (VAS04.54) Maximum useful life of intangible fixed assets is 20 years. x (VAS 04.57) In some cases, the useful life of intangible fixed assets may exceed 20 years upon reliable evidences but must be specified. In this case, the enterprises must: (a) Depreciate the intangible fixed assets according to their most accurately-estimated useful life; and (b) Justify the reasons for the estimation of the assets' useful life in the financial statements. x (VAS4.65) Useful life and amortization method must be reassessed at least at the end of every fiscal year.	x (IAS38.88) An entity shall assess whether the useful life of an intangible asset is finite or indefinite and, if finite, the length of, or number of production or similar units constituting, that useful life. An intangible asset shall be regarded by the entity as having an indefinite useful life when, based on an analysis of all of the relevant factors, there is no foreseeable limit to the period over which the asset is expected to generate net cash inflows for the entity.	(Article 11.2) Land use rights is amortized over the land lease period. Land use rights with indefinite useful life is not amortized.	x Requirements on range of useful lives for intangible fixed assets of Circular 45 are not consistent with those of IAS 38. IFRS permits measurement of intangible assets with indefinite useful life for which amortization is not required. x Similarly to tangible fixed assets, VAS permits reassessment of useful life and amortization method on an annually basis while under Circular 45, method of amortization is allowed to be changed only once during the use of assets.

		<p>x (IAS38.107) Intangible assets with indefinite useful life are not amortized.</p> <p>x (IAS38.109) The events and circumstances relevant to the classification of an intangible asset as having either a finite or indefinite useful life may change over time. A change in the assessment of the useful life from indefinite to finite is accounted for as a change in estimate under IAS8.</p>		
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4.2 Land-use rights is investment property

Definition	(VAS05.5) Investment property is property being land-use rights or a or both, building - or part of a building - infrastructure held by the owner or by the lessee under a finance lease to earn rentals or for capital appreciation or both, rather than for use in the production or supply of goods or services or for administrative purposes; or sale in the ordinary course of business.	(IAS40.5) Investment property is property (land or building or part of building or both) held (by the owner or by the lessee under a finance lease) to earn rental income or for capital appreciation, or both, rather than for use in the production or supply of goods or services or for administrative purposes; or sale in the ordinary course of business.	<p>According to Circular 16, for properties held as a result of foreclose in accordance with Clause 3, Article 132 of the Law on Credit Institutions:</p> <p>x For properties held for sales or transfer for purpose of recovering capital within 3 years, the credit institutions shall not record the increase in assets and depreciation;</p> <p>x For properties acquired for use in normal course of business, the credit institution shall record the increase in assets and depreciation them according to prevailing regulations. The procurement of such assets must comply with the provision of in Clauses 3 and 4, Article 6 of Decree No.93/2017/ND-CP, in which the net book value of those assets must not exceed 50% of the charter capital and reserve for supplementary</p> <p>x For properties acquired for use in normal course of business, the credit institution shall record the increase in assets and depreciation them according to prevailing regulations.</p> <p>The procurement of such assets must comply with the provision of in Clauses 3 and 4, Article 6 of Decree No.93/2017/ND-CP, in which the net book value of those assets must not exceed 50% of the charter capital and reserve for supplementary charter capital.</p>	x Under Vietnamese law, entities and individuals are legally not allowed to own land but only land use rights. Therefore, definition of investment property in VAS 05.5 is modified in accordance with this requirement. x With respect to the provisions in Circular 16, no recognition of properties held as a result of foreclose may result in understating of enterprises' assets in their financial statements
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(The authors synthesized)

4.3 Advantages and limitations of current regulations on accounting for land use rights in enterprises.

Advantages

The regulations on accounting for land use rights in enterprises have been standardized, creating favorable conditions for enterprises to determine the value, record and present information on the financial statements relatively fully.

Limitations

In addition to the above advantages, the regulations on accounting for land use rights at enterprises also have some limitations that lead to the presentation of information that is not really useful in the financial statements:

Firstly, for land use rights that are leased by an enterprise and the land rent is paid annually or once without a land use right certificate but has an irrevocable land lease contract and the enterprise has the right to control the benefits derived from that land, current Vietnamese accounting regulations do not guide this type of land use right to be valued, recognized and presented in the financial statements as an intangible asset, and only instructs that this one-time rental will be gradually amortized to expenses on Account 242 – prepaid expenses.

Secondly, for land use rights that are intangible fixed assets, the valuation subsequent to initial recognition follows historical cost model. There is neither guidance in recognition for impairment loss nor recognition under revaluation model.

Thirdly, in case of the land use right that is assigned by the State to the enterprise without land use levy, the historical cost of this type of land use right is being guided by Decree 151/2017 to be determined according to the land price bracket of the People's Committee of the province or city according to Article 100, which is not very reasonable, because in many cases the price based on the land price bracket of the People's Committee of the province or city does not truly reflect the market price.

Fourthly, the current guidance on amortization of land use rights regarding the amortization period and amortization method according to Circular 45/2013/TT-BTC is for tax purpose only. Meanwhile, VAS 04 on intangible fixed assets and VAS 05 on investment properties do not have clear instructions for the case of long-term land use rights without amortization. In this case, the enterprise needs to test for impairment, and report any impairment loss in the financial statements.

Fifthly, there is a need for more complete guidance for specific businesses that are assigned land for preserve afforestation, or forestry enterprises that are assigned land for afforestation and do business on it, or enterprises that produce and trade in salt, agricultural enterprises that produce seeds... For these enterprises, the State neither collects land use fees nor issues land use right certificate (LURC). Therefore, it is necessary to guide them on how to determine the value and reflect in the accounting books and financial statements about the land resources assigned by the State to enterprises, thereby providing more complete and transparent information about the financial resources of the enterprises.

Sixthly, the current regulations on accounting have not yet guided enterprises to fully disclose the land resources that the enterprise is entitled to manage and use to bring benefits to the enterprise in the financial statements.

5. DISCUSSIONS

5.1. Completing the identification and recognition of land use rights

According to international practice, land is considered a tangible fixed asset while in Vietnam it is an intangible fixed asset because it is the right to use. However, land is an asset with a specific shape, so the classification according to Vietnam's regulations is not suitable with the nature of the property. On the other hand, a subleased land is classified as investment property along with the premises on it as a tangible asset leading to inconsistent classification of property as land in Vietnam.

In Vietnam, land is collectively owned by the people and managed by the government on their behalf. Thus, under such a system, property owners cannot have full and legal title to the land. Their rights are limited to the land use rights permitted by law.

Land users usually receive a land use right certificate which shows the land user's rights to the property. There are different types of land use rights, however it is important to note that under current regulations people can have indefinite LURCs. An individual can rent a piece of land and pay the rent annually (known as an "annual arrangement") or pay the entire rent in one payment (known as a "one-time arrangement").

More practically, the different legal status of land ownership has a great influence on the assumptions made about asset recognition. According to land ownership law of Vietnam, the physical form of land cannot be recognized in Vietnamese accounting standards, only land use rights can be measured and reported as intangible assets. This rationale to a certain extent reinforces our assumption that the economic nature of land use rights in Vietnam is similar to physical land in western countries. If they are formally different but are of the same "economic nature", the different measurement and presentation in accounting will make it difficult to achieve the "true comparability" in the current financial statements.

Specifically, the difference is as follows: The IASB defines an asset as "a resource controlled by the entity as a result of past events and from which future economic benefits are expected to flow into the entity" (IASB, 2010). Land is measured as an asset in the financial statements of companies when they have control over the land. However, Vietnamese reporting entities do not control the land but only hold land use rights. Companies do not report land in their financial statements but as "land use rights", which are often classified as intangible assets in their Statements of financial position.

While the underlying economic nature of these two accounts in relation to companies' businesses may not be so different, if we shift our focus to the reported financial position and performance the issue of comparing financial statements will become clearer.

Under IFRS, intangible assets must be recognized at cost, just like PPE assets. However, unlike PPE assets, intangible assets cannot then be measured to fair value or revalued unless there is an active market. By their very nature, most intangible assets have no active market and therefore will not be subject to revaluation (Kimmel et al. 2006). Using the cost model, after initial recognition, intangible assets are recognized at cost less accumulated amortization and accumulated impairment loss. As mentioned, land use rights in Vietnam have a limited term of use. An entity must systematically value an asset based on its useful life, resulting in a depreciation expense in the profit or loss account for each period.

In summary, in order to make the information on the financial statements of the enterprise be comparably informative, the accounting regulations should consider the recognition of land in the form of land use rights so as to clearly show the nature of the current transactions related to the land use rights.

In our opinion, from the point of view of accounting, relevant accounting standards should clarify and provide specific conditions for determining land use rights or distinguishing land use rights from long-term leased land. It cannot be implied that land use rights are subject to the provisions of other legal documents (land law).

In Vietnam, land acquisition is essentially like a lease, i.e. Vietnamese companies lease land for 50 years from the State. However, it is not completely the same as a lease because Vietnamese companies divide land into two parts: (1) physical land (not recorded in accounting); (2) and intangible land use rights, but they only recognize the intangible part of land use rights. The physical part is off the balance sheet. To make the financial statements comparable, a consistent treatment of the financial position and performance is made based on the underlying economic nature of the transaction.

5.2. Completing accounting for assigned land use rights as intangible assets

Regarding the legal status of land use rights, with (1) land use rights assigned by the State with land use levy or legally transferred and (2) leased land use rights existing before the effective date of the 2003 Land Law, enterprises have been granted land use right certificates by competent authorities and have paid land rent for the entire lease period or for many years, of which the remaining lease period is at least five years. The above cases are considered as intangible assets at the enterprises. Meanwhile, land use rights are allocated by the State without land use levy, with leased land with one-off rental payment for the entire lease period (land lease period after the effective date of the 2003 Land Law and the land use right certificate is not granted), the land rent shall be gradually amortized into business expenses according to the number of years of land lease, and shall not be recorded as an intangible asset. Thus, all cases of prepayment of land rent after the effective date of the 2003 Land Law must be recorded as prepaid expenses, regardless of whether there is a land use right certificate or not. If the land is leased with annual rental payment, the land rental shall be accounted into business expenses in the period corresponding to the annual land rental payment.

However, in our opinion, in the case of leasing land use rights, it is advisable to consider recording and presenting information in accordance with regulations on leased properties. Meanwhile, land use rights assigned by the State with land use levy or legally transferred are recorded as intangible assets. Specifically, enterprises need to consider the following contents related to land use rights eligible for intangible assets:

Initial recognition at cost:

The historical cost of a fixed asset as a land use right is determined to be the entire amount spent to acquire the lawful land use right plus (+) expenses for compensation for site clearance, leveling, and registration fees. (excluding expenses for construction of works on land); or the value of land use rights received as capital contribution.

Valuation subsequent to initial recognition:

Enterprises choose one of two models:

+ Cost model:

Carrying amount (land use rights) = Initial cost – Accumulated amortization – Accumulated impairment loss of land use rights (if any)

+ Revaluation model:

Carrying amount (land use rights) = Revaluation amount of land use rights – Subsequent accumulated amortization – Accumulated impairment loss of land use rights (if any)

However, using the revaluation model of land-use rights assets requires an active market for the asset.

Amortization of land use right assets:

+ If the land use right has a finite useful life: calculate amortization

+ If the land use right has an indefinite useful life: excluding depreciation, periodically test for impairment of the asset.

5.3. Completing state-leased land use rights

According to the provisions of Clause 8, Article 3 of the 2013 Land Law, the State leases land use rights (hereinafter referred to as the State leases land) means the State's decision to grant land use rights to the subjects who wish to use the land through the lease of land use rights.

Currently, the law stipulates two cases when the State leases land, including:

- Land rental with one-time payment;
- Land rental with annual payment.

This was allowed under previous lease accounting standards with operating leases. However, under the new accounting treatment of IFRS 16, finance leases and operating leases should be treated equally, at least, when it comes to capitalization of payments to the government for the use of land. The IASB's IFRS Interpretation Committee found that there are characteristics of a lease based on the definition of a lease, that is, "A lease is an agreement whereby the lessor transfers to the lessee an amount or a series of payments for the right to use an asset for an agreed period" is satisfied. The characteristics identified in this standard include:

Property use right: land use right is the right to use property.

The existence of lessor and lessee: government, identified as lessor and subject as lessee.

One-time or multi-time payment: the payment for the purchase of rights is made directly from the organization or individual that is assigned land and pays the annual land rent to the State for continued use.

Agreement period: there is an agreement between the State and the entity on the time, including the extension plans.

Given this analysis, it is therefore correct that the annual land payments include land rent and therefore should be capitalized under IFRS 16 by creating a new depreciable lease that is characterized

by annual land rent paid to a government representative the right to use the land for the lease term (for example, 49 years or 50 years) and at the same time creates a lease obligation that represents an obligation to pay annual land rent for the lease period in the statement of financial position.

The transaction costs to purchase the land will continue to be capitalized and amortized over the useful life as the first factor, but will be restored at the end of the land use term if the use right is renewed with the same entity or individual. In short, the combination of transaction costs and the present value of the annual land rent for the lease term will represent the amount capitalized for the land and amortized accordingly.

At the lease commencement, the lessee must recognize in the statement of financial position the land use rights and the obligation to pay the rent. The lessee is required to recognize the following items in the comprehensive income statement, except to the extent that other accounting standards require or permit this item to be included in the cost of the asset:

- (a) interest expense on the rental obligation
- (b) amortization on land use rights
- (c) any change in rental payment liability due to a revaluation of the expected rent or expected payments under the term option and the residual value in relation to current or previous period.
- (d) any impairment in the value of land use rights.

Initial recognition:

At lease commencement, the lessee must identify:

(a) The lease liability is initially measured at the present value of the lease payments payable over the lease term, discounted at the rate implicit in the lease if that can be readily determined. If that rate cannot be readily determined, the lessee shall use their incremental borrowing rate.

(b) the land use right equivalent to the rental liability, plus any initial direct costs incurred by the lessee.

Valuation subsequent to initial recognition:

After lease commencement, the lessee must identify:

- (a) Liability to pay rent at the amortized price according to the effective interest method
- (b) Land use right according to the amortized price

Amortization of lease land use rights:

The lessee calculates the amortization of the land use rights according to the amortized value, the lessee must choose a method of analysis and consider the amortization period according to IAS 38.

Impairment test for land use right:

The lessee must apply the impairment test for the land use right at each end of the reporting period to determine if it is impaired and recognize any impairment loss in accordance with IAS 36.

Disclosure on financial statements:

The lessee must disclose the following items in the statement of financial position:

- (a) lease liabilities, separately from other financial liabilities;

(b) land use rights as if they were assets

The lessee must disclose amortization on the land use rights and interest expense on lease liabilities separately from other amortization and interest expenses, either profit or loss.

The lessee must classify cash payments for leases as financing activities in the statement of cash flows and present them separately from other financing cash flows.

6. CONCLUSION

The problem of current IFRS harmonisation is that we try to create an appearance of ‘uniformity’ and the appearance of ‘comparability’. Many financial numbers look alike in the accounts, but in fact, they may be subject to substantially different treatment. If we are satisfied with the current practices that are achieving comparability by treating different transactions in different ways, we may be undermining our own objective by creating the illusion of similarity. As pointed out above, there are many solutions to come with international convergence and comparability to be achieved. We might accept that we can work towards better comparability but that absolute uniformity of reporting practice and disclosure may be beyond this globalisation effort.

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EXPANSION IN GOVERNMENT INVOLVEMENT AS FISCAL RESPONSE TO THE TIMES OF COVID-19 PANDEMIC

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Abstract: *The Coronavirus Disease 2019 (COVID-19) pandemic has led to a huge expansion in the size and scope of state involvement in society life. All over the world, governments have used emergency powers to lock down economies and curtail the movement of people to halt the spread of the virus. At the same time, policymakers have attempted to offset some of the resulting collapse in private sector economic activity by unleashing a massive wave of government spending. Government's fiscal policy during this phase ranges from providing blanket assistance to focusing on sectors most affected by the pandemic. The size and composition of the fiscal response has varied across countries, reflecting differences in automatic stabilisers, pre-pandemic fiscal space, the severity of infections and policy preferences. This article focuses on the Governments' involvement (including Vietnam's) via fiscal response during the acute phase, as well as policy measures largely intended for the recovery phase.*

Keywords: *Government's role, fiscal policy, response to Covid-19, economic recovery, pandemic.*

1. INTRODUCTION

The economic contraction that began in February 2020 differs from previous contractions, including the Great Depression of the 1930s and the Great Recession of 2007-2009. It was caused by concerns about the spread of the COVID-19 and government policies aimed at limiting person-to-person contact by the stay-at-home and shutdown orders. This has reduced cash flow to businesses and increased the number of unemployed workers, and a decreased population spending sharply. Some measures undertaken to address this economic contraction were consistent with similar stimulus measures used to increase demand in the Great Recession. Others were designed to sustain businesses during the shutdown and make it easier for individuals to comply with stay-at-home orders. Some benefits, such as expanded and augmented unemployment insurance benefits, fulfill both purposes of sustaining the unemployed and preventing a further decline in aggregate demand due to lost wages. The government can also use expansionary monetary policy to stimulate the economy such as to lower interest rates and provide liquidity. Although monetary and fiscal policy are related (in that monetary policy can enhance or offset fiscal stimulus), this article focuses on fiscal policy.

2. A BIGGER STATE IN TERMS OF DIRECT AND INDIRECT FISCAL INVOLVEMENT

The response to the pandemic has seen the role of the state expand in several different ways. One is that governments in most countries have taken greater control over the everyday lives of their citizens. The use of emergency powers to limit the movement and activities of individuals has, until now, been restricted to times of war. The other way is a series of policies that have focused

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on supporting the economy – in particular, on the role of fiscal policy.

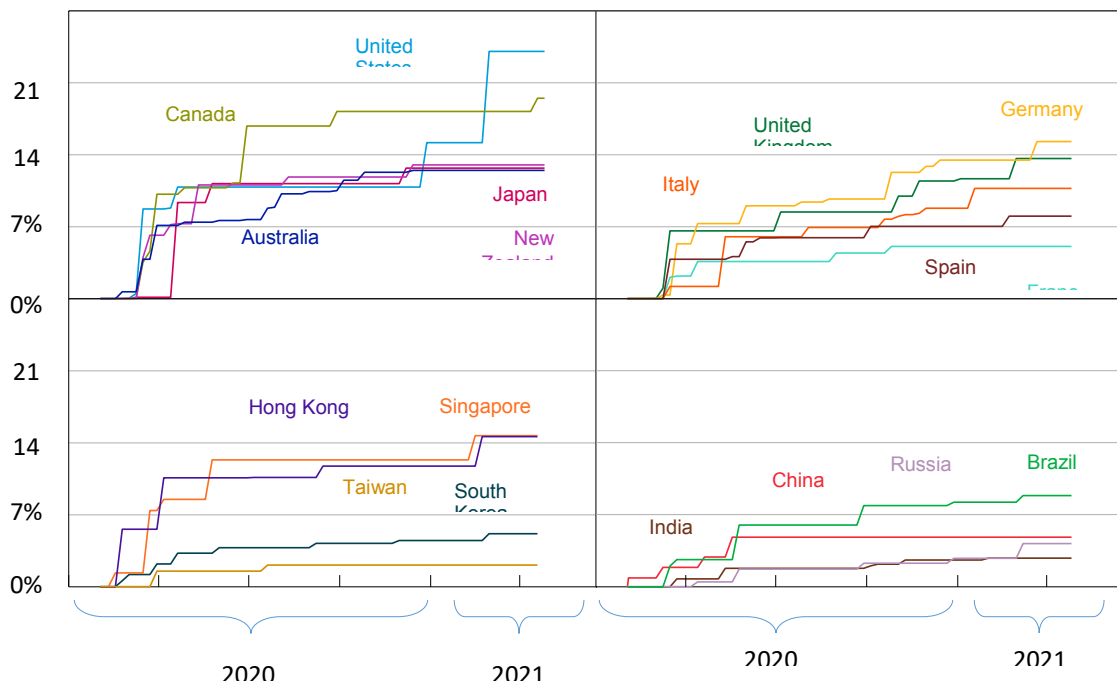
The COVID-19 pandemic sharply disrupted economic activity and, in most countries, triggered the largest economic contraction since at least the Second World War. As the severity of the pandemic became apparent early in 2020, governmental authorities across the world began implementing a multifaceted policy response. This included the largest fiscal policy response in decades, which substantially limited the decline in economic activity. The subsequent economic recovery has also been seen in large part due to unprecedented policy support. According to the IMF, the pandemic has produced a combined fiscal response by the world's governments equivalent to 12 per cent of global GDP. In the meanwhile, the fiscal support provided in 2009 during the global financial crisis was equivalent to only 2 per cent of global GDP.

The Government's involvement can be characterised as having two phases: acute phase and recovery phase. In the acute phase, which is still ongoing in many economies, the response has focused on supporting private incomes, preserving employment relationships and shoring up health systems. This has mainly been achieved through large direct transfers to households, enhanced unemployment benefits, wage subsidies and increased healthcare funding. In the recovery phase, when infections have been brought under control, government's support will direct toward boosting investment. This includes public infrastructure, and incentives to support private investment and consumption. These support measures will be spread over a longer period than the acute phase.

a) Fiscal involvement in the acute phase

In the acute phase of pandemic outbreak, most advanced economies have taken direct fiscal measures, that are expected to persist into early 2022, have ranged from 5 to 24 per cent of 2019 GDP. Authorities in emerging market economies have provided smaller, yet still significant, direct fiscal support which has been equivalent to between 1 and 9 per cent of GDP (IMF 2021) (Graph 1). For many economies, this has undoubtedly contributed to the largest single-year increase in the government debt-to-GDP ratio during peacetime. Fiscal support in the acute phase of the downturn was initially delivered rapidly and in large part was a response to the effects of public health measures (such as mobility restrictions) on economic activity. Then, fiscal measures were expanded and enhanced rapidly as the severity of the pandemic, and the extent of the economic damage became more apparent.

In advanced economies, governments have demonstrated flexibility in their fiscal response. The majority of fiscal measures had been designed to be short lived, often just in a duration of few months, but repeated in case of infection outbreaks and associated public health controls. Up to now, many programs are still providing significant support to the economy. In emerging economies, fiscal response was massively released in the first half of last year, but despite significant subsequent resurgences of infections, governments of these countries were constrained in their ability to continue extending large scale fiscal support.

Graph 1: Fiscal Support in the Acute Phase*(Per cent of 2019 GDP)*

Sources: International Monetary Fund, <https://www.imf.org/en/Publications/WEO>

Besides, the size of direct fiscal support has varied across economies because of differences in automatic stabilisers, pre-pandemic fiscal space and decisions by some countries to implement indirect fiscal measures instead. Automatic stabilisers are government policies that automatically adjust government spending and revenue to support economic activity through different stages of the business cycle. For example, during economic downturns, government spendings naturally increase as more people receive unemployment benefits (which support household incomes and consumption), while at the same time government revenues derived from taxes on household and business incomes and consumption tend to fall sharply, especially where tax rates are progressive, which results in a smaller share of income going into taxes at lower levels of income.

In developed economies with strong automatic stabilisers, including more generous unemployment benefits and pre-funded wage subsidy schemes designed to maintain employments, smaller additional fiscal measures are required in order to provide the same support to private incomes as other economies with weaker automatic stabilisers. For instance, European economies tend to have strong automatic stabilisers that provide relatively high levels of support to a larger share of their populations, which is one reason why their direct fiscal support has been smaller. In contrast, the United States has weaker automatic stabilisers, and this was one reason why US authorities provided the largest additional direct fiscal support in the times of the pandemic (shown in Graph 2).

Advanced economies that initially provided large direct fiscal responses also tended to have a lower pre-pandemic government debt and smaller fiscal deficits. As the pandemic crisis broke out, these governments became increasingly willing to extend and increase their fiscal support and the low cost of funding this support through government bond issuance. In contrast,

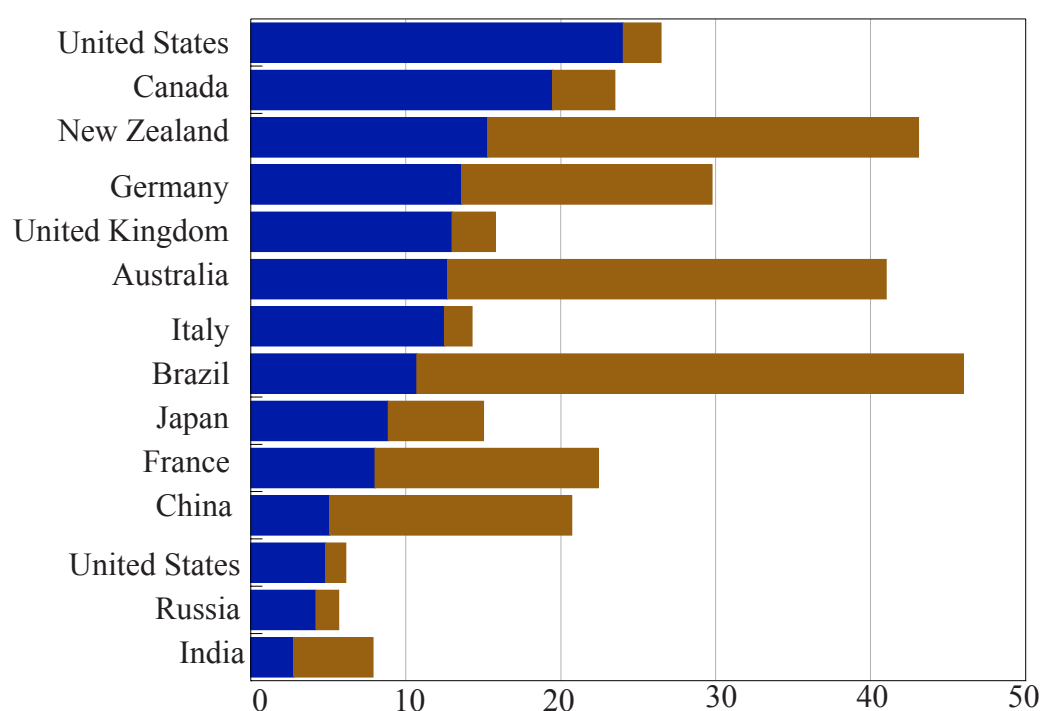
in emerging market economies, the direct fiscal support measures were, on average, smaller in scale compared to advanced economies. This reflected greater financing constraints experienced by some governments, including the high cost of new bond issuance. These financing constraints have made it more difficult for many emerging market economies to support their health systems and economically vulnerable segments of their populations.

Some governments have attempted to support their economy with a larger emphasis on indirect fiscal measures such as loans and loan guarantees (Graph 2). This has typically reflected policy preferences of the authorities and a more limited ability to increase direct fiscal spending. Indirect fiscal measures were used extensively in the Euro zone because of concerns early in the pandemic about the ability of some member countries to raise funds at favourable interest rates and in a manner compliant with their EU treaty obligations. Indirect fiscal measures comprised a large proportion of the fiscal response in some emerging market economies, including India and Brazil, due to their more limited fiscal space. These indirect fiscal measures were still much smaller than in advanced economies.

Governments prioritised support for private sector, employment and the health care. Without decisive policy interventions, the pandemic would have sharply reduced household and business incomes, caused greater labour market disruption and prolonged economic scarring through business and personal bankruptcies and higher long-term unemployment. Indeed, in the early days of the pandemic, there were widespread concerns that it may lead to another Great Depression. Fiscal policy was swiftly recognised as the best tool to address these risks because it could be targeted at directly supporting incomes on a large scale.

Graph 2: Acute Phase Direct and Indirect Fiscal Support

(Per cent of 2019 GDP)



Sources: International Monetary Fund, <https://www.imf.org/en/Publications/WEO>

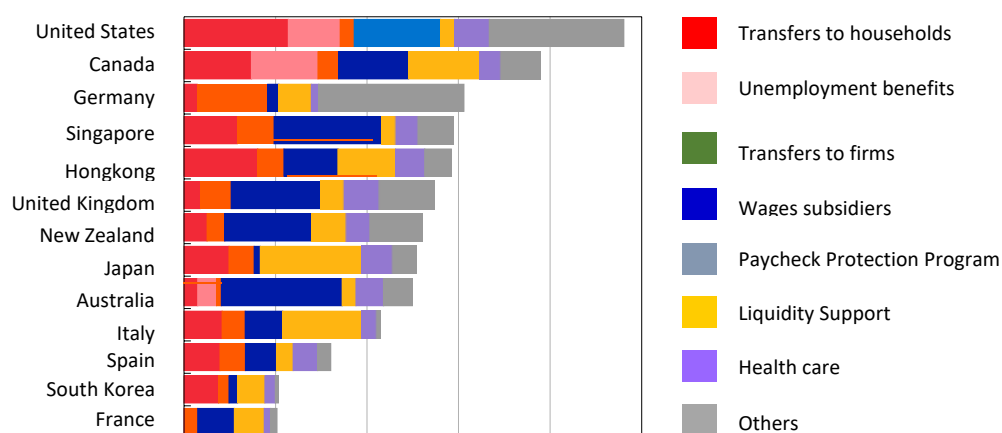
The direct fiscal response in the acute phase has mainly consisted of direct transfers to households and businesses, wage subsidies and tax deferrals (Graph 3). Private sector cash flows were also supported by measures such as low cost government-guaranteed loans and the temporary pausing of some debt and other contractual obligations, such as rent and mortgage payments. Most of the acute phase direct fiscal support has been disbursed in 2020 and early this year.

As part of this support, wage subsidy schemes were deployed in almost all economies to preserve employments and to provide replacement income to workers in affected businesses. The use of wage subsidies was motivated by a range of considerations: expectations that the pandemic disruptions would be short lived as well as the limited need for structural adjustment given the nature of the shock. The take-up of wage subsidies has been substantial. Across almost all economies, the use of the subsidies peaked at between 15 to 60 per cent of the labour force. The value of wage subsidy programs has been different among economies as some governments utilised existing schemes that were already funded (partly or fully) from past contributions.

Another key component of fiscal support during the acute phase has comprised of unemployment benefits, which in some economies have been increased, extended and made easier to access. In the United States, unemployment benefits were substantially increased as unemployment increased sharply; the income of many unemployment benefit recipients in this country was higher than their earnings in the jobs they had before the pandemic. Unemployment benefits also increased in Australia but to a lesser degree. Meanwhile, Canada implemented a new and temporary unemployment benefit scheme, to better deal with the impact of the pandemic on labour incomes. A few advanced economies also provided substantial direct transfers to households in the form of cash payments. These payments were largest in the United States, totalling 6 per cent of GDP or 11 per cent of median household income. Hong Kong, Japan and Singapore also made large direct transfers to households.

Graph 3: Type of Acute Phase Direct Fiscal Support

(Per cent of 2019 GDP)



Sources: International Monetary Fund, <https://www.imf.org/en/Publications/WEO>

As a result of these fiscal policy measures, private incomes in advanced economies held up well during the pandemic despite the sharp drop in economic activity and hours worked. This outcome is in stark contrast to the experience during previous recessions when private incomes typically fell. In some economies, including Australia, Canada and the United States, household

incomes increased sharply. In most European economies and Japan, wage subsidies only partially replaced wages, so household incomes declined. In addition to boosting household incomes, wage subsidies supported business viability by helping firms meet their major expense, labour costs; this helped reduce bankruptcies.

Household income support schemes helped to cushion the fall in household consumption. By providing households with more income certainty, they supported households in maintaining a higher level of consumption than otherwise; restrictions on services consumption; boosting household's spending on goods. These schemes also contributed to a significant increase in household savings during 2020 and early 2021.

In some of the large emerging market economies, including Brazil, India and Russia, the direct fiscal response prioritised income support for the most vulnerable parts of their populations through direct transfers and subsidies for essential consumption. By contrast, China's support measures were mostly targeted to small businesses and stimulating aggregate demand directly, including through infrastructure investment. The Chinese Government also encouraged state-owned enterprises and banks to support employment and financing conditions.

All economies provided additional funding for their healthcare systems to increase hospital resources, COVID-19 testing and contact tracing. Governments have also expanded funding since late 2020 in support of the procurement and vaccine programs. Although the additional healthcare spending has been a small share of the direct fiscal support, it has led to a 20 per cent increase in healthcare spending in advanced economies.

b) Fiscal response in the recovery phase

In almost all economies, fiscal policy, that is produced in the acute time, is expected to remain accommodative over the next few years for the recovery phase. In most advanced economies, fiscal policy is expected to continue to focus on supporting incomes and preserving employments. But as Covid-19 pandemic are brought under control and vaccines are rolled out, the emphasis of fiscal support will shift. This will change into a greater focus on public investment, particularly in green and digital initiatives, incentives for more consumption and private investment, and retraining programs for workers in those sectors that are expected to have been severely impacted during the pandemic.

The fiscal measures that have already been announced for the recovery phase are substantial but in most economies are smaller than for the acute phase and will be spread over a longer period. With a sound spare capacity in most advanced economies, these measures can reduce the long-term economic negative effects of the pandemic without generating high inflation. The size and design of the recovery phase fiscal support varies across countries (Graph 4). The United States is expected to provide very large recovery phase fiscal support, equivalent to 9 per cent of GDP, which will be focused on infrastructure investment and spread over a decade. European Union members has deployed a combination of grants and loans that are expected to be spent between 2021 and 2026, equal to 5 per cent of EU's GDP.

In emerging markets, where fiscal space is often more limited, some governments with pre-existing macroeconomic or financial imbalances have faced more pressure to reduce fiscal deficits. But this experience has varied considerably across countries. Some large emerging market economies in Asia have had few issues in announcing fiscal measures to support activity during their

recovery phase. For instance, India announced fiscal stimulus measures after the initial lockdown ended late 2020, including consumption incentives and increased infrastructure spending, while China started transitioning to its recovery phase measures at the same time. But most emerging economies are yet to announce substantial support for the recovery phase, partly because their priority is still on bolstering health systems to deal with elevated infection cases and to support the rollout of vaccination programs.

3. VIETNAMESE GOVERNMENT'S RESPONSES TO COVID-19 WITH A VIEW TO PANDEMIC RESISTANCE AND ECONOMIC RECOVERY

In response to the economic crisis caused by Covid-19 pandemic, a series of fiscal policies have been introduced by the Government, which has been assessed as one of the most effective measures in this situation. In the year of 2020, Vietnam was not only able to limit the number of casualties (only 35 in 2020) but also to record a positive GDP growth rate of 2.9 percent in 2020. More concretely, the authorities adopted the sequencing strategy advocated in the policy notes. In early 2020, a fiscal package was adopted to help the most affected individuals and businesses through a combination of tax breaks and cash transfers. Subsequently, the Government removed various administrative bottlenecks in the execution of the public investment program, which led to a 40 percent increase in its disbursement rate compared to the previous year. Significant reforms were adopted to enable the digitalization process in both the government and businesses, including e-payment systems.

a) Enterprise support policies

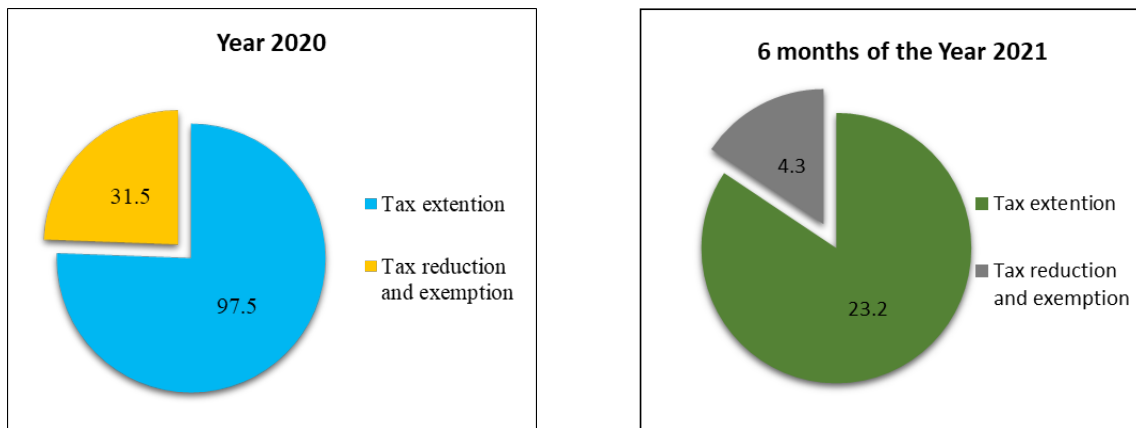
Extension of deadlines for tax payment and land rental fee to the business activities significantly influenced by COVID-19 was issued by the government on 8th April 2020 in Decree No. 41/2020/ND-CP. According to this policy, roughly 740,000 active enterprises (accounting for 98% of total enterprises) and most of the suspending business households were applicable for extension of tax payment and land rental charges with an expected investment of the support package of 180 billion VND.

The policy that reduces 15% land rental fees in 2020 was issued by the Government according to Decision 22/2020/QD-TTg on August 10, 2020. Accordingly, applied subjects are over-15-day suspension-due-to-COVID-19 enterprises, institutions, households and individuals, which rented lands directly from the Government according to Decision or Contract made by state agencies under yearly payment form. Beneficiaries are individuals and institutions having direct-renting-land contracts with the government or state agencies, excluding individuals or institutions with non-state-owned contracts.

The policy that cuts corporate income tax in 2020 by 30% for enterprises, co-operative society, other institutions with total revenue under 200 billion VND was issued by Resolution 116/2020/QH14. The beneficiaries of this tax reduction and exemption policy were profitable enterprises, referring to enterprises that were not significantly influenced by the COVID-19.

Graph 4: Total amount of tax reduction, exemption and extension under fiscal responses

Unit: Thousand billions



Source: Vietnam's General Statistics Office, 2021

Continually, Vietnamese government issued *Decree 52/2020/ND-CP* on the extension of deadlines for the payments of taxes and land rental fees for the 2021 tax year. Decree 52 took effect on April 19 and is similar to Decree 41 last year, which catered to businesses affected by the pandemic. Eligible taxpayers are granted specific extensions on tax payments as follows: (1) Value Added Tax (VAT): Eligible taxpayers will be granted a five-month deferral. So, for taxpayers declaring VAT on a monthly basis, VAT declaration in April would be delayed to September; (2) Corporate Income Tax (CIT): CIT payments for Q1 and Q2 will be extended by three months. So, for example, payment of Q1 CIT would be due by July 30, 2021. Of note, taxpayers should still consider the 75 percent rule when making provisional CIT remittances; (3) VAT and PIT for individuals and business households. The deadline for VAT and PIT payment for individuals and business households such as SMEs will be extended to December 31, 2021; (4) Land lease: The deadline for payment of land lease for the first period of 2021 will be deferred for five months from May 31, 2021.

b) Increasing public investment capital policy

Accelerating the public investment disbursement is an important solution of the government to promote economic growth in 2020. A total approved public investment from the government budget in 2020 was nearly 700 thousand billion VND, as 2.2 times more than the one in 2019 (312 thousand billion VND), which includes 470.6 thousand billion VND in government budget estimation in 2020 and 225,2 thousand billion transferring from 2019.

c) Social security packages

According to Resolution No. 42/NQ-CP on 9th April 2020 and Decision No. 15/2020/QĐ-TTg, the first social security package provided the guides for assistance and implementation of policies to support people facing difficulties caused by the COVID-19 pandemic, respectively. Accordingly, about 62,000 billion VND would be disbursed for roughly 20 million workers who were postponed, lost their jobs due to the impact of the pandemic.

The 2nd social security package has been introduced under Resolution No.68/NQ-CP on the 1st July, 2021 which provide wide-range support on employees and employers severely affected by the pandemic. Accordingly, this resolution implements policies to decrease and defer contribution payments into a number of Social Insurance funds, provides funding support for businesses, and facilitates allowances for employees, individuals and business households impacted by COVID-19.

The total amount of the package is up to approximately 26 thousand billions dong. This package include such crucial contents as: (1) Reduction in social insurance contributions for the occupational accidents and diseases fund; (2) Deferral of contributions to the retirement and death fund; (3) Training funding support; (4) Allowances for employees temporarily ceasing working without salary; (5) Allowances for employees suspended from work to implement COVID-19 quarantine; (6) Allowances for employees subject to loss of employment; (7) Additional allowances for both pregnant employees and children; (8) Food allowances for F0 and F1 cases with amount of 80,000 VND per person per day for those who need to be treated for COVID-19 infection (F0), and for those who have to undergo medical isolation (F1) under a decision of a competent authority; (9) Support for tour guides and artists, lump-sum support of 3,710,000 VND per person; (10) Support for business households with business registration and tax registration that cease operating for 15 consecutive days or more, a one-time support of 3,000,000 VND per business household; (11) Loan support to pay salaries for employees ceasing working and salaries during business recovery; (12) Support for other individuals without labour contracts, an allowance of no less than 1,500,000 VND per person per time or 50,000 VND per person per day based on the actual number of cessation days.

4. DISCUSSION AND CONCLUSION

The COVID-19 pandemic caused the largest fall in economic activity since the Second World War. The expansion of the states' interference was a necessary response to the crisis, with significant fiscal policy in most economies. Country governments have prioritised direct fiscal support for private incomes and employment, which has limited economic scarring and given the recovery a solid basis. The pandemic has produced a combined fiscal response by the world's governments equivalent to 12 per cent of global GDP.

But, fiscal rescue policy with the bigger government has increasingly led to the bigger national debt. The current recession's economic effects, including discretionary spending and the automatic revenue declines and spending increases that accompany a recession, are projected to increase the debt. The pandemic's economic effects bumped up the debt, and it is projected to continue on its upward vicious cycle. In addition to exacerbating the debt, the economic contraction will mean a longer period, perhaps of years, before the debt can be addressed through increases in revenues and/or reductions in spending, requiring extensive changes to stabilize the debt. Eventually this debt may be addressed by either a reduction in mandatory spending, an increase in tax revenues, or both.

Thus, in the future, policymakers may consider more traditional fiscal policies designed to boost aggregate demand. Together with the arrival of vaccines promising a potential easing of the pandemic, policymakers must consider the evolution of their fiscal responses. Instead of temporary fiscal measures, governments should concentrate their efforts on providing a platform to enable the transition to a modernized and resilient post-COVID-19 economy.

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TAX AVOIDANCE, ITS DETERMINANTS AND APPLICATION IN AUDIT SAMPLE SELECTION OF STATE AUDIT OFFICE OF VIETNAM

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Abstract: Tax avoidance is considered as one of the most arguable topics these days. This paper analyses the relationship between level of tax avoidance and level of using external tax consultation and tax havens in non-financial multinational companies which are public listed in FTSE 350. The result suggested that tax avoidance is a popular method in the companies that are chosen as sample and there is a positive correlation between audit fee a company paid and the level they use tax avoidance tools. In conclusion, with better insight with tax avoidance and its determinants, State Audit Office of Vietnam (SAV) could use better methods for preliminary sample selecting when taxation audit multinational companies.

Keywords: tax avoidance, tax consultation, tax havens, State Audit Office of Vietnam, multinational companies.

1. INTRODUCTION

A report released by Her Majesty's Revenue and Customs (HM Revenue & Customs, 2018) measured €1.7 billion of tax avoidance and €5.3 billion of tax evasion, accounting for 21.2% in total of estimated tax gap from 2016-2017. The problem of tax avoidance is being applied by vast majority of large multinational enterprises has undoubtedly raised an endless controversy worldwide because of its relationship to tax evasion, which is absolutely illegal. Therefore, over 60 nations all over the world are strongly backing plans to critically pay attention to the matter of tax avoidance in big enterprises. Due to this, there has been a huge awareness to research into tax avoidance. There are a variety of research projects conducted on the subject of tax avoidance, most of them identify that there is relationship between the level of tax avoidance and numerous other determinants, for instance, governance and incentives (C. Armstrong et al., 2015) or corporate social duty (Sikka, 2003). In recent time, there have been a variety of precedents uncovering that the usage of tax avoidance is favoured, particularly by multinational enterprises (Fuest et al., 2013) and (Graham et al., 2014).

Recently, the correlations between tax avoidance and using external tax consultation as well as tax havens have been closely inspected. Literally, there is study stated that multinational enterprises widely use tax avoidance plan of external tax consultation (Sikka and Hampton, 2005) and tax havens (Gumpert et al., 2016) to effectively reduce their tax liabilities.

This paper aims to review on concept of tax avoidance, external tax consultation, tax havens and their correlations, and finally can contribute to the performance of tax audit in State Audit Office of Vietnam.

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2. LITERATURE REVIEW

What is tax avoidance and how it is estimated?

According to (Michelle Hanlon and Heitzman, 2010) regarding a firm's activities, tax avoidance is considered as an essential one. (Richardson et al., 2013a) stated that companies can dramatically lessen their taxes with the help of tax avoidance. The ultimate goals of enterprises are profit, in other words, they always focus on maximization of their financial returns (Henderson, 2016). Therefore, big firms tend to use tax aggressiveness, which are all activities created to attain tax gains according to (S. McGuire et al., 2012), to utilize their tax expenses. In other words, firms try to maximize their profit, and this trend is ever-increasing all over the world (Hopkins, 2013). This trend has raised awareness for many studies to get insights on tax avoidance, for example what are the factors that affect the level of tax avoidance (C. S. Armstrong et al., 2015) (Dyrenge et al., 2010). Although there are both advantages and disadvantages in using tax avoidance, they are quite popular these days among big firms (Financial Times, 2016). There are a variety of possible methods that could be applied to engage in tax avoidance, however the common strategy is to abuse the difference in tax rates of different tax jurisdictions and lower the tax overload. Many common methods were researched by scholars, these comprise of tax shelters (Ostas and Hilling, 2016), and profit shifting (Janský and Prats, 2015).

There is a variety of possible potential consequences of tax avoidance. The consequences may be direct, for example, a reduction for a differently non-deductible expense could be made to improve company's cash flow or investor wealth. They could also be indirect, for instance the reduction lessens the marginal benefit of the reduction in the tax liability due to the interest expenses and may alter the company's capital structure decisions (Graham et al., 2014). There are both direct and indirect consequences, that means normally consequences can be effortlessly recognised; indeed, sometimes they can't be seen unless pointed out.

There is a variety of research on the problem of how tax avoidance is measured? Tax avoidance could be measured through financial statement indexes. There are many models that has been created by scholars to estimate level of aggressiveness tax avoidance. According to (Richardson et al., 2013b), business tax planning could be measured by a dummy variable, which is described as "one that takes only the value 0 or 1 to indicate the absence or presence of some categorical effect that may be expected to shift the outcome" (Goertzen, 2017). This method is correct; however, they have some certain limitations for example it is hard to collect data on big enterprises to make the dummy variable.

The effective tax rate (GAAP ETR) is one of the most popular methods. This index is mostly calculated as to divide the worldwide total income tax expenses by worldwide total pre-tax accounting incomes (M Hanlon and Heitzman, 2010), for measurement of the level of tax avoidance. By using this index, (C. Armstrong et al., 2015) successfully calculated average ETR of the firm's size and industry peers in three consecutive years. This method will be applied in this study since ETR could be used to detect the change in tax aggressiveness by the profit shifting method, particularly firms that shift profit from high tax countries to low tax countries (Richardson et al., 2013b).

External tax-consultation and relationship with tax avoidance

Many professional service firms offering taxation consulting and tax aggressiveness services. Particularly when Grant Thornton exited FTSE 350 audit market, the Big Four (KPMG, Deloitte,

EY and PwC) dominated and performed over 95% of the audits for FTSE 350 firms in 2017 (Feller and Schanz, 2014). It is obviously undeniable that the lure of profits is too attractive, however there is very little research on this problem (Sikka and Hampton, 2005). Audit firms offer tax consultation service, and they earn a lot from non-audit services like that, for example KPMG earns €79m in the financial year ended September 2017, which made 40% in compared with their audit fee, still be the least in big 4 in non-audit fee though (Jolly, 2018). Particularly, (S. T. McGuire et al., 2012) provides the findings that the external tax consultation are one of the determinants of tax avoidance.

Using tax havens in tax avoidance

Tax avoidance can be inferred by the utilization of tax havens. With the escalation of globalization, multinational firms can augment their benefit through exploiting different tax rates in other countries (Dyregang et al., 2019). There are a few different ways of using tax aggressiveness by exploiting tax jurisdictions. For example, using multiple holding company structures in places like the Cayman Islands, take advantage of tax haven locations for additional flexibility are considered as powerful devices connected to engaging in tax avoidance.

A variety of multinational firms exploited tax havens. Over 250 firms on the FTSE 350 Index hide their taxable earnings offshore for tax avoidance (Hopkins, 2013). In particular, these companies mostly abuse transfer pricing as the method to avoid taxable profits, or even other techniques namely Double Irish with a Dutch sandwich. (Cripe et al., 2016) shows that “transfer pricing” is referred to as “an accounting and taxation practice that allows for pricing transactions internally within businesses and between subsidiaries that operate under common control or ownership, including cross-border transactions”. The previous research examined the number of taxes paid by multinational enterprises and SME firms which are domiciled in the EU and demonstrated that the effective taxation paid by the latter is much higher. The analyses apparently illustrate that the tax avoidance plan is widespread by using of mechanisms utilising offshore structures.

3. METHODOLOGY AND PROPOSED MODEL

Research methodology

The study examines how using tax avoidance plans have relationship with external tax consultation and using tax havens by modelling an Ordinary least squares (OLS) regression model. This research model will be based on a study from (C. S. Armstrong et al., 2015) and (S. T. McGuire et al., 2012), which set up a regression model to measure the level of tax avoidance.

Statistical tool SPSS will be used to analyse 2 hypotheses:

H1: There is a correlation between using external tax consultation and level of effective tax rates in non-financial multinational enterprises.

H2: There is a correlation between using tax havens and level of effective tax rates in non-financial multinational enterprises.

with the OLS regression model:

$$ETR = \alpha_0 + \alpha_1 * ETC + \alpha_2 * THs + \sum_i \delta_i \text{CONTROL VARIABLE}_i + \epsilon$$

Variables	Data type	Definition
ETR (GAAP Effective tax rates)	Dependent variable for the measurement of level of tax avoidance	Worldwide total income tax expense / Worldwide total pretax accounting income.
ETC (External tax consultation)	Independent variable for the measurement of level of using external tax consultation	Proportion tax fees = Non-audit fees / Total fees paid to auditors.
THs (Tax havens)	Independent variable for the measurement of level of using tax havens	Proportion of number of tax havens the company located subsidiaries.
MCAP (Market capitalisation)	Control variable	Number of outstanding shares * market price per share.

- Dependent Variable: The effective tax rate, ETR, is employed as the dependent variable in this case. Generally, ETR is popularly accepted by many prior researches as tax avoidance measurement. For example, (S. T. McGuire et al., 2012) state that ETR is employed as measurement to tax avoidance level to examine the impact of external audit firms to its level of tax avoidance. Correspondingly, (C. S. Armstrong et al., 2015) employed ETR to analyse the level of tax avoidance. Since of this, this subordinate variable is reliable with the point of this inquire about.

- Independent variables: There are 02 independent variables comprising “External tax consultation” and the level of using “Tax havens”. Hypotheses H1 and H2 will be tested through the variable analysis, accordingly.

- Control variable: Effects of valuation of companies is definitely significant according to (C. S. Armstrong et al., 2015). Market capitalisation will be employed instead of ROA which is used in study of (Otto et al., 2015), because ROA shows the level of profitable of firm, however it is appropriately replaced by market capitalisation in the study of (C. S. Armstrong et al., 2015), which show not only the total value of all a company’s shares of stock but also the market’s perception of its future prospects.

3.2 Data collection

The data used for this study will be collected will be hand-collected and calculated in the consolidated financial statements of non-financial multinational companies

Data of all firms listed in the Financial Times Stock Exchange 350 Index (FTSE 350) between 2017 and 2019 have been collected. The main reason that this study focuses on analysing non-financial companies is that according to (Lanis and Richardson, 2018), in research of tax avoidance, financial firms and utility firms were not included as the aggressiveness measures tend to be impacted by the law and regulations of the government.

As suggested by (C. S. Armstrong et al., 2015), companies with extreme ETR (more than 1 or less than -1) index should be excluded since they could lead to possibility of too much focus on a few extreme factors. I also removed firms with negative pre-tax profits, and firms missing tax, financial, and/or registration data. The final population determined in this study consists of 174 firms.

4. RESEARCH RESULTS

IBM SPSS is used to analyse the relationship between variables in the regression model as defined in previous chapters and test the hypotheses (H1 and H2) as well.

With model of Multiple Regression (the model aim to examine the relationship between one continuous dependent variable and two independent variables).

Independence of observations:

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ETRs	-0.147653	0.045445	-3.249086	0.0017
ETC	0.099722	0.062130	1.605042	0.1122
THs	0.001637	0.003061	0.534672	0.5943
R-squared	0.407929	Hannan-Quinn criterion	-1.092481	
Adjusted R-squared	0.380390	Schwarz criterion	-1.010180	
S.D. dependent var	0.168577	Akaike info criterion	-1.148139	
S.E. of regression	0.132696	Durbin-Watson stat	2.197457	
Sum squared resid	1.514300	Mean dependent var	0.133804	
Log likelihood	57.24033			
F-statistic	14.81319	Prob(F-statistic)	0.000000	

The Durbin Watson statistic is estimated at 2.197457, therefore the independence of observations could be accepted.

Test for multi-collinearity between variables: The results satisfied the rule of thumb have all correlations between .7 and .3 and -.7 and -.3. Initially, this assumption is accepted by checking scatterplots (**Figure 2**). In the final Coefficient table, the number of Tolerance and VIF could be checked. The figures of Tolerance are all above .1, therefore no multi-collinearity found here.

In accordance to Figure 1 and 2, there are also no major deviations from normality (Davis, 1993)

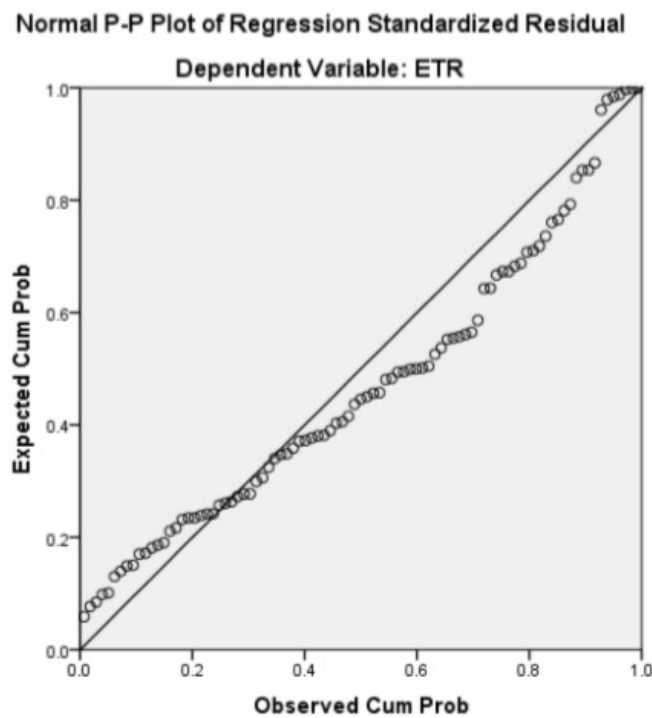


Figure 1: Scatter plot graph

Descriptive statistics

	N	Range	Minimum	Maximum	Mean	Std. Deviation
ETR	174	0.6936	-0.0595	0.7241	0.1449	0.1686
ETC	174	0.8497	0.0000	0.8497	0.2989	0.2270
THs	174	34.9305	2.7083	31.3223	17.0153	4.6079
MCAP	174	5.8880	5.4968	11.3848	7.5293	1.1343

Table 5: Descriptive statistics with population N = 174

At the first glance, regarding dependent variables, we can see the population of 174 firms have the number of mean of effective tax rates (ETR) at 14.49%, which is less than the statutory tax rates. In other words, the companies paid less tax to the government than they required to do. Furthermore, it is a steady result compared with prior study for example (S. T. McGuire et al., 2012).

Regarding independent variables, companies that being examined have a mean tax havens using at roughly 17.0153%. To be more specific, approximately 53.33% of companies using tax havens have a negative impact on the tax they need to pay. Considerably, the number also can inform that the tax havens using could justify 53.33% in companies' tax. In addition, the mean of External tax consultation is at approximately 29.89%. That means approximately 30% aggregate fees paid to external audit firms is likely to pay for non-audit services for example tax consultation service.

Table 6 Spearman correlation matrix Population=174

	ETR	ETC	THs	MCAP
Pearson Correlation				
GAAP ETR	1.000	0.126	0.113	0.500
ETC	0.126	1.000	0.086	0.132
THs	0.113	0.086	1.000	0.042
MCAP	0.500	-0.132	0.042	1.000
Sig. (1- tailed)				
ETR		0.017	0.142	0.000
ETC	0.017		0.208	0.106
THs	0.142	0.208		0.347
MCAP	0.000	0.106	0.347	

The usage of Pearson method is coherent with prior study by (C. S. Armstrong et al., 2015). With the one-tail test, in the case of the number of significance is lower than 5%, the null hypothesis could be rejected since the correlation between two variables did exist. The outcome of the analysis is there are significant correlations between ETRs and many other control variables. Furthermore, ETRs has a positive correlation with ETC and THs, and it is substantial with ETC because of the significant value is less than 5%.

What is more essential is the examination on correlations to evaluate whether the model is multi-collinearity or not. According to (Davis, 1993), if the correlation of independent variables are over 0.7, one of them should be excluded.

If a company has a lower ETR than the average statutory tax rate, it is possibly that it is performing tax avoidance. Approximately 68 percent of companies in the population (119 companies) have the number of ETR no more than the indicated statutory tax rates, in other words, tax avoidance tool is being used by no less than 50 percent of companies in order to lower their tax liabilities. After barring the enterprises with negative PBT (in other words they have no tax liabilities), the number is 63.51% (107 companies). After calculation, these companies have pre-tax earnings sum up at €18.80 billion and consequently their tax liability is €3.76 billion where the statutory tax rate at 20%. However, they only have totally tax payable of €1.82 billion. That means they only pay approximately 48.4% of the tax that they are estimated to pay. In other words, the companies have saved 48.4% on tax payable.

Model result analysis

Table 7: Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change statistics				
					R Square change	F change	df1	df2	Sig. F change
1	.648 ^a	.408	0.380	0.1337	.472	12.114	3	171	0.001

a. Predictors: (Constant), ETC, THs

b. Dependent Variable: ETRs

The R_Square shows the level of the variance of dependent variables. Specifically, the value of R Square is at 40.89%. In other words, the regression model justifies 40.89% of the variance in the value of ETRs. The Adjusted R Square stays at 38.04%, quite coherent with the result of prior study, for example in research of (Richardson et al., 2013a) Adjusted R Square = 36.44%. Furthermore, ANOVA is used to test the statistical significance of the result (Table 8). It also hints that the model achieves statistical significance as the value of Significance is no more than 5%. To conclude, the OLS regression model in this study is statistically significant and acceptable.

Table 8: ANOVA^a

Model		Sum of squares	df	Mean Square	F	Sig.
1	Regression	1.043	3	0.261	14.813	0.001 ^b
	Residual	1.514	171	0.017		
	Total	2.557	174			

a. Dependent Variable: ETRs

b. Predictors: (Constant), ETC, THs

Table 9: Coefficients

Variables		Coefficients	Standard Error	Sig.
Intercept	(α_0)	-0.149	0.048	0.002
ETC	(α_1)	-0.101	0.059	0.014
THs	(α_2)	-0.002	0.003	0.599
MCAP	(β_1)	-0.038	0.005	0.037

Examination on hypothesis: “H1: There is a correlation between using external tax consultation and level of effective tax rates in non-financial multinational enterprises”. Firstly, regarding coefficient, the analysis outcome hints that ETC and ETR has a negative correlation. In other words, if a company pay money on external audit firms, the more it pays, the more chance of they use tax avoidance. Thus, hypothesis H1 has been accepted. The Significant value ($=0.014$) is less than 0.05. Therefore, α_1 is significant with 95% of confidence. When compared to prior research (C. S. Armstrong et al., 2015) and (Richardson et al., 2013a) this outcome is consistent.

Examination on hypothesis: “H2: There is a correlation between using tax havens and level of effective tax rates in non-financial multinational enterprises.”.

It is shown that the level of using tax havens has a positive correlation with ETRs. However, leverage of this aspect on ETR is quite insignificant. In compared with ETC, THs has 50 times less effect the on ETRs. Consequently, it can be said that the positive coefficient (α_2) prove that H2 cannot be accepted. The Significant value (0.599) is greater than 5 percent and lower than 0.1, therefore a conclusion could be drawn: α_2 is insignificant with 95% of confidence and only significant with 90% of confidence. To summarize, the hypothesis H2 cannot be accepted with 95% of confidence.

The MCAP (Market capitalisation) has the negative correlation with ETRs, following by the higher valuation of the company, the higher chance of abusing plan of tax avoidance. Specifically, the control variable here is statistically significant, because of its value of Sig. is less than 5%. This result is steady with prior study (C. S. Armstrong et al., 2015) and (Otto et al., 2015).

5. DISCUSSION AND CONCLUSION

Potential application in audit process of State Audit Office of Vietnam

When designing an audit at State Audit Office of Vietnam, the auditor shall consider the purpose of the audit procedure and the characteristics of the population from which the sample will be drawn. To provide a reasonable basis for the auditor to draw conclusions about the population from which the sample is selected, an appropriate insight of audited entities could help. Particularly, to evaluate the truthfulness, accuracy and completeness of tax reports of a multinational company, the insight for tax related transactions are required. These days, companies tend to use tax avoidance to maximise their profitability, therefore the research on nature of tax avoidance and its determinants is practical.

If the auditor can preliminarily assess the risk of using tax avoidance in multinational companies that will be audited, the audit sample design, size and selection of items for testing can be change accordingly as a clear understanding of what constitutes a deviation or misstatement is required. In addition, state auditors could change the responses to audit risks, in other words the approach the auditor will adopt to confirm the true and fair view of the reports, as well as the audit procedures. For example, if auditor's test reveals that 30% of audit population has high level of using external tax consultation (with the exposure of high to extreme non-audit fees), he/she can evaluate the risk of these companies at high, and choose an appropriate number of sample (accounts, offshore, sites, equity, assets, etc.) to be audited to ensure the true and fair view of audit report as the lower the risk the auditor is willing to accept, the greater the sample size will need to be.

In tax audits performed by SAV, particularly with subject matters of prevention of tax evasion and transfer pricing at multinational corporations, SAV regularly encounter obstacles plenty struggles in determining the audit objects as well as having to change the audit procedures correspondingly,

for instance making changes to the audit plan, determining the material risks, the focus of the audit as well as deciding on the sample size, the threshold of non-material risk is fundamental. It is even more significant with type of audits that focus on efficiency and effectiveness issues namely pre-audits or performance audits. Currently, SAV is developing guidelines and frameworks to appropriately perform audits, including tax audit and transfer pricing, tax evasion, tax exemption and reduction in particular. An in-depth study of tax avoidance and its determinants can be used as a reference to perform many steps in the audit process, contributing to perfecting the state management system and increasing the operational efficiency of state auditor in this field of audit.

Conclusion

Based on the results, hypotheses H1 is accepted and H2 is rejected. Therefore, in terms of research questions, the results prove that a company's level of using tax avoidance has a positive and statistically significant relationship with its level of using external tax consultation. In addition, it suggests that the use of tax havens may increase the level of using tax avoidance, but insignificantly.

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THE INTERNAL FACTORS AFFECTING ON APPLICABILITY SUCCESS ABC ACCOUNTING METHOD

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Abstract: *The study was conducted to assess the impact of internal factors on the level of application of activity-based costing (ABC). Data is collected from managers of 101 businesses that are clients of independent auditing firms. Research results show that: Business strategy; Financial resources; Qualifications of human resources; Characteristics of production and business; Organizational management characteristics and corporate culture significantly affect the level of ABC application. On the basis of the research results, the author proposes some recommendations to encourage Vietnamese manufacturing enterprises to apply the ABC method to enhance competitive advantages in the integration trend.*

Keywords: *Strategic product costing, ABC methods, cost management, SMA, firm performance*

JEL Classification: *A14, G33, M41*

1. INTRODUCTION

Globalization, international economic integration and trade liberalization have been the trends of the contemporary world economy. Vietnam's deeper, broader and more effective integration with the world economy has brought about great achievements for the country in general as well as for businesses in particular. Vietnamese enterprises have more opportunities to participate in the global market, integrate more deeply into the world financial market, and access foreign investment capital flows. However, the level of competition is getting fiercer, enterprises not only compete with each other in the country but also with foreign enterprises. In that context, cost management accounting information plays an important role, as a key tool to help managers perform the functions of operating, controlling and making decisions for the current activities of the business and establish a scientific basis for future activities.

Thus, cost management accounting information is one of the important "weapons", helping businesses create competitive advantages in the integration period. As a result, the pressure placed on accountants to provide useful cost information and to correctly and fully determine the cost of production has become increasingly essential. Faced with that situation, many businesses have been applying ABC accounting method because of its superiority. However, the level of success when applying this method in practice in enterprises is relatively different. Therefore, this study was conducted with the aims of reviewing and evaluating the impact of internal factors on the level of ABC method application and business performance, thereby proposing some recommendations to encourage Vietnamese manufacturing enterprises to apply ABC method in strategic management.

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This study was conducted to answer the following questions: (1) What are the internal factors affecting the level of application of ABC method in strategic management of corporate managers? (2) How is the impact of each of these factors on the dynamic level of ABC application? (3) How to apply the ABC method to improve the performance of the business in the coming time? The results of the study are very necessary, in order to encourage Vietnamese manufacturing enterprises to apply ABC method in strategic management and to improve competitive efficiency and help enterprises develop sustainably.

The remainder of the paper is organized as follows: Section 2 presents Literature Review; Section 3 describes theoretical background and research hypotheses; Section 4 discusses our sample and research methodology; Section 5 presents the findings and provides a conclusion.

2. LITERATURE REVIEW

In developed countries, the method of activity-based costing has received much attention from both academics and business executives. The benefits of ABC's accounting method and its impact on the company's economic performance have driven many empirical researches, and it is considered one of the most cost-effective accounting tools (Alsayegh, 2020; Lu et al., 2017). Recently, there are quite a number of related studies such as theoretical studies, research on the practical application. The research of (Kucera, 2019) showed that, employing the theoretical perspective of the contingency theorists, the particular feature of an appropriate cost accounting system depends on the specific circumstances within and outside an organization. The research (Sorros et al., 2017) pointed out that 49.21% of all schools responded that the use of ABC accounting was necessary and effective in financial management. The study also found that the lack of appropriate software, data collection difficulty and the level of accounting staff were key barriers to the successful application of ABC accounting. The research of (Lu et al., 2017) showed that the SMA techniques, such as the ABC system, are crucial for companies to cope with different challenges, while also providing astute information that does not only help in overcoming the challenges of changes in a business environment but also in improving organizational performance.

The study of factors affecting the ability to successfully apply the ABC method in enterprises is also of great interest to scholars. The research of (Brown et al., 2004; Z. Y. Fei & C. R. Isa, 2010) has identified the groups of factors that affect the implementation and use of the ABC accounting methodology. These include: Organizational factors such as the support of senior managers, training to apply the activity-based costing system; contextual factors such as the level of competition, the suitability of managerial decisions, and the adaptation of the current system. Research by (Madwe et al., 2020), which studies the use of ABC accounting in multinational companies in South Africa, has highlighted the benefits of using activity-based costing method. A study by (Z. Fei & C. Isa, 2010) shows that factors such as behavior, organization, and technology are key factors in the success of ABC accounting. In addition, factors such as the role of culture and the structure of the organization also significantly affect the ability to successfully apply the ABC accounting method to the enterprise. The research by (Wegmann, 2019) has shown that even in small firms, the potential for product cost distortion is real if traditional costing is used. There has only been little empirical evidence on whether organizational performance is influenced by environmental uncertainty and market orientation and ABC implementation. (Laitinen, 2014) affirmed that the extant body of knowledge has left an apparent gap in measuring the perception of ABC and the

impact of its implementation on overall organizational performance. (Farhood, 2005) reported that previous studies have tested environmental uncertainty in the context of innovativeness, other than the ABC system. Also, (Elhamma, 2015) argued that market orientation has not been widely studied and should be considered as an added contingency factor. The results reported in previous studies on environmental uncertainty and market orientation are inconclusive. One of the possible reasons for these inconclusive results is that managers' use SMA of information, such as ABC information, may mediate this relationship (Zhang & Isa, 2010). (Alsayegh, 2020) echoed that understanding the mediating effect of advanced SMA practices such as ABC implementation on the relationship between contingency factors and organizational performance is considered an important research area.

In Vietnam, studies on ABC accounting method are mainly researches in theory and testing applied in some enterprises. Recently, there have been a number of studies concerning the factors affecting the applicability of the ABC accounting methodology. The study by (Tran et al., 2020) showed that the factors affecting the method of determining activity costs include: Behavior and organization factors, technical factors, corporate structure factors, and corporate culture factors. However, the influencing factors in the research model have not been tested by the authors to examine how each factor influences the success of the ABC method. The study of (Tran & Thao, 2020) and the study of (Tam & Tuan, 2020) also found down the factors that influence the ABC application such as: Gross Revenue, Product Diversity, and Cost Structure. However, is limited to assessing whether or not there is a correlation between these factors and the likelihood of successful implementation of the ABC methodology. Cost structure at a rate how the business can successfully apply the ABC method. Beside that, these studies have not yet evaluated the impact of these factors on ABC implementation.

In general, there have been many studies related to the implementation of ABC. However, most of these studies are conducted in developed countries, there will be significant differences when applied to Vietnamese manufacturing enterprises. There are a few studies in Vietnam that have investigated the factors affecting the success of the ABC method, but these studies were limited to assessing whether there is a correlation between these factors on the ability to use the ABC method without measuring the specific impact. Therefore, building empirical studies to prove the importance of ABC implementation to the performance of Vietnamese manufacturing enterprises is really necessary to promote business managers to apply ABC method into practice in the future. Therefore, this study was conducted to provide business managers with an overview of the internal factors affecting the application of ABC method of Vietnamese manufacturing enterprises, encourage managers to apply this method in the future to improve competitive efficiency as well as business performance.

3. THEORETICAL BACKGROUND AND RESEARCH HYPOTHESES

3.1. Theoretical Background

ABC emerged from the work of Cooper and Kaplan (Cooper & Kaplan, 1991). ABC draws on a hierarchy of costs: facility sustaining (or organization sustaining), product sustaining, batch level and unit level. Activities in the unit level are easily traced to an individual product, such as ice cream and, therefore, costs are accurate, traced on labour hours (or costs), material used (or material cost) and machine hour (or machine costs). The views on the ABC accounting approach

suggest that the ABC accounting approach emphasizes activities as primary cost collectors. The cost of these activities will then be allocated to the cost object according to the number of activities that these users have used (Aldukhil, 2012). The ABC accounting method overcomes the disadvantages of traditional pricing, providing more flexible and useful information for decision makers. The ABC approach is not only aimed at accurately pricing costs to provide information for financial accounting but also aims to provide cost information to decision makers (Fadzil & Rababah, 2012). Although this method has many advantages over traditional methods. However, the reality is that the level of success of enterprises when applying this method is not absolute. To explain the degree of success when using this method, the study employed the following theories:

Uncertainty theory: According to (Liu, 2009), uncertainties affecting the design of a business also impact on the technical tools of management accounting. In other words, an appropriate corporate management accounting system depends on the characteristics of the business and the business environment that is operating. This shows that it is not possible to develop a modeling paradigm for the use of accounting methods for all businesses. This means that choosing the right ABC accounting method should be appropriate for each business, with the internal and external environment in which the business operates. This theory is chosen by many researchers to study the uncertainties affecting the application and implementation of the ABC accounting methodology in the enterprise, typical examples are (Babu & Masum, 2019; Fei & Isa, 2010). Most studies suggest that the success of applying ABC accounting to the different firms is different, but also the degree of success when applying to a business but at different stages of development also different.

Representation theory: The theory is that the relationship between shareholders and the manager is a representative relationship or trust relationship (Brown et al., 2004). Both shareholders and company managers want to maximize their benefits, thus it is reasonable to believe that the company manager will not always act in the best interest of the employer, or other stakeholders. The conflict then arises when the information is incomplete and asymmetric between the subject and the agent in the company because of different interests from both sides. Therefore, the level of successful use of the ABC method will depend on the relationship between business owners, executives and outside investors, such as: remuneration mechanisms, monitoring mechanisms, the relationship between the shareholder and the manager, between superiors and subordinates.

Sociological theory: Sociological Theory focuses on how the organization is established through interactions between people, organizations and society. (Cagwin & Bouwman, 2002) argue that the existence of a socially acceptable organization of acceptable behavior is required to achieve a high level of productive efficiency. According to sociological theory, the efficiency of an enterprise is not only an internal problem of the enterprise but it is influenced in a general social context related to regimes and policies, and the current relationships resolved with employees in the business. Therefore, the target set by the enterprise must be in the common goal accepted by the society. This is in line with the trend of sustainable development and the benefit of the enterprise must be linked to the common interests of the society. According to this theory, the ability to successfully apply the ABC accounting method is influenced by factors such as: social and political power, social policies and modes of solving workers' interests.

3.2. Research Hypothesis

Uncertainty theory has shown that uncertain factors will affect the application of management tools in general as well as the application of ABC accounting method in particular. Research by

(Anderson & Young, 1999), Majid and Ali (2013), has shown that enterprises producing products with different properties, diverse product categories, and rich sizes, demand Cost information to serve the management's business control is higher, both in quantity and quality. Moreover, the more complex the manufacturing process, the more difficult it is to determine the correct and sufficient costs incurred. Therefore, accountants need to find more advanced and useful tools, so the level of application of ABC accounting method will be higher. Therefore, the study proposes the first research hypothesis as:

H1: The more complex the production and business characteristics, the higher the application of ABC accounting method.

Research by Anderson (1999), has shown groups of factors related to management organization, including: support from senior managers, training, and training to apply the cost identification system. Activity-based costing has a strong influence on the success of the ABC method of accounting. Khalid (2005), also pointed out that senior management support, training and adequacy of resources are important factors explaining the success of ABC accounting. According to Majid and Sulaiman (2008), organizational factors (such as senior management support, employee training or non-accounting owners) influence each stage of the adoption process using the ABC accounting method. Upping and Oliver (2011) determined the factors belonging to the management organization that affect the level of application of ABC accounting method. Therefore, hypothesis H2 is proposed as follows:

H2: The more empowered the management organization is for managers at all levels, the higher the level of application of ABC accounting method.

Research by Anderson (1999), Upping and Oliver (2011), Majid and Ali (2013), all show that the level of training of managers at all levels and especially the understanding of ABC accounting method affects strongly influence the degree of application of this method. Bajus and Stasova (2014) also argue that the level of human resources, especially accounting human resources in enterprises, will significantly affect the ability to handle situations in terms of systems analysis and activity-based cost objects or issues related to costing per activity or allocation. Therefore, hypothesis H3:

H3: The higher the level of human resources, the higher the application of ABC accounting method.

Researches by Upping and Oliver (2011), Majid and Ali (2013), suggest that in order to apply the new accounting method, the issue of training organization for the whole enterprise must be done, therefore, it is necessary to apply the new accounting method to have sufficient resources in terms of time and money to do this. Bajus and Stasova (2014), argue that when implementing cost allocation according to ABC accounting method, quantitative analysis is required. This means that computers are required to handle, and software to be used specifically for enterprises according to the characteristics of production and business activities. Therefore, hypothesis H4:

H4: The stronger the financial resources of the enterprise, the higher the level of application of ABC accounting method

Research by Khalid (2005) on business strategy suggests that when the proportion of fixed costs accounts for a relatively large proportion of total costs of enterprises, the need to use ABC accounting method is enhanced to ensure accuracy and usefulness of cost information provided

for decision-making purposes. Upping and Oliver (2011), also said that the more competitively an enterprise operates in an environment, the more focus it is on the strategy of creating an advantage, the higher the degree of application of ABC accounting method is. Majid and Ali (2013), have shown a close relationship between the development of new products, new markets and the need to apply the ABC method of accounting. Therefore, hypothesis H5:

H5: The more specific, detailed and flexible the business strategy is, the higher the level of ABC accounting method is applied.

Research by Anderson (1999), Bajus and Stasova (2014) on corporate culture, has shown that the observed variables of corporate culture factors (supportive culture and goal-oriented management culture) affect affect the level of application of the ABC accounting method. Therefore, hypothesis H6:

H6: The stronger the supporting culture, the higher the level of ABC accounting method is applied

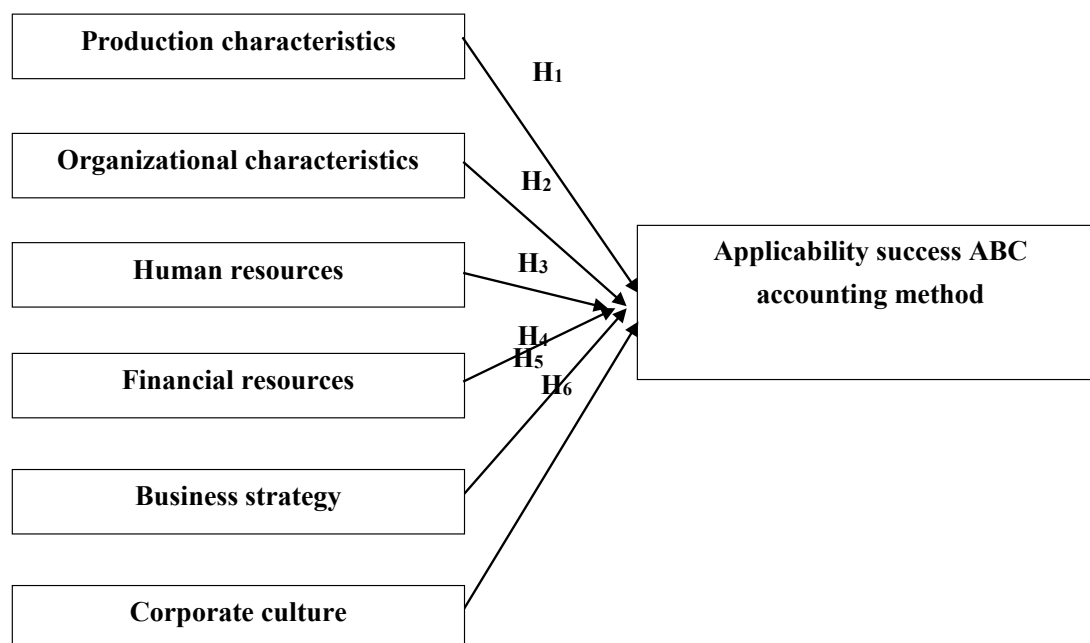


Figure 1: Theoretical framework

4. RESEARCH METHODOLOGY

4.1. Data Collection

The research sample is selected from the manufacturing enterprises in Vietnam listed on the stock market from the Website <http://finance.vietstock.vn>, the research team selects the enterprises that are the clients of the independent audit. The sample selected to send the questionnaire was 305 manufacturing enterprises of 668 enterprises, accounting for 45.66% of the total listed Vietnamese manufacturing enterprises as of March 31, 2020. The survey period was from April 2020 to August 2020. The number of survey questionnaires distributed was 305 votes, 124 votes were collected, and the number of valid votes included in the study was 101 votes. Preliminary survey forms are built and sent to the survey subjects through the Google forms application (accessed at: <https://docs.google.com>). The research sample is summarized in Table 1 of which the results show that the respondents to the questionnaire are all chief accountants or chief financial officers of the

enterprise. They have worked at the enterprise for quite a long time, on average of 3 years or more. Those are the people who know very well about financial and accounting activities of the business, hence their responses have certain reliability.

Table 1: Descriptive information

Criterion		Frequency	Percent (%)
Position	Chief Financial Officer	65	64,36
	Financial Manager	35	34,65
	Other	1	0,99
Years of working in the organization	Below 3 years	7	6,94
	3-8 years	47	46,53
	Above 8 years	47	46,53
Age of organization	Under 3 years	0	0
	3-8 years	4	3,96
	More than 8 years	97	96,04

Source: Synthesis of the research team

4.2. Research scale

The scale of research concepts used in this study is inherited from previous studies. The scale of production and business characteristics includes 4 measures inherited from the study of Alsayegh, 2020; the management organization characteristics scale includes 6 measurement items inherited from the study of Lu et al., 2017; The human resource qualification scale consists of 4 measurement items inherited from the study of (Sorros et al., 2017); Financial resource scale consisting of 4 measurement items inherited from the study of Alsayegh, 2020; Business strategy scale consisting of 3 measures inherited from the study of Sorros et al., 2017; Corporate culture specific scale includes 5 measurement items inherited from the study of Alsayegh, 2020; The scale of using the ABC method includes 5 measurement items inherited from the study of Madwe et al., 2020; A total of 7 concepts and 31 items are designed in the form of a 5-point Likert scale with: 1- Completely disagree; 2 - Disagree; 3- Neutral; 4 - Agree; 5 - Totally agree.

5. RESULTS AND DISCUSSION

5.1. Measurement model

Reliability analysis of each scale: To analyze the reliability of each scale and explain the effect of variables that intervene in relationships between independent variables and dependent variables, the study conducted Cronbach's Alpha test and Composite Reliability for 8 variables with 36 observational variables in the model introduced. The internal consistency reliability has been achieved for all reflective constructs as represented as the table 2. The results of Table 2 show that cronbach's Alpha is all greater than 0.7 and the combined reliability of all the corresponding variables is above the threshold of 0.7 (Hair et al., 2014). At the same time, the external load coefficients are all greater than 0.7, the mean extracted variance is all higher than 0.5, so the proposed research structures achieve convergence value (Convergnent Validity).

Table 2: Results of reliability testing, EFA of variables

Conceptual structure and questions	Loading	Cronbach's Alpha	Composite Reliability	AVE
Characteristics of production and business (IF1)	0.743	0.765	0.780	0.646
Richness of manufactured products	0.758			
Degree of difference between product types	0.729			
Proportion of indirect costs in total costs	0.713			
The complexity of the source of the cost		0.732	0.803	0.531
Characteristics of management organization (IF2)	0.724			
Level of senior management support	0.745			
The level of trust of the owner with the administrator	0.812			
Diversity of levels of management	0.704			
Level of decentralization between managers at all levels	0.727			
Level of authorization for middle and low administrators				
Ratio of management and supervisory staff to total employees	0.749			
Human resource qualification (IF3)			0.824	0.605
Degree of theoretical training	0.662			
Consciousness to learn from experience from developed businesses	0.635	0.813		
Awareness of the importance of administrative tools				
The need to apply cost management accounting information	0.714			
Financial resources of the business (IF4)	0.801			
Ability to schedule staff training and retraining				
Ability to provide costs to conduct training	0.613			
Responsiveness in terms of implementation support software	0.701		0.821	0.621
The ability to meet the budget for implementation	0.608	0.859		
Business strategy of the enterprise (IF5)				
Readiness with a cost structure change strategy	0.713			
Readiness with competitive development strategy	0.654			
Readiness for new growth strategy	0.701			
Corporate culture (IF6)	0.812		0.811	0.611
The level of support of the administrator with the employee	0.701	0.804		
Degree of mutual support among employees	0.692			
Consensus on development goals	0.700			
Willingness to change new methods	0.726	0.813	0.816	0.598
Level of trust in management decisions	0.652			
Level of application of ABC method (DFM)	0.701			
How easy it is to use the ABC method	0.653			
Evaluate the importance of ABC method	0.713		0.804	
The extent to which ABC is used to allocate indirect costs				
The level of using ABC to gather for objects	0.704			0.632
The extent to which ABC is used to control incurred costs	0.657	0.806		

Source: Synthesis of the research team

5.2. Test scale - Reliability and value

The study also tests the discriminant validity (Discriminant Validity) between the research structures. Previous studies often used Formell – Larcker criteria to evaluate the discrimination, but this criterion was assessed to be very weak in the case loading coefficients of observed variables in each research variable has little difference. Therefore, this study uses the ratio of distinctive features – unique features (Heterotrait – Monotrait, HTMT) to evaluate the distinction between structures. The HTMT criterion of the pairs of structures to achieve the discriminant value is 0.85. The results of table 3 have shown the HTMT value < 0.8 . Thus the constructs in the study gain discriminant validity. Table 3 also presents the results of the multicollinearity test, the results show that at the same time, all the correlation pairs are less than 0.8 and all the VIFs of the independent variable are less than 5, which proves that shows that there is no multicollinearity. In addition, in order to increase the reliability of the regression results, the study tests whether there is a change in variance in the research model or not through the use of White's General test. The test results show that the p value is greater than 0.05, so at the 5% level of significance, the hypothesis H0 about the homogeneity of variance is acceptable. That is, the sample does not have variance. With the above analysis, we confirm that the research data is suitable to perform multivariable regression analysis to examine the relationship between internal factors on the implementation of activity-based costing.

Table 3: Correlation and Multi - collinearity Test

	IF1	IF2	IF3	IF4	IF5	IF6	DFM	VIF
IF1	1.000							3.361
IF2	0.261	1.000						2.435
IF3	0.257	0.112	1.000					1.865
IF4	0.159	0.266	0.153	1.000				2.629
IF5	0.163	0.163	0.146	0.210	1.000			3.366
IF6	0.144	0.249	0.376	0.226	0.124	1.000		2.291
DFM	0.485	0.262	0.365	0.214	0.417	0.348	1.000	3.358

5.3. Test research hypothesis

The criteria for evaluating the quality of the PLS - SEM model as well as the hypothesis testing steps in this study are based on Hair's evaluation suggestions. According to the author, PLS - SEM does not have an appropriate measure for the model, so the quality of the model is assessed by two values, R2 and Q2, referring to the evaluation of interpretability and likelihood. the predictive power of endogenous structures. Results R2 and Q2 in Table 4 show that the structural model is of good quality. Next, the VIF coefficient of all concept structures < 3 shows that the multi-collinearity phenomenon between the explanatory variables (Independent) does not affect the testing of the research hypothesis.

Path coefficients related to the environmental uncertainty and market orientation impact are significant with the significance level of 5% (Table 4). Besides, Bootstrap test results also show that these coefficients are all different from zero. Thus, it can be concluded that hypotheses from H1 to H6 are supported by data.

Table 4: Results from SEM regression

Hypothesis	Structural	Research models			VIF	Test result
		Std.Err.	t-Value	Bootstrap		
H ₁	DFM β IF1	0.542	0.32***	[0.30;0.55]	1,00	Support
H ₂	DFM β IF2	0.409	0.43***	[0.38;0.65]	1,00	Support
H ₃	DFM β IF3	0.311	0.46***	[0.41;0.51]	1,51	Support
H ₄	DFM β IF4	0.392	0.35**	[0.31;0.39]	1,44	Support
H ₅	DFM β IF5	0.422	0.31**	[0.26;0.45]	1,53	Support
H ₆	DFM β IF6	0.613	0.28**	[0.21;0.35]	1,34	Support
T statistics in brackets * p<0.1, **p<0.05, *** p<0.01						
R ² (%) R ² _{FPI} = 35,7						
Relevance level of forecast (Q ²) Q ² _{FPI} = 31,35						

The results in Table 4 support that the H₁, H₂, H₃ hypothesis are acceptable at a significance level of 1%. While the H₄, H₅, H₆ hypothesis are acceptable at a significance level of 5%. This result indicated that, Business strategy; Financial resource; Qualifications of human resources; Characteristics of production and business; Organizational management characteristics and corporate culture significantly affect the level of ABC application.

5.4. Discussion and recommendation

Through conducting a survey of analytical results with a sample of 101 enterprises, the sample size is consistent with the requirements set forth. Analysis of the obtained sample data has adjusted the observed variables for the study after evaluating the reliability and validity, the model is completely suitable for multivariable linear regression. The variables in the model all have a positive and strong impact on the ability to successfully apply the ABC accounting method of Vietnamese manufacturing enterprises. All 6 research hypotheses H1, H2, H3, H4, H5, and H6 are accepted. Thus, through the above research results, it is confirmed that the ability to successfully apply the ABC accounting method of Vietnamese manufacturing enterprises is influenced by 6 factors, the degree of influence of the ranking factors is determined by the following factors: in descending order is: Business strategy; Financial resource; Qualifications of human resources; Characteristics of production and business; Organizational management characteristics and corporate culture. From the above research results, in order to successfully apply the ABC accounting method, the author recommends that businesses should focus on the factors affecting the implementation of this method, specifically as follows:

First, the business strategy of the enterprise has the strongest influence, so it is necessary to consider internal factors (which factors promote development and vice versa); have a cost structure strategy, a competitive advantage strategy (in terms of price, associated services), a new product strategy.

Secondly, the financial resources of the business also have a significant influence, so it is necessary to properly assess the current financial capacity of the business, prepare enough resources in terms of funding and time. When implementing this method, it is necessary to carry out quantitative analysis, so it is necessary to equip computers and software suitable to the business characteristics of the enterprise.

Thirdly, the level of human resources, characteristics of production and business activities, organizational and management characteristics and corporate culture are also factors affecting the ability to successfully apply ABC accounting method. Therefore, when applying this method, it is necessary to analyze and evaluate those factors to make reasonable adjustments to bring the highest efficiency to the business.

6. CONCLUSION

Applying a combination of qualitative and quantitative research methods, the study analyzed, evaluated and measured the influence of factors on the ability to successfully apply ABC accounting method, that is: Business strategy; Financial resources; Qualifications of human resources; Characteristics of production and business; Organizational management characteristics and corporate culture. From the research results, the author has proposed some recommendations to improve and promote the ability to successfully apply ABC accounting method for Vietnamese manufacturing enterprises in the future. However, the study has some limitations such as: the research sample (not enough and the number is not much), so the research results inferred for the whole have not high reliability, the level of factors in The research model explaining the variability of the ability to successfully apply the ABC accounting method is not high, showing that there are other factors affecting the ability to successfully apply the ABC accounting method but have not been included in the study. model in this study. These are suggestions for future studies.

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PROCESSING ADMINISTRATIVE REFORM FOR DEVELOPMENT NIGHT-TIME ECONOMY

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Abstract: *Night-time economy is an economic model that has been known in countries around the world, however, in Vietnam, this phrase has only appeared recently, especially when the Prime Minister issued Decision No. No. 1129/QĐ-TTg dated July 27, 2020 on approval of “Project for developing night-time economy in Vietnam”. A well-developed night-time economic model will be an opportunity to create a driving force for economic growth by promoting the development of many traditional and non-traditional business lines, creating more jobs for the society, and increasing state budget, helping to improve people’s living standards. However, the development of Vietnam’s night-time economy still faces many difficulties and limitations, including problems related to the process of administrative reform to develop the night economy. This article focuses on analyzing the current state of the administrative reform process, thereby pointing out the results and limitations of the administrative reform process to propose some recommendations on this issue in the coming time.*

Keywords: *Night-time economy, administrative reform, economic development*

1. INTRODUCTION

The night-time economy is an issue attracting attention in the current context of Vietnam’s economy. There are many opinions which are the same on this issue, one of these concepts said that “*night-time economy is all service activities taking place after 5 pm the night before until 6 am the following* “. Activities of economic models including the shopping at the night markets, business centers, convenience stores 24/24, the area gastronomies, works of arts, music, entertainment programs, festivals, events, and tourism places are only open at night ... All activities during this period are economic, contributing to urban regeneration, and economic growth and profit. The night-time economy has gradually become one of the new economic growth engines in many countries by promoting the development of many traditional and non-traditional businesses, creating many jobs, increasing people’s income, and contributing to the state budget. The night-time economy also helps to increase the efficiency of economic activity thanks to maximizing time, improving efficient infrastructure, promoting cultural values, and especially prolonged stay tourists.

A well-developed night-time economic model will be an opportunity to create a driving force for economic growth by promoting the development of many traditional and non-traditional business lines, creating more jobs for the society, increasing the state budget, and improving people’s living standards. However, if it is not properly planned and managed, it will have many

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consequences for the economy such as security, environmental and social issues. One of the problems contributing to the night-time economy development is promoting administrative reform. The government must have the positive orientation of reforms, linked to the goal of the night-time economy so it is suitable, fast, and efficient. Through the contributions of administrative reform to economic development in general, the authors would like to emphasize and propose solutions to promote administrative reform to develop the night-time economic model in the coming time.

2. LITERATURE REVIEW AND PREVIOUS RESEARCH STUDIES

Recently, the topic of “night-time economy” has been mentioned in several studies around the world. Most of these studies emphasize the importance of night-time economic development in countries and regions. A study by Randwick City Council (2019) on Australia’s night-time economy suggests that the night-time economy contributes significantly to economic output and, if well managed and supported, will continue to grow and contribute more. According to the study, in 2017, Australia’s night-time economy accounted for 17% of all businesses (374,835 out of 2,200,000), employing 3.2 million people. This industry accounts for 26% of Australian jobs and 19% of total revenue (including sectors: food, drink, entertainment, ...). Along with that, the night-time economy can play an indispensable role in urban regeneration and revitalization of towns and city centers, helping to preserve the identity and uniqueness of each destination. Meanwhile, the report of NSW and University of Technology Sydney (2017) night-time economy in the UK contributes 6% of the total revenue of the economy. These studies all provide evidence that the nighttime economic potential brings both economic and social benefits at both the national and local levels. It should be noted that to develop the night economy, it is necessary to ensure many conditions, of which, the Local Government Association (2019) believes that managing the night-time economy in the UK needs coordination between local authorities and a third-party organization. three to effectively manage and develop a safe night economy, thereby reaping benefits for the country.

In Vietnam, many studies have also shown that developing the night-time economy is inevitable, in line with international trends and bringing new opportunities and motivations to the economy. This process needs an assessment and identification of development potential, as well as a need to measure all the shortcomings and challenges, including the issue of administrative reform for night-time economic development. Luu Thanh Tam (2020) also emphasized that Vietnam needs to have breakthrough policies, creating opportunities for people to boldly invest in the night-time economic development. The tourism industry and key tourist destinations need to have a thematic project on this issue. In addition, the Government also needs to remove inadequate policies that limit the development of night tourism, such as regulations on business hours. In addition, ministries, branches, and localities should organize and re-plan tourist areas, prioritize night-time economic development, and concretize policies on night-time economic development. economical. Meanwhile, Tran Thi Thu Huong et al (2021) argue that it is necessary to review and perfect policies and create a unified legal corridor for night economic development. At the same time, clearly define and define the responsibilities and authority of state agencies in the management of night economic activities based on strengthening decentralization and decentralization for localities.

Although many studies confirm that administrative reform plays an important role in the development of the night-time economy, most of them are general assessments, there is no specific

assessment of the results achieved, and limitations of the current administrative procedure reform policies in our country to achieve the goal of developing the night-time economy soon.

3. METHODOLOGY

This study uses qualitative methods, descriptive statistics based on the data of policies and laws of our country related to the development of the night economy. Along with inheriting research experiences from previous works on administrative reform for night economy development, to make important arguments related to the research content.

4. ADMINISTRATIVE REFORM IN DEVELOPING NIGHT-TIME ECONOMY

4.1. Current status of nighttime economic development

In Vietnam, after the issuance of Decision No. 1129 / QD-TTg dated 07/27/2020 of the Prime Minister approved Project on developing night-time economy in Vietnam, development of night-time economy has begun to be noticed. The purpose is set to exploit the potential of the night-time economic model to create dynamics of economic growth, promoting the transformation of the economic structure of localities and the country, thereby contributing to enhanced income and living standard of the people, while limiting the negative impact on social and environmental issues.

Besides the opportunity to develop, the night-time economic model also the significant challenges faced by national and local governments. There are the problems of the environment such as noise pollution, increased waste generation, or the problems of society such as overloaded public services, rising crime, hybrid cultures ... So, the night-time economic model is functioning properly according to the objectives of economic development - society, the need to ensure mechanisms and policy framework and strategies, plans, planning obviously for this economic model. To do that, it is necessary to promote administrative reform so that it is synchronous among sectors and fields, from the central to local levels, to have a direction to develop the night-time economy in Vietnam and suitable to the strengths of each locality.

Situation of developing night-time economy in some countries and Vietnam

The night - time economy on the world

The concept of the night-time economy has been around since the late 1970s, especially in Europe. Most countries share the same opinion, that the night-time economy is not an integral part of the economy but focuses on developing service activities that take place from 6 pm to 6 am the next morning, specifically cultural services, entertainment, sports, entertainment, food services, shopping services, tourism, festivals, family events. Normally, the night-time economy is divided into the “evening economy” (from 6 p.m. to 0:00 a.m. the next day) and the “late-night economy” (from 0:00 a.m. to 6:00 a.m.).

Today, the night-time economy is not merely service activities serving the youth in urban areas. As more and more businesses and service providers extend their hours of operation into the evening, the night-time economy has attracted more age groups and is becoming more inclusive by serving more people. different demographic groups.

Currently, many countries around the world have effectively built a night-time economic model. Specifically, for the UK, the night-time economy contributes about 6% of GDP annually, equivalent to £66 billion per year, and creates more than 1.25 million jobs for people. According

to a report by London First and E&Y (2018), the employment structure in the 24-hour economy in London is relatively developed in both breadth and depth, rich and diverse. Specifically, not only do restaurant and bar service jobs attract a large number of workers, but a series of other jobs also show rapid growth in labor demand, such as Engineers, security guards, nurses, cleaning workers, taxi drivers, technology, and information support specialists, performing artists... Overall, it can be seen that economic activities taking place in the evening in London have positively impacted the labor market, creating a job ecosystem with potential for further development in the overall activities. nighttime economic activity in this City. The night-time economic activities bring high revenue in countries mainly towards the fields of tourism and culture, namely food service, bar, shopping, art, theaters, visiting the museum and the hotel.

Meanwhile, in the United States, the chains of restaurants play the most important role in the night-time economy of New York, bringing in 12 billion USD and creating more than 140,000 jobs per year (night-time only). In Sydney, Australia, promoting night-time economy policies aims to create linkages in the community. Shopping activities, nightlife activities have brought sales of 3.6 billion USD per year, with nearly 5 thousand businesses participating, the scale is estimated at 27.2 billion USD per year, creating a value of 234 thousand jobs. Another developed country, Japan, also introduced policies to promote night-time economic models such as restaurants, clubs, karaoke, bars, etc. It is estimated that the market size could be up to 400 billion yen (about 3.7 billion USD) by 2020.

For China, this country is also promoting the development of night-time economic models in many cities. Every night, there are about 10 streets with food stalls, 16 markets, and various 24/7 convenience stores in Beijing that receive financial support to promote the night-time economy. In addition, the night-time economic model also witnessed the rapid growth of online activities based on the rapidly developing information technology platform. Online nighttime activities in China are extremely diverse, from watching movies, listening to music, reading online stores, e-commerce, video games, and the series of evening shopping promotions...

Models of night-time economy in Vietnam today

In Vietnam, the night-time economic model only take place mainly in the big cities such as Ho Chi Minh City, Hanoi and some localities have tourist tradition which was available with many activities such as walking streets, food streets, night markets .. and the latest is the appearance of a convenience store systems, specifically as follows:

In Hanoi, the government city has piloted a walking street in the Hoan Kiem lake area and surrounding city People's Committee in 2016. Old quarters and some nearby areas are allowed to operate until 02 am Friday to Sunday. Besides, many nightlife activities were held, for instance, the night tour at Hoa Lo prison called "*Sacred shining spirit of Vietnam night*", the chains of art and culture performances, included big events with the participation of domestic and international artists. In 2018, the city issued Decision No. 14/2018/QĐ-UBND dated May 25, 2018, on the provisional regulation on management, organization of events, festivals, and activities in the central area of the Imperial Citadel of Thang Long – Hanoi in which there is a regulation that the time for the event does not exceed 11 pm. The city government also established a tourist information and support center to introduce and provide information about sightseeing tours in the city, install and operate a wifi-free system in Hoan Kiem lake.

In Ho Chi Minh City, this city has developed streets that have many restaurants, food stands at night (food, bars, cafeteria, performing arts), especially is planning the development of streets are specialized in food and beverage in the evening such as Nguyen Thuong Hien street (District 3), Phan Xich Long area, Chinese street (District 5), My Hung quarter (District 7).

In Thua Thien - Hue province, the government of Hue City is implementing the “*Bright and live*” project to provide more services in the evening for tourists and residents. The city government has put into operation the long-term lighting system and pedestrian street. In addition, Thua Thien Hue is building the image of a “*Green - Clean - Bright*” city and organizing activities associated with cultural and art events, festivals, entertainment, food, shopping in the evening ... such as traditional music performances on Huong River, Old Citadel, pedestrian Nguyen Dinh Chieu street. The city has also formed pedestrian streets in the area of Pham Ngu Lao - Chu Van An - Vo Thi Sau streets, especially piloted the construction of walking routes on both sides of the Huong Riverbank and the outdoor stages.

In Danang, many tourist destinations organize not only cultural but also modern activities in the evening such as Sunworld Danang Wonders (Asia Park), Than Tai Mount hot spring resort, Ba Na Hills Golf Club, BRG Danang Golf Resort (opening until about 10 p.m.); casinos for foreigners at Crowne Plaza, Furama resort, One Opera (24 hours per day); Charming Da Nang shows, Ao Dai show, Vietnamese soul, Han River sediments, festival activities on the banks of the Han River...; walking night street in Ngu Hanh Son district (operating until about 12 p.m); bar/disco activities, music venues (operating until 02 am). The city also organizes waterway tours to enjoy the Han River at night with various services of sightseeing, music, food ... until 22:00. The local government focuses on building and decorating architectural highlights to visit and check-in in the evening such as Dragon Bridge, Nguyen Van Troi Bridge, Sun Wheel, Love Bridge, ...

Although a lot of night-time activities are organized in the provinces, most of them are still monotonous, not satisfying the needs of tourists. Many people think that the night-time activities in Vietnam essentially are extending the activities of the daytime economy, without investments, specific supported policies, and professional activities. Many programs are just simply taking advantage of which is available during the day to work in the evening, somewhat seasonal nature and lack of stability.

A contribution to the state budget when developing the night-time economy

Night-time economy is a new model, thereby, there are no tracking statistics, but the trend of the night-time economy will be the development of commercial activities, transport, services, estimates will be based on statistics of these economic activities during the day.

The widespread Covid-19 pandemic has affected negatively many aspects of the economy, like commercial, transport and tourism. According to the General Statistics Office, from 2019 to June 2021, these activities have more ups and downs development, in 2019 total retail sales of goods and services revenue consumption reached 4,940 trillion dong, up 11.8% over the previous year; 2020 5,059.8 trillion dong; The first 7 months of 2021 reached 339.4 trillion VND and decreased by 19.8% compared to the same period last year. In 2019, passenger transportation reached 5143.1 million, 3561.9 million by 2020 passengers, down 29.6% compared with 2019. The first 7 months of 2021, there is a sharp decline by 19.8% in passenger transportation. The freight transport sector in 2019 reached 1,684.1 million tons, up 9.7% over the previous year; In 2020, freight transport

reached 1,596 million tons, down 5.2% compared to 2019 , in the first 7 months of 2021, freight transportation decreased by 11.6% in shipping volume.

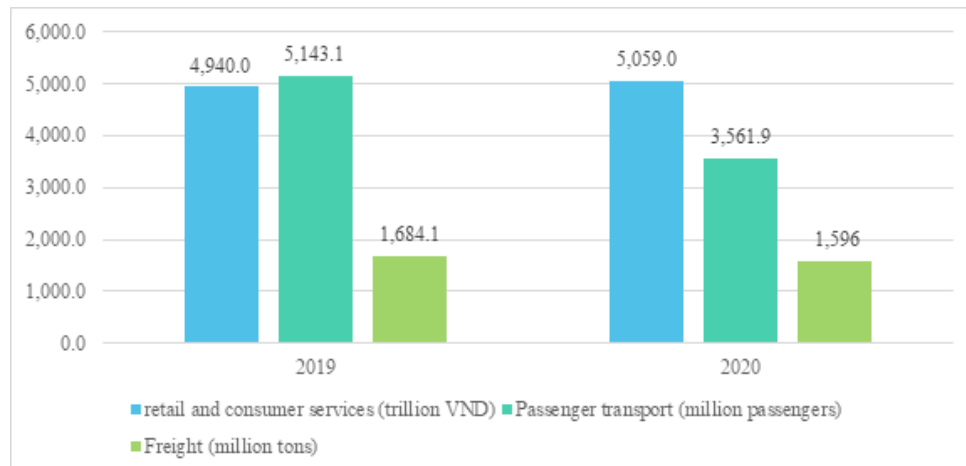


Table 1: Operational results of some types of services since 2019

(Source: GSO)

2019 is the second consecutive year Vietnam holds the title of “Leading Destination in Asia” by the World Travel Awards (WTA) polls. International visitors to our country were estimated at 18,008.6 thousand arrivals, up 16.2% over the previous year. Assuming that the economic growth rate at night as well as during the day is not affected by the Covid-19 epidemic, the operation is large and organized, then the forecast of revenue from night-time economic activities is similar. as day on the sectors like commercial, transport, and tourism, thereby contributing significantly to the annual state budget.

4.2. Objectives of administrative reform in developing night-time economy =

4.2.1 Objectives of administrative reform

Administrative reform is a major policy that the Vietnam Communist Party and Government have paid special attention to in all fields. Administrative reform has contributed significantly to socio-economic development in recent years. This process has contributed to building an innovative, modern and growing economy. Public Administrative reform aims to not only ensure legality, efficiency, transparency, and fairness in carrying work but also to eliminate cumbersome and overlapping procedures, policies that cause difficulties for people and businesses.

Firstly, institutional reform, building, and perfecting the institutional system of the state administration directly affects the development of the night economy. Improve institutions and legal frameworks to promote the development of the night economy.

Secondly, reforming administrative procedures, reforming drastically, synchronously and effectively regulating administrative procedures related to people and businesses, reviewing, and cutting time, simplifying business procedures. , optimize the administrative procedure settlement process based on the strong application of information technology, remove barriers restricting business freedom, improve and improve the quality of business investment environment, ensure fair, equal, transparent competition, innovate and improve the efficiency of the implementation of the one-stop-shop mechanism in handling administrative procedures. Promote the implementation

of administrative procedures in the electronic environment so that people and businesses can perform services anytime, anywhere, on different means.

Thirdly, public finance reform strongly renews the mechanism of allocation and use of state budget for administrative agencies, reviewing contents related to night economic development to create a source of expenditure for expenditures. costs incurred in connection with the state management of night economic development.

Fourth, increasing applications in information technology, digital transformation, and application of advanced science and technology to promote completion of construction and development of the E-Government. Thus, contributing to innovating working methods, improving work productivity to meet the requirements of night-time economic model development.

4.2.2 Requirements when developing night-time economic model

The development of the night-time economy must be harmonized with the local development strategy. Local governments who run night-time economies must have a long-term vision, synchronous planning, development roadmap and appropriate implementation resources.

Developing a night-time economy is in order to support daytime activities. This model aims for some purposes such as creating jobs, raising incomes, improving living standards, creating a spillover motivation for other industries to develop together and making positive contributions to socio-economic development.

The content of night-time economy development is suitable to the needs and trends of the market, meeting the requirements, consumption needs, entertainments of the people, especially the labor force working in the province. This model also encourages the participation of the residential community, businesses, and investors involved in the development of the night-time economy, without imposing the subjective thinking of the management agency.

On one hand, the night-time economic activities must be associated with local characteristics and strengths of culture, customs, art and cuisine to form unique and different tourism products. These travel programs will attract more and more tourists, increase the length of stay, visitor spending and create community cohesion, social exchanges for residents and visitors.

On the other hand, the night-time economy needs to minimize social conflicts, risk, and negative effects due to the development of the model.

4.2.3 Difficulties in administrative reform to develop night economy

Administrative reform does not only include local and technical improvements, but also involves the fundamental issue of the institutional system, organizational structure and human resource management so that process requires study carefully before proceeding. In fact, the administrative management in our country currently does not have specific mechanisms to support the development of the night economy. Therefore, if there is no adjustment, the following difficulties will arise:

Firstly, the system of legal documents orienting the development of the night-time economy does not have many guiding documents for implementation. The night-time economy management is still carried out by agencies who are in charge of normal sectors and fields, with main duties such as investment licensing, business registration, and business lines. condition; licensing management of cultural events and art performances; supervise commercial activities, guide the implementation

of commercial civilization; environmental sanitation monitoring (solid waste collection, noise impact assessment in the area); organize public lighting plans; ensure security and order in the area, manage the temporary absence of people and foreigners; inspect and guide conditional business establishments to promptly detect, prevent and handle violations of the law on security and order, etc. In general, the current management has no priority for developing the night-time economy.

Secondly, the administrative apparatus is still strange with this model, the localities have not yet had the breakthrough and sensitivity to meet the requirements of the night-time economy development. The administrative management apparatus has not been unified from the central to the local to supervise and manage the activities of night-time economy. It has not clearly defined and decentralized specific positions and fields when the night-time economy comes into operation.

Thirdly, the quality of public servants of the state apparatus is not ready to perform peculiar tasks. Moreover, the night-time economy is a fresh model, unprecedented before, so it requires a force of civil servants who have the capacity, expertise and qualities to plan and organize the implementation of policies to develop the night-time economy in the future.

5. SOLUTIONS TO PROMOTE ADMINISTRATIVE REFORM TO DEVELOP NIGHT ECONOMY

The night-time economy is a new model of economy, in order to operate effectively, it is necessary to have solutions to promote administrative reform from the very beginning, which is a premise to create conditions for night-time economic development to carry out the next step. If the public administration system meets requirements, this model will enable to increase not only employment and income for people but also revenue for the state budget. Various sectors in the economy will benefit like commercial and transportation.

Firstly, strengthen the role, responsibility and capacity of state agencies in performing state tasks, including developing the night-time economy.

Secondly, defining administrative reform is not only a separate job of the administrative system, but also a requirement of the whole society, so it is necessary to strengthen propaganda and information dissemination to all officials and public employees. Organizations and people are aware, agree and abide by the guidelines, policies and contents of administrative reform of the Party and State.

Thirdly, allocating sufficient financial and human resources for administrative reform. State agencies need to mobilize and allocate sufficiently capable staff and public servants to develop and organize the implementation of the tasks of administrative reform, improve research capacity of officials and servants directly to advise on administrative reform tasks.

Fourth, applying information technology to administrative management, gradually forming “*e-Government*” to improve the effectiveness and efficiency of directing, centralized and unified administration of the Government and the administrative system. main levels.

Fifth, innovating the method of monitoring and periodically evaluating the performance of administrative reform tasks, regularly measuring the satisfaction of the people of the organization. Regularly survey the satisfaction of people and organizations with the service of state administrative agencies at all levels in various forms, on different state management contents, such as promulgating mechanisms, legal policies, law enforcement organizations, public service provision... of state administrative agencies at all levels.

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THE CONTENT TO SECURITIES COMPANY RESTRUCTURING IN VIETNAM

MBA. Hoang Van Luan¹

Abstract: *To better understand the information contents of restructuring a company includes many diverse activities. There are several ways to corporate restructuring, however, focus on core elements and following the option has suitable for Vietnam stock market is strongly important. Based on the literature review the study show three main factors to complete the restructuring of securities intermediaries: financial restructuring, operational restructuring, and business strategy restructuring. By investigate on 74 stocks company in Vietnamese stock market, for evaluating the financial performance and comparison well known CAMEL model was used. This article also evidence that despite the market have developing suitable, however still appear the company didn't meet the requirements of legal framework, thereby giving early warning to companies and the policy makers. it is advisable to focus on analyzing financial restructuring factors based on CAMEL early warning model to make appropriate choices for companies as well as providing solutions for policy makers to promote a healthier and more effective restructuring process. Implications of findings and directions for future research also discussed.*

Keywords: *Restructure; securities company; stock market*

1. INTRODUCTION

In this paper, the author briefly reviews prior research on corporate restructuring, and then introduce the articles in the special issues are the main content of securities firms restructuring on Vietnam stock market. There are indications that restructuring can be performance-enhancing for the firm, but it can also have significant unintended consequences. The main content in this issue applies a broad range of research methods and theoretical perspectives to corporate restructuring in special is topic of securities restructuring, its initiating forces, and its consequences.

The object of the article is investigating how the securities companies on the Vietnam stock market are restructure except Fund Management Companies section, from there give a solution for handling securities companies. Develop the risk evaluation and classification system and send early notification to securities companies and fund management companies; classify these companies for management and supervision. Based on the theoretical and literature research, this article focusses on analysis three main factor apply on the content of stock firms restructuring on Vietnam stock market as: corporate strategy, finance, and organizational studies. The applied research methodology is based on the positivism approach. The research methods applied in the article are systematic literature review, comparison, statistic, and subjective assessment.

2. LITERATURE REVIEW

The fundamental reason for carrying out corporate restructuring is to further enhance the long-term survival of firms. In particular, the securities firm has played an important rule on the

¹ Aviation Labor Supply and Import-Export Joint stock company (Vietnam Airlines)

stock market. The stock firm is a brokerage on the market, their business has considering as a financial organization and get profit through brokerage activities.

An approach to restructuring that received a lot of attention in the 1990s was following by E.H. Bowman and H.Singh (1993) studies that Corporate restructuring is an area of great interest to researchers in corporate strategy, finance and organizational studies. In which, corporate strategy restructuring includes changing the structure of assets through merger, consolidation, sale or elimination of divisions or investments in order to increase or decrease the degree of diversification. Financial restructuring is the change of capital structure through debt restructuring or share buyback... Operational restructuring involves changes in production, personnel, and organization without including property changes. All studies confirm that financial restructuring is one of the three important contents of corporate restructuring.

In addition, Maran Marimuthu (2009) show that corporate restructuring has undoubtedly become a major program for many organizations as it paves ways for greater efficiency and cost-effectiveness. Both corporate and business strategies are currently integrated into restructuring program to yield greater financial performance in both short and long run. The general framework for corporate restructuring comprises of reorganization of assets (acquisitions and sell-offs), creating new ownership (spin-offs, split-ups and equity carve-outs), reorganizing financial claims (exchange offers, leveraged recapitalization, financial reorganization and liquidation) and other strategies (eg joint ventures, LBOs, etc) (Weston, Siu and Johnson, 2001). Seem this hypothesis agree with Vietnam stock market, because nearly times all of case for restructuring securities firm common is M&A, joint ventures.

Thus, in content of Decision No. 242/QD-TTg dated February, 28, 2019 of the Prime Minister approving the scheme for “Restructuring securities and insurance markets by 2020 and vision to 2025” has high light and show in particular that the securities firms could issue the restructuring plan, in order to renew the operation model, improve the financial ability, strengthen the risk management ability and company management ability, as well as enhancing transparency and professionalism in operating the companies. Develop the risk evaluation and classification system and send early notification to securities companies and fund management companies classify these companies for management and supervision. Evaluate and classify account receivables and financial assets of securities companies and fund management companies.

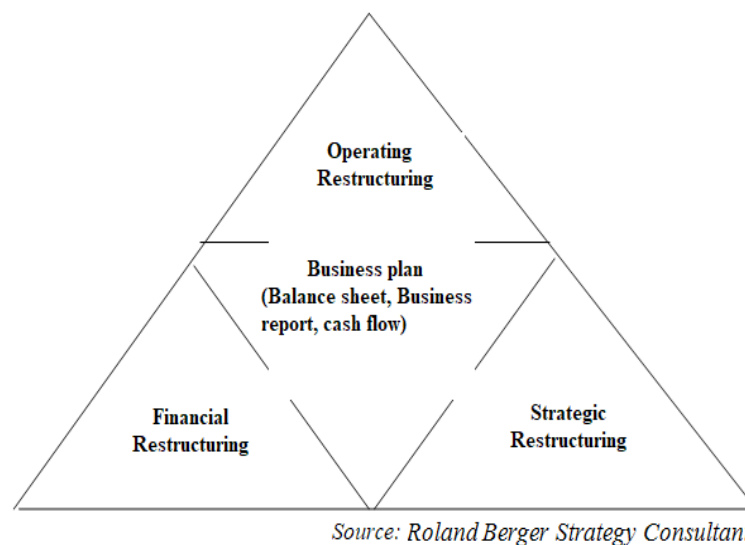
In Vietnam, the term of “restructuring” appeared in 2005 when the economy fell into a recession with events related to real estate and stock market bubbles due to the expansion of monetary policy towards this market. In the context of many enterprises having difficulties in restructuring, many studies have been carried out with a restructuring approach to improve operational efficiency of enterprises. According Doctoral. Vu Bang, former Chairman of Vietnam State Securities Commission confirmed: “Restructuring the system of intermediaries is important in general planning to stock market restructuring”. The process of restructuring the Vietnamese stock market has officially started with the Ministry of Finance adopting a scheme on restructuring securities companies in January 2012. The scheme, approved under Decision No. 62/QD-BTC, aims to gradually reduce the number of securities companies while intensifying the management and supervision of their operation in preparation for the opening of the financial service market under the committed integration roadmap.

Restructuring includes many diverse activities; however, it can be divided into three basic restructuring directions as illustrated in Figure 1, the element has defined as follows: *Strategic restructuring*: This includes the reorganization of the appropriate structures and processes by divisions within the company. In the medium to long term, a company affected by a crisis can only regain competitiveness if it solves its internal problems, eliminates inefficient business processes and divisions, company position in a competitive market. This requires a change in business strategy restructuring.

Operating restructuring: To improve profitability and solvency according to the identified value chain. The focus of operational restructuring is primarily on ensuring the short-term viability of the company by taking quick actions to increase cash flow and improve business results.

Financial restructuring: This is the implementation of measures to push back the insolvency that is threatening the company and ensure the company's viability. The goal of financial restructuring in the medium and long term is to re-establish a solid and healthy capital structure. Financial restructuring is often done by dynamic re-capitalization, in order to provide enough equity and cash flow to finance future growth. Financial restructuring is a prerequisite for sustainable restructuring process.

Fig.1. Restructuring three-sector model



From the above evidence, the author decided to analyze in detail the financial restructuring of securities companies on Vietnam stock market to go into depth analysis, and show the advantages and disadvantages exist.

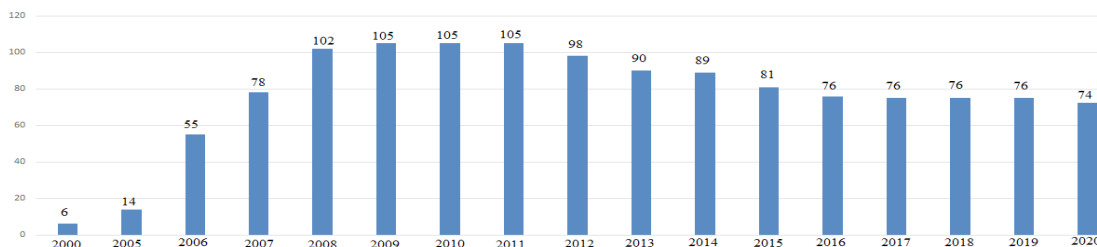
3. METHODOLOGY AND RESEARCH RESULTS

3.1. Overview on process restructure securities company in Vietnam

Since the establishment of the stock market up to now, the number of securities companies in Vietnam has developed unstable. When the first stock exchange was established in 2000, there were only six securities firms. However, the number of securities firms increased rapidly, peaking at 105 securities firms in 2012. After that, according to the restructuring project, many weak securities companies were stopped operating, some securities companies had to merge into other securities

companies. The rapid formation of securities companies led to fierce competition, especially competition on brokerage market share. More than 70% of the market share of transactions is concentrated in 23 securities companies and only less than 30% of the market share, trading part is held by the remaining 80 securities companies.

Table 1: Number of securities companies in Vietnam in the period 2000 -2020



Source: The data synthesis by author base on Vietnam SSC annual report

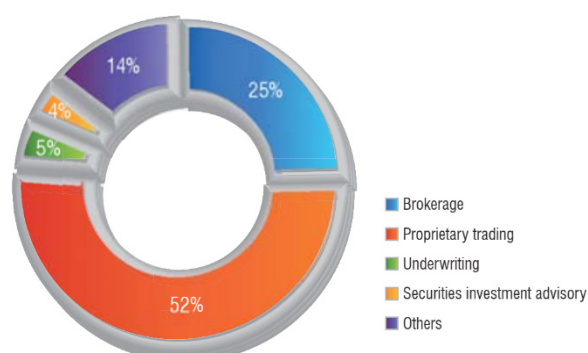
In the end of years 2020 is also the 5th year in a row that the VN-Index has outperformed the MSCI Frontier Market - MSCI FM (17.3%). Special, Mid-cap stocks have increased 12% compared to VN30 group after 3 consecutive years of underperforming this group. Vietnam Stock Market (stock market) ended 2020 successfully beyond expectations. The two main indexes are VN-Index and VN30 recovered spectacularly 67.5% and 75.3% from the bottom and regained positive growth of 14.9% and 21.8% for the whole of 2020.

Fig.2. VN-Index Compare with MSCI FM

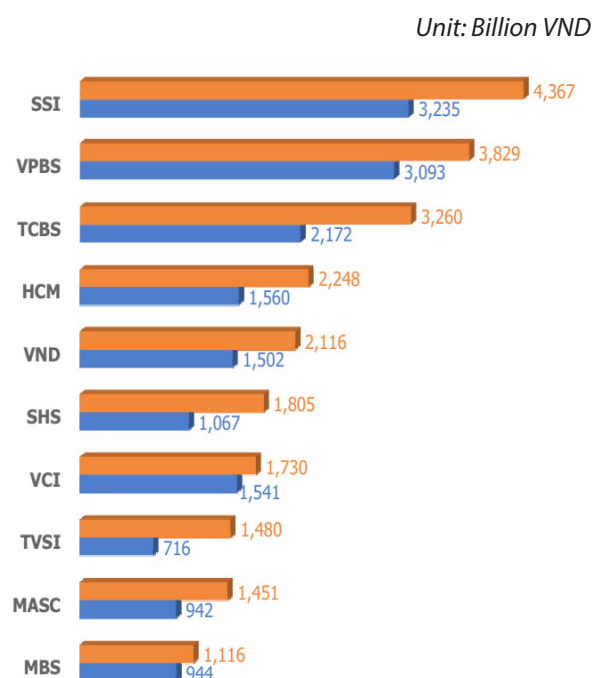


Source: Bloomberg

Brokerage and proprietary trading activities maintained a high growth rate and accounted for a large proportion of the revenue structure of securities companies. Accordingly, proprietary trading accounted for the largest proportion of the total securities revenue (52%); followed by brokerage services accounting for 25%. The revenue from underwriting activities only accounted for a small proportion of 5% show in fig.3. The more details about revenue of securities company has record growth rate is suitable compare with previous year, the result show that Business activities of securities companies achieved positive results with total revenue and profit increased to the highest level during the restructuring process illustrate at fig.4.

Fig.3. The common Revenue Structure of Securities company

Source: Estimated base on SSC, SSI, FinPro data

Fig.4. Top 10 Securities Revenue in 2020

However, if compared with the market size and compared with other countries in the region. The number of Vietnam securities companies is still at a high level. By the end of 2020, Vietnam's stock market capitalization reached VND 5,5 trillion, equivalent to 105% of GDP with the number of securities companies being 74 companies. Meanwhile, in some countries like China, the market capitalization is more than 4,560 billion USD with the number of securities companies being 116 companies. South Korea with a market capitalization of more than 1,848 billion USD, but the number of securities companies is only 65 companies. This has many potential risks of competition in business activities of Vietnamese securities companies, the financial safety of each securities company as well as the whole securities system, especially for small and newly developed securities companies into operation on the market.

Table 2: Business activities of Securities Company

Category	Unit	2016	2017	2018	2019	2020
Number of companies		82/98	83/98	83/98	76/76	74/76
Total charter capital	VND Bil	41,880	44,150	55,623	61,847	65,303
Total equity	VND Bil	45,049	55,365	67,401	77,738	79,672
Total revenue	VND Bil	13,471	19,638	30,537	42,564	45,651
Total profit in the year	VND Bil	2,735	6,278	8,918	15,623	24,621
Number of securities companies making a profit in the year	Company	51	66	68	67	71
Number of securities companies making a loss in the year	Company	30	16	15	9	5

Source: SSI, VND, SCC, FiinPro

Business activities of securities companies achieved positive results with total revenue and profit increased to the highest level during the restructuring process. Total revenue of securities companies reached VND 79,500 billion, up 75% and total after-tax profit reached more than VND 8,900 billion, up 65% compared to the whole year of 2018. Despite the outbreak of the Covid-19 pandemic, significant impact on business operations of the business community, but

many businesses Listing/registering businesses still have results positive business. Number of businesses reporting Profitable statements still account for 84% of the total number of companies that have made currently reporting in the third quarter of 2020, this represents The business has had quite a good endurance despite the experience through the Covid-19 epidemic.

Table 3: Top 10 brokerage market share

2015		2016		2017		2018		2019	
SSI	13,07	SSI	13,69	SSI	16,25	SSI	18,70	SSI	13,96
HSC	11,97	HSC	12,45	HSC	11,90	HSC	11,24	HSC	10,54
VCSC	8,39	VCSC	8,86	VCSC	8,50	VCSC	10,95	VCSC	8,19
VNDS	5,69	VNDS	6,12	VNDS	7,20	VNDS	7,31	VNDS	6,81
SHS	5,28	MBS	5,69	MBS	6,27	MBS	5,63	MBS	4,77
MBS	4,82	SHS	4,25	BVSC	5,32	SHS	4,02	MAS	4,47
ACBS	4,51	BSC	4,19	SHS	5,12	ACBS	3,46	VPS	3,94
FPTS	4,03	ACBS	4,09	BSC	3,54	FPTS	3,34	BVSC	3,75
BSC	3,88	KIS	3,87	BOS	3,41	BVSC	2,99	BOS	3,13
BVSC	3,73	FPTS	3,65	FPTS	3,23	BSC	2,83	KIS	3,08

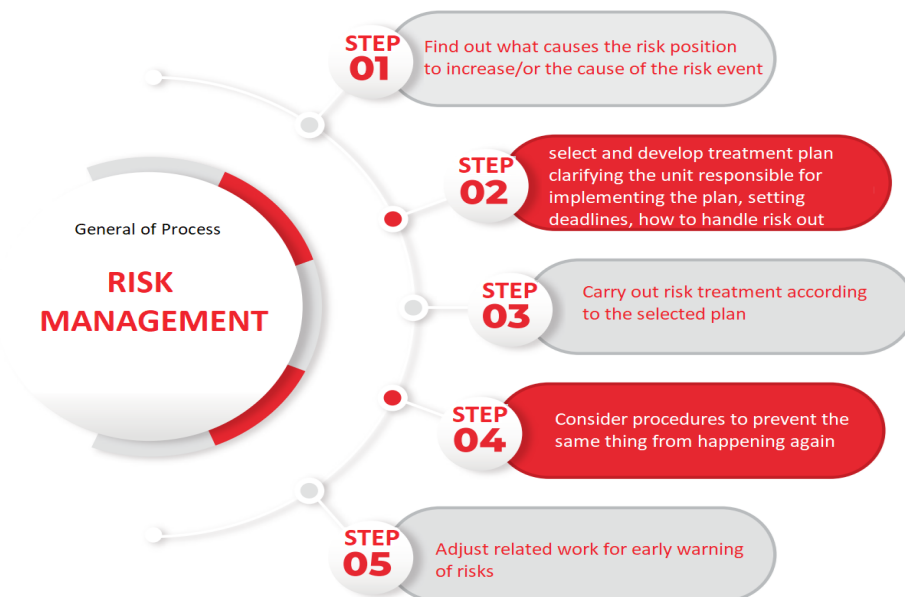
Source: Collect data by author base on Company annual report

The table 3 show the difficult of market share for top ten brokerage, the result confirms that over the years, the market share has narrowed, large companies have to face fierce competition, so it is imperative to re-divide the market share for companies that have successfully restructured through M&A deals or increased charter capital.

3.2. Operating restructuring corporate strategy

In this article, the author analysis focus on Internal restructuring of securities firm According of the Decision No. 242/QD-TTg dated February, 28, 2019 of the Prime Minister show that the securities firms could renew the operation model, improve the financial ability, strengthen the risk management ability and company management ability. Develop the risk evaluation and classification system and send early notification to securities companies. In most of operating for the stock firms the indicator play an important role is risk management, thus Qian Zhou (2021) argue that generally, companies can optimize their compliance and risk control mechanism by doing the following: Conducting proactive and regular compliance reviews to identify the potential risk exposures. Develop standard protocols to prevent and tackle incompliance scenarios. Review and revise the company's contract templates to adapt to the new context, such as adding force majeure clauses to mitigate the fallout of unexpected circumstances.

Companies may decide to get through the restructuring by temporarily reducing production and scope of operation. Internal restructuring refers to alterations made internally on operations, capital, supply chains, human resources (HR), systems, legal frameworks, as well as locations of a company to make the business more integrated and profitable. Companies with optimized structures can be better prepared to mitigate the impact of unexpected crises and make quick responses. This is vitally important for businesses when uncertainties are increasing globally despite the positive trend in the selected market.

Fig.5. Five steps to Risk Management

The fig.5 shows details of five steps to risk management. This is the most important on improve business activities, for the case of financial firms as brokerage stock firm this indicator may effect on the survival of company. An investigate by

3.3. Organizational and strategy restructuring

For company restructuring in Vietnam, businesses must strategize based on which options will bolster their operational sustainability and facilitate company preparedness and agility, factors that are essential during periods of crises like the pandemic. The business strategy of a securities company is an overall and long-term program of activities aimed at creating a certain development step of the securities company, a commitment to the basic and comprehensive goals that a securities company needs to achieve and the differentiation of a securities company. allocate resources to achieve those objectives in the future operating environment. Thus, the business strategy of a securities company must be built based on the Government's financial policy, the development orientation of the stock market and the actual business activities of that securities company. When a goal is included in the business strategy of the securities company, shows that this goal has been oriented by the management of the securities company in the long term, and the securities company will have to prepare appropriate resource factors to ensure the target will be done

An investigate by Roland Berger Strategy Consultants (2005), In Germany Surveys show that German companies have learned to react more quickly when they find themselves in crisis. A comparison of the times shows that since 2001, the response speed of companies has increased. A significant percentage of 32% of the companies interviewed responded as soon as they noticed a strategic crisis (in 2001 it was 20%). However, 51% (2001 about 57%) of companies will act only when signs of a profitability crisis appear. Another 17% (23% in 2001) wait until they are actually in a solvency crisis before they take countermeasures.

Typically, the crisis process begins with a strategic crisis. In a strategic crisis, a company will continue to focus on shrinking markets, undervalue new competitors, continue to maintain core products as it has passed the culmination of the product life cycle, and ignore changes in customer

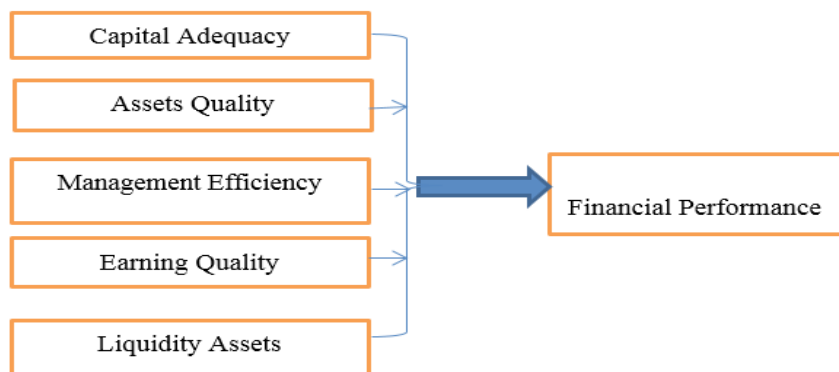
behavior patterns. Failure to implement crisis countermeasures will, sooner or later, lead to a profit crunch, and reliance on available liquidity and negative cash flows will soon lead to solvency crisis. As the crisis spreads throughout the company, the scope of action will become increasingly narrow. The pressure to take action increased significantly and culminated in the solvency crisis. Early and quick countermeasures largely produce better refactoring results. Interviewees agreed: If they had to go through restructuring again, they would implement solutions for strategy restructuring faster with greater impact while focusing on big goals (28%) and will begin restructuring efforts earlier (23%).

3.4. Financial restructure analysis

Financial restructuring obviously involves equity or debt restructuring that has direct influence on capital structure. In short, it can be clearly restated that debt restructuring is a means of conducting financial restructuring program that has effect on a company's capital structure (Miller and Modigliani, 1958; Myers and Majluf, 1984; Majumdar and Chibber, 1999). Hence, this is a study that makes an attempt to put forward certain critical areas of capital structure that so far have not been rigorously explored but these areas tend to create a significant impact in the manner the literature on capital structure is understood.

Same point with research of Ahamed Lebbe Abdul Rauf (2016) The research instrument used is the CAMEL Model which is the recent innovation in the area of financial performance evaluation of bank (also securities company). The components of CAMEL model Capital adequacy,

Fig. 6. CAMEL Framework



Asset quality, Management efficiency, Earning quality and Liquidity are focus on analysis. According to the empirical evidence in the literature, CAMEL framework is widely used to evaluate financial performance of banks, also used to evaluate financial of stock company. As such Kumar et al. (2012) following conceptual framework is developed show in fig.6.

3.4.1. Capital Adequacy

Capital adequacy refers to overall financial condition of stock firms and also the ability of management to meet the need of additional capital. The computation of capital adequacy ratio is done by taking ratio of equity capital and loan loss provisions minus non-performing loans to total assets Ahamed Lebbe Abdul Rauf (2016). The highlight and most important point of the internal restructuring of the Vietnam securities companies also strongly, mainly through the change of major shareholder structure (14 securities companies with transfer over 10%

of charter capital), with participation of many major financial institutions in the region such as: KB, Nonghyup (Korea), Yuanta (Taiwan), Aizawa (Japan). Most companies with a major change in shareholder structure have changed their management and operating personnel, as well as gradually improving their financial capacity through additional capital from major shareholders. By the end of the third quarter of 2018, the total charter capital of securities companies reached VND 51,794 billion, up 15.3%; total equity reached 66,430 billion Dong, up 19.6%; Total assets reached VND 120,379 billion, an increase of 17.5% compared to the end of 2017. Over 97% of the number of securities companies currently have a financial safety ratio of over 180%.

Table 4: Charter capital and Equity capital per Stock company in Vietnam during 2015-2020

Category	Unit	2015	2016	2017	2018	2019	2020
Number of stock company	Company	81	76	76	76	76	74
Charter capital	Billion VND	39.203	39.479	43.867	51.794	61.847	65.303
Charter cap/Number of stock company	Billion VND	483,98	519,46	577,23	681,5	873,7	882.47
equity capital	Billion VND	44.704	46.939	53.410	66.430	77.738	79.672
equity capital/ Number of stock company	Billion VND	551,9	617,62	702.76	874.08	1022.8	1076.6

Source: Based on company annual report and SCC data

Table 4 shows that, although the number of securities companies has decreased, the total chartered capital and equity of the securities companies has increased over the years. This partly shows the efficiency of the restructuring of securities companies when they removed from the market small-scale companies, weak financial energy, and increased financial energy of securities companies operating well in the market, contributing to ensuring that security of securities companies. Table 3 also shows that the average chartered capital of Vietnam securities companies has continuously increased over the years. If compared with the level of representative office for securities companies to fully implement securities trading operations, this average chartered capital is already higher. In the year 2019, there are 24 securities companies with charter capital of 1,000 billion VND or more, accounting for 33% of the total number of member securities companies. In particular, there are 2 securities companies with charter capital of over 5,000 billion VND including Mirae Asset Securities Company (Vietnam) and SSI Securities JSC with charter capital of 5,445 billion VND and 5,100 billion VND respectively. In addition, 30 securities companies with charter capital from 300 billion VND to less than 1,000 billion VND, accounting for 40% and the remaining 20 securities companies whose charter capital is below 300 billion VND, accounting for 27% of the total number of securities companies.

Business activities of securities companies achieved positive results with total revenue and profit increased to the highest level during the restructuring process. Total revenue of securities companies reached VND30,500 billion, up 55% and total after-tax profit reached more than VND 8,900 billion, up 40% compared to the whole year of 2017. Restructuring of securities companies has taken place strongly from the beginning of the scheme, in addition to the macro stability that has had a positive impact on the stock market, so revenue and profits of securities companies have been increase gradually over the years.

3.4.2. Asset quality

Following the arguments by Hoang Thi Bich Ha (2018) to determination of asset quality should be explain the variables on Value of total assets after risk adjustment is determined by subtracting total assets (excluding fixed assets) from total risk potential risks in asset classes. Total value at risk including value at risk market value, liquidity risk value and operational risk value. This component is determined and instructors by Circulars No 226/2010/TT-BTC, the data taken from the capital adequacy ratio reports of securities companies.

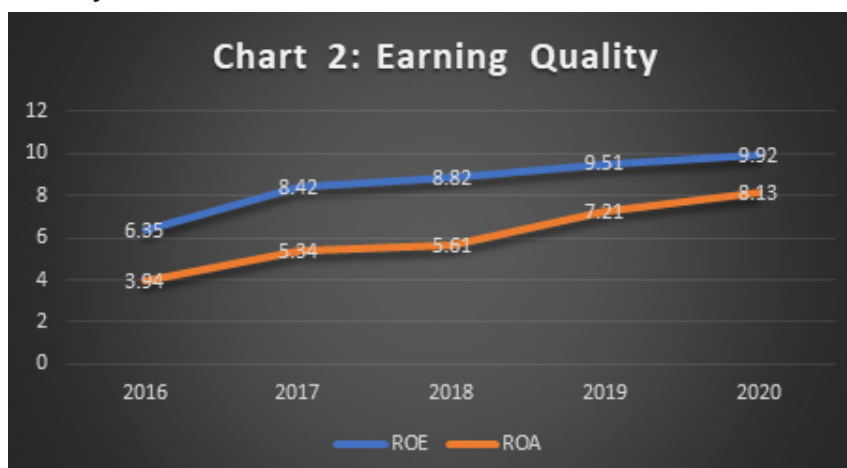


Source: Based on Company Annual Report

The result on chart 1 show that whole system of Vietnamese securities companies within 5 years from 2016 to 2020, the average risk-free asset/total asset ratio of securities companies has achieved a high level of safety. This ratio is always over 70%, proving that the asset quality of the system of securities companies is always guaranteed, accounting for a large proportion of the total assets of Vietnamese securities companies, which are low-risk assets. However, that does not mean that all securities companies can meet this safety criterion. In the market, there are still many securities companies that have not met the level of financial safety.

3.4.3. Earning quality

In general, ROA & ROE indicator of stock companies on Vietnam stock market has increase stability. The reason has mentioned above, the market has developing remain strongly despite the outbreak of the Covid-19 pandemic, significant impact on business operations of the business community Vietnam's stock market is rated as 1 in 10 stock markets have the best resilience to the pandemic and recovery world.

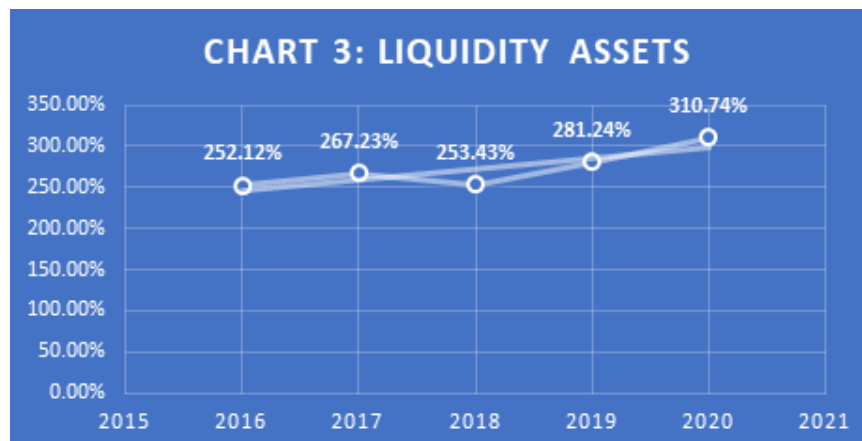


Source: Based on Company Annual Report

However, also record the stock companies has loss profit, but not significantly and have tends to decrease through the years.

3.4.4. Liquidity Assets

According to the results presented in chart 3, Liquid assets make higher more than safety threshold (120%). The most of securities companies on the market meet the requirements of this criterion. following to international practice, liquid assets must reach 200% or more to be considered safe. Thus, on average, this coefficient of the system of Vietnamese securities companies has been achieved.



Source: Based on Company Annual Report

By investigated on each of firm, the author finds that only two company named Viet Stock (VSC) and SJC Stock Company (SJSC) doesn't meet requirements respectively 118.14% and 119.23%. Thereby, it is necessary to have a solution to remind and warn companies to recognize risks early. The Management Efficiency indicator are exits in this article the reason is The reason is that this factor is very qualitative, sometimes not shown in the financial statements, so there will be no accurate results.

4. CONCLUSIONS AND POLICY IMPLICATIONS

To achieve this result, the author used the methods of analysis, comparison, access, data collection, and especially the CAMEL financial security model to analyze the results and direction find the best way to develop. From the above comments, the study shows the solutions for policy makers and the company to apply for implement the restructuring of securities companies in the coming time as follows:

- *Firstly, capital safety regulations:* Capital adequacy regulation is understood as the regulation on the minimum initial capital required to carry out the securities trading operation and the safe working capital adequacy ratio to ensure in the business process. The determination of the minimum capital level and the capital adequacy ratio must be appropriate for each business operation and each stage of development of the stock market. The value of risk assets is taken into account in determining the capital adequacy ratio. This is also in line with IOSCO's view that financial security should be approached based on risk.

- *Second, regulations on financial safety ratio reporting:* Financial safety reports must be calculated daily and periodically submitted to the securities monitoring system of the Stock Exchange on a daily, weekly, or monthly basis. This will help the securities companies manage risks better

and the regulators will also follow closely the financial safety situation of the securities companies, avoiding systemic risks. From the above reasons, propose solutions for policy makers necessary to regulate the frequency of determining and publicly announcing their financial safety ratios, it should be monthly, instead of semi-annually as the current regulations. Such increased identification and disclosure will contribute to increasing the securities companies' liability to customers, to the market; simultaneously promoting more strongly the demand of restructure securities companies in internal themselves. From there, companies will actively seek partners if M&A or recognize their own strengths and weaknesses to restructure themselves, not being pressured by the current strong restructuring policy.

- *Third*, measures to handle when the securities company violates the financial safety ratio: When the financial safety ratio falls below the prescribed level, it is necessary to require securities companies to limit their business activities or suspend business activities, to explain measures and time to overcome. If not, the securities company may be suspended or revoked its business license. Strong necessary measures are taken to limit risks from a specific securities company, thereby causing risks in the whole system.

- *Fourth*, set up an early risk warning system: In addition to capital and capital adequacy regulations, an early risk warning system should be developed by the SSC with specific risks, according to the levels considered to be probable risks. Establishing an early risk warning system will first help securities companies identify possible risks, and then soon propose remedial measures. In addition, the early warning system will also help regulators grasp the situation quickly, thereby taking measures to limit risks in time.

- *In addition*, to restructure securities trading organizations through reviewing, assessing, and classifying these organizations based on the level of risk to the market in order to take appropriate measures, renovating the activities of securities trading organizations, improving financial capacity, managing risks according to international practices and improving competitiveness, ensuring safe, stable operation and maximum protection. multiple assets and interests of investors.

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DEVELOPING THE NIGHT TIME ECONOMY AFTER COVID - 19 PANDEMIC

Dr. Tran Duc Trung¹

Abstract: *Economic development and business sustainability in the context of globalization is not only growth economy alone, but also the change, a more complete economic structure and life of the people. In the world, the nighttime economy accounts for an increasing proportion of the economy. In Vietnam, the economic fact the night is a potential need to be stimulated and extraction operators. The Covid -19 pandemic with its undesirable effects is disrupting the development of the night time economy. The article with a 3-part structure has clarified the issues: (1) Concept, potential and benefits of night time economy; (2) Situation of night time economy in Vietnam; (3) Impact of the Covid-19 pandemic on the night time economy in Vietnam; (4) Solutions to develop night time economy after Covid-19. With innovation in thinking and systemic solutions, economic certain night will become a new impetus to the economy of Vietnam.*

Keywords: *economy, economic development, night time economy, Covid-19 pandemic*

1. INTRODUCTION

In a quick survey on the world's leading search site Google in Vietnam, the term "Kinh tế ban đêm" had more than 98.3 million results in 0.46 seconds; and for the term "Night time economy" there were 740 million results in just 0.63 seconds of searching. Thus, it can be said that the problem of the night time economy has been receiving great attention from economists and society.

The development of global economy is clearly expressed through the activities and economic flows. Accordingly, in the past 2 years (2019 - 2020) and the first half of 2021, production and service activities of the economies have all shrunk. Global trade signs of weakness, appearing in both exports and imports in the majority of countries in the world. Demand for goods and raw materials production dropped sharply and commodity supply chains interrupted. The trade outlook is more bleak in export- and tourism- dependent countries. In the updated report "World Economic Situation and Prospects for 2021" dated May 11, the United Nations Department of Economic and Social Affairs (DESA) raised its growth forecast for the world economy thanks to the recovery of the global economy. strong recovery of the US and China. According to the report, DESA forecasts that the world economy in 2021 will grow at 5.4% instead of 4.7% as forecast in January 2021. This is a significant increase in the context that in 2020, world economic growth will decrease by 3.6%. In general, the world economy in 2021 has gradually recovered, but the growth outlook is still uneven because of many risks when economic activities still depend on the situation of the Covid -19 pandemic, vaccination progress and the emergence of new variants.

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In this context, exploiting the economic potential is an objective requirement of the economy, especially for developing countries. Night time economy has appeared in Vietnam, but only in potential form and simple manifestations. Currently, we have not paid enough attention to the role and size of the night time economy. This is a very important economic (region) for the domestic economy. Developing the night time economy will contribute to creating jobs for laborers; create conditions for economic development, especially the private sector. The following research paper is structured in 3 parts: (1) Introduction to the research problem; (2) Overview of the research situation; (3) Research content and results will provide synthesis, analysis, exchange and discussion to clarify theoretical and practical issues of night time economy. In order for the night time economy to develop as expected, it is necessary to closely follow the characteristics of this concept and apply it flexibly in the actual conditions of Vietnam.

2. LITERATURE REVIEW AND PREVIOUS RESEARCH STUDIES

In the world, there have been scientific works, authors - research works on night time economy. Typically, the work can be mentioned: “*Nightlife Cities: The Night Time Economy*” by author Sergey Avetisyan, 2020. At the beginning of the work, the author asks the question: “*What is happening to the economy when economists are sleeping?*”. The book is written for people who want to learn about how the night time economy works but are not too interested in statistics. Economist Sergey Avetisyan explained general principles underlying the idea of economics at night in urban different entertainment industries, urban collection, non-industrial h óa ... In plain language, the author has made critical arguments for the policies of some cities in terms of the incentives they create, rather than the goals they claim when developing the night time economy. However, the work favors the presentation of night time economy as an interesting aspect of urban economy, which emphasizes tectonic factors.

Work: “*Draft Supplementary Planning Document Night Time Economy*” of the London Legacy Development Corporation offers these guidelines to ensure the development of the economy at night, with a specific range in the city of London (UK). The development of the night time economy must be safe and not to the detriment of other economic interests. In the work, the authors have analyzed and evaluated policies towards night economic development. While London has been recognized as an exciting and vibrant 24-hour city, the city’s Mayor wanted to enrich London’s nighttime economy and culture. Vision for London has 10 principles set out in the economic construction of the night in London, predicted that London at night will be: “There is universal estimate; provides exciting opportunities for all Londoners; Promote all forms of culture, entertainment, retail and service activities; Promote the safety and well-being of residents, workers and visitors; Promotes a friendly and accessible nightlife. Promotion and protection of investment, operation and business spirit ... become a city 24h flexible support ...” The book focused on proposed policy for London, with the specific characteristics of this city. Therefore, the application to other localities or countries needs to take into account its own characteristics.

With the work: “*Bouncers: Violence and Governance in the Night-time Economy Oxford*”, Oxford University Press, the group of authors Hobbs, D., Hadfield, P., Lister, S., Winlow, S mentioned the other side the night time economy. In fact, the expansion of leisure time at night emerged as a key indicator of the prosperity of post-industrial cities, attracting investment, creating jobs, and regenerating the built environment. However, the increase in bars, restaurants, entertainment centers... has attracted a large number of young people and caused negative social consequences. Post-industrial restructuring has created an increasingly complex

volume of nighttime entertainment options, through which there are many illegal commercial opportunities. The authors have analyzed based on observations, interviews and then made policy suggestions for ensuring safety and legal compliance when developing the night time economy.

The doctoral thesis titled: “ *Policing nightlife: the representation and transformation of security in Sydney’s night-time economy* ” by Phillip Wadds - University of Western Sydney in 2013 focused on studying historical and social conditions, ideas Cultural meanings and regulatory controls have shaped the public and private forms of policing in Sydney’s night time economy . With that approach, the work has to reflect broader changes in the nature and roots a the policy of contemporary and how aspects of liberalism , neo-liberal and ideal tubers a “ city 24 hours ” and night time economy. This study also analyzes the effectiveness of nighttime economic policies, in light of media, political and public debates about regulation and aspects of the night time economy. . This study focuses on four specific Sydney nightlife locations to provide detailed observations . Therefore, the scope is only reflected in a city in a country, not yet universally recognized for the locality or other countries.

In Vietnam, there have also been a few authors - research works, discussing this topic recently. The article can be introduced : “ *Night time economy - “light door” for the tourism industry* ” by Nguyen Minh Phong, Nhan Dan Newspaper, 11/2019. The content of the article emphasizes the value, potential and benefits of the night time economy with vivid examples in some countries around the world. In fact, Vietnam should consider carefully the needs of travelers and those factors make of safety and security to develop night time economy. The article gives the author’s point of view on policy formulation and encouragement of night economic development in Vietnam. However, the author has only looked at it as a whole, but has not delved into specific aspects of those development policies and requirements.

Group of authors Tran Duc Hiep, Nguyen Duc Bao with the article “ *Experience in night economic development in some countries* ” , published in Online Finance Magazine , March 2021 have made some general comments about the concept Night time economy. Specifically, most countries share the view that the night time economy is not an integral part of the economy, but focuses on developing service activities that take place from 6pm to 6am the next day. . The article also gives comments about the level of social interest in the night time economy and introduces the leading night economic developing countries in the world such as the United Kingdom, the United States, Australia, France, Japan, Thailand or China... From there, some policy suggestions and experiences are given for Vietnam in developing the night time economy.

In general , domestic and international authors - works have mentioned, researched , exchanged, and evaluated multi-dimensionally the night time economy on the basis of theory as well as practice. Yet there is, or there is little of the author - the work refers to the impact of the pandemic on the economy Covid -19 at night, or just mention night time economy at a local aspect or a national family. Therefore, it is necessary to have a more complete, direct and topical view on this issue.

3. RESEARCH CONTENT AND RESULTS

3.1. Concept, potential and benefits of night time economy

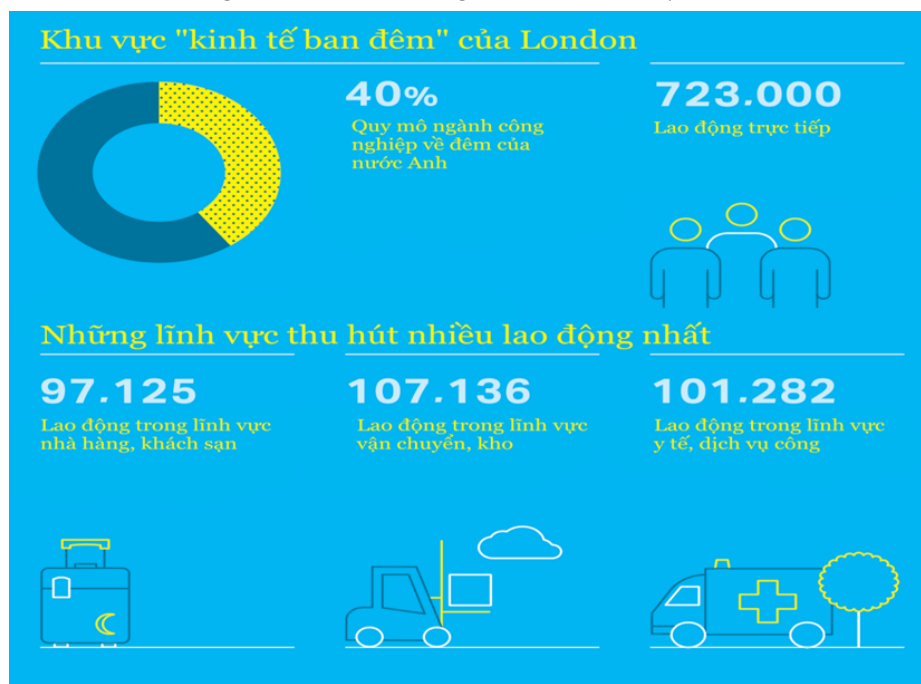
Night time economy is a new concept in Vietnam. In the world, the term night - time economy or evening economy has appeared for a long time. There are many different conceptions of the night time economy, but according to the author of the article : “The night time economy is the totality of economic activities that take place in the period from the night before to the next morning, including the major activities such as : tourism, cuisine, culture, entertainment and activities of

trade and other services such as transport, retail, credit, telecommunications... “ Some other views say that night time economy includes production activities in other industrial sectors that take place at night, derived from the accepted concept of economy. In general, the night time economy is still very new, there is no general concept around the world. The time frame for economic activities at night depends on the regulations of each country, each locality, it can be from 5pm - 7pm the day before until 6am - 7am the next day.

The night time economy has great potential. This is one of the dynamic economic sectors and regions with high economic value, bringing billions of dollars, positively contributing to GDP growth, creating many jobs for the society and increasing revenue for the state budget. For the country's development, economics helps nighttime economic restructuring and exploit new resources and freeing the resources. Night time economy also contributes to increasing the spiritual values, enriching the cultural life of the people, promote the development of sustainable tourism and enhance the national image.

The benefits brought from the night time economy are undeniable. Economic activity at night has been developed in many countries around the world, including the typical in the city of Sydney (Australia), Zurich (Switzerland) and Amsterdam (Netherlands), Tokyo (Japan)... Beijing International night brought great benefit, contribute to Australia 102 billion dollars per year, 66 billion b total bout for the UK, forecast to reach 400 billion US dollars scale in Japan. According to a study by Ernst & Young (E&Y), the automotive industry in the UK contributes about 6% of GDP. Of which, the ph in London accounted for around 40% in terms of size, the equivalent of 26.4 t dependence table Kingdom. In Australia, the size of Sydney's nighttime economy in 2017 was \$4 billion. Night economy often concentrated in the large urban centers. There are famous landmarks in the world such as: Las Vegas, New York, Hollywood (USA); Beijing, Shanghai, Shenzhen (China); Paris, Toulouse (France)... Most of the nations are the decentralized local government in the planning and development that local night time economy.

Figure 1: London's night time economy (UK)



Source: London's 24 - Hour Economy, E&Y

Especially, night time economy is sector diversified, dynamic, cohesive high, so it has the supply of large employment. According to estimated statistics, in the UK, the night time economy creates more than 1.25 million jobs, in London alone has created direct jobs for more than 723,000 workers, equal to one-eighth of the total number of jobs in the city. In the US, each year New York pays \$4.2 billion in wages to employees in the food industry at night. Particularly in 2018, operations of the restaurant at night in New York brought 12 billion dollars and create 141,000 jobs. Arts institutions, from museums and galleries to theatres, create more than 18,000 jobs and generate \$3.1 billion in revenue. Every night, New York generates more than 8 million USD from performances and art exhibitions. Including the sports, bar and food industries, New York gets \$19 billion a year from the night time economy. In Sydney (Australia), each year the night time economy creates 234,000 jobs, with a turnover of \$ 27.2 billion... The above figures can show great potential and benefits from the night time economy.

Figure 2. The number of people working in night time economy in London (UK)

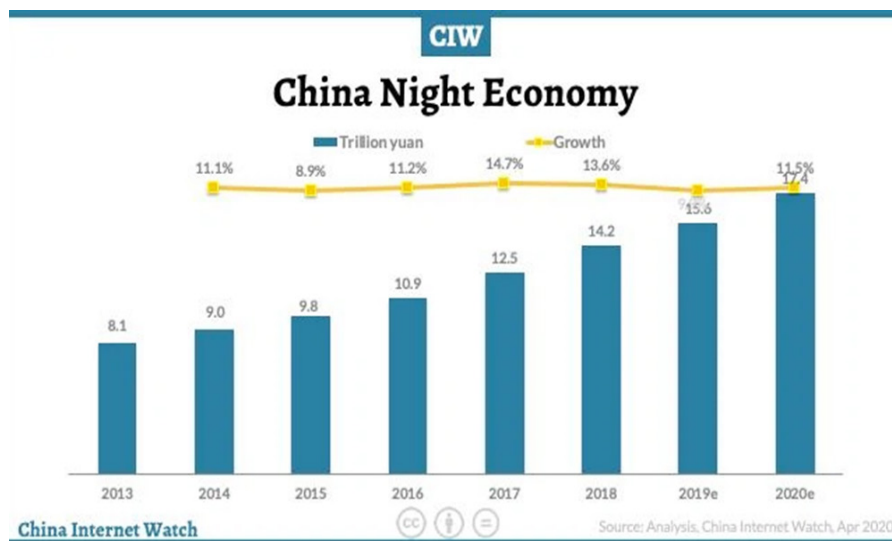
BẢNG 1: SỐ LƯỢNG NGƯỜI LAO ĐỘNG TRONG NỀN KINH TẾ BAN ĐÊM TẠI LONDON (NĂM 2016)	
Ngành	Số lượng người lao động
Nông, lâm, ngư nghiệp	600
Khai thác và khai thác đá	250
Sản xuất	19.035
Cấp nước, thoát nước, rác thải	1.176
Xây dựng	23.287
Bán buôn, bán lẻ và sửa chữa	59.248
Vận chuyển và lưu kho	107.136
Nhà ở và dịch vụ ăn uống	97.125
Thông tin và truyền thông	54.558
Tài chính và bảo hiểm	15.086
Bất động sản	5.895
Khoa học, kỹ thuật	59.803
Dịch vụ quản trị và hỗ trợ	62.150
Dịch vụ công và quốc phòng	45.342
Giáo dục	15.840
Y tế và công tác xã hội	101.282
Nghệ thuật và giải trí	46.592
Dịch vụ khác	7.350
Hộ gia đình với tư cách là người sử dụng lao động	1.541
Tổng	723.296

Nguồn: Báo cáo của tổ chức London First và E&Y (2018).

Source: Report of London First and E&Y (2018)

The night time economy is growing rapidly in Asia. In Japan, in 2020, it is estimated to reach 3.7 billion USD. The Japanese government proposed a policy to promote nighttime economic growth from the end of 2017, mainly addressing transportation infrastructure and regulations related to locations and working conditions. In China, the night time economy grew by 11.9% between 2013 and 2018 and is expected to reach a value of \$2.6 trillion by the end of 2021. Beijing is ranked 6th out of 10 cities that ordered the most night food in the world. The city has a goal that by 2022, more than half of all convenience stores will be open 24 hours a day.

Figure 3. Night time economy growth in China



Source: China Internet Watch (2020)

3.2. Actual night time economy in Vietnam

In Vietnam, the activities of trade in services at night in many localities was quite strong, especially in the local resources, resources, nature tourism currently. But those activities are not enough to call the night time economy, because the connotation of this term is quite broad. Actually, economic activities at night of Vietnam now also monotonous and small, focusing on culinary and night markets, or the pedestrian street... Entertainment activities, art performances at night, a system of shops, supermarkets, busy and continuous night shopping areas have not been formed in big cities ...

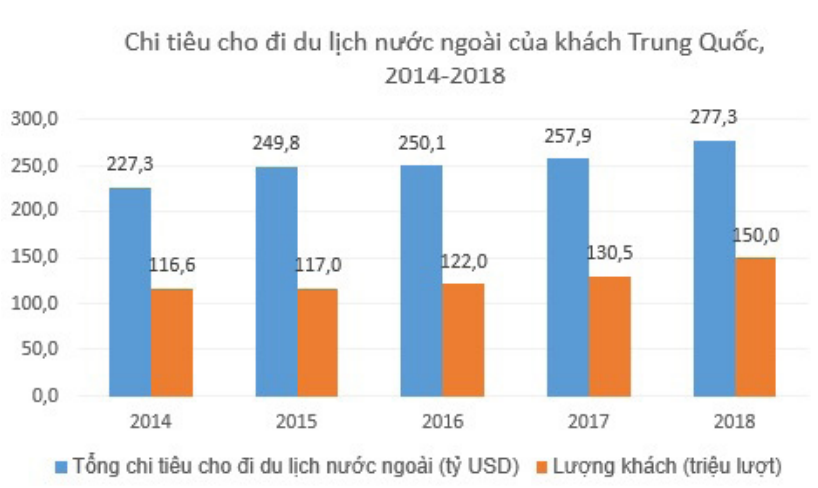
The current night economic development mainly focuses on small and retail services, such as commercial centers, convenience stores, night markets, and entertainment areas. Hanoi Old Quarter, Bui Vien, Pham Ngu Lao Street in Ho Chi Minh City, Hoi An in Quang Nam... are considered favorite destinations of foreign tourists when coming to Vietnam. But there, the localities and the tourism industry have not yet developed into prominent brands to attract domestic and foreign tourists. Some famous tourist areas such as Sa Pa, Da Nang, Ha Long... have not yet diversified the services developed at night to maximize the activities of tourists. The products and services that are taking place in destinations at night can not be called "night time economy" but only in the scope of "night food and entertainment services". According to the Vietnam National Administration of Tourism, the country currently has about 20 night markets for tourism and about 1,000/2,300 convenience stores operating 24 hours a day, mainly in Hanoi and Ho Chi Minh City.

Currently, Vietnam's tourism products are mainly concentrated in the daytime, from about 7 am to 5 pm, called hard products, and only bring about 30% of service revenue. The remaining about 70% of the revenue is from 6pm to 2am the next day, so far has not been developed. According to statistics, currently each international visitor to Vietnam only spends about 700 USD, a very low level compared to other countries in the region. Tourists coming to our country want to experience and explore, especially visitors from countries with large time zone differences, the greater the need for transactions and travel. That's why the number of international tourists to our country increased, but revenue from travelers reschedule incommensurate increase. Now, daily visitors to Vietnam spend average 96 USD, while Thailand is 163 USD and Singapore is 325 USD.

According to the survey of National Administration of Tourism in 5 years showed about 60% of spending by international visitors to Vietnam for accommodation and dining; Activities such as shopping, souvenirs, sightseeing, entertainment and entertainment only account for 20%, the rest is other expenses. Accordingly, international visitors only spend 15 to 18 percent of their total spending on shopping. Meanwhile in Thailand, Singapore, and Japan, this proportion accounts for nearly 50%. Many tourists want to spend money in Vietnam, but they have little opportunity because the products and services of tourist areas are still quite monotonous. Most visitors to Vietnam mainly enjoy sightseeing, eating, resting and returning, with little entertainment or shopping. That services at night are not diversifie will not be able to keep their customers or generate revenues for local people as well as the state budget.

With about 18 million international tourists coming to Vietnam every year, the night time economy is considered a new and disruptive trend. For Vietnam, it is also an opportunity to diversify and develop the tourism economy, especially with the visitor from China, a particularly large market. Over the past decade, China has emerged as an important source of international tourists for Asia in particular and the world in general. The number of Chinese tourists traveling abroad increased from 10.5 million (in 2000) to 150 million (in 2018), an average growth rate of 16%/year.

Figure 4. Outbound travel spending by Chinese tourists period 2014 -2018



Source: Vietnam National Administration of Tourism

Through studying and analyzing the current situation of the night time economy in Vietnam, four main observations can be made as follows: (i) The night time economy has already formed in Vietnam, but it is still in its infancy. Night activities are mainly small businesses in places with potential and advantages in tourism and culture; (ii) the size, nature and conditions of the legal form nighttime economy is not sufficient; (iii) Commercial products and night services are not yet abundant. (iv) Revenue from spending by foreign tourists has not been strongly exploited.

3.3. Impact of the Covid-19 pandemic on the night time economy in Vietnam

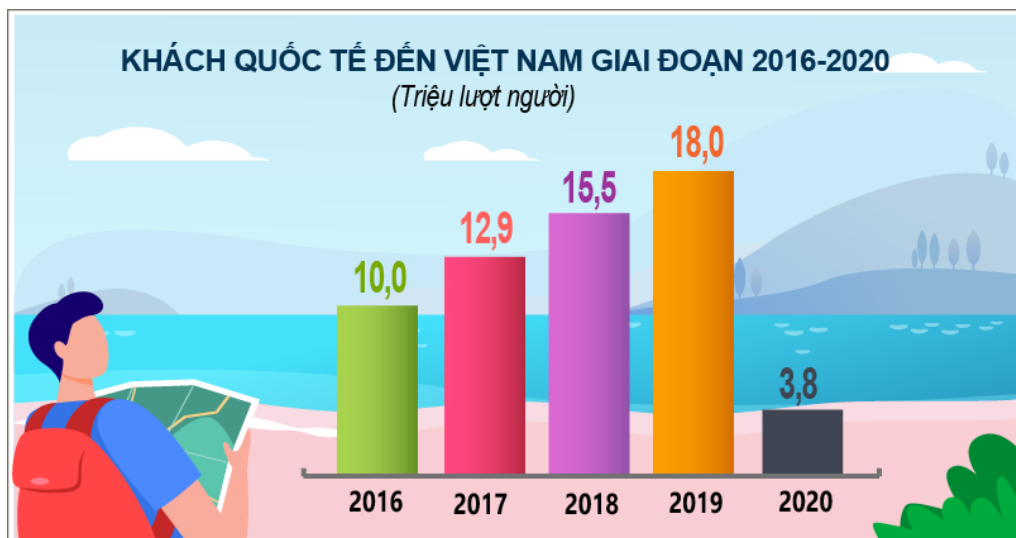
The emergence of pandemic Covid - 19 has affected the whole economy in the world and Vietnam, in which the impact on economics night is not small, because it is the regional economic dynamic, highly interactive, including the associated involvement of multiple objects

and the interference between sectors: manufacturing, tourism, services, aviation... In which most affected sector is the tourism industry, transport service, consumers. A sharp drop in tourist arrivals means a decrease in revenue from the night time economy. These are the immediate and long-term difficulties affecting the development of the night time economy in Vietnam.

Some key industries and sectors providing goods and services for the night time economy are affected by Covid – 19:

For tourism: Tourism plays an important role in Vietnam's economy, accounting for 8% of GDP (2019), forecast to reach 10% the proportion of GDP (2025). From the end of 2019 to the beginning of 2020, the Covid-19 epidemic broke out in China and quickly spread around the world, including Vietnam, with increasingly complicated developments not only making growth targets difficult to achieve. tourism, aviation... went bankrupt, but also caused our country's tourism industry to fall into a serious crisis. There have been many businesses in the tourism, hotel, and restaurant business that have to consider the plan to reduce personnel to the maximum extent, and at the same time give employees annual leave, split shifts to limit salary costs. Besides, many companies which have great financial potential in this time also focus on cost savings, personnel training and maintenance facilities. Only Hanoi, by 12/04/2020, has 853 accommodation establishments, tour operators in 1371 (1297 international, 74 domestic), 35 transport enterprises, 130 destinations tourism in the area has been temporarily suspended. In total, about 29,568 employees temporarily quit their jobs (accommodation 14,300 people, travel agencies 11,168 people, transportation 1,100 people, tourist destinations 3,000 people).

Figure 5. Number of international visitors to Vietnam in the period 2016 – 2020

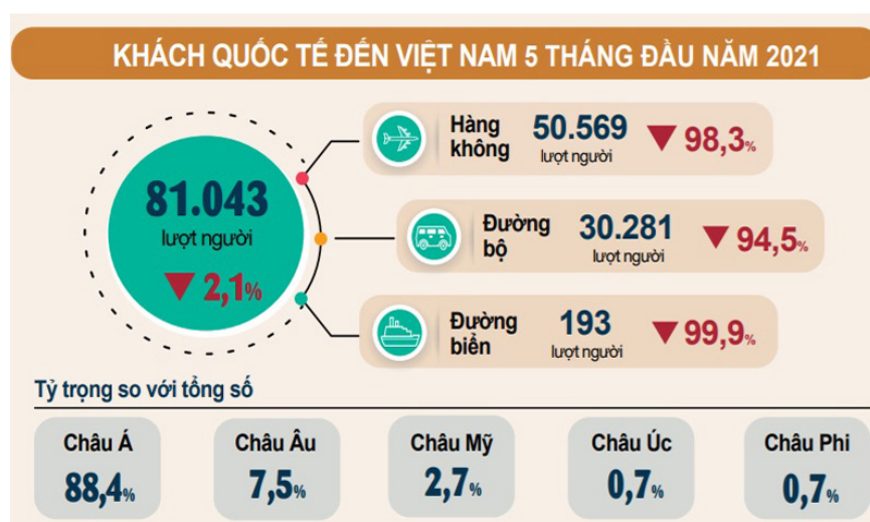


Source: Vietnam General Statistics Office

The Covid-19 epidemic broke out again in early 2021 made the tourism industry to once again fall into a state of loss, and tourism in many localities fell into a gloomy state. A series of customers have contacted travel businesses to request to cancel tours, including tours that do not go to epidemic areas due to fear, only a few customers agree to postpone the tour to another time, when Covid-19 epidemic is under control. The number of domestic and international tourists dropped sharply, leading to a serious decrease in tourism revenue in the first two months of the year, reaching only VND 2.5 trillion, down 62.1% over the same period last year. Due to the

impact of the Covid-19 epidemic, many major tourist attractions in Vietnam have had to stop operating, or open but stop organizing activities to welcome the spring, so the number of visitors has decreased sharply compared to the same time in years. prior to. According to statistics, the revenue of travel services in the first 2 months of 2021 of Hanoi decreased by 47.7%; Da Nang decreased by 67.7%; Ho Chi Minh City decreased by 69.2%; Thua Thien - Hue down 73.3%; Hai Duong fell 89.4%. Da Nang decreased by 67.7%; Can Tho fell 72.1%. Particularly during the Lunar New Year holiday 2021, although there are many incentive programs, promotions and discounts launched, the room capacity of accommodation establishments in Ho Chi Minh City is still limited. Ho Chi Minh City only reached less than 10%; the number of tourists to Binh Thuan, Nha Trang... also decreased by 50-80% compared to the previous year.

Figure 6. Number of international visitors to Vietnam in the first 5 months of 2021



Source: Vietnam General Statistics Office

For the food service industry : If in January , 2020, restaurants reduced their revenue by 10% - 20%, then in the following months that number has increased to 50% - 70%. Restaurants must paused and closed at the request of Government that will decrease or have no revenue . Preventing diseases cost (mask, hand cleaners liquid, restaurants antiseptic spray), promotion increases. Even if there are no customers or they have to close during the epidemic season, businesses still have to pay a rental fee of several tens of millions, even hundreds of millions per month. The pressure to pay the rent and the fear that after the epidemic ends, the demand for food will also decrease, which has caused many restaurants to return their premises, let employees quit, and accept to spend billions of dong of investment.

Regarding transportation services: Many taxi brands, bus, car contract with the impact of the epidemic Covid - 19 also fell into difficulties because of declining revenue. Vehicles lying at the station, stopping operations on fixed routes also often happen. This not only causes loss of revenue for businesses, but also pushes many people into unemployment, for the very simple reason that the company does not have enough wages to pay because of declining sales. As an example, Mai Linh Nghe An taxi company. The reduction of up to 40% in the number of passengers means a decrease in revenue, leading to a decrease in the driver's salary. Many drivers run without customers, which leads to boredom, so they take a break or find a temporary job to wait for the epidemic to end and

then go to work. After tourism, transportation, especially aviation, is the industry that has suffered the most due to the Covid-19 epidemic from China. The suspension of flights to China caused Vietnamese airlines to reduce 5.1 million passengers, accounting for 62% of the market share of this 8.1 million passengers market (in 2019). As for other markets, from the end of March, Vietnamese airlines have cut nearly 100% of international flights. Therefore transportation service yard - on from the airport also fell sharply .

3.4. Solutions to develop night time economy in Vietnam after Covid - 19

Vietnam has many tourism resources and is increasingly becoming a favorite destination for international tourists. The value added content in the revenue of tourism activities is higher than in many economic sectors. Cultural and artistic potential, unique cuisine, young population size, high level of integration and globalization, relatively mild weather at first... are the inevitable reasons for night time economy to grow in Vietnam developed, in line with international trends.

Pandemic Covid -19 has been far-reaching effects on all aspects of the economy, to all countries in the world, is currently continuing complicated. The global economy at one point fell into a serious recession. Vietnam's economy has opened the large, intensive international integration, and has been hit harder padded g influence to all sectors. However, in the difficult context, there are still positive and optimistic signals from the economy. Vietnam's GDP in the first 6 months of 2021 still has positive growth and is still the highest in Southeast Asia. According to the General Statistics Office, in the first 6 months of 2021, GDP increased by 5.64%, higher than the 1.82% growth rate of the first 6 months of 2020.

On July 27, 2020, the Prime Minister of Vietnam signed and promulgated Decision No. 1129/QĐ - TTg on "*Approval of The project of night time economy development in Vietnam*". The objective of the project is to exploit the potential of night time economy development, in order to make the most of new economic development opportunities, to improve people's income and living standards; At the same time, to limit risks and negative impacts on the work of ensuring political security and social order and safety; towards economic growth, job creation, community cohesion, social exchange for people, motivation for the development of public services and optimization of the use of public services; encourage the development of many new industries and effective participation of enterprises. Developing night time economy will be an inevitable trend in the future. In order to develop the economy smoothly in the post-Covid - 19 period, according to the author, it is necessary to focus on the following 6 main groups of solutions:

First, control and repel the pandemic of Covid – 19

This is the first and urgent solution. In the context of the epidemic has complicated, Vietnam should continue to have on the powerful of the whole political system, levels, branches and units, local businesses and participation in response to positive all people. Strongly deploying epidemic prevention and control measures with the goal of effectively handling and zoning the outbreak; isolation, timely treatment; review and strictly manage people from epidemic-hit provinces and cities; well control the source of infection, handle the epidemic drastically, ensuring the correct process and regulations. Virtual defend and expand "the green", folded tightly and thoroughly squelch in "red zone" in the prevention strategy. Quickly detect and conduct thorough tracing of cases and outbreaks, preventing the disease from spreading to the community. Mobilized strongly in the agencies' communication, journalism, system of radio at all levels to promote awareness of the people and communities on the obligations and responsibilities in the work of prevention Covid -19 pandemic.

Second, raise awareness and positive conception of night time economy

This is the basic factor to focus on. Previously, the concept of many people and places about business and economic activities taking place at night was still simple and incomplete. Many notions only believe that economic activities at night contain more risks than opportunities for profit. Therefore, the next time the grant management and people need to raise more awareness, thinking about the economy at night, then proceed to eliminate prejudices still in negative forms, commercial operations night service in particular and night time economy in general.

Third, develop a policy for developing the night time economy

Develop and complete mechanisms, policies and legal corridors on night-time economic development in Vietnam. Starting from the point of view that the night time economy is not an integral part of the economy, and actively developing the night time economy is in line with the development trend of the economy, accelerating the process of international integration. In economic terms, policies need to be connected, harmonized and synchronous.

In fact, the tourism product at night brings many business opportunities, create jobs for the workers, and especially brings the opportunity to experience, enjoy the cultural values, local travel for visitors. To develop night time economy, local authorities need to have a full assessment of the position and role, opportunities and risks of this type. Localities and industries need to plan and build amusement parks, food courts, tourist attractions. Enterprises and cultural and artistic units should link and exploit the products they have in a synchronous manner along the product chain. For example, when implementing art performance center models, it is necessary to have a connection with other shopping, dining, entertainment programs, etc. so that visitors can use a variety of services within a certain period of time. In particular, it is necessary to enhance the role of the locality in identifying, researching and developing types of night time economy suitable to the locality. Actively research international experiences and the linkage between other modern economic models and activities such as e-commerce, digital economy, circular economy... for comprehensive development. Developing the night time economy needs to follow the law of supply and demand of the market, and harmonize between goals and resources.

Fourth, improve the night economic management mechanism

The night time economy takes place in the period from the night before to the next morning, which is still considered a rest time after a working day for many people. In fact, there are many subjects involved in the night time economy such as: those who want to enjoy the evening space, or those who work through the night, those who manage the night... Therefore, it is necessary to be alert, more active in extending the night operation time. Making tourists to have the opportunity to experience the night service, pay more out of the tour is very encouraging. To implement this, it is necessary to remove many barriers, for example, the prohibition of restaurants and bars having to close after 24h... Along with the bright sides, the prospect of night economic development is still there. There exist inadequacies and difficulties in management and administration, especially the increased risk of social evils and crimes. Therefore, in order to deploy the night time economy, it is necessary to set high requirements on ensuring security and order, social safety, controlling problems of noise, light and waste pollution; monitoring issues of hygiene, food safety, quality control, origin, commodity prices, etc..

Fifth, prepare development resources night time economy in Vietnam

In order to promote the development of the night time economy, management agencies and local governments need to take the initiative in resources . Capital and resources available locally, such as labor, resources, nature , combining resources from state budgets, particularly social resources derived from the organizations and individuals, enterprise. In addition, localities also need to develop and implement policies to encourage and give incentives to enterprises and business households to participate in night economic activities . Create conditions for business establishments access formal financial sources, especially sources of credit banks. Also check completion of preferential policies on taxes, fees, interest rates, money leasing land.

Sixth, choose the model and strongly promote the night time economy

Promote tourism, promote night economic activities; building night tourism products based on local cultural elements, creating accents according to local characteristics; select types of services, iconic locations to attract tourists ... The research and development of a model of night economic development needs to be suitable with the advantages and practical conditions in the locality, especially suitable for the ability to build supporting infrastructure, investment resources and the ability to mobilize and attract investment in each specific location. Night economic development programs/plans need to have a careful calculation of influencing factors and impacts of night time economy on the locality (both positive and negative impacts) based on demand and the maximum exploitation of strengths, as well as requirements , the ability to arrange resources for management and support .

4. CONCLUSION

Night time economy is the new driving force for development. It is more evident than in the context of Vietnam's economy is the impact from various sides, especially the impact of the pandemic Covid - 19. Night time economy has much potential, show the dynamics in integration, exploiting all economic and social benefits for consumption and growth. To "lighting" the night time economy, to synchronize harmonize the legal and policy from macro to micro. With a look ahead aspiring through the lens of innovation , commitment to social transformation in a volume range, contributing to growth, night time economy will is " bright door « for Vietnam economy in the future.

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SUSTAINABLE DEVELOPMENT CONFRONTING CONTINUED WAVES OF COVID-19 IN VIETNAM: ADAPTATION AND ADJUSTMENT

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Abstract: *Continued waves of Covid-19 have onset since the end of 2019, creating such a profound disturbance in all aspects of social life that it forced the social and development activities of countries to readjust a basic way to cope and thrive in the new normal. From the perspective of sustainable development, the Covid-19 pandemic is negatively affecting all aspects of sustainable and green development in the world and in Vietnam. By synthesizing documents and statistics, the article analyzes the impact of the Covid-19 pandemic on economic growth and sustainable development in Vietnam. The results show that the impact of Covid-19 waves on sustainable development pillars in Vietnam is significant and depends on the capacity of Government to adopt and adjust policy according to dual objectives. Based on the research results, the authors have given some suggestions for policy adjustment towards sustainable development in the future.*

Keyword: *Adaptation, adjustment, Covid-19, policy, sustainable development*

INTRODUCTION

Originating from Wuhan (China) at the end of 2019, up to now, the Covid-19 pandemic has broken out all over the world with many dangerous new strains. As of August 08, 2021, the world recorded 203,000,000 cases, 4,300,000 deaths in 215 countries and territories, leading in the total number of cases and the number of deaths. Death is still the US, followed by India, Brazil, Russia... In the ASEAN region, Indonesia overtook the Philippines to become the leading country in the region in terms of total cases and deaths. In Vietnam, the number of infections is 216,000 people, 3,397 deaths. Every day, the world has hundreds of thousands of new cases, thousands of deaths and shows no sign of slowing down, even spreading rapidly in some countries after easing social distancing measures.

The Covid-19 pandemic has had a comprehensive and profound impact on all countries, and is still evolving in a complicated manner. The global economy fell into a serious recession. Vietnam is a country with a large economic openness and extensive international integration, which has also been affected by the Covid-19 epidemic. Although our country has had initial successful disease control, Covid-19 has significantly affected all socio-economic fields, disrupting the supply chain, production and circulation of goods. A number of industries such as export, import, aviation, tourism, accommodation services, catering, healthcare, education, labor and employment are directly affected; many businesses go bankrupt, dissolve, suspend operations, downsize, etc. This article discusses sustainable development confronting continued Covid-19 waves in our country on two contents: the impact of the Covid-19 epidemic on sustainable development; and some policy suggestions for continued sustainable development.

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LITERATURE REVIEW

Impact of Covid-19 on economic growth and UN sustainable development goals has been a relatively common problem around the world, being studied in a diverse range of both methodological and research aspects.

Kalterina Shulla et al (2020) analyzed how the new circumstances created by the pandemic have affected the interdependencies between SDGs. Following a synopsis of the current literature

Walter Leal Filho et al (2020) used entail an analysis of the literature, observations and an assessment of current world trends to discuss how the coronavirus pandemic may influence the SDGs and could affect their implementation

Jacob Hörisch (2020) allowed SAMP-research to argue that the COVID-19 crisis not only relates to the SDGs but is part of the research field of sustainable development itself. The pandemic has been found to severely threaten the achievement of the SDGs, while opportunities concerning selected SDGs can also be found. In this regard, the author identifies patterns, concerning which types of SDGs opportunities or respectively, threats exist

. Osman Gulseven (2020) argued that while the deteriorating economic conditions will negatively affect most aspects of development, we might also observe some positive developments in the long term.

In Vietnam, the research work on the impact of Covid-19 on sustainable development is taking initial steps. Therefore, the number of internal research on this issue is still very limited. Some studies on published include these following:

Nguyen Danh Son (2020) illustrated sustainable development in the new normal due to the Covid-19 epidemic in our country on two contents: the impact of the Covid-19 epidemic on sustainable development; and some policy suggestions for continued sustainable development.

Bach Hong Viet (2020) analyzed the impact of the Covid-19 pandemic on economic growth and sustainable development in Vietnam. From there, suggest some suggestions for sustainable development in the future.

Nguyen Quang Thuan (2020) assessed the impact of the Covid-19 pandemic on the world economy and Vietnam in 2020 thereby offering suggestions for policy solutions to perform the dual task of fighting the epidemic and developing the economy at the same time. economic and social stability in the coming period.

METHODOLOGY

i. Data collection method

The paper conducted data collection method on the basis of researching existing documents and by logical thinking manipulation to draw the necessary scientific summaries related to the concept of sustainable development confronting continued waves of Covid-19. By reviewing the scientific literature from different official sources all around the world as well as practising historical and theoretical systematization methodology, our research came to the critical conclusions about issues related to sustainable development Vietnam has been facing under Covid-19 crisis.

ii. Data analysis method

- This paper applied the method of synthesizing, analyzing and comparing secondary data about the content and related issues related to sustainable development Vietnam has been facing with under Covid-19 crisis. Since then, it has proposed some policy adjustment to improve the pillars of sustainable development in Vietnam.

RESULTS AND DISCUSSION

1. Continued waves of Covid-19 and the new normal of sustainable development

“New normal of sustainable development” is a phrase used to refer to the state after events with severe impacts and consequences such as economic crisis or pandemic. Just like the human body when suffering from an illness, the economy and social life strongly affected by the Covid-19 pandemic must stretch themselves before the devastation at a fast pace with many resources and resilience of not only each cell of the economy (businesses, households) but also the entire national, regional, and even global economy. When this event (the Covid-19 pandemic) passes, it will certainly leave severe sequelae that take many years to overcome and recover to continue to develop.

Sustainable development is in essence, harmony and fairness between generations and within generations in developing as well as enjoying the fruits of development. The Covid-19 pandemic has been and will continue to disrupt harmony and fairness in each country as well as globally. It even deepens and exposes some of the injustices in development that are hidden or overshadowed by the glitz of development achievements. From the perspective of sustainable development, the Covid-19 pandemic is having a negative impact, in some areas even very negative, on all aspects of sustainable development.

Regarding the economic, all forecasts of prestigious international organizations (WB, IMF, ADB, ...) assume that the world economy will prosper in 2021 compared to previous forecasts. However, the delay in the implementation of the Covid-19 vaccination campaign will hinder the economic recovery of developing countries. According to the latest report on the world economic outlook released on July 27, the International Monetary Fund (IMF) forecasted that global growth would remain the same at 6% for 2021, but the difference between the two growing among developed economies with many emerging markets and developing economies.

The growth outlook for advanced economies this year has improved by 0.5 percentage points, but this is more than offset by the rate of downward revisions for emerging and developing economies. developed due to the significant decline in the ranking of emerging Asia. For advanced economies, the IMF forecasts growth for these countries will be 5.6% in 2021, up from 5.1% forecast made in April. However, for emerging markets and developing countries, the IMF has lowered its growth forecast to 6.3% from 6.7% growth in April. 2021. For 2022, the IMF forecasts global growth of 4.9%, up from the previous forecast of 4.4%. In Southeast Asia, the IMF forecasts growth for Indonesia down 0.4% to 3.9%; Malaysia dropped 1.8% to 4.7%; The Philippines dropped 1.5% to 5.4% and Thailand dropped 0.5% to 2.1%.

Large bailout packages have been rolled out by countries to help businesses and consumers and stem the economic slowdown, but seem to be nothing compared to the shutdown and freeze of manufacturing activities, business and consumption in society. Germany has allocated at least 350 billion Euros (about 10% of GDP) to funds to support businesses in difficulty, while Japan has launched a huge rescue package of nearly 1 trillion USD (about 20% of GDP) but still does not prevent many declines of the economy as well as the bankruptcy of many small and medium enterprises. Because, these relief packages are just temporary measures with the risk of being forecasted that there will be the next wave of variant corona virus outbreaks if not well controlled. Thus, it is clear that the economic “circuit” of sustainable development is currently temporarily stalled, interrupted and divided between groups of developed countries and developing countries because of inadequacies in the supply of vaccines.

In terms of society, the widespread outbreak of the Covid-19 epidemic not only disrupted global production and supply chains, seriously affected labor, especially in labor-intensive industries, and the informal sector...but also lead to the risk that a part of the people will be impoverished and a part of children deprived of development opportunities.

Economic decline, stagnation, and freezing lead to a decline, stagnation, and freezing of work and incomes of labours and their families. It even reveals inequalities and injustices in the field of employment and income. Poverty also increases accordingly. Workers' livelihoods and their family incomes are affected by a tremendous multiplier, especially for workers in the informal sector, where 60 percent of workers make their living in the economy. global - is the region that is currently the most severely hurt, especially in poor, underdeveloped countries.

The pandemic has also revealed more clearly the weaknesses in the social protection and security systems of many countries, including leading developed countries. The gap between the rich and the poor in society has also increased, even breaking the achievements of hunger eradication and poverty reduction achieved previously. From a medical perspective, the corona virus does not discriminate who its victims are, but from a social impact perspective, it brutally discriminates against the poorest and the weakest in society.

There have been concerns that the Covid-19 pandemic will not only cause young people to lose their jobs now, but also have long-term effects on mental health, creating a "isolated generation". "are less skilled than they used to be. Educational psychologists also warn of an increased risk of depression and low self-esteem at school age as a result of the coercion of being forced to stay at home. There are also warnings about an increase in domestic violence, about divorces stemming from the state of isolation and social distancing due to Covid-19. Thus, the Covid-19 pandemic is not only disrupting many achievements, but also revealing hidden and hidden gaps in the implementation of social sustainable development goals.

Regarding the environment, the Covid-19 pandemic seems to create a pause for the negative impacts on the environment due to stagnant and quiet development activities: better air quality, carbon emissions and pollution. contamination due to reduced production. It is clear and solid evidence to refute long-standing suspicions that human development is not the main driver of climate change. However, environmental scientists have also warned about the rapidly increasing amount of household waste from home consumption and medical waste that is often used only once, accumulated for many months without being recycled. as well as about the risk that, when the pandemic is over, managers can easily fall into attempts to restore the economy with disregard or neglect, even ignoring what they have committed to green development, environmental protection, especially related to the use of fossil fuels.

2. Sustainable development issues in the response to the Covid-19 epidemic in Vietnam

As a country deeply integrated with the world, Vietnam is also directly affected by the Covid-19 pandemic. Although Vietnam has quickly and successfully controlled the spread of corona virus, has positive economic growth in 2020, however, as the simile image of Deputy Prime Minister Vu Duc Dam at the National Assembly meeting on June 13, 2020, "we are in a low-lying field, the water in the river is much higher and still raining", the sustainable and green development in our country is still temporary. interrupted, greatly affected on all 3 pillars of sustainable development.

There have been published studies on the impact of the Covid-19 pandemic on Vietnam's development sectors and fields, which the common point in the assessment is not light across all areas of sustainable development. That is first of all a decline in both quantity and quality (capacity, growth potential, creativity, innovation, ...) of economic cells that are enterprises. According to the report of the Ministry of Planning and Investment at the meeting of the Standing Committee of the National Assembly mentioned above, in 2020, there are 103.424 enterprises withdrawing from the market, waiting for dissolution and completing the procedures. dissolved, much higher than 88.651 newly established enterprises. Meanwhile, in the first 7 months of 2021, the above figure was 79,7 thousand enterprises, up 25,5% over the same period in 2020.

According to a survey on the impact of the Covid-19 outbreak conducted by the Research Department for Private Economic Development under the Advisory Council for Administrative Procedure Reform, 20% of businesses said they had to be ceased, 76% of enterprises could not balance revenues and expenditures and 2% were dissolved, only 2% of businesses were temporarily not affected by the pandemic. Out of 76% of businesses that cannot balance revenues and expenditures, 54% said that cash inflows only meet less than 50% of expenses and only 7% said that cash inflows meet more than 75% of expenses.

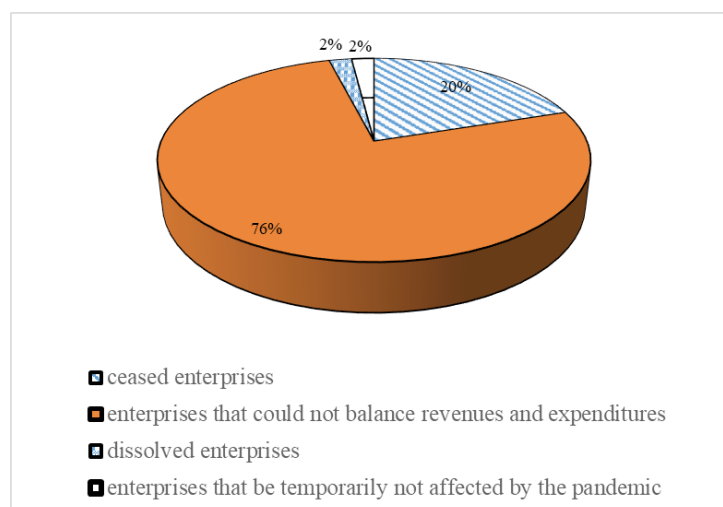


Figure 1: Survey results on the impact of the Covid-19 outbreak on enterprises

Source: Research Department for Private Economic Development

However, with the almost matching forecasts of domestic agencies and international organizations about positive growth in 2021, it is safe to say that the main engines of the country's economic growth are likely to be the same. In the remaining period of 2021 and early 2022, enterprises will continue to recover gradually before the healing and shifting of international supply chains. There are also not many businesses that are proactive in supply and the market has the ability to recover faster, such as agricultural, forestry and fishery products. The significant decline in income due to Covid-19 made consumption power in society decrease, consumers tightened their spending due to uncertainty about the disease's development.

The stagnation of production and business activities led to a deep reduction in the demand for capital in the economy, causing the interest rate level to be adjusted sharply in 2020 and starting to recover in the first half of 2021 when the economic situation is favorable. more important. The supply, demand and solvency of the economy have all decreased markedly and the bankruptcy and

stagnation of many businesses make the national revenue during the peak of the epidemic in 2020 also decrease sharply while the Government has to spend money. more (hundreds of trillions of dong) for Covid-19 relief packages. According to the Ministry of Finance, in 2020, the total state budget revenue will decrease by 163 trillion VND compared to the assigned estimate. State budget deficit equals about 4,75% of GDP (up 1,31% compared to the set target); the fair debt ratio is about 55,5% of GDP (up 3,2% compared to the old target).

From the perspective of social sustainability, the Covid-19 pandemic has also seriously hurt workers, especially the vulnerable and vulnerable to major fluctuations such as the financial crisis. main, epidemic. From a labor perspective, in our country, the weak and vulnerable labor force accounts for the majority, because they are workers in small, medium and micro enterprises accounting for more than 90% of the total population. businesses in the economy. With a significant part of our country's economy often called the "sidewalk economy" (livelihood on the streets), the freelance workers here suffer the most, the greatest loss of jobs. livelihood opportunities because of Covid-19. Even the travel ban also makes many of them, who come from other places, trapped in very difficult circumstances not only in terms of economy but also living conditions as well as family affection.

In the second quarter and first six months of 2021, the Vietnamese labor market was affected by the 3rd and 4th outbreaks of the Covid-19 pandemic. The labor and employment situation in the second quarter of 2021 shows that the labor market has not shown any positive signs with the number of employed people decreasing compared to the previous quarter, the unemployment and underemployment rates increasing compared to the previous quarter. The rate of workers in informal employment increased compared to the same period last year. Underemployed workers in the second quarter of 2021 were 1,1 million people, an increase of 173,5 thousand people compared to the previous quarter and a decrease of 137,1 thousand people compared to the same period last year.

The faster, stronger, and more difficult-to-control outbreak of the fourth Covid-19 epidemic has resulted in a higher underemployment rate among working-age workers in urban areas than in rural areas (equivalent to the rate of underemployment) at 2,80% and 2,49% respectively. This trend is different from the trend seen in previous years, where underemployment is often higher in rural areas than in urban areas. In terms of three economic sectors, the proportion of underemployed workers in the second quarter of 2021 in the service sector is the highest with 35,8%, followed by the agriculture, forestry and fishery sector with 35,6%.

However, the recovery of the average income of employees from the third quarter of 2020 to the first quarter of 2021 was interrupted. The second quarter of 2021 recorded a decrease in the average income of employees compared to the previous quarter (Figure 2). The number of unemployed people of working age in the second quarter of 2021 was nearly 1,2 million people, an increase of 87,1 thousand people.compared with the previous quarter and decreased by 82,1 thousand people over the same period last year. The unemployment rate of working age workers in the second quarter of 2021 was 2,62%, up 0,2 percentage points compared to the previous quarter and down 0,23 percentage points over the same period last year, of which the unemployment rate of working age workers in urban areas is 3,36%, up 0,17 percentage points and down 0,95 percentage points (Figure 3).

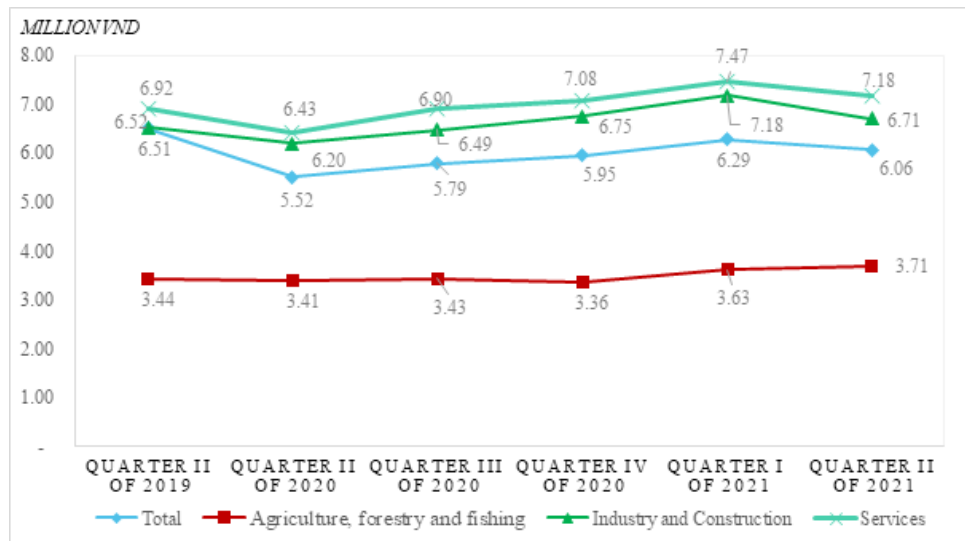


Figure 2: Workers' average monthly earnings by sector across quarters, 2019-2021

Source: General Statistics Office

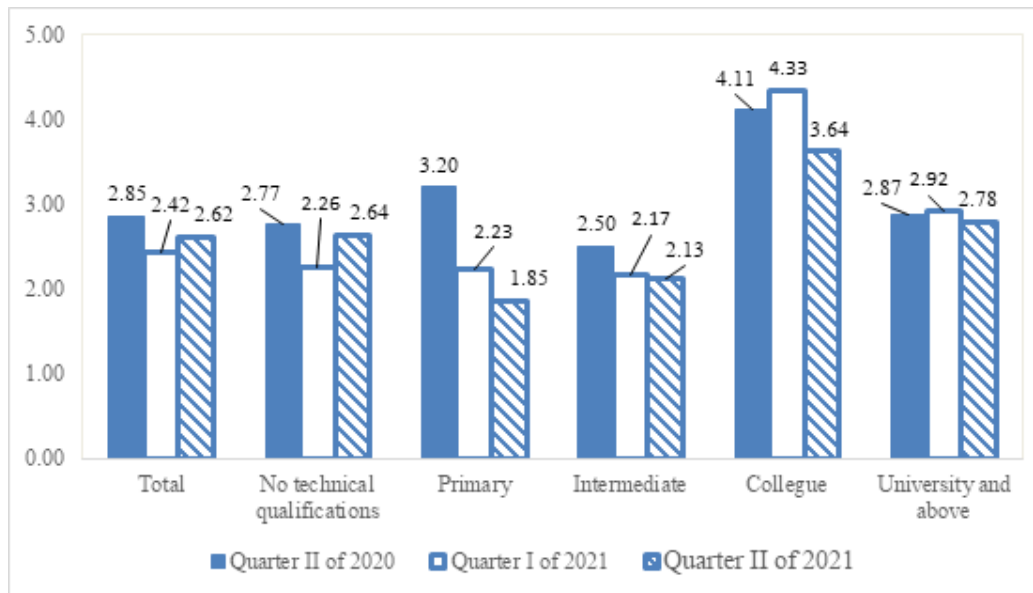


Figure 3: Working-age unemployment rate by professional and technical qualifications

Source: General Statistics Office

In another area of sustainable development, which is the environment, in the response to the Covid-19 epidemic, it seems that global concern is focused on both the economic and social fields, while the quality of the environment has been improved somewhat. due to temporary stagnation of economic and social activities that partly results in emissions reduction. However, the actual environmental picture of our country still has gray and dark patches with cases of serious environmental pollution. The Ministry of Natural Resources and Environment said that in the first six months of 2020, more than 1,000 cases of environmental pollution had to be handled. That is not to mention the incidents that occur under the responsibility of local management. Many of these cases have taken advantage of the attention of authorities and society on anti-Covid-19 activities.

Ordinary household and medical waste that need to be disposed of is probably the biggest problem during the period of isolation and social distancing. There are no specific statistics on the amount of domestic and medical waste during the response to the Covid-19 epidemic in our country, but it can be seen that it is increasing. The reason is that during this time, household consumption may not change much compared to before the Covid-19 epidemic, but the fundamental change method is to switch to online ordering with a significant increase in packaging, especially plastic and nylon packaging; and normal medical waste increased greatly due to the anti-epidemic protective equipment and the sudden increase in the number of patients.

Another issue about the environment and sustainable development that also needs attention is the risk that when the pandemic is over, managers will easily fall into early attempts to recover the economy with disregard or neglect, even ignoring what has been committed about the environment. The impatience to save and recover the economy soon after containing the Covid-19 pandemic may lead to development decisions with a return to the “economy first, environment later” thinking, making it even more difficult to develop. The gap between economic growth and environmental protection in our country is wider.

Thus, the picture of sustainable development in our country after the Covid-19 epidemic is over will be much different from before the epidemic, in all areas of sustainable development with severe negative consequences, especially economic and social. That development reality, as it is called internationally, is the new normal that all countries must take into account and face in order to adjust their development policies accordingly, even taking into account their own policies. For the period of socio-economic recovery after severe injuries can continue the sustainable development roadmap outlined previously. This new normal contains not only fewer balances and harmony in sustainable development achieved after many years of efforts and efforts in each country and on a global scale, but also create new new imbalance, new challenges for sustainable development.

3. Some policy adjustment suggestions for adaptation to Covid-19 waves in sustainable development in Vietnam

Currently, Vietnam’s economy is still quite stable in the face of the challenges of the Covid-19 pandemic. However, there is still a great risk and potential instability if the epidemic breaks out again. The prolonged global Covid-19 pandemic remains the biggest threat to the outlook for economic growth and sustainable development. The macroeconomic indicators of the first 6 months, such as economic growth and inflation rate that reached about 5,64%, 1,47% respectively showed positive signs of recovery and development.

However, the economic growth target of 6% to 6,5% in 2021 becomes extremely challenging when the fourth wave of Covid-19 epidemic is still complicated, negatively affecting industries and sectors. important areas and areas, making great contributions to economic development. In a recent announcement, the Asian Development Bank (ADB) was cautious when lowering its GDP forecast for Vietnam to 5,8% from 6,7% in April 2021. The reason comes from the inadequate implementation of vaccinations and the application of prolonged distancing measures in the largest growth areas of the country, affecting trade circulation and limiting economic activities. Also adjusting the forecast, but Standard Chartered Bank - a leading international group operating in the banking sector still has optimistic forecasts when making a forecast that Vietnam’s GDP growth in 2021 will reach 6.5%, down slightly from the previous forecast of 6,7%.

Facing the complicated developments of the Covid-19 pandemic, the Government also said that in the coming time, there are many risks, difficulties and challenges. But with the determination to realize the dual goals, prioritizing the effective prevention and control of the Covid-19 epidemic to boost production and business, the Government has not changed the set target. To have a basis for operating scenarios, the Ministry of Planning and Investment has also developed two scenarios to realize the growth target assigned by the National Assembly and the Government. Accordingly, in scenario 1, to achieve the economic growth target of 6%, the third quarter of 2021 needs to achieve a growth rate of 6,2%; the fourth quarter of 2021 increased by 6,5%. In Scenario 2, to achieve the economic growth target of 6,5%, the third quarter of 2021 must achieve a growth rate of 7% and the fourth quarter of 2021 an increase of 7,5%.

Thus, the prospect and determination to recover the economy in the medium and long term are worth noting many positive signals. In order to realize the above scenarios, the adaptive policy in sustainable development in our country in the face of Covid-19 waves will have 2 requirements: first, restoring capacity for sustainable development; and secondly, enhancing sustainability in development with the following main pillars:

(i) Regarding the economic, continue to maintain and increase the size of the financial support package to be large and effective enough to remove difficulties for production, business, and economic recovery, with a focus on businesses. this is a major contributor to GDP growth (about 60%). Currently, a support package of 62 trillion dong has only been disbursed 13 trillion dong, mainly for employees, and businesses are difficult to access due to difficult procedures.

In addition, it is necessary to focus on stimulating investment demand in manufacturing enterprises for export to actively source goods when the world market reopens normally. At the same time, speeding up the disbursement of public investment capital, achieving the highest disbursement rate, focusing on removing difficulties for slow-disbursed projects, especially key and large-scale projects. has a wide spread, creating strategic breakthroughs in infrastructure and creating impetus for economic growth. Good implementation of prevention of the spread of epidemics to prevent recurrence of the epidemic, creating conditions for expansion international relations, especially trade.

(ii) Regarding the social, along with the economic relief or support package for businesses, it is necessary to make policies supporting labor transformation to adapt to the new employment context when the economy recovers. after the Covid-19 pandemic. Some developed countries such as Japan, the UK, and France cannot rely much on the domestic labor supply, besides economic relief/support for businesses, they also have policies to loosen entry and residence conditions. for foreign workers. According to ILO (2020), “Decent Work and Sustainable Development Goals in Vietnam”, in 2019, before the Covid-19 epidemic broke out in Vietnam, up to 54% of workers were working in easy jobs. hurt. During and after this epidemic this number will certainly be much higher. According to the same report, 53% of jobs across the country require medium skills, and 12% require high skills. The remainder (36%) are low-skill jobs. These figures are a big challenge for labor, labor resources and associated with the livelihood of our people and need to be noticed right now in a series of support packages for recovery and development in the new normal.

(iii) Regarding the environment, during the Covid-19 epidemic, compared to the heat of economic and social issues, the environment seems to be less hot. But the reality in our country

is not so, because before this epidemic the environment was even hotter than the economy and society. At the National Assembly session in November 2016, The Minister of Natural Resources and Environment once stated that “Our environment has reached the point of no longer being able to bear it”. It’s just that our country’s environmental problems are overwhelmed by the intense heat of economic and social issues.

When the economy recovers and develops after the Covid-19 epidemic, the heat of environmental problems will surely return, even hotter if there is no plan to prepare now. This preparation needs to include both psychological and policy. In terms of psychology, there will certainly appear a “freedom” mentality that is often present after the repression both in production and in consumption. We are striving to achieve the Sustainable Development Goals, so environmental sustainability goals must not be neglected. In the relief/support policy packages for economic and social recovery and development, environmental protection requirements should be attached to both the management side (the planning agencies and implementing organizations) and also the supported side (enterprises).

CONCLUSION

The Covid-19 pandemic is a huge new challenge that directly and deeply threatens the sustainable development progress of all countries. Sustainable development in the new normal due to the Covid-19 pandemic poses new problems for sustainable development management both at the national and global levels. So far, Vietnam has made important initial successes in responding to the Covid-19 epidemic, helping to limit and reduce negative impacts on the country’s sustainable development process. However, the unsustainable situation in development, especially in terms of economy and environment, poses many problems of sustainable development in the new normal due to the Covid-19 epidemic. Health in development (understood both literally and figuratively) according to sustainable development indicators have been seriously affected, requiring a lot of time to recover and regain development momentum in a sustainable direction.

The new normal of sustainable development due to the Covid-19 waves requires appropriate and prudent policy adjustments. It is worth noting in policy adjustment, also the main message of this article is that the core of sustainable development is the harmony of aspects/aspects of sustainable development for generations. The policy to respond in the new normal due to the Covid-19 epidemic takes economic recovery and development as the center, but for sustainability, people and the environment are the goals and foundation that our Party and State have established. confirmed many times.

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DEVELOPING VIETNAM'S DIGITAL BANKING TRANSFORMATION

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Abstract: *There is no denying that 2020 delivered unexpected changes and challenges for banks, as many Vietnamese were forced to become part of the digital banking ecosystem. While an increased emphasis on digital was already underway, the coronavirus pandemic expedited the process in ways that will continue to change the way people interact with financial institutions this coming year. Like other markets in the world, digital banking is gaining traction in Vietnam. The market has been experiencing a digital wave in its banking scene as retail banks continue to invest heavily in digital technology. The collected data is analyzed and interpreted by applying statistical tools and techniques. This paper aims to offer valuable insights on digital banking, the current status of Vietnam's digital banking transformation, and propose some recommendations to develop Vietnam's digital banking transformation.*

Keywords: *digital banking, Vietnam, transformation.*

1. INTRODUCTION

Digital banking adoption is growing across Vietnam, driven by evolving customer expectations and enhanced digital penetration. The COVID-19 pandemic has accelerated this trend, as enforced digital transitions have embedded a more immediate impetus for change. The COVID-19 pandemic not only creates challenges for banks, but also pushes them to foster digital transformation to survive, experts have said. A recent survey by the State Bank of Vietnam found that 95 percent of credit institutions in Vietnam have either implemented digital transformation strategies or are in the process of formulating them. It is expected that in the next three to five years digital-only banks will have revenue growth of at least 10 percent, while regular lenders will have more than 60 percent of customers using digital transaction channels. State-owned banks seek to digitise their entire system, while smaller banks have identified certain areas to improve service quality and the customer experience. This paper

2. LITERATURE REVIEW

Different authors have defined it in different ways based on their understanding of the application of electronic banking. In the book "Digital Banking: A Strategy to Launch or Become a Digital Bank", Chris (2014) considers digital banking as a banking model in which operations are mainly based on platforms and electronic data and digital technology, is the core value of banking operations. Sharma (2016) approaches the concept of a digital banking as a bank that applies the latest technology platforms to all banking functions and services, and at all levels of the bank's operations. Thus, digital banking is understood as an operating model of a bank based on digital

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technology. More specifically, the way and operation process of an organization, based entirely on advanced technology, to perform the functions of a bank.

The concept of digital banking has a broader and more comprehensive scope than the concepts of online banking (online banking, internet banking), virtual banking (virtual bank), electronic banking (e-banking), and direct banking. Digital banking refers to the bank's integration of digitization for all areas of banking services, the application of digitization in the business activities of financial institutions and in customer interactions. Meanwhile, the remaining concepts only reflect a part of the application of digitization in the banking sector, such as applying only to one type of service (transfer, payment, financial advice, account management, etc.) rather than requiring digital integration for all banking operations. Before becoming a banking operation model in the digital age, digital banking has also undergone many forms of development. IBM (2015) said that when traditional banks began to apply machines to provide banking services, they were the first bricks for the formation of the modern digital banking model today. As technology is increasingly applied to the banking sector, the development of new technology, and especially the introduction of financial technology (Fintech) has made a breakthrough change in the banking operation model, forming a pure digital banking operation model. Researchers from the Massachusetts Institute of Information (MIT, 2017) also divided the digital bank's development process into three phases: The phase of increasing the application of machines and technology to the banking sector; Digital banking interfacing stage; and Pure Digital Banking Stage.

The bank's transformation from traditional business model to digital banking is called banking digitization. This transformation process has been studied by many organizations and banks with different approaches. It is difficult to give a standard definition for the transition of traditional banks to a single bank. number. Some common approaches to the concept of bank digitization often focus on the aspect that banks focus on improving customer service and user experience, based on the digitization of interactions, expectations. and customer experience on the database. This transformation is influenced by many combined factors, including: The spread and development of outstanding technological achievements of the Industrial Revolution 4.0 (Internet of Things (IoTs-Internet of Things).); Big Data (Big Data); Artificial Intelligence (AI-Artificial Intelligence); Blockchain Technology (Blockchain)); Development milestones of portable electronic devices (smart phones, tablets); Request to cut operating costs of traditional banks; The rapid development of financial technology; and Customer expectations for banking services.

3. RESEARCH RESULTS

3.1 The current status of Vietnam's banks

Vietnam's banking sector consists of four state-owned commercial banks, 31 joint-stock commercial banks, nine wholly-foreign-owned banks, two joint-venture banks, two policy banks and one cooperative bank. In addition, there are 48 foreign bank branches currently operating in Vietnam.

Vietnam had almost 19,000 ATMs and 270,000 point-of-sale terminals in place in 2019. To date, 78 banks offer internet payment solutions. Mobile payment is available at 47 banks, and 29 banks accept QR code payment. Real-time payment systems are enabled by the National Payment Corporation of Vietnam (NAPAS) while the National Credit Information Center of Vietnam provides credit information infrastructure. The country's national identification database is still under development.

The State Bank of Vietnam is the country's central bank and a ministerial-level government agency. SBV manages monetary and banking activities alongside Vietnam's foreign exchange. It also issues banknotes, acts as the central bank for credit institutions, and as the government's monetary service provider. In March 2017, SBV established a Fintech Steering Committee and Working Group. This group was set up to develop an enabling regulatory framework to support the development of Vietnam's fintech ecosystem.

Figure 1. Vietnam banking market share by asset 2020



Source: Digital banking Vietnam report

Today, the majority of Vietnamese banks have either implemented or are in the process of developing their digital transformation strategies. In fact, by the end of 2019, 60 per cent already had digital transformation initiatives in place.

There are two basic approaches to the digital transformation of banking in Vietnam. The first involves the digitalisation of an existing bank. This consists of digitising certain business segments, internal processes and front-end channels. Examples of front-end channel developments include innovation in mobile banking, e-know your customer (eKYC), QR code payment, virtual assistants/chatbots and 24/7 call centres.

Meanwhile, developments in internal processes include online real-time trading systems, robotic process automation and the application of artificial intelligence and third-party data in risk management. Digitising the information database and the utilisation of technologies and tools such as big data warehousing, automated data collection, cloud computing, data analytics, artificial intelligence, open API and blockchain are still in their infancy. However, looking ahead, they present significant growth potential.

Vietcombank, TPBank and Techcombank are just some examples of this first approach. These banks operate on an omni-channel platform to ensure a consistent customer experience. They aim to become smarter at analysing customer behaviour and obtaining customer insights. This will enable them to provide personalised products and services and, in turn, gain a competitive advantage in the market.

The second approach is a combination of the first along with the development of stand-alone, digital-only banks. This will usually focus on a specific target customer segment. VPBank, with the launch of the digital-only bank Timo, as well as the recently-launched YOLO, are two examples of this.

3.2 Current status of digital banking transformation in Vietnam

- Macroeconomic and demographic factors

Together, strong economic growth and a young, tech-savvy population will drive demand for fintech solutions. Vietnam has seen impressive annual GDP growth of 6 per cent in the last

five years and 7 per cent in 2019 alone. Meanwhile, GDP per capita is predicted to increase from US\$2,516 in 2018 to US\$4,449 in 2025. This rapid rise in incomes is expected to boost demand for consumer products and services. At the same time, Vietnam boasts favourable demographics. Its large and growing population stood at about 97.75 million people in 2020. Vietnam has a golden population structure, with 70 per cent of people aged between 15 and 64 and a median age of 30.4.

Figure 2: Vietnam population structure by Age



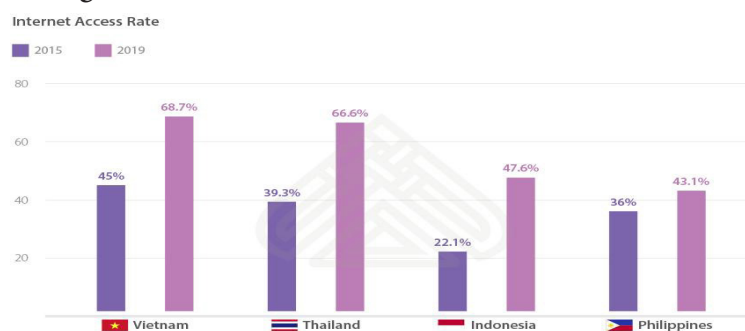
Source: Fintech Vietnam report

- Consumer digital readiness

Vietnam is ready for digital adoption. Consumers have a high degree of digital literacy and are likely to adopt a range of online services. This, in turn, offers opportunities for embedded financial solutions.

Internet access is widespread. Internet access rates have risen from 45 per cent in 2015 to 68.7 per cent in 2019. Mobile subscriptions are even higher, with a penetration rate of 130 per cent. There are 51 million mobile internet/phone customers on the country's 3G/4G network. Meanwhile, around 72 per cent of the adult population own a smartphone. Vietnam has also seen strong growth in e-commerce. The gross merchandise value of e-commerce was just US\$0.4 billion in 2015. This grew to US\$4.6 billion in 2019 and is projected to rise to US\$23 billion in 2025. That amounts to a compound annual growth rate of 49 per cent between 2015 and 2025 – the highest in Southeast Asia (SEA).

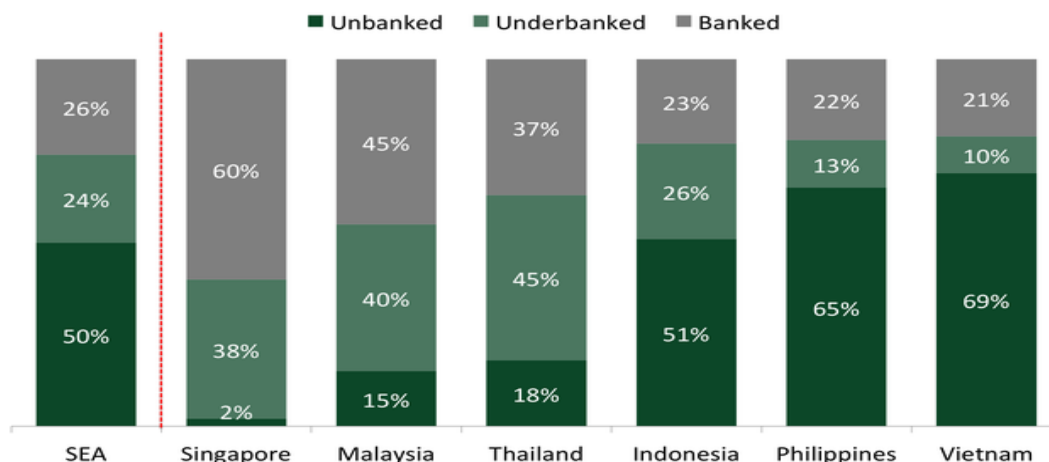
Figure 3: Internet Access Rate in Southeast Asia



Source: Business insider intelligence

- Banking penetration

Traditional banking penetration in Vietnam is still low compared to other emerging markets. Vietnam has the lowest bank account rate in six ASEAN countries at 31% of the population aged 15 and up. This ratio is 35% in the Philippines, 49% in Indonesia and 82% in Thailand.

Figure 4 : Share of unbanked, underbanked, and banked consumers in Southeast Asia

Source: Business insider intelligence

A large majority of Vietnamese – 69 per cent of the adult population - do not have a bank account. To increase bank penetration and achieve financial inclusion, Vietnam faces some important challenges. Firstly, ATMs and POS terminals are mainly concentrated in urban areas. Secondly, there is a lack of suitable products and services for people in remote and rural areas. And, thirdly, most banking transactions need to take place in physical branches, because they cannot be executed digitally. These challenges present opportunities for companies to develop and bring to market fintech solutions which serve Vietnam's large under-banked and unbanked population.

- Entrepreneurial business environment

Vietnam is renowned for its entrepreneurial environment. This, together with the increasing openness from the community and businesses to work with start-ups, accounts for the recent growth in start-up enterprises over the last five years. To put that in perspective, Vietnam jumped from being the fifth to the third most active start-up ecosystem among the six largest ASEAN countries in just two years. Only Singapore and Indonesia ranked higher in 2019. Most bank and credit institutions in Vietnam have chosen to cooperate with fintech companies to develop and grow together. Examples include Vietinbank and Opportunity Network, as well as Vietcombank and M_Service.

- Digital infrastructure

Vietnam is a country with low penetration of traditional banking services but rather high development of digital infrastructure. Network coverage is increasingly widespread in Vietnam. The main telecommunications companies include Viettel, VNPT, and Mobifone. Mobile technologies are also developing fast as it is reported that 95% of Vietnamese households have 4G networks. After 2 years of trials, The Ministry of Information expects to approve 5G services this year in mid-2021. This means that when pushing for penetration of banking in general, Vietnam will have great potential to promote the development of digital banking over the medium term.

- Government support

The government plays a crucial role in facilitating a conducive environment for digital banking to flourish. In particular, the government and SBV have introduced regulations to guide the banking and financial services sectors in this direction. Back in March of 2017, the Fintech Steering Com-

mittee was established by SBV. The purpose of this committee is to create a favorable legal and economic framework for fintech to grow. The Prime Minister of Vietnam also announced the issuance of Decision 986/QĐ-TTĐ, approving the Banking Strategy “Development strategy for the Vietnam banking industry to 2025 with the vision towards 2030”. The Government of Vietnam has also introduced broader reforms to support the growth of digital banking and financial services. In December 2018, for example, SBV issued Decision 2617/QĐ-NHNN on the ‘Action plan of the banking industry to realise Directive 16/CT-TTĐ of the government on enhancing the nation’s capability to embrace the 4th industrial revolution technologies by 2020 with the vision towards 2025.

3.3. Limitations of digital banking transformation in Vietnam

Some of the problems facing the development of digital banking in Vietnam in the current period are the legal issues of the corridor, the internal problems of the banking system and the knowledge of users of financial services.

- Internal barriers of the banking system

For banking to be fully digitized, it means that both the banking system and employees will have to undergo a cultural shift. However, it is good to know that unlike other businesses, banks have a unique way of departmentalization, and this greatly influences the level of technology to be used. While some departments will benefit from a digital banking system, some departments will have to lay off some employees. Also, employee training may be required. A challenge across vertical segments includes technology that is generations old. In certain areas of the business, these outdated assets need to be updated, upgraded or completely replaced in order to meet market challenges, customer needs, and emergent competitors.

- The knowledge of user

The lack of customer trust is also an obstacle in digital banking. 90 per cent of payments for e-commerce transactions are done through cash-on-delivery because customers do not trust sellers and deliverers. Vietnamese have kept the habit of using cash for a long time. The habit of buying online is gradually forming but the common payment form is still COD.

- The security risks

There is no legal framework for data sharing, storage and exploitation. Security risks such as fraud, customer fraud, network attacks on bank infrastructure, and user data leakage are rising. According to Ernst & Young Vietnam, 8,319 cyber attacks occurred on banks last year and 560,000 computers were affected by malwares capable of stealing bank account information. Banks faced losses of US\$642 million caused by computer viruses, while only 52 percent of customers worried about security while using online banking. The challenge for the regulators when the development context of financial technology has exceeded the current legal framework. Meanwhile, there are not enough financial institutions and traditional financial services, which are subject to many legal constraints to ensure the safety of the system, the safety regulations and laws for the Fintech companies in Vietnam.

4. CONCLUSION

The digitalization has a great potential, but it is associated with new risks and threats that still require awareness. However, on the other hand, financial technologies are risk management tools in banks (for example, big data can be used to minimize credit risk, in internal audit, control, ML/TF, etc.). Therefore, the development of digital banking in Vietnam requires the

efforts of both banks and the government. Banks should start by building their digital strategies and visions. Then, they can assess their current digital state and select the appropriate approach for digital transformation with clear objectives aligned with financial effectiveness. As for the legal framework, the Government should instruct relevant ministries and departments to create a national database on the population and allow opening, sharing and connecting with services such as banking, telecommunications and insurance. Also, the Government should create a legal framework for user data security and information security to create a safe and reliable digital transaction system

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HUMAN RESOURCES TRAINING IN FINANCE AND BANKING INDUSTRY TOWARDS FINTECH DEVELOPMENT IN THE INDUSTRIAL REVOLUTION 4.0

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Abstract: Finance and banking sector is currently highly evaluated in term of information technology application and directly affected by the industrial revolution 4.0. Vietnam's banking industry has undergone many changes in organizational structure, operation methods, risk management, and service provision to adapt to challenges in the digital age, especially the trend of Fintech application. The article focuses on analyzing the impacts of Fintech on the Finance - Banking industry, especially in the field of human resources. From there, it outlines the problems that need to be solved and some solutions to help the financial - banking industry take advantage of opportunities for cooperation and effectively apply the achievements that Fintech brings afterward.

Key words: Fintech, financial and banking, labor, training

1. INTRODUCTION

With the explosion of information technology, Fintech is currently becoming a rival to the banking sector and greatly affects the operation of this system. Fintech has fundamentally changed the business model and management of banks in the direction of digital banking, applying new technology to products/ services meeting customers' requirement. The trend of cooperation towards becoming partners is being carried out by banks and Fintech companies. Accordingly, banks will benefit from immediately applying and updating modern technologies provided by Fintech, applying technology solutions in providing products and services to meet the needs of customers in terms of quality, price and reliability while Fintechs can exploit the bank's customer network, data and capital. However, there is a problem that Vietnamese Fintech companies face a shortage of high-quality workers having extensive knowledge in both financial and information technology expertise. This requires a deep study of the impact of Fintech on the labor market in the financial and banking sector, through which policies are issued to promote training activities to meet current needs.

2. METHODOLOGIES

2.1. Research method

The study was conducted with the employment of research methods, including: data analysis, data synthesis, comparison and contrast to clarify the current effect of Fintech on the labor market

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in the banking and finance sector in Vietnam. From which, solutions were proposed to exploit the strengths of the financial and banking workforce towards the Fintech development in Vietnam in practice.

2.2. Data

Secondary data was obtained from reliable sources, mainly from Fintech Vietnam 2020 reports on the current status of this activity in the context of the industrial revolution 4.0, state-level scientific research works, articles published in specialized journals on Fintech activities and a number of research works published through websites.

3. RESEARCH RESULTS

- Outlined the basics of Fintech and the advantages of Fintech compared with traditional banking and finance activities.

- Assessed the development of Fintech and Fintech application in financial and banking activities in Vietnam, thereby analyzing the fundamental impact of Fintech on the labor market of the financial-banking sector..

- By clarifying the impact of Fintech on labor force of the financial and banking sector, identified a number of problems that need to be solved and propose solutions accordingly.

4. DISCUSSION AND SOLUTION

4.1. Fintech development in Vietnam

Along with the increasingly strong development of technology in the industrial revolution 4.0, a large number of startups focus on technology application in finance, by which Fintech companies are formed. These companies apply technological innovations in financial operations and services to improve financial performance. They bring new technologies, applications, products, processes and business models to the financial services industry, such as: internet, mobiles, and cloud computing technology and open source software for the purpose of improving the efficiency of banking and investment activities. Especially after the financial crisis in 2008, Fintech has created a digital revolution that can completely change the way the banking industry does business and has a very strong impact on the financial industry, restructuring this sector. In the traditional financial market, there is only interaction between financial institutions (banks, financial companies, insurance companies, securities companies ...) and customers. In contrary, Fintech has changed the whole provision model and operation of financial services in the direction of financial institutions in which Fintech companies and customers mutually interact through information technology applications.

Vietnam is becoming one of the most potential markets in the region for the development of Fintech. Vietnam's Fintech market reached \$4.4 billion in 2017, of which attracted about \$129 million from foreign investment deals involving Fintech companies in the 2016-2017 period, and is expected to reach about \$7.8 billion in 2020 according to a research conducted by consulting firm Solidiance. In 2008, the State Bank of Vietnam piloted a number of payment service providers in the market. The booming of Fintech activity in Vietnam started in 2015 with the launching of payment applications on mobiles, such as: MoMo, Payoo or 1Pay which are widely used by consumer finance companies, and LoanVi online loan. In addition, VP Bank has also developed a mobile

online banking application – Timo. With these applications, Fintech companies are changing payment methods and opening the era of technology application in lending activities in Vietnam. By 2020, there were about 123 Fintech companies operating in Vietnam (providing diversified financial services such as payment, money transfer, capital mobilization, peer-to-peer lending, financial management, eKYC) in which 27 organizations providing intermediary payment services (accounting for over 60%) have been officially licensed to operate. Currently, the number of Fintech companies has increased to about 80 companies operating in many different fields.

In Vietnam, Fintech companies mainly focus on the payment field, such as: MoMo, Payoo or BankPlus... Some domestic companies have encroached on the Fintech segment, offering e-wallets for payment activities of customers, such as: FPT Ewallet of FPT, VTC Pay of VTC, Vimo of MobiFone. More than 5.76 million e-wallets have been issued and linked to bank accounts to support payments. In addition, FundStart, Comicola, Betado or Firststep have also been operated to raise funds; LoanVi with online lending service; BankGo, MoneyLover, Mobivi with personal financial data management; and Timo – the first digital bank in Vietnam. Not only attracting the attention of Vietnamese Fintech companies, many foreign investors have also directed to develop the Fintech segment in Vietnam. Typically, the investment fund 500 Startups spent 10,000 USD to invest in about 100-150 startup projects in Vietnam in 2016. The fund's investments are mainly in the fields of financial technology, educational technology, e-commerce, advertising, media and entertainment. In 2018, 500 Startups continued to mark the 20th investment milestone in a blockchain-based fintech startup in Vietnam. In addition, WorldRemit, a startup operating in the field of remittances, also aims to expand its service in Vietnam because of its high appreciation of the level of remittance in Asia and Vietnam by allowing users to send money abroad from a mobile device or computer and the recipient can receive the money in their bank accounts, receive it in cash, receive it with a mobile wallet or a mobile top-up service. Startup Tapp Commerce is also implementing Fintech related products to help people easily transfer and receive money through local businesses or even retail stores in their area.

4.2. Fintech's strengths and weaknesses compared to traditional banks

4.2.1 Strengths of Fintech

The potential of Fintech development in Vietnam is highly appreciated when Vietnam has many favorable conditions for Fintech development such as a young population, an increasing number of people using mobile phones and the internet, high consumption growth, low unemployment rate, and about 90% of payments are made in cash. Currently, Vietnam has over 128 million mobile subscriber accounts, of which nearly 50% are smartphones, more than 64 million people are using the Internet, 58 million people are using social networks. Vietnam has been listed in the 7 top countries using social networks most and ranks 19th out of 50 countries in the Asia-Pacific region with the number of people using the Internet and smart mobile phones. This actively promotes payment via mobile phones. As announced by the World Bank, in 2017, 39% adults in Vietnam have not ever used the deposit service at official systems and 65% of people are sending or receiving remittances outside the official system or paying tuition and utility costs in cash. Therefore, this is a huge source of potential Fintech customers.

The banking system is slow to change, lacks flexibility in technology application, leading to the increase of transaction costs and inability to respond promptly to customer needs, meanwhile,

Fintech can help customers easily access the banking services conveniently with the lowest cost as well as bring good experience and great satisfaction to customers through innovation and the ability to apply technology flexibly and effectively. This dramatically promotes the development of modern banking services and makes comprehensive financial programs widely available to the people.

One of the main barriers preventing people from accessing formal financial services in Vietnam is the long distance from a bank branch, high cost, and complicated procedure. Fintech does not need a branch network and transaction offices are as wide as banks, therefore, Fintech is attracting a large number of customers, including people living in rural, remote and island areas that are difficult to access to banking services. Customers can use technologies and Fintech applications on smartphones with internet connection. With the nature of startups, Fintech companies are very creative and dynamic, analyzing and evaluating customers' psychology towards financial products and services in order to apply new technologies, providing users with better services.

4.2.2. Weaknesses of Fintech

Besides the outstanding strengths, Fintech companies lack experience in banking and finance activities, financial risk management and network security risk management; lack of capital, human resources and customer base. However, the banks have more advantages in terms of customer network, information technology infrastructure, and risk management experience. With their brand and reputation, banks that have owned a traditional customer base and built a wide network. This is a solid foundation when entering the competition with Fintech companies. Meanwhile, Fintech companies are startups, gradually building their reputation and brand. It is the incomplete legal infrastructure that makes it difficult for Fintech to create trust and reach customers in its financial activities. Technology development leads to the increasing cybersecurity risks and this is also a weakness of Fintech companies in Vietnam.

Although the Internet universalization is very wide in Vietnam today, the number of people using modern financial services is very small, partly due to the people's habit of using cash, especially in the rural areas where more than 80% of ATM card transactions are for cash withdrawal. The fear of accessing new technology and the fear of information theft are also barriers that make banking technology products do not work. The legal framework for banking agency services in remote and isolated areas has not been developed and completed, and products have not been designed to suit the knowledge and needs of rural people, thus limiting the ability to access to financial services.

Fintech's ecosystem has been gradually formed and expanded. The growth and stability of the ecosystem including Fintech startups, technology developers, policy regulators, financial customers, and traditional financial institutions are still not high and tight, leading to inability to promote the development of Fintech. Legal regulations and adjustments do not keep up with new technologies, thus limiting and slowing down the development of high-tech applications and digital banking, causing legal risks for banks and Fintech companies when deploying high-tech applications.

4.3. FINTECH'S INFLUENCE ON THE LABOR MARKET

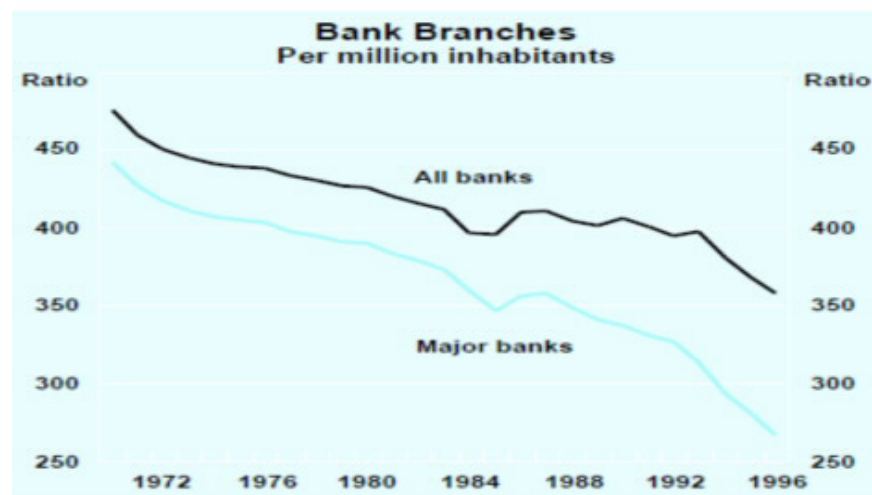
4.3.1 Changes in recruitment demand

Technological advances have been constantly improved and transformed. In order to find out new ways and develop new policies in human resource management or training models in the digital revolution, relevant units first need to grasp the key changes and trends in recruitment demand for banking human resources.

The application of technological achievements has significantly impacted on a wide range of banking activities, such as payments, data analysis, and customer interaction. With the strong development of digital banking, traditional banking operations will be gradually replaced, starting with the shrinking of transaction offices and branches, leading to the decline of some positions such as: tellers, retailers, call center staff, etc.

A lesson from Australia's experience in the period of reform and opening of the market to foreign partners from 1984 to the present shows that expanding the branch network of domestic banks does not bring efficiency and competitive advantages, but applying advanced technology in providing banking services is an appropriate choice instead.

Figure1. Downtrend of bank branches in Australia



Source: RBA, 1996, p.02

Applying technology helps banks simplify processes, procedures and paper work. In the past, the traditional paperwork process could take up to several weeks, with modern applications it only takes days, even hours. It is estimated that within the next few years, machines can perform approximately 30% of the current workload at banks (Earn & Young, 2018). Furthermore, when artificial intelligence is widely used, machines can easily observe and learn from humans, thereby perfecting all skills in a short time. Therefore, the reduction of human resources in the banking sector is inevitable.

The strong development of technology can replace the large number of bank employees who are working directly at traditional counters. The trend of “paperless banks”, “paperless financial institutions”, artificial intelligence, robots will be more and more popular. Branches and transaction offices of banks are increasingly shrinking in both size and number. When it is difficult for employees to maintain a competitive advantage in terms of cost and efficiency, technology can replace a large number of employees working at banks, financial institutions, securities companies, insurance companies, etc., ... leading to a decrease in the number of employees in the financial-banking sector. However, the demand for high-quality human resources (who are good at both financial and banking professional knowledge and information technology) tends to increase. Since then, changing the labor structure in the financial - banking industry in the direction of reducing the proportion of low-skilled workers (administrative work, managing documents, preparing data ...), increasing higher- skilled labor force to meet the requirements in the new context.

4.3.2. Lack of technology personnel

One of the most obvious impacts of the Industrial Revolution 4.0 is the trend of digitalization in banking sector. Developing digital banking is no longer an option, but an indispensable requirement, forcing banks to promote the application of information technology in financial operations and transactions. The need for human resource in this process is anticipated to be substantial. For the past five consecutive years, the positions of software developer, information technology engineer, and technology project manager have been regularly recruited by Vietnamese banks. However, it is not easy to recruit people to take on this responsibility because this is a highly specific industry, requiring personnel to have background knowledge of banking operations, processes, regulations, risk management, etc. Training and working practices cannot keep up with the rapid development of technology, causing a scarcity of quality personnel in the market. Furthermore, these specific technical positions require candidates to have knowledge and experience in new technologies, such as learning machine, artificial intelligence, block chain, etc., ... which have not been widely trained in Vietnam. Employers, therefore, also have less choice, forced to look for foreigners or Vietnamese studying and working abroad for key technical positions.

In the face of new changes in the financial and banking sectors, banks are not only racing to attract and retain talent, but also have to compete with Fintech companies. Currently, the opportunities for advancement in the banking industry are quite modest because there is not change with management positions and vacancies are often recruited. In addition, working environment in banking sector has long been considered more rigid and restrictive, not creating much creative and operational space for high-quality technology personnel compared to technology companies. Despite possessing a huge customer database, banks are sometimes still less attractive in the eyes of candidates since breakthroughs and improvements in technology are often seen as supporting the financial procedure. Meanwhile, skillful workers prefer environments with a lot of “playing ground” and decision-making power.

In the past, bankers often only needed to be proficient in one profession and follow a certain progression route, but there is a need to be more versatile now. Instead of “quantity”, banks focus more on “quality”. In order to keep up with the transformation according to the modern technology model as well as invest in technology infrastructure development, workers in the financial and banking sector must not only have professional expertise but also have the ability to analyze data, be proficient in digital technology operations. In addition, when banks adopt a flexible operating model instead of a rigid departmental structure, employees will need to know how to quickly adapt to the rotation between “temporary teams and groups” to keep up with the trends and new ways of operating in the banking sector.

4.4. Solutions

In July 2019, the State Bank of Vietnam issued Decision No. 1537/QD-NHNN approving and promulgating a plan to implement the strategic human resource development strategy for the banking sector up to 2025, with orientation to 2030. The plan focuses on: (i) Developing professional standards; (ii) Strengthening cooperation between training units and employers in the banking industry; (iii) Training high quality human resources; (iv) Training staff to grasp scientific and technological advances and apply them to the industry’s practice; (v) Building a team of information technology staff at credit institutions; (vi) Strengthening cooperation, taking advantage of support, technology transfer, intensive professional training from international organizations; (vii) Developing human resource strategy up to 2025, with orientation to 2030. This decision

shows that the State Bank has quickly grasped the changes in human resource needs of the banking industry and taken appropriate steps to prepare for the future.

4.4.1. Banking system

Banks in Vietnam have prepared and caught up with the Industrial Revolution 4.0. Not inferior to banks in the world, Vietnamese banks are clearly oriented to transition to a modern technology model, operating on a digital platform. The ultimate goal is to increase competitiveness, reduce costs, increase profits, and improve operational efficiency. It is important to focus on the quality of human resources in order to achieve this. In the coming time, the implementation of solutions to adapt to the changes of the human market is very necessary to ensure sustainable development, associated with the development trend of the banking industry in the digital age.

First, the banking industry needs to make changes soon to develop, attract and retain the talents to face with the challenges from the technological revolution. It is necessary to train the existing staff regularly, fostering and updating knowledge about profession and technology. However, making decision on which skills need to be fostered is also not an easy task because it is difficult to predict what the future will be, which skills will be valuable in the near future. Therefore, it is still more important to train soft skills, logical thinking, creative thinking, breakthroughs, the ability to solve problems in situations beyond the scope of regulations and existing precedents. This is especially important to the middle and senior management as they are the key force for implementing the reform plan and adapting to changes.

Second, it is estimated that by 2025, 72% of the global workforce will be Y generation, born between 1981 and 2000, often valued more in versatility and competence in mastering technology compared to previous generations. This generation, therefore, has more job opportunities in the 4.0 age, leading to a situation that they are perceived as less “loyal”. They are more agile, but also favors the challenges and want to be more empowered. In order to attract and retain this force, as well as high-quality human resources, in addition to attractive remuneration, benefits, and bonuses, banks need to meet career development expectations by building a reasonable promotion path, increasing self-determination, promoting creativity and flexibility in corporate culture and organization.

Third, banks must also be stricter in recruitment process. The quality assessment of human resources is not only based on banking professional qualifications, digital technology operation skills, but also the compliance with the operational process of providing banking products and services in the IT environment. It is paying more attention to professional ethics that is how banks protect themselves against risks when their operations greatly depend on the information security.

4.4.2 Education and training sector

Firstly, in the face of changes in recruitment demand of the banking sector, educational institutions need to reduce academic subjects, increase applicability, and adjust curricula in the direction of focusing on interdisciplinary training, for example, supplementing and in-depth training in financial technology, digital banking, e-commerce, information technology management, etc.,... to develop versatile human resources with sufficient knowledge to keep up with modern banking technology trends. Not only curricula, training methods also need to be renewed, eliminating passive learning, increasing practice hours, giving students the opportunity to access technology applications or operational models in reality.

Secondly, training institutions should promote cooperation with banks in order to develop enrollment quotas in line with market needs. Universities can even actively train human resources

according to the orders of enterprises; organize internships and practical experiences so that students have certain experiences and visualizations from an early age. This helps graduates can work immediately without the need for professional retraining. International training links also need to be enhanced in quantity and quality to contribute to building high-quality human resources.

Thirdly, it is necessary to equip undergraduate students of finance and banking with knowledge of existing financial products using Fintech as well as basic infrastructure requirements and how the products or service is marketed and provided. It is necessary to form clubs specializing in Fintech where students majoring in finance and banking, information technology, law can exchange knowledge to each other and Fintech startups; Fintech experts and Traditional banking and financial institutions eager to transform services according to the development of Fintech also there. At these clubs, knowledge about entrepreneurship and innovation should also be promoted and exchanged in the form of group seminars or short courses. Next, it is vital to add some Fintech subjects in post-graduate and/or university program, such as: Overview of Fintech, market, currency and future transactions with Fintech application. These courses should be designed with a focus on application, giving a certain amount of time in the course to have exchanges between students, lecturers and Fintech experts, innovative start-up experts in the banking and finance industry. Through these activities, not only students but also lecturers will have the opportunity to exchange practical knowledge about Fintech, combined with self-research to improve the knowledge/ability of lecturers for the training programs on Fintech in the near future

Although in some typical economies, such as: the US, UK, Germany, the application of machinery, scientific and technical advance has made thousands of jobs in the financial and banking industries disappear, in Vietnam, the labor market in this field is still developing relatively vibrantly due to the growth plans of banks and the diversity of financial services. The opportunity to enter the banking sector is still relatively open to workers, but they are forced to upgrade, diversify their skills, equip themselves with qualities that machines cannot replace, as well as constantly update and grasp new trends in order to stay “safe and sound” in the next 5 to 10 years, or even longer, when the traditional banking model is completely changed. In addition to the ability to mastering technology, the bank will increasingly focus on the global thinking, creativity, acumen and flexibility of candidates to changes. Apart from expertise, qualities and soft skills will bring the candidates more competitive advantages, helping them become more “attractive” in the labor market of banking industry.

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THE DYNAMIC IMPACTS OF ENERGY CONSUMPTION ON CO2 EMISSIONS IN VIETNAM: DO RENEWABLE ENERGY CONSUMPTION AND FINANCIAL DEVELOPMENT MATTER?

Master. Nguyen Thanh Tham¹

Abstracts: *The purpose of this study is to examine dynamic impacts of renewable energy consumption incorporating financial development on CO2 emissions in Vietnam by using a dataset of time-series in a 24-year period from 1992 to 2015. The method of Auto-Regressive Distributed Lag and Bounds (the ARDL) test is employed to examine the long run and short run relationships among the variables. Findings of the research show that higher levels of renewable energy consumption and financial development contribute to reducing CO2 emissions in Vietnam both in the long term and in the short term.*

Key words: *renewable energy consumption, financial development, dynamic impacts, Co2 emissions, Vietnam*

1. INTRODUCTION

Along with the rapid socio-economic development, countries around the world are constantly putting great efforts towards reducing CO2 emissions. Among measures to mitigate Co2 emissions, the development and consumption of renewable energy are solutions being widely applied over the world. According to IEA (2020), of total energy supply (TES) in the global in 2018, there was 13.5% generated from renewable energy sources, including wind, hydro, solar, biofuels, solar thermal, renewable municipal waste, geothermal. On average, annually renewable energy sources have been increased by 2% since 1990 (IEA, 2020).

Like other countries, the Vietnamese government has recently taken steps towards a low-carbon economy via promoting the production and consumption of renewable energy. Since 2016, Vietnam has been implementing the Renewable Energy Development Strategy to 2030 and a vision for 2050. The main object of the strategy is to increase the use of renewable energy sources both in production and in the social life, aiming to reduce emissions of greenhouse gas by 8% in 2030 through the application of preferential tax rates and protection of investment policies (Thoi, 2020). Additionally, the government has carried out some latest other policies and programs, namely: 1) the National Power Development Plan 8 (2020); 2) Supporting mechanism for the development of biomass power and waste to energy projects in Vietnam (2014); 3) Enhancing depreciation tax relief for promotion of renewable energy (2013). In terms of attracting financial investment for developing renewable energy, a series of policies have also been adopted to meet a large amount of capital for renewable energy by 2030, including corporate income tax preferences, import duty preferences and land-related incentives.

Vietnam has been one of the top energy-intensive economies worldwide (DEA, 2017). On average, the supply of commercial primary energy increased by 9.5 per cent per year and was

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greater than the economic growth from 2001 to 2015. As of 2010, fossil fuels energy use accounted for nearly 70% of energy consumption in total while approximately 70% of the energy consumption in 1990 was low-carbon (ADB, 2017). The upward trend of the fossil fuel energy consumption might stem from the growth of energy consumption due to the expansion of economic growth with nearly 7% annually, broad urbanization, industrial growth, transportation mechanization in the line with increase in population from 85 million to more than 105 million from 2010 to 2050 (ADB, 2017; DEA, 2017). These can lead to an increase of 10-fold of energy -associated emissions over the period 2010-2050 (ADB, 2017).

There has been a fact that despite of the Vietnamese government's policies to promote the use of renewable energy, the supply of renewable energy has not promptly met its needs in the production and consumption. According to IRENA (2020), as of 2016, the supply of renewable energy in Vietnam accounted for only 31% of the total primary energy supply while the capacity of renewable energy was nearly 40%. Among the five main types of renewable energy resources, their capacity in generating renewable energy was mostly 96% from hydro/marine and only 4% for the others (i.e. solar, wind, bioenergy, and geothermal) (IRENA, 2020). The rise in renewable energy in Vietnam has been along with its increase in Co2 emissions. These have been raised a question that whether the development of renewable energy contributes to reducing Co2 emissions in Vietnam.

A little research has been carried out on the role of renewable energy consumption and financial development in reducing CO2 emissions in Vietnam (Nguyen, Dang, Chan and Su, 2021; Al-Mulali, U., Saboori, B., and Ozturk, I., 2015). Even if research was conducted, however, much uncertainty still exists about the relation between the consumption of renewable energy and Co2 emissions. Additionally, far too little attention has been paid to the association between financial development on Co2 emissions. Insteads, studies to date have tended to focus on FDI rather than financial development in the relation with Co2 emissions. With this in mind, this study aims to contribute to this growing area of research by exploring the roles of renewable energy consumption incorporating financial development on Co2 emissions by using the ARDL method for time series from 1992 to 2015. Not only does this study confirms previous findings of the effects of renewable energy consumption and financial development on Co2 emissions, but it also has gone some ways towards enhancing our understanding of the role of renewable energy consumption and financial development in mitigating Co2 emissions in Vietnam. Results of the study would provide useful references to policy-makers in an effort to mitigate Co2 emissions in Vietnam.

The study will be divided into 5 main parts, including Introduction, Literature Review, Data and Methodology, Results and Discussion, and Conclusion.

2. LITERATURE REVIEW

There is an increasingly large amount of attention of researchers and policy-makers on the impact of renewable energy use as well as financial development on Co2 emissions. Most of empirical research shows that an increase in renewable energy consumption might decrease Co2 emissions. Zafar, Zaidi, Sinha, Gedikli, and Hou (2019) investigates the association between renewable energy consumption, stock market, banking development and Co2 emissions in G-7 and N-11 countries over the period 1990-2016 by employing The Lagrange Multiplier (LM) bootstrap panel cointegration method. Results of the study show that the consumption of renewable energy improves the environmental quality by reducing Co2 emissions. Moreover, the development of

the banking sector has a negative effect on Co2 emissions in G-7 countries while it has a positive impact on N-11 countries' Co2 emissions. Interestingly, the stock market contributes to a lower level of Co2 emissions in G-7, but a higher level of Co2 emissions in N-11. For the region of the Middle East and North Africa (MENA), Charfeddine and Kahia (2019) examined the association between the consumption of renewable energy, financial development and Co2 emissions in the period 1980-2015 by employing a model of the Panel Vector Autoregressive. Findings of the research point out that both consumptions of renewable energy and financial development have slightly negative impacts on CO2 emissions and economic growth.

Furthermore, some studies investigated the relationship between renewable energy consumption and Co2 emissions incorporating the Environmental Kuznets Curve (EKC) hypothesis which indicates an inverted U-shape association between Co2 emissions and economic growth. Bilgili, Koçak and Bulut (2016), by utilizing estimations of FMOLS and DOLS for a panel dataset of 17 OECD nations between 1977 and 2010, found that renewable energy use resulted in lower levels of Co2 emissions in the line with an existence of the EKC among the countries. Similarly, Shafiei and Salim (2014) provide evidence of an appearance of the EKC along with a negative effect of renewable energy consumption on CO2 emissions by using the model of Stochastic Impacts by Regression on Population, Affluence, and Technology (STIRPAT) for the OECD over the period 1980-2011. However, Nguyen et al., (2021), by using the Autoregressive Distributed Lag (ARDL) approach for a time-series dataset from 1980 to 2018, shows that there is non-existence of the EKC in Vietnam. Results of the research also point out that higher levels of hydro-power renewable energy could significantly mitigate CO2 emissions while FDI might increase carbon dioxide emissions.

However, some studies show unclear associations between consumption of renewable energy and reduction in Co2 emissions. Al-Mulali et al., (2015), by employing the ARDL method for a time-series dataset from 1981 to 2011, found positive impacts of import, fossil fuel energy consumption on Co2 emissions in Vietnam. In particular, renewable energy consumption does not significantly reduce Co2 emissions. In addition, Apergis, Payne, Menyah and Wolde-Rufael (2010) shows a significantly positive relationship between renewable energy consumption and Co2 emissions while having a negative impact of nuclear energy use on Co2 emission by employing a model of Panel Error Correction for 19 developing and developed countries from 1984 to 2007. In particular, the findings of the Granger causality test in the study provide evidence of lacking a contribution of renewable energy consumption to mitigate Co2 emissions. Similarly, for the US between 1960 and 2007, Menyah and Wolde-Rufael (2010) shows that renewable energy consumption did not contribute to the emissions reduction by applying the Granger causality test. However, the findings of the research found that higher levels of nuclear energy consumption might bring about lower levels of CO2 emissions.

In summary, the impacts of renewable energy consumption, financial development on Co2 emissions are various. Specifically, renewable energy consumption, financial development can have positive, negative or neutral effects on Co2 emissions reduction. From the previous studies, it is clear that the different directions might stem from distinctions in using data, time periods, even methodology.

3. DATA AND METHODOLOGY

3.1. Economic model

To examine the relationships between renewable energy consumption, financial development on CO₂ emissions in Vietnam from 1992 to 2015, the following function will be used:

$$\text{Coe} = f(\text{recons}, \text{fina}, \text{urb}, \text{gdpc}, \text{egin})$$

Where:

Coe: denoted by Co₂ emission per capital (metric tons per capita)

Recons: denoted by renewable energy consumption (% of total final energy consumption)

Fina: denoted by financial development index

Urb: denoted by the urban population growth (annual %)

Gdpc: denoted by Gross Domestic Product per capital (constant 2010 US\$)

Egin: denoted by energy intensity level of primary energy (MJ/\$2011 PPP GDP)

3.2. Data

The dataset used in the study are time-series from 1992 to 2015 which are collected from World Bank Development Indicators and International Monetary Fund. The statistics summary of the variables is presented as follows:

Table 1: Descriptive statistics of the variables

Variable	coe	recons	fina	urb	gdpc	egin
Mean	1.0346	50.4795	0.3554	3.2614	987.1513	6.0479
Median	1.0236	48.5067	0.345	3.1701	926.0758	5.9830
Max	2.0321	74.7020	0.47	3.8729	1667.172	6.9639
Min	0.3063	34.7959	0.27	3.0182	478.4369	5.6188
Std. Dev	0.5331	12.6619	0.0543	0.2223	364.2123	0.3326

Methodology

The study will be started with the Augmented Dickey-Fuller test to check whether the variables are stationary or not, followed by decision orders of integration.

The main methodology used in the study is the Auto-regressive Distributed Lags and Bounds test (ARDL). The study utilizes this method because of that the ARDL approach can analyze simultaneously effects of the independent variables on the dependent variable in both long-run and short-run. Another advantage of the ARDL method lies on its better efficiency in evaluating models with small sample size compared with other methods (Al-Mulali *et al.*, 2015).

For examining cointegration among the variables, the Bounds test will be used. If there is evidence of existing cointegration, the long run effects of renewable energy consumption, financial development on CO₂ emissions in Vietnam from 1992 to 2015 are estimated. Afterwards, the association between the independent variables and the dependent variable in the short term will be tested by utilizing the Error Correction Form. Otherwise, the research will conduct the Var approach for the short run estimation.

The ARDL model:

$$\Delta\text{COE}_t = \beta_0 + \sum_{i=1}^n \beta_i \text{COE}_{t-1} + \sum_{i=0}^n \delta_i \text{RECONS}_{t-1} + \sum_{i=0}^n \gamma_i \text{FINA}_{t-1} + \sum_{i=0}^n \lambda_i \text{GDPC}_{t-1} + \sum_{i=0}^n \varepsilon_i \text{EGIN}_{t-1} \\ + \varphi_1 \Delta\text{COE}_{t-1} + \varphi_2 \Delta\text{RECONS}_{t-1} + \varphi_3 \Delta\text{FINA}_{t-1} + \varphi_4 \Delta\text{GDPC}_{t-1} + \varphi_5 \Delta\text{EGIN}_{t-1} + \mu_t$$

In which:

- n is the optimal lag length.
- $\beta_i, \delta_i, \gamma_i, \lambda_i, \varepsilon_i$ are the short-term dynamic coefficients of the ARDL models
- $\varphi_1, \varphi_2, \varphi_3, \varphi_4, \varphi_5$ are the long-run coefficients of the ARDL models
- Δ is the first difference
- μ_t is the disturbance
- β_0 the intercept.

Finally, some main diagnostic tests need to be conducted to examine the validity of the model. They consist of serial correlation test, heterokedasticity test, histogram-normality test, and stability test.

4. RESULTS AND DISCUSSION

In this section, the study will present results of the unit root test, the cointegration test and the ARDL test for both the long run and the short run estimators, and the diagnostic tests.

4.1. The unit root test

By using the Augmented Dickey-Guller test (ADF), unit root tests or stationary tests are checked among the variables. The null hypothesis of the test is that the variables have a unit root. The results of the ADF test are shown in the Table 2.

Table 2: Results of unit root test and decision on the order of integration

Augmented Dickey-Fuller Test Result							
Null hypothesis: The variable has a unit root							
Variables	With intercept		With trend and intercept		None		Decision
	t-statistics	p-value	t-statistics	p-value	t-statistics	p-value	
coe	1.512022	0.9987	-3.197612	0.1116	3.596020	0.9997	I(1)
D(coe)	-3.511969**	0.0175	-3.748860**	0.0411	0.366990	0.7803	
recons	-2.013306	0.2795	-0.855774	0.9452	-5.920710***	0.0000	I(0)
D(recons)	-3.612399**	0.0133	-3.990679**	0.0234	-2.095277**	0.0371	I(1)
fina	-6.267585***	0.0000	-7.135763***	0.0000	0.137975	0.7168	I(0)
D(fina)	-4.998197***	0.0005	-5.585207***	0.0007	-4.817971***	0.0000	I(1)
Urb	-2.75087*	0.0805	-2.468278	0.3391	-1.870503*	0.0596	I(0)
D(urb)	-3.349738**	0.0236	-3.621149**	0.0491	-3.173378***	0.0028	I(1)
gdpc	3.091242	1.0000	0.182677	0.9962	2.836698	0.9979	I(1)
D(gdpc)	-0.520406	0.8693	-3.664377*	0.0508	1.598155	0.9688	
egjin	-4.141992****	0.0046	-2.577252	0.2924	-1.489415	0.1247	I(0)

D(egin)	-2.717427*	0.0895	-1.181660	0.8852	-3.087077***	0.0039	I(1)
The asterisk's *** means the significant at 1% level							
The asterisk's ** means the significant at 5% level							
The asterisk's * means the significant at 10% level							

As can be seen from the Table 2, the t-statistics of the ADF test of the variables are significant at least 10% level of significance for both the level form and the first-different form. Hence, the null hypotheses of having unit roots are rejected. In other words, all of the variables are stationary. Specifically, *coe* and *gdpc* are stationary at only the first-different form (i.e. I(1)) while *recons*, *fina*, *urb*, *egin* are stationary at both the level and the first-different forms (i.e. I(0) and I(1)).

4.2. The cointegration test

To examine whether the variables are co-integrated (i.e. existing the long-run relationships among the variables), the research utilizes the Bound test based on the null hypothesis that there are no level relationships among the variables. The result of the Bounds test is presented in the Table 3 as follows:

Table 3: The result of the Bounds Test for cointegration

F-statistics	Finite sample	I(0) at 1% significant level	I(1) at 1% significant level	Decision
22.46782	30	4.537	6.37	Co-integration

It is clear that F-statistics of the Bounds test for cointegration is 22.46782 and greater than the upper-bound of 6.37 at 1% significant level. It implies that the null hypothesis of existing co-integration among variables fails to reject. In other words, the variables have long term relationships. Therefore, the Error Correction Mechanism (ECM) will be employed to estimate the short run effects of renewable energy consumption, financial development on CO2 emissions in Vietnam from 1992 to 2015.

4.3. Estimations of the long-run and short-run relationships

- *The long-run relationships*

The estimation results of the long-run impacts of the independent variables on Co2 emission in Vietnam from 1992 to 2015 are shown in the Table 4.

Table 4: The estimation of the long – run relationships

Dependent variable	COE	
	Coefficient	P-value
Recons	-0.017622***	0.0000
Fina	-0.6695608***	0.0007
Urb	-0.016388	0.7034
Gdpc	0.000963***	0.0000
Egin	0.112344***	0.0005

From the Table 4, we can see that the coefficients of *recons*, *fina*, *urb* are -0.017622, -0.6695608, -0.016388 respectively. While the coefficients of *recons*, *fina* are highly significant even at 1% level of significance, the coefficient of *urb* is insignificant even at 10%. It means that higher levels of renewable energy consumption, financial development contribute significantly

to a lower amount of Co2 emissions in Vietnam in the long run. In addition, urbanization has an insignificant decrease in Co2 emissions in Vietnam in the long run.

The results from the Table 4 also show strong evidences of significantly positive impacts of *egin* and *gdpc* on levels of Co2 emissions in Vietnam in the long term (i.e. the coefficients of *egin* and *gdpc* are 0.112344 and 0.000963, and they are highly significant at 1%).

**The short run relationships*

As mentioned earlier, because of having cointegration among the variables, the estimation of the short run effects of renewable energy consumption, financial development on the Co2 emissions in Vietnam are carried out by using the Error Correction Mechanism. The results of the short term estimations are presented in the Table 5 as below:

Table 5: The estimation of the short – run relationships

Dependent variable	COE	Durbin-Watson: 2.569634
Independent variable	Coefficient	P-value
	0.724606***	0.0000
<i>Recons</i>	-0.013003***	0.0017
<i>Fina</i>	-0.644868***	0.0001
<i>Fina (-1)</i>	0.409005***	0.0001
<i>Urb</i>	0.096033**	0.0442
<i>Gdpc</i>	0.001625***	0.0000
<i>Egin</i>	0.097481**	0.0027

As can be seen from the Table 5, all of coefficients of the variables in the short term are significant. Being similar with the estimations of the long run, renewable energy consumption and financial development have their significantly negative effects on the Co2 emissions in Vietnam in the short run. In other words, a decrease in the Co2 emissions considerably results from lower levels of consumption of renewable energy and development of finance as well.

Interestingly, the short-run impact of urbanization on Co2 emissions is significantly positive at 5% (p-value less than 5%).

For the energy intensity and gross domestic product per capital, their coefficients in the short run are significantly positive at 1% level of significance. Hence, we can say that increasing in the levels of energy intensity and gross domestic product per capital lead to higher levels of the Co2 emissions in Vietnam in the short term.

4.4. Diagnostic tests

There are two main types of diagnostic tests presenting in this section, namely residual diagnostics (i.e. serial correlation, heterokedasticity, and histogram normality), and stability diagnostics (CUSUM test).

- *For the residual diagnostics*

Results of the residual diagnostics are shown in the following Table 6:

Table 6: Results of the residual diagnostics

Diagnostic tests	Null hypothesis	Statistic indicator	p-value	Decision
Serial correlation	The variables are serially uncorrelated	1.1219 (F-statistic)	0.3673	No serial correlation

Heterokedasticity	The variables are homokedastic	0.632710 (F-statistic)	0.7784	No heterokedasticity
Normality	The variables are normally distributed	1.623705 (Jarqua-Bera)	0.444035	Normal distribution

Based on the results of the residual tests in the Table 6, it is clear that the estimations in the short term and long term are far away from the serial correlation and heterokedasticity. Additionally, the variables in the study are normally distributed. Hence, the model used in the research are valid for the residual diagnostics.

- *For stability test*

To examine whether the models used in this research are stable or not, CUSUM test and CUSUM of square test is employed and shown in the Figure 1 and Figure 2. Obviously, recursive residuals are stable within the range of 5%.

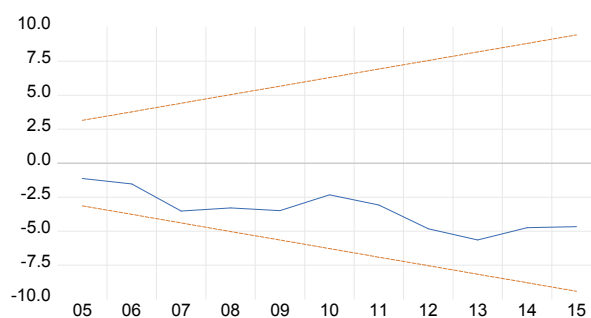


Figure 1: Results of the CUSUM test

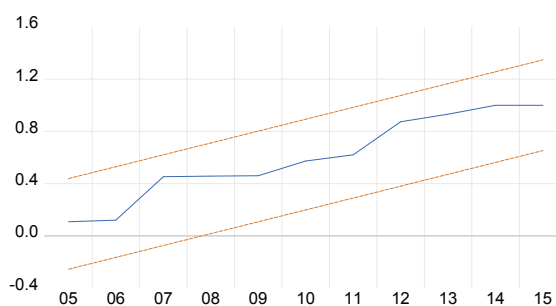


Figure 2: Results of the CUSUM squared test

- **Discussions**

The study evaluates the association between renewable energy consumption and financial development and Co2 emissions in Vietnam in the period from 1992 to 2015 by using the method of ARDL and Bounds test. The findings of the research show that both renewable energy consumption and financial development might contribute to decreasing Co2 emissions in Vietnam in both the long term and the short term. These relationships are strongly consistent with the results of the previous studies (Zafar et al., 2019; Charfeddine et al., 2019; Bilgili et al., 2016; Shafiei et al., 2014; Nguyen et al., 2021; Al-Mulali, 2015). Some possible explanations for the negative effect of financial development on Co2 emissions in Vietnam are that the financial development can provide

more opportunities for companies, households and individuals to access financial resources more broadly. Hence, it allows them expand their research, development and use of renewable energy sources, thus mitigating Co2 emissions via decreasing fossil-fuel energy intensity.

For the role of urbanization in reducing Co2 emissions in Vietnam, the findings of the research provide strong evidence of the significantly positive effect and the negative impact of urbanization on Co2 emissions in the short run and long run, respectively. These directions of the effect of urbanization on Co2 emissions are quietly consistent with the reality in development processes in Vietnam. In the early stage of industrialization and urbanization, a large number of constructions including factories and housing infrastructure are widely built, thus increasing environmental pollutants. Furthermore, the current rapid urbanization growth in Vietnam could lead to an increase in traffic density; therefore, it can result in a higher level of Co2 emissions generated from transportation.

Limitations

The generalisability of these above results is subject to certain limitations. One of the limitations lies in the fact that the dataset used in the study was just collected until 2015. Thus, the study could not comprehensively provide the latest review of the impacts of renewable energy consumption and financial development on Co2 emissions. Another potential limitation of the paper is that little previous research in Vietnam employs the ARDL approach in assessing the impacts of consumption of renewable energy and financial development on Co2 emissions. Hence, this brings about limitations in comparing the findings of the study with those in previous research. This research has thrown up many questions in need of further investigation. Accordingly, an updated dataset should be used (if possible) and engaged with the EKC hypothesis to provide better evidence of the associations between renewable energy consumption, financial development and Co2 emissions.

5. CONCLUSION

The study sets out to examine the impacts between renewable energy consumption and financial development on Co2 emissions in Vietnam from 1992 to 2015 by employing the Auto-regressive Distributed Lag and Bounds test. There is strong evidence of existing co-integration among the variables. The more significant findings to emerge from this study are that renewable energy consumption and financial development could decrease Co2 emissions in Vietnam for both the long term and the short term. Interestingly, urbanization brings about a higher level of Co2 emissions in the short run whereas it contributes to reducing Co2 emissions in the long run. Not only does this study confirm previous findings of the negative effect of renewable energy consumption and financial development on Co2 emissions, but it also has gone some ways towards enhancing our understanding of the role of renewable energy consumption and financial development in mitigating Co2 emissions in Vietnam.

Taken together, the findings of the research suggest that the Vietnamese government should take actions to strongly promote the use of renewable energy and financial development towards a low-carbon economy. First of all, not only should the government improve awareness about the role of renewable energy, but it also encourages consumption of renewable energy to mitigate Co2 emissions. In addition, financial development policies aimed at increasing access to financial resources should be further expanded to companies. In exploiting and using renewable energy in their production. On the one hand, having more financial resources could speed up the process of accessing and applying as clean-energy technologies in the production, thus reducing fossil energy. On the other hand, companies can be possibly approached to various financial resources to exploit the potential of renewable energy in Vietnam.

Furthermore, the results of this research support the idea that urban expansion through the construction of public infrastructure and facilities should be linked to the use of green materials to limit emissions to the environment. Essentially, urbanization needs to be included in an overall long-term plan to limit discrete construction. In that way, Co2 emissions in Vietnam in the future might be at a lower level.

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EXPERIENCES OF CHINA IN DEVELOPING GREEN BOND MARKET AND LESSONS FOR VIETNAM

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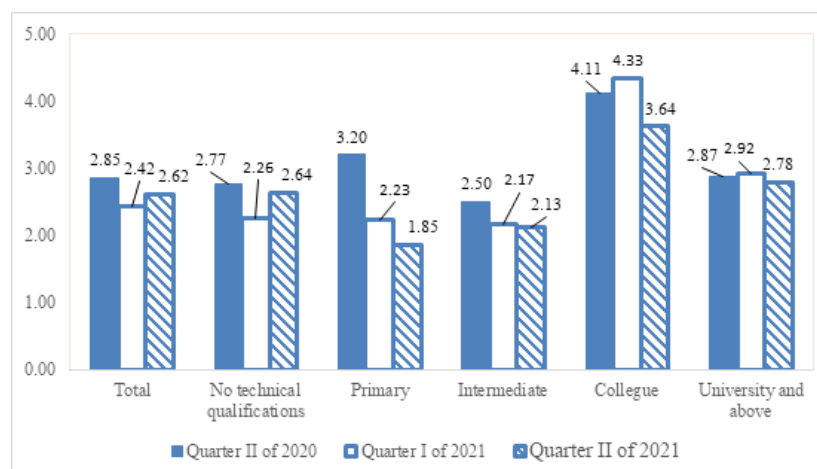
Abstract: In many countries, green bonds are considered one of the most effective tools in the financing of low – carbon and climate – resilient investment. In Vietnam, until the end of 2020, only approximately USD 25 million was issued, which is much lower than demand of green finance that estimated at USD 31 billion. One of the main reason for this issue is the lack of policy for green bond and green bond market. In this paper, the authors will study the experiences of China which have a milestone in developing green bond market over the past 5 years to draw some lesson learned for Vietnam.

Keywords: green bond, green bond market

1. INTRODUCTION

Green bond is a debt security that is issued to raise capital specially to support climate related or environmental projects. Green bonds have the structure of traditional bonds with the use of proceeds exclusively applied to finance or refinance projects that deliver environmental benefits [4]. Under the Green Bond Principles defined by the International Capital Market Association, the bond must also align with four core components: (i) use of proceeds, (ii) process for project evaluation and selection; (iii) management of proceeds; (iv) reporting [6].

Bond investments meet the needs of institutional investors in green bond market, as they offer relatively long – term maturities in line with their liabilities, and relatively stable and predictable returns. In green bond market, the government take responsibilities for creating and supporting market by some policies. Participants in green bond market are issuers and investors.



Source: [8]

Diagram 1: Building blocks of a green bond market

^{1,2} Academy of Finance

The growth of green bond market provides increasing opportunities to finance the implementation of the sustainable development goals, climate commitments and other green growth projects. A green bond market has three key benefits to a country and its environmental goals and commitments: (i) It increases the finance available for green projects, therefore incentivizing an increase in their number. Nowadays, green bond mainly finance projects within renewable energy, energy efficiency, low – carbon transport, sustainable water, waste and pollution. (ii) Green bond market is a viable vehicle for enabling the increasing pool of sustainable investors to access environmental projects. Bonds are instrument and an approach with which foreign investor are familiar, so these institutions need little new understanding or capacity. Investors are also interested in placing money where the environmental impact achieved is highest per unit of currency, and emerging and developing economies have the potential to offer this where lower project costs exist. (iii) Green bond market can be a catalyst for further development of the domestic capital market and financial system more broadly beyond environmental related projects.

Over the past 5 years, there has been an increasing demand from institutional investors for investment opportunities that mitigate the risks arising from climate change, deliver social impact as well as support sustainable development. The global green bond market achieved a key milestone of USD 1 trillion in cumulative issuance since 2007, with issuance of USD 280 billion in 2020 [6]. The rising demand from investors has resulted in the development of thematic bond markets.

In Vietnam, there have been some decrees related to green bond such as: Decree 93/2018/ND – CP, Decree 95/2018/ND – CP, Decree 163/2018/ND – CP, Law on environmental protection 2020 give the definitions of green bond for provincial government, government and corporation respectively; Decree 163/2018/ND – CP and Decree 81/2020/ND – CP regulate the principles of issuance, use of resources and information disclosure. However, there are some gaps in green bond issuance law such as guideline for issuing green bond, green project standards, capital use supervision, etc, which leads to the fact that green bond has not developed. Until the end of 2020, only approximately USD 25 million was issued [3], whereas the demand for green finance in 2020 and 2030 is estimated at USD 31 billion and USD 113 billion respectively [4]. This means the issuance of green bond has not satisfied the requirement of the demand.

This study attempt to find out the experiences of China which has the fastest growing green bond market all over the world. Having done in 2015, China rapidly took a lead position in global green bond issuance. Until 2020, China has the second largest volume of outstanding green bonds in the world. Studying experiences of China would enable authors to suggest some lessons for Vietnam.

2. PREVIOUS RESEARCH STUDIES AND METHODOLOGY

2.1. Previous research

International Institute for Sustainable Development (2014) proposed a number of areas of action in China to implement green bonds market including: developing a green bonds program, a program of government support for green bond issuance, allowing selected state – owned companies and local governments to issue green bonds and helping build a domestic investor base by instituting a system of green bond certification against clear and transparent criteria for green investment [8].

Sachs (2014) proposed that the green bond proposal represents an opportunity that can be carried out immediately to begin the Sachs plan: green bond issuance can finance essential projects in decarbonizing so that debt can be paid through long – run programs [9].

Climate and Development Knowledge Network (2017) discussed the key building blocks and enablers for a green bond market. The study reflects on what green bond markets need for success, and offers explanations [3].

Wang and Zhi (2016) found that green finance is a financial method for connecting environmental goals with economic growth. The article studied the current status of green finance in the field of renewable energy and found some drawbacks, proposing some solutions for market mechanism development and policy formulation. Moreover, the authors showing the internal conflicts between green finance and environmental protection to propose practical solutions to achieve a better ecological balance [11].

Sustainable Banking Network (2018) found that green bonds are an effective instrument to help achieve the climate and sustainable development goals. The paper also showed that the combination of policy leadership and market – based action, raise awareness and build capacity ensured success in developing green bond market in some countries [10].

Chuc Anh Tu (2020) found out the most important factors influencing the development of green bond market in Vietnam, including: the legal framework for green bond operations, monetary policies of State Bank of Vietnam and the official interest rate of green bond. The study also recommend establishing green regulations and green economic policies in the country to support the implementation of green bond in Vietnam [1].

Climate Bond Initiative (2020) showed the shortcomings of green bond market in China in 2020, highlight green investment opportunities and clarified what is green and promote green bond issuance as a tool to finance green infrastructure [2].

Global Green Growth Institute (2020) studied the challenges to invest in green bonds in Vietnam and put forward some solutions for enhancing the green bond market in Vietnam. The research also showed it is essential for banks to identify key risk barriers, appropriate policy interventions to address the challenges of developing green bond [4].

2.2. Methodology

The data and information in the research is obtained from reports of international financial institutions such as International Finance Corporation, Climate Bonds Initiative, Sustainable Banking Network, etc. The authors studies the challenges of China's green bond market since its inception and the solutions that the Chinese government had taken to response to challenges, which enabled China to become the second largest volume of outstanding green bonds in the world in the period of 5 years from 2016 to 2020. The paper also systematizes those experiences of China in developing green bond market according to the following aspects: guideline, green securitization, credit enhancement and tax incentives. Moreover, the study finds out the similarity of the challenges of developing green bond market in Vietnam with that of China to put forward some lessons for Vietnam.

3. RESEARCH RESULTS

3.1. Introducing guideline of green bond market

In August 2016, the guidelines for establishing the green financial system were jointly released by 7 ministries including People's Bank of China (PBOC), Ministry of Finance, National Development and Reform Commission (NDRC), Ministry of Environmental Protection, China Banking Regulatory Commission, China Securities Regulatory Commission and China Insurance

Regulatory Commission, which stipulated to promote green bond market development amid a wide range of plans to green the entire financial markets [8]. The guideline includes:

Firstly, China's experience shows the powerful effect of providing clear definitions of green investments. Across many different projects, the definition of "what is green" is important to provide credibility to the market as well as achieve the public policy objectives of the government to justify the incentives provided. It is important that green definitions follow performance – based metrics to ensure that transparency and understanding of use of proceeds in bonds is maintained after the money has been raised by the issuer. Therefore, China introduced the definition that involved identifying the types of investments necessary with green cities, clean water, environmental remediation, low – carbon transport, energy efficiency and clean energy. This definition provide the foundation for the development of a standardized certification system for qualified enterprises and projects, funded by the market and using credible actors as verifiers [8].

Secondly, the guideline provide direct regulators to incorporate regulatory provisions needed to establish a green bond market. Three authorities responsible for different bond – types in China's bond market. The promotion of an open and transparent green bond market requires coordination and agreement with all regulators to promote credibility. The regulatory framework includes: (i) Rules for disclosure on the use of green bond proceeds and a requirement for adequate reporting platforms for post – issuance monitoring of use of proceeds; (ii) A framework for the introduction and supervision of covered bonds, including criteria on asset quality and type for local governments and commercial banks; (iii) Tax – based incentives for green bonds in retail and corporate sectors [7].

3.2. Developing green securitization

One of the challenge for developing China's green bond market is small – scale projects and lack of aggregation instruments. The minimum bond issuance size which is typically required by the majority of institutional investors. However, many green projects are much smaller than the minimum bond issuance size, making capital raising difficult. Therefore, using aggregation instruments to bundle together small – scale green assets could create appropriate green financial products to meet investors' deal size requirement. Asset – backed securities and covered bonds are the most established aggregation instruments in the traditional bond market. To develop green bond market, China's government have implemented some solutions for supporting growth in green asset – backed securitization.

The first solution is supporting the development of standardized green loans contracts. China's government offer direct financial support to existing market efforts on standardization of green loan contracts and establishing public – private initiatives and working groups to develop standardization processes. Standardizing the contracts for these assets from the beginning enabled securitization to grow. For example, China National Renewable Energy Centre has set up a working group for solar securitization that included industry actors. The group has worked to develop standardized loan contracts for solar panels, as well as operations and management standards [8].

The second measure is encouraging uptake of standardized loan contracts for green assets. Once standardized loans for green assets were developed, the next step was to ensure that the deal flow of standardized green loans is large enough for the loans to be aggregated and sold in the capital markets. The public sector facilitated uptake of the standard contracts by making this a requirement to quality for other green securitization support mechanisms such as warehousing and credit enhancement. Public institutions could also incentivize the origination of standardized loans

by offering preferential lending rates to standardized loans contracts to finance green projects. Increasing the deal flow of standardized loans contracts enabled to create asset pools large enough for securitization in the bond markets [8].

The third action is supporting the establishment of financial warehousing of green loans to aggregate across originating entities. A limited deal flow of standardized green loans can be barrier to securitization at the early stages of the market. The loan portfolios of each individual lender can be too small for issuance in the bond market. A financial warehouse that aggregates loans across originating entities was a solution. At the early stage of the market, commercial banks in China have hosted a green financial warehouse given their understanding of green assets and projects, and existing involvement in green credit. This model of combined warehousing and credit enhancement offered simultaneously by a single public sector initiative has been used to support the securitization of loans to small – and – medium sized enterprises [8].

3.3. Credit enhancement

At the first stage of green bond market, many Chinese corporates, especially non – state owned smaller corporates found it difficult to issue green bonds rated as investment – grade due to their low credit ratings or unrated status, which leads to the fact that their financial profile and credit worthiness were not comparable to the risk – return characteristics of non – green bonds. To handle this issue, China provided explicit public credit enhancement to green bonds, including green asset – backed securities.

In detail, NDRC proposed new approaches of guarantees to enhance credit ratings of green bonds. For instance, guarantees were offered to issuers when their projects revenues cannot cover the total investment. Local government are encouraged to set up green bond guarantee fund, providing guarantee for bon issuance only [10].

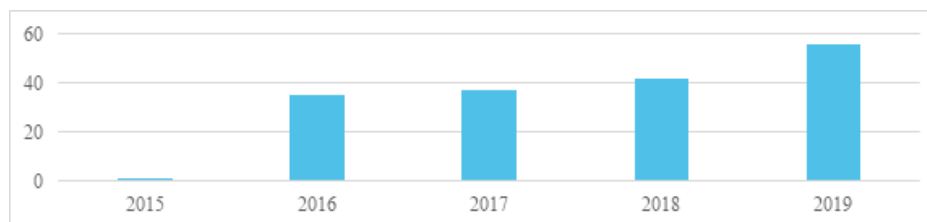
Proposed by NDRC revenues from carbon allowance, emission rights, energy use rights, and water use rights, as well as intellectual property, collaterals of expected green revenues can be seen as means of guarantees and credit enhancement of the green bond issuance. Detailed policies regarding how to implement these proposed guarantees have not yet been released [10].

Chinese green bond issuers used credit enhancement methods that are used in other investment areas. Privately provided guarantees and collaterals have used in China for credit enhancement, which were mainly used by SMEs with lower credit ratings for their private placement bonds. Green bond issuers looked for third party such as large corporates and professional guarantee corporations to provide guarantees. Alternatively, green bond issuers could use land, property, account receivables, stock or investment equity as collateral to achieve credit enhancement [10].

3.4. Tax incentives

Tax incentives was a cost – effective tool by providing a significant boost to investment with a relatively low impact on public finances. They can reduce the interest cost of financing. Tax incentives specially for green bonds were first proposed by PBOC in 2015, as part of a broader range of recommendation for implementing a green financial system in China. PBOC proposed tax incentives for labelled green bonds in the form of tax exemptions for institutional investors that allow them to treat the green bonds as treasury investments. Tax incentives for green bonds reduced funding costs, which significantly improve the financial viability of green projects, as capital costs account for a significant share of overall project costs [10].

3.5. Results of implementing policies



Source: [2]

Figure 1: China's green bond issuance from 2015 to 2019

The launch of official guidelines in 2015 led to China being a major driver of global growth in green bond issuance in 2016, accounting for 39% of global issuance in the year. Total green bond issuance from China reached USD 37,1 billion and USD 42 billion in 2017 and 2018 respectively. 2019 experienced a new milestone in issuing green bond when Chinese issuers printed USD 55.8 billion, increasing by 60% compared to 2016. China is now the second largest green bond issuer following the United State. The combination of policy developments, financial instruments has led to a rapid growth in the market.

4. DISCUSSION AND CONCLUSION

From the experiences of China in developing green bond market, the authors suggest some lessons for Vietnam

Firstly, building clear guideline for green bond

China's experiences proves that green bond guidance plays an important role in the development of green bond market. Learning from experiences of China, Vietnam's government should consider establishing a committee that takes responsibilities for developing detailed guideline for green bond. A committee should include members from Ministry of Finance, State Bank of Vietnam, State Securities Commission of Vietnam and Ministry of Natural Resources and Environment. This committee would build a detailed regulations that provide clear criteria for use, management of proceeds, reporting as well as identify eligible green projects. A clear guidance for issuers, investors and intermediaries is one of the first steps to establish and grow a domestic green bond market, which help dispel misconception regarding the cost and complexities of green debt issuance process and help to catalyze green bond issuances.

Secondly, developing green securitization

Being similar with the China's market at the first stage, most green projects in Vietnam are much smaller than the minimum bond issuance which makes capital raising difficult. Therefore, using aggregation instruments to bundle together small – scale green assets and asset – backed securities may be one of solutions for Vietnam to develop green bond market. To support growth in green securities, Vietnam should take some actions: (i) Supporting the development of standardized green loan contracts. In fact, there is a lack of standardized loan contracts available for green assets in Vietnam, hence, Vietnam's government could play a role in facilitating market – led development of standardized contracts by offering direct financial support to existing market efforts on standardization of green loan contracts, and establishing public – private initiatives and working groups to develop standardization processes; (ii) Encouraging uptake of standardized loan contracts for green assets. The deal flow of standardized green loan must be large enough for the loans to be aggregated and sold in the capital market. Hence, the public sector could

facilitate uptake of the standard contracts by making this a requirement to quality for other green securitization support mechanisms such as warehousing and credit enhancement; (iii) Supporting the establishment of financial warehouse of green loans to aggregate across originating entities. A limited deal flow of standardized green loan is a barrier to securitization at the early stages of the market. The loan portfolios each individual lender can be too small for issuance in the bond markets. A financial warehouse that aggregates loans across originating entities can be a solution.

Thirdly, improving credit rating

Most enterprises in Vietnam are small – medium size enterprises, which means they find it difficult to issue green bonds rated as investment – grade due to their low credit ratings or unrated status. To handle with this situation, State Bank of Vietnam should consider proposing new approaches of guarantees to enhance credit ratings of green bond, including government fund and collaterals. Moreover, green bond issuers could also consider privately provided guarantees and collaterals which are supplied by banks. Green bond issuers could use land, property, account receivables, stock or investment equity as collateral to achieve credit enhancement from banks.

Finally, imposing tax incentives

Tax incentives can be a cost – effective tool as they can reduce the interest cost of finance. In Vietnam, tax incentives for green bonds have not detailed and completed, which have not encouraged both issuers and investors to join in market. To solve this problem, Ministry of Finance should complete tax policy for green bonds and propose Vietnam’s government imposing this tax, which support certain segments of bond markets.

In order to address environmental issues, including air, water, soil pollution and climate change, until 2030, an estimated investment of at least USD 113 billion will be required in Vietnam. Green bonds could be considered an ideal vehicle. Studying experiences of China in developing green bond market. Some lesson learned could be drawn for Vietnam including: building clear guideline for green bond, developing green securitization, improving credit rating and imposing tax incentives.

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FACTORS AFFECTING THE DEVELOPMENT OF GREEN BOND MARKET: A CROSS-BORDER EVIDENCE AND IMPLICATION FOR VIETNAM

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Abstract: *This study identifies the factors affecting the development of green bond market in top issuing economies, then making policy implications for Vietnam. Investigation on the sample of 17 countries over a course of 5 years found three main forces of the Green Bond (GB) market development, namely the government support, the economy scale, and the market capitalization. Developed countries with large GDP and strong supports of government have a better market for Green bonds. This finding emphasizes the importance of government supporting policy, legal framework, and economic growth to the development of Green Bond market in less developed countries like Vietnam.*

Keywords: *Green Bond, market development, cross-border evidence, Vietnam.*

1. INTRODUCTION

Climate changing and how to build a resilient globe in the rising threats of climate change is a tough question for nations, business, and investors over the world. At COP 21 in Paris, governments agreed that mobilizing stronger and more ambitious climate action is urgently required to achieve the goals of the Paris Agreement. UNDP estimates that climate change could drive an additional 100 million people into poverty by 2030. To address this worrying outcome, a large financial resource is needed. However, UNDP indicates that there still exists a big gap in finance for the investment in climate change. This situation calls for financial initiatives for climate finance, especially for mitigating and adapting to climate change in developing countries. The UN Environment Programme (UNEP) estimates the adaptation costs alone faced by just developing countries will be from \$140 billion to \$300 billion per year by 2030, and doubled by 2050. This amount is far reaching from the current fund for climate change at \$ 78 billion per year, and the committed amount from developed countries at \$ 100 billion per year.

One of the effective financial instruments for climate finance is Green Bond, a debt instrument used to finance projects, assets and activities that support climate change adaptation and mitigation. The concept of Green Bond was first introduced by World Bank in 2008 as a capital raising solution for climate change related problems. According to Climate Bonds Initiative, there are 8 uses of proceeds categorized into Green: Energy, Buildings, Transport, Water, Waste, Land use, Industry and ICT. Green Bonds can benefit many stakeholders. Investors will diversify the investment portfolio with a new financial instrument, which not only generate stable returns but also allow

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them to engage with company management on green. Issuers can raise from a large number of investors and obtain the investor's engagement and stickiness. For a whole economy, GB issuance is a way to raise social capital for environment friendly projects, meet social responsibilities (Taghizadeh-Hesary & Yoshino, 2019). Since the world is moving to sustainable development and green finance, the bright future is anticipated for GB. The global green bond market increases by up to 4.5 times over a course of 5 years, from 2014 to 2018. The total issuance volume in 2018 is \$ 167 billion. Over 1,500 green bonds were issued by 44 countries, and 5 new sovereign GB issuers are Belgium, Indonesia, Ireland, Lithuania and the Seychelles (Serena Vento, 2019). Global green bond and green loan issuance reached to \$ 257.7 billion with an increase by 51% compared to 2018. There are 250 new issuers, bringing a total of \$ 67.8 billion. China and South Korea are two Asian countries in Top 15 green bond issuance countries in 2019. Most of the leading green bond issuers are from European and North America. Despite of the fact that some emerging countries are attempt to expand and diverse their GB issuance, the current development of GB market in such countries is primitive. Hence, understanding about the success of developed issuers is critical for developing countries in improving the development of GB market.

Despite the remarkable increase in issuance volumes over past decade, empirical studies on the driving forces of the GB development is spare. Tolliver et al. (2020) argued that GB shares some common characteristics with other forms of debt instruments; hence, factors affecting the development of conventional bonds can be significant for GB development. The authors also pointed out the distinct features of GB and proposed that there are alternative factors for the growth of GB. In this paper, we address the question of which factors contributing the development of GB market of developed countries through a study on the sample of 17 top issuers over a course of 5 years from 2015 to 2019. Our study provides a cross-border insight into the determinants of GB development via an empirical examination on successful issuers. Based on empirical findings, we make recommendations for developing Vietnam GB market.

The paper is organized into 5 parts. Part 1 is Introduction to the research topic. Part 2 is Literature Review and Hypothesis Development. In part 3, we present the methodology and data for the study. Part 4 is empirical results and discussion. Conclusion of the paper is in Part 5.

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Despite the fact that GB market development is a hot topic attracting many scholars over the world, empirical evidence on the driving forces of that growing trend is nascent. Most of the previous studies on GB market development is qualitative and descriptive. Wang & Zhi (2016) conducted an expert study to propose solutions for market mechanism development and policy formulation for renewable energy sector. Nguyen et al. (2019) indicated the role of Vietnamese government in motivating private investment for green energy sector in Vietnam. Banga (2018) identified the driving forces and the obstacles for the development of GB in developing countries theoretically. Anh Tu Chuc et al. (2020) used the AHP approach to specify the factors affecting the development of GB in Vietnam. The finding emphasized four major factors, including economic, political, social & cultural, and infrastructure criteria. Among these factors, infrastructural and economic factor showed significant impact on the current development of Vietnam GB market. So, the regulatory framework for GB market is central of government policy. Anetta Kuna-Marszalek & Jaakub Marszalek (2019) pinpointed the importance of GB characteristics to the issuance

success. Moreover, governments need to remain the attractiveness of GB in the long term through favorable mechanism such as tax incentive or public guarantee.

The study of Tolliver et al. (2020) is the first empirical study that demonstrate unique drivers for GB market development besides the common factors found in the conventional bond market growth. The study constructed a normalized index of Nationally Determined Contributions robustness scores and found the largest positive and statistically significant impacts of these scores on GB market growth. Besides, the study examined the effect of Institutional and Macroeconomic factors on GB market growth. The authors highlighted the need for further studies on specific factors contributing to GB development merely.

Based on the findings of previous studies on GB market development, we hypothesized that the development of GB market depends on three groups of factors, including institutional factors, economic factors, and Green Bond specific factors. In line with the extant literature, we identify Institutional factors are Institutional quality and Government support; Economic factors are Economy Scale and Stock market capitalization; Green Bond specific factor is GB infrastructure.

2.1. The positive impacts of political and economic factors on the GB market development

The causal relationship between economic growth and the financial market development has been expressed in the literature. The extant literature provides a wide range of perspectives and evidences about the relationship between the economic growth and the financial market development. The demand-following hypothesis argued that the economic growth leads to the financial market development. That means a growing economy can generates additional and new demands for financial services, leading to the response increase in supply and the growth of the financial system (Patrick, 1966). Likewise, Greenwood & Jovanovic (1990) considered the economic growth a basis for the development of financial structure. The demand -pulling hypothesis is confirmed by the study of Odhiambo (2008), Liang & Teng (2006), Odhiambo (2010), Kar et al. (2011).

The organization of finance has a strong relationship with many other aspects of a nation's economy and polity (Davis, 2011). The role of political factor in the development of the financial system can be examined from various academic perspectives. LaPorta et al. (1997, 1998) found the positive impact of legal codes and their enforcement on both equity and debt security market development. Poor political institutions lead to greater financial instability (Acemoglu et al. 2003) despite the fact that they have restrictive regulations on finance. Alternatively, poor political institution allows the actions that could be harmful to the investors' benefits, restricts the equal right to access to the financial resources of stakeholders, and limits the development of financial market. Eichengreen & Luengaruemitchai (2014) found institutional factors such as control of corruption and the quality of bureaucracy enhanced the growth of the corporate bond markets. Claessens et al. (2007) reported the strong relationship between the government bond market growth and institutional and macroeconomic indicators. The study shows that countries with good, more democratic institutions have larger government bond markets. Similar findings could be seen in the study of Acemoglu et el. (2000).

Based on the previous theoretical background and empirical results, we hypothesize that:

H- 1a: Economic factors make positive significant impacts on the development of GB

H - 1b: Political factors make positive significant impacts on the development of GB

2.2. The positive impact of GB infrastructure on the development of GB market

GB supporting infrastructure is necessary for the development of GB. This statement is emphasized in the survey on 24 key investors of G20 Green Finance Study Group in 2016. 50% of participants in the survey indicated the importance of green bond guidelines, ratings, indices, and incentives for GB issuers to the development of GB market. This finding is in line with Banga (2019), who claimed that the lack of institutional arrangement for the GB market and the shortage of GB mechanism hinder the development of GB market. Yamahaki (2020) investigated the specific barriers to the development of a green bond market in Brazil and found two sets of challenges for the development of GB market in Brazil. The first comprises supporting factors to the development of GB such as obstacles of the local bond market development and inadequate legal protection for investors. The second includes specific characteristics of GB such as low expected rate of returns on low carbon projects. CGGI Vietnam (2020) conducted a survey on 20 firms about investment intention towards GB. The finding showed that Absence of policy guidance and Lack of the project or issuers are the main challenges that prevent firms from investing in GB. Therefore, we proposed that countries with GB supporting infrastructure would have higher development of GB market.

H2 – The better the GB infrastructure, the higher the GB market development.

3. DATA AND METHODOLOGY

3.1. Data

We used the secondary data collected from various sources of information to examine the above hypothesis. The sample consists of 17 countries over 5 years, from 2015 to 2019. These countries are top issuers of GB by issuance value (more detail is shown in Table 1). The data set for GB issuance value of the 17 Top issuers were collected from the Climate Bonds Initiative Database. We also collected data for political and economic factors from the World Bank's governance and development indicators and Heritage Foundation's index of economic freedom. Data on GB infrastructure were collected from United Nation's framework convention on climate change (UNFCCC, 2019). The following table shows the issuance value of the sample countries:

Table 1. The issuance value by countries in the sample

Unit of measure: \$ billion

Country/year	2019	2018	2017	2016	2015
China	31.3	30.9	22.5	36.2	1
US	51.3	34.1	42.4	30.3	10.5
France	30.1	14.2	22.1	15.8	4.6
Germany		25.8	16.2	4	4.6
Netherlands	23	14.8	10.8	6	4.1
India	10.3	6.5	4.3	1.6	1.1
Spain	13.2	9.8	5.2		
Italy	8.7	5.1	2.9		
UK		4	3.3	1.9	0.7
Brazil			2.4	1.7	0.6
Sweden	10.3	6.1	5.3	6.1	5.0
Canada	7	4.3	3.5	2.7	2.2

Norway	5.0	3.8	2.2	1.5	0.9
Japan	7.2	4.1	3.2	2.6	0.5
Denmark	5.5	4.8	2.3	1.4	0.6
South Korea	4.8	1	0.6	0.5	0.95
Australia	4.5	4.2	3.4	2.5	1.4

(Source: Own collection from Climate Bond Initiative Database)

3.2. Methodology

We constructed the following multivariate regression model for hypothesis testing:

$$GB_issuance_{i,t} = \beta_0 + \beta_1(Regulatory_quality_{i,t}) + \beta_2(Rule_of_law_{i,t}) + \beta_3(Government_support_{i,t}) + \beta_4(LNsize_{i,t}) + \beta_5(Market_cap_{i,t}) + \beta_6(GB_infra_{i,t}) + \varepsilon_{i,t}$$

The explanation of variables in the study is shown in Table 2.

Table 2. An explanation of variables in the model

Variable	Meaning	Measure & Data Source
Dependent variable		
GB_issuance	The value of GB issuance in \$ billion	Climate Bonds Initiative, 2018b. Green Bonds Q3 2018 Dataset. CBI, London, UK. https://www.climatebonds.net/data-requests .
Explanatory variables		
Political variables		
Regulatory_quality	This variable reflects the quality of regulation of a country.	It is measured by the index of regulatory quality of the World Bank WGI (2019) at: https://databank.worldbank.org/source/worldwide-governance-indicators .
Rule_of_law	This variable indicates how law enforcement attracts investors and indirectly affects the development of GB market.	It is measured by the index of law of the World Bank WGI (2019) at: https://databank.worldbank.org/source/worldwide-governance-indicators .
Government_Support	This variable refers to the government interventions to the bond market and restriction on financial market investment.	It is measured by the index value of trade freedom and capital control in the financial market. Data obtained from: The Heritage Foundation, 2018. The Index of Economic Freedom. The Heritage Foundation. https://www.heritage.org/index/ .
Economic factors		
Lnsiz	This variable reflects the scale of an economy	Lnsiz = ln (GDP) GDP is obtained from the World Bank WDI (2019).
Market_cap	This variable reflects the development of the stock market of an economy	Market_cap = The total value of stocks traded as percentage of GDP. This variable is collected from the World Bank WDI (2019)
GB_infra	This variable refers to the commitment of an economy to reduce the greenhouse gas emission and adapt to the climate change by investing in GB proceeds.	GB_infra is measured by each country's index score. Data were collected from UNFCCC, 2019. NDC Registry (Interim). United Nations. https://unfccc.int/news/ndc-interim-registry

4. RESULTS AND DISCUSSION

Table 3. Descriptive statistics of variables in the empirical model

Variables	Obs	Mean	Std. Dev.	Min	Max
Dependent variable					
GB_issuance	85	7.8828	10.2958	0.590	51.3000
Independent variables					
Regulatory_quality	85	1.1840	0.7550	-0.4478	2.0474
Rule_of_law	85	1.2515	0.7916	-0.4145	2.0964
Government_support	85	83.2094	6.8458	64.6000	89.4000
LNSize	85	28.3306	0.9976	26.5387	30.5134
Market_cap	85	87.7919	34.1058	27.2184	164.8450
GB_infra	85	6.7665	1.3650	3.4300	8.5000

Table 3 reports the descriptive statistics for the variables in the empirical study. On average, top countries issued \$ 7.8828 billion GB per annum. However, the fluctuation is large, at the value of \$10.2958 billion. The dispersion in GB issuance value of Top issuers is wide. The maximum value is \$ 51.3 billion, which belongs to the US. In 2019 while the lowest value is \$ 0.590 billion – the issuance value of Brazil in 2015. The value of Regulatory quality index ranges from -0.4478 to 2.0474 with the mean value of 1.1840 and standard deviation of 0.7550. Since the sample includes both developed and emerging countries, the values of regulatory quality index diverse. Similar trend can be observed for the rule of law index, Government support, GB_infra. The economy scale variable is entered around \$ 28.3306 billion with a very small deviation of \$ 0.9976 million. The market capitalization of the stock market, in contrast, shows the large dispersion among the economies. The smallest value is of 27.2184 % GDP while the largest one has the market value of stock market 1.65 times higher than GDP.

Table 4. Correlation matrix of variables in the empirical model

	GB_issuance	Regulatory_quality	Rule_of_law	Government_support	LNSize	Market_cap	GB_infra
GB_issuance	1						
Regulatory_quality	-0.1006	1					
Rule_of_law	-0.1159	0.9637*	1				
Government_support	-0.0384	0.8526*	0.8047*	1			
LNSize	0.5971*	-0.3671*	-0.3995*	0.0237	1		
Market_cap	0.2418*	0.5327*	0.5791*	0.3359*	0.0237	1	
GB_infra	-0.2501*	0.6016*	0.5642*	0.5935*	-0.3233*	0.0594	1

The correlation matrix of the variables in the model is shown in Table 4. The dependent variable has relationship with LNSize, Market_cap, and GB_infra at p-value <10%. There exists the correlation between explanatory variables; however, when we run the regression model, the VIF postestimation shows that the model does not have the problem of multicollinearity.

The empirical result of the model is reported in the following table:

Table 5. The empirical result of the study¹

Variable	Robust Coefficient	t-value	p-value	Hypothesis testing
Regulatory_quality	-1.15516	-0.25	0.802	H1a-not supported
Rule_of_law	-1.270504	-0.28	0.778	H1a-not supported
Government_support	0.4244266	2.77	0.007	H1a-supported
LNSize	5.756137	4.52	0.000	H1b-supported
Market_cap	0.0736843	1.96	0.053	H1b-supported
GB_infra	-1.099268	-1.47	0.146	H2-not supported
Cons	-186.5815	-4.44	0.000	

Table 5 shows the empirical result of the study on the determinants of GB market development. H1-a is valid when the explanatory is Government support, yet no significant impact is found for the regulatory quality and the rule of law. Government support reports the positive significant effect on the GB market issuance. That means the economy with stronger support from government has larger amount of GB issuance. This finding emphasizes the importance of government direction and policy to the development of GB market. Government orientation and support play a key role in inspiring the development of GB market. This result is consistent with the study of Claessens et al. (2007), Voica et al. (2015), Tu et al. (2020), Tolliver et al. (2020), Banga (2019). The economy size and market capitalization of the stock markets show positive effects on GB issuance value, significant at p-value <10%. So, H1-b is valid. Alternatively, a big market with highly developed stock market can raise more funds from GB issuance. In contrast, small economy scale and primitive stock markets are main obstacles for the development of GB market. This finding supports the demand-pulling hypothesis about the influence of economic growth on the development of financial market as well as GB market. Similar result was found in the study of Broadstock & Cheng (2019), Le et al. (2021), Tolliver et al. (2020).

However, we do not find the significant impact of Regulatory quality, Rule of Law, and GB_infras on the GB issuance value. The insignificant results of the institutional quality factors and green bond infrastructure can be interpreted that there are two strands of green bond market development. The first is coming from top developed countries that have high institutional quality and available infrastructure for any innovative financial instruments, including GB. For such countries, there is no needs for specific requirements for GB market development. Therefore, no significant effect of legal framework and institutional quality could be observed. The second is about the new emerging markets and less developed markets that have low institutional quality and lack of specific regulatory framework for GB market. Due to the highly rapid growth of economy, these countries have to deal with the environmental problems as well as the ends of resources. In such circumstances, GB issuance is selection to mitigate the side effects of overheated economic growth model. Emerging economies and low-income economies, who are vulnerable in climate changing yet lack of financial resources to deal with consequences of climate change, need tremendous foreign investment. Successful GB issuance, from the demand side, depends heavily on the expected rate of return and the risk of green projects, which are named the major challenges for emerging countries on the road to a low-carbon economy (Yamahaki, 2020).

¹ The estimate is from POOL OLS regression with Robust Estimation. We tested three types of regression for Panel data and found POOL OLS is best fit. The model does not have the problem of collinearity and error variance is constant. The R-squared of the model is 0.4375.

5. CONCLUSION AND LESSONS DRAWN FOR VIETNAM GB MARKET DEVELOPMENT

This study examines the impacts of political factors, economic factors, and GB infrastructure on the development of GB market across 17 top issuers over the world. The result emphasizes the important of the government support, the economy scale, and the development of the stock market to the development of GB market. Successful GB issuers are economies with large GDP, highly developed stock market and strong support from government for GB market. Alternatively, countries with small scale, less developed stock market, and weak government support will get difficulties in raising financial resources for climate change through GB issuance.

Vietnam is one of the most vulnerable countries to climate change. Climate Bond Initiative estimates the Vietnam will need around \$ 31 billion by 2020 to move its current carbon-dependent development to a sustainable development towards the commitment to cut 8% carbon emissions by 2030. Tremendous amount of money is need for green transition; however, most infrastructure investment in Vietnam currently comes from government budget and Official Development Assistance (ODA). Since heavy dependence on the public finance can result into serious fiscal problem in the long run, Vietnam government has already implemented the action plan to foster the role of private-sector investment. In 2016, Vietnam piloted the first GB issuance in Ho Chi Minh City and Vung Tau, listed on HNX, with the value of \$25 million and \$4 million respectively. However, in the survey on 20 firms, 80% respondents show the interest in such GB but only 5% to 10% have the action plan for green investment. That means the social awareness about GB in the Vietnam market is still at infant stage. 50% of respondents state that the motto of GB investment is enhancing green images of their organization instead of the climate and environmental benefits of GB. Therefore, to boost the development of GB market in Vietnam, together with the economic growth, stock market development, government support, rising awareness of society about GB is critical.

Based on the empirical results and the current situation of Vietnam GB market, we make following recommendations to enhancing GB market development for Vietnam:

(i) Completing the legal framework for the corporate bonds in general and GB in particular

Despite the fact that Vietnam GB market is on the upward trend recently, the volume of GB issuance is much smaller than other ASEAN countries. Singapore issued \$6.11 billion, Indonesia reached to \$2.88 billion, and Philippines raised \$2.02 billion. To enhance the GB development, Vietnamese government needs to complete the regulatory framework for the corporate bond market, then for GB market. The size of Vietnam bond market is still small, just about \$ 58.9 billion. Decree 163, issued by the Government on December 4 2018 is considered the first legal framework for corporate green bonds in Vietnam. It motivates the further investment of private sector in green projects through detail terms about GB, including the definition and overview of corporate green bonds; principles for corporate GB issuance; disclosing and reporting regimes for corporate GB; issuance method, redemption and swap of corporate GB; restrictions on the transfer of GB; potential channel and platform to mobilize capital for green projects (Climate Bonds Initiative, 2019). This action expressed the turning action plan of the Vietnamese government. However, to make the real results, the enforcement of legal regulation is important.

For example, the government should develop a set of criteria for national green projects, creating conditions for the Government, local authorities and businesses to easily choose green projects that are eligible for the green bond issue. The green project of Vietnam can be built based

on the Green Bond Principles of the International Capital Market Association (ICMA) or refer to the green project criteria of countries around the world (China, France, and Belgium). The development of a set of green project criteria plays a particularly important role in the issuance of green government bonds and builds a strong legal basis to support the Ministry of Planning and Investment in the portfolio development process. medium-term public investment projects, in which some green projects are included in the portfolio using green government bonds. This set of criteria should be assigned to the Ministry of Planning and Investment in construction in coordination with the Ministry of Natural Resources and Environment and the Ministry of Finance. Accordingly, Vietnam's green project criteria set can refer to the contents of green project criteria according to the international practice of the Climate Bond Initiatives.

(ii) Raising awareness of society, especially market stakeholders about GB

Raising awareness of society about GB, both from supply and demand side, can boost the performance of GB market in Vietnam. Perception improvement should be started from the hazardous consequences of climate change, the needs for green and sustainable finance, and the benefits of green projects to human life in a long run. When the overall awareness of the society about climate change and environmental issues increases, the potentials for GB market become visible.

Besides, authorities and government bodies need to collaborate and cooperate to implement favorable mechanism and supporting policies to encourage firms to adopt renewable energy, environment friendly production line, eco-materials, and eco-products. For green corporate bond issuers, the Bond Market Association coordinates with the Ministry of Finance and international experts to have manuals on the issuance process, disbursement mechanism, and reporting regime. Moreover, seeking international assistance from ASEAN countries or other international organizations to support businesses in related costs (costs of hiring independent assessment consultants, costs of developing environmental impact assessment reports). When the issuance of green corporate bonds is popular in the market, businesses can find funding for these costs by themselves, or record them into operating expenses.

(iii) Comprehensive, detail, and appropriate government supporting program

Finding accurate receivers is the most challenging for any government supporting policy and program. Additionally, many supporting programs sound missing on paper but lack of efficiency in reality. These situations lead to the waste of budget and efforts. Therefore, a comprehensive, detail, and appropriate government supporting program is critical for the development of GB market. Currently, around 30 cities implemented their green action plans towards the sustainable development goals of Vietnam by 2030. The government should encourage the anonymous of local government in making and conducting the green action plan. The Province Competitive Index should include the items for green commitments, and green criteria should become major in evaluating and selecting foreign investment.

Any favorable mechanism should be reviewed carefully before enacted in a large scale. For example, the tax preferential policy for issuers and investors in GB should be detail and allow the potential investors and issuers to recognize their own benefits when investing or issuing GB. Investors, especially foreign investors, should be guided carefully and comprehensively about GB in Vietnam. To enhance the involvement and engagement of investors, three factors need ensuring: Transparency, Reliability, and Risk.

To promote GB transaction and cut the transaction costs for both investors and issuers, the government needs to improve the efficiency of financial intermediaries, with a focus on banks, insurance companies, and stock companies. Currently, development banks are viewed as the most attractive green bond issuers. However, to maintain the long-term performance of GB market, the participants of other players such as corporation and non-financial organizations should be enhanced. Insurance companies need to design green products to offer customers, together with the promotion campaign to boost the awareness of customers about risky consequences of climate change to their businesses and lives.

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IMPACT OF NON-FINANCIAL INFORMATION ON ANNUAL REPORT TO ACCOUNTING PERFORMANCE, MARKET PRICE OF VIETNAM LISTED COMPANIES - LITERATURE REVIEWS

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Abstract: *The stock market is an important investment and capital mobilization channel of the economy. Faced with the situation of information asymmetry in Vietnam's stock market, increasingly rich information requirements from investors as well as limitations of financial information, the article wishes to test the practical value of non-financial information published on the stock market in Vietnam. The article focuses on studying the impact of non-financial disclosure on annual report, financial indicators of accounting and market value fluctuations of enterprises, and expects to detect changes over time of financial statements. the above correlation.*

Keywords: *accounting, market, securities, stock market*

1. INTRODUCTION

Accounting information includes financial information and non-financial information. We do not deny the important role of corporate financial information for investors' decision making. However, the increasingly developed society leads to overheating of enterprises' production and business activities, affecting the environment, exploiting workers to maximize profits, despite the consequences that may cause damage to the environment. damage to sustainable economic development, so since the 1990s, organizations have introduced the concept of sustainable development, since then the awareness of enterprises and stakeholders has improved, not only not only financial information but also extended to non-financial information perspective, a broad concept that includes information on environmental, social, corporate governance, and other non-financial information issues, from the form of encouraging voluntary disclosure to a number of non-financial information, which emphasizes the mandatory disclosure of environmental and social information.

2. NON-FINANCIAL INFORMATION AND PERFORMANCE EVALUATION ISSUES

There are many studies and documents confirming the usefulness and necessity of using non-financial measures in the performance evaluation system of enterprises. In two studies by Kaplan and Norton (1992), Bushman (1996), in general, the above researchers all criticize the evaluation of performance based only on financial indicators taken from accounting information. Non-financial information is becoming an increasingly important factor in performance evaluation.

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Kaplan (1983) studied companies manufacturing in the US and compared their productivity with those of companies manufacturing in Japan and Europe. When investigating the reasons for higher productivity in Japan and Europe, Kaplan realized that American companies needed to develop non-financial metrics to get a clearer picture of their performance. enterprise. Research results encourage managers' attention to shift from short-term evaluation criteria and total numbers to non-financial evaluation indicators related to long-term goals, such as performance. productivity, quality standards...

Amir and Lev (1996) studied the value of non-financial information in evaluating the performance of the wireless industry. Amir and Lev point out that financial information is not important in this area and argue that non-financial information, mainly about intangible assets, is more important and relevant. They admit that in the mobile telecommunications industry, investors are more interested in the potential subscriber index, or penetration, rather than financial information. They see this as a measure of their success business operations and competition. Another non-financial metric they use is the company's average number of subscribers per employee. Regression models of market volatility, volatility of earnings and book value show that market prices are not correlated with financial indicators. The conclusion is that for mobile telecommunications businesses, analyzing financial information will make more sense when there are non-financial indicators attached. The study also found a positive correlation between financial and non-financial indicators.

In May 2001, the Financial Reporting Standards Committee of the American Accounting Association also studied and confirmed the usefulness of non-financial indicators when reporting business results of enterprises. Following this recommendation, Itner et al. (2000) also reviewed the studies in the field of management accounting and the temporal statistics of performance evaluation methods in accounting practice. Itner et al. reported that starting in the mid-1990s, the subject of management accounting research was the financial and non-financial factors that create value for investors, and therefore suggested that the balanced scorecard The balance sheet (BSC) is an ideal performance evaluation model because it combines both financial and non-financial measures.

In Vietnam, in recent times, although there have been no official studies or statistics on the issue of using non-financial measures in performance evaluation, businesses, especially listed ones, have are focusing their attention on the issue of non-financial information. In the seminar "Non-financial issues of enterprises attracting the attention of investors" in 2010 organized by the State Capital Investment Corporation (SCIC) with the participation of 40 enterprises. Listed companies, representatives of the Singapore Stock Exchange, City Bank, McKinsey & Co and Morgan Stanley, experts have affirmed that if the non-financial issues are well managed, it will play a role as "the pedestal" support" for sustainable development because it helps potential investors feel more secure when considering investing in the business.

While the importance of non-financial measures has been affirmed and encouraged to be included in the performance evaluation system, non-financial measures still have many shortcomings when applied in practice, even in developing countries. has a strongly developed accounting and financial system. The usefulness of non-financial performance measures is tested in the study of Stivers (1998).

Stivers (1998) surveyed 253 executives of Fortunes 500 companies in the US and Canada Post 300. The question asked of survey respondents was to determine the importance of each indicator

in the set. It combines 21 non-financial performance evaluation indicators on five dimensions: customer service, market value, learning and growth, goal realization, and employee contributions. The results show two main limitations:

1) The weighting gap in performance appraisals: although non-financial measures are rated as important, they may not be implemented (e.g. 63.2% of companies assess academic performance) questioning and development are important, but only 21.8% of companies rate this aspect).

2) Gaps in the use of non-financial information: even when non-financial measures are designed to measure performance, they are not even used for decision-making (e.g. there are 83.8 % of companies rate delivery quality metrics, but only 71.1% confirm using them for planning purposes).

Finally, in a different direction of research, Itner et al. (1997) investigated the factors affecting the choice between financial performance and non-financial performance indicators. The study found that a company only really attaches importance to non-financial performance indicators when: (1) operating in industries subject to strict control by authorities, especially in reporting problems; (2) using a strategy that focuses on invention and innovation, (3) adopting the strategy of taking quality as the top principle.

3. DISCLOSURE OF NON-FINANCIAL INFORMATION ON PERFORMANCE

3.1. The relationship between asymmetric information theory and non-financial disclosure

The concept of asymmetric information:

Asymmetric information is a concept in economics that describes situations in which market participants have different information about the value or quality of an asset or service. services being traded (exchanged) in that market.

Asymmetric information occurs when one party to a transaction has more information than another. Typically the seller knows more about the product than the buyer, or vice versa.

Asymmetric information is mentioned in a classic article published in 1970 by American economist George Akerlof: “The Market of Lemons: Quality Uncertainty and the Market Mechanism”. In it, there is a classic example, George Akerlof has applied the used car market in the US to illustrate the problem of information asymmetry when the car seller knows very well the condition of the car he wants to sell and Buyers do not. It is assumed that the two parties cannot exchange information with each other. The seller will initially bid \$8,000 for a used car. But because buyers don’t know what it’s really worth, they only accept it for an average price of \$4,000. At that price, everyone who sells cars knowing that their car’s value is more than \$4,000 will pull out of the market, leaving the market with cars priced under \$4,000. At this point, due to a lack of information, the buyer only estimates the true value of this car to be less than \$ 4,000, they will pay \$ 2,000. And from there, car sellers who know their car is worth more than \$2,000 will withdraw. Just like that, the market will be left with very bad and worst cars that in American slang are lemons. Over the years, the theory of information asymmetry has affirmed its important role in the economy, especially in the fields of investment activities.

The relationship between asymmetric information and non-financial disclosure:

Refer to a number of studies on asymmetric information in Vietnam and around the world, including “Information asymmetry, corporate disclosure and capital markets: a practical observation on disclosure theory ” – Paul, Krishna and Palepu (2010), “Information on the stock market” –

Ho Thai Khanh (2012), the authors all agree that (1) by building a channel to provide sufficient information, reliability, accuracy, and (2) developing the forms and content of information disclosure, the problem of asymmetric information can be solved. Non-financial information, thanks to its timely and objective advantages and the ability to offset the limitations of financial information, can completely become a tool to realize the two solutions mentioned above. As mentioned, non-financial information is provided in a timely manner, is unlikely to be tampered with and provides users with insight into many aspects that financial information cannot reflect. In addition to the properties that help to improve the information delivery system mentioned above, the diverse nature of non-financial information is sufficient to develop specific forms and content of information disclosure for each industry or group. enterprise. Non-financial information, if used properly and fully exploited to its inherent advantages, will become an important factor in ensuring trust and fairness for investors in the stock market. In summary, the participation of non-financial information in the information disclosure system helps the principle of openness and transparency in the market, which is the most important principle of the stock market. If this principle is to be ensured to a greater extent, investor confidence will be increased and the end result will be an efficient financial market.

Weil (2008) again proposes a framework for assessing whether basic disclosure systems in the US have improved over time – whether there are improvements in accuracy and coverage of disclosures. information to the user of the information or not. In it, Weil also evaluates the costs and benefits of information disclosure and the increase in transparency from the point of view of both the disclosing enterprise and the information user. Weil (2008) believes that disclosing information only as required by law will create information asymmetry between business managers who have access to internal information sources and users of information. outside sources cannot access such information.

3.2. Issues with non-financial disclosure of performance

Currently, in Vietnam, the issue of non-financial disclosure of performance is still relatively new, has not been approached directly and is the focus of any research. In the study “Knowledge economy and the necessity of human resource accounting in enterprises” carried out by Pham Duc Hieu (2012), the author found quite useful statistics. The study examined the annual reports for the fiscal year 2011 of 30 companies listed on the Ho Chi Minh Stock Exchange in the VN30 list. Information published in the annual report is divided into 3 groups: financial information (15 variables), corporate governance information (9 variables) and information on social responsibility and human resources (8 variables). Variables are measured on a binary scale: 1-if present, 0-if absent. Statistical results show that enterprises disclose quite enough financial information (mean 9.81, standard deviation 1.51). Meanwhile, the non-financial information disclosed is mainly about corporate governance (including quality control, evaluation of investment activities, ensuring implementation of corporate resolutions and plans, changes in administrative apparatus...) with mean 7.75, standard deviation 1.43. Non-financial information such as social responsibility, human resources is overlooked, even not in the annual report (mean 3.81, standard deviation 1.56). This proves that information disclosure of Vietnamese enterprises only stops at the level of ensuring compliance with the provisions of the law and authorities - information about the situation of governance, and enterprises. non-financial information has not been fully disclosed in the annual report.

3.3. The relationship between non-financial disclosure and operating results on the basis of accounting

The business performance that investors are most interested in is the profit of the business. This indicator depends entirely on fluctuations in revenue and expenses. Thus, the disclosure of non-financial information can completely help explain the fluctuations of the revenue and expenses of the enterprise.

The non-financial and revenue and expense disclosures are a comprehensive performance indicator disclosure – including both non-financial and financial measures. First, in most cases, product quality is quite difficult for customers to observe and identify before buying, so a policy of widely presenting non-financial information about product and service standards can be taken as an indicator of product quality. For example, enterprises follow international quality standards such as ISO 9001:2008, HACCP, on production according to an advanced technological line... Therefore, disclosure of non-financial information is clear and transparent, helping to grow revenue through increasing the number of customers who are fully informed, increasing the number of sales per customer. Second, the widespread reporting of non-financial information can create a strong brand, a good sign for a company's products and services. With a strong brand, a company can launch new products and services or reach new markets more easily. Therefore, the author argues that the extent of non-financial disclosure is positively correlated with revenue, revenue growth, and year-over-year revenue stability, factors that ultimately result in a higher profit and better quality of return.

Non-financial disclosure helps reduce costs: Comprehensive and transparent non-financial disclosure also helps reduce costs through (a) increased bargaining power with suppliers relative to competitors industry without supporting non-financial information systems, (b) spend less on marketing activities by establishing strong relationships with distributors through proactively providing information, bringing its image to its stakeholders more clearly and (c) be able to access cheaper capital sources by becoming a less risky player in the capital markets.

3.4. The relationship between non-financial disclosure and the market price of firms

The intrinsic value of a company depends on many factors, and only a few can be measured by financial metrics. In today's competitive market, companies hold a multitude of resources that contribute significantly to intrinsic value but are outside the financial numbers: human resources (employee qualifications), intangible assets (data, intellectual property, copyrights) and customer resources (brands, reputations) customer list),... to differentiate yourself from competitors. These are the key competitive advantages businesses need to survive and thrive that non-financial information can fully reflect.

Fama and French (1992, 1995) suggest that there are two schools of financial research on determining the stock price of a company.

One school of thought assumes that the stock market is efficient, and that any new information will be reflected almost immediately in stock prices. According to this school, non-financial disclosures will have a direct impact on stock prices immediately.

The other school holds that markets are inefficient and that stock prices are affected by both financial factors, such as transaction costs and taxes, etc., such as expert expectations and Investors. According to this view, market supply and demand for a particular security determines the price of that security, and this supply and demand are in turn influenced by investor expectations and

behavior. Therefore, public and transparent information disclosure – including non-financial information can affect the intrinsic value of the business and through this channel affect the price of securities.

In summary, regardless of the context of market efficiency, both financial and accounting theory lead to positive conclusions about the impact of non-financial disclosure on the market value of firms. . In general, non-financial measures compensate for the shortcomings of financial measures. Theoretically, non-financial information provides a fundamental solution to the problem of information asymmetry. However, the performance evaluation will be optimal if both financial and non-financial measures are combined. Applying financial theories about efficient markets, accounting theory leads us to the conclusion that there is a positive correlation between disclosure of non-financial information and financial position, operating results. business as well as the market value of the business.

4. SOLUTIONS TO INCREASE THE EFFICIENCY OF USING NON-FINANCIAL PERFORMANCE EVALUATION INFORMATION

To improve the efficiency of using non-financial information in performance evaluation, the author recommends that enterprises make decisions based on a well-built non-financial measurement system. The process suggested by the author in the study includes:

To associate non-financial measures with operational strategy, the selection of these measures should be based on the cause-effect relationship model. The first step is to develop a cause-and-effect relationship model based on elements of the business's operational strategy. Next, the enterprise should store all data obtained from the information system, which can be useful when evaluating the determinants of business success in a unified manner. When there are enough databases, businesses need to transform them into useful non-financial information. There are many methods to test cause-effect relationships, such as statistical models, analysis, or methods in the field of Marketing such as survey groups, interviews ... These relationships need to be regularly evaluated and adjusted accordingly, because the ever-changing competitive environment can weaken or neutralize the impact of success determinants. The conclusions derived from the data analysis must then be used in the management decision-making process if non-financial performance measures are to be used to improve accounting profit accounting or market value. The final step in performance evaluation using non-financial measures is to assess whether operational plans, investments, and trade-offs are actually delivering the desired results.

5. CONCLUSION

The level of non-financial information disclosure on the Vietnamese stock market is currently low, the disclosure trend shows that businesses have a bias in choosing to evaluate operational aspects. The research results show that although non-financial disclosure has a negligible negative impact on the results of accounting activities, it has a significant positive influence on the market and on the assessment of investors. invest. This result suggests to managers about the importance of non-financial information in enhancing the corporate image in the eyes of investors, as well as the ability to improve performance by non-financial measures. finance.

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SOLUTIONS TO IMPROVE THE QUALITY OF RURAL HEALTH SERVICES CONTRIBUTING TO THE CONSTRUCTION OF AN ENHANCED NEW RURAL AREA AND A MODEL NEW RURAL AREA IN HUNG YEN PROVINCE

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Abstract: Health service is one of the basic social services to meet the essential needs of people. Health services are also one of the criteria in building an enhanced new rural area and a model new rural area. The article focuses on analyzing the current situation of health service quality in rural areas in Hung Yen province. From there, propose solutions to improve the quality of rural health services in order to contribute to the construction of improved new rural areas and model new rural areas in Hung Yen province.

Keywords: Medical service; new countryside; newly enhanced countryside; model new countryside; hung Yen province.

1. INTRODUCTION

The national target program on new rural construction is one of the most important tasks of industrialization, modernization, national construction and defense.

At the same time is an important basis for economic development - rural society towards sustainability, increase income and improve living standards of rural people [1]. New rural construction is a continuous process. Therefore, localities that have finished building new rural areas need to continue to build advanced new rural areas and model new rural areas. Advanced new rural construction in order to build communes up to new rural standards ensures that new rural construction is a regular and continuous process, towards the goal of sustainable rural development [2]. To build a model new rural area in order to maximize the advantages of the locality. Create a typical model to popularize, replicate and improve the material and spiritual life of rural people [3]. To successfully build a new countryside advanced, new rural model, the local force to develop services for the essential needs of society, including health services.

Medical services are activities serving the essential needs of society, for the common good of the community, of society by the State directly undertake or authorize and facilitate the private sector perform. Improving the quality of health services will help society develop sustainably. At the same time, health services are an important content and a foundation for building a new rural area, an enhanced new rural area, and a model new rural area today.

Hung Yen province is one of three provinces of the country to complete the goal of building a new countryside. Hung Yen province has determined that new rural construction is a long-term continuous development process in order to constantly improve the quality of material and spiritual life of rural people. The Provincial People's Committee has developed the plan No. 03/KH-UBND

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dated January 9, 2020 on the plan to build a new rural area in Hung Yen province. Based on that, localities after being recognized as meeting new rural standards must continue to strive to improve the quality of the criteria, towards building communes up to advanced rural standards, and building model rural villages [4]. To successfully achieve that goal, Hung Yen province needs to develop rural health services to improve the material and spiritual life of the people in the province. The current health criteria of Hung Yen province still have certain limitations. Currently, Hung Yen Province is building new advanced rural areas and model new rural areas. Therefore, research on improving the quality of rural health services, contributing to the construction of an enhanced new rural area and a model new rural area in Hung Yen province is very necessary.

The article focuses on reflecting the quality of rural health services in Hung Yen province. On the basis of those research results, the author makes some assessments and proposes solutions to improve the quality of rural health services, contributing to the construction of an enhanced new rural area and a model new rural area in Hung Yen province.

2. RESEARCH METHODS

2.1. Methods of information collection

- *Collecting secondary information:* The secondary data includes documents related to rural health services in articles and reports on results of new rural construction of communes and districts in Hung Yen province, reports to the Department of Health of Hung Yen province.

- *Collecting primary information:* To understand the quality of rural health services in Hung Yen province, the author collects primary information by distributing questionnaires. The subjects of the survey are people (who benefit from rural health services). The survey form focuses on 5 criteria to assess the quality of rural health services: (1) Reliability; (2) service capacity; (3) responsiveness; (4) empathy; (5) tangible means.

The sample size selected for the survey was calculated according to the Slovin formula as follows:

$$n = \frac{N}{1 + N(e)^2}$$

In there:

n: The number of people need to investigate

N: Number of people in Hung Yen province

e: Errors allowed. Choose $e = 5\%$ (95% confidence level). The number of people to be surveyed according to the above calculation method is 560 people. The total number of survey samples is specifically distributed in table 1:

Table 1: Summary of survey subjects

No	District, city	Quantity
1	Hung Yen city	50
2	Van Lam District	60
3	Van Giang District	50
4	Yen My District	70

5	My Hao Town	50
6	An Thi District	60
7	Khoai Chau District	70
8	Kim Dong District	50
9	Tien Lu District	50
10	Phu Cu District	50
Total		560

2.2. Analytical methods

- *Descriptive statistical method*: The author uses this method to describe, analyze and evaluate the current situation of the quality of rural health services, contributing to the construction of an improved new rural area, a model new rural area in Hung Yen province.

- *Comparative method*: Mainly used by the author to assess the variation of rural health service providers from year to year.

2.3. Methods of processing and synthesizing information

Through collecting research results, the author will check, clean the data and then synthesize by calculating by Excel software according to the research objectives.

3. RESEARCH RESULTS

3.1. Status of rural health services in Hung Yen province

Health Services of Hung Yen province has built a comprehensively developed medical system towards modernity and depth. High-tech facilities, a team of qualified doctors to meet the needs of medical examination, treatment, care and improvement of people's health.

The current health service system in Hung Yen province includes 10 health centers at the district level and 145 commune health stations at the commune level. Health service providers in Hung Yen province are shown in the following table:

Table 2: Rural health service providers in Hung Yen province

No	District, city	Commune Health Station	District Health Center
1	Hung Yen City	10	1
2	Van Lam District	10	1
3	Van Giang District	10	1
4	Yen My District	16	1
5	My Hao Town	12	1
6	An Thi District	20	1
7	Khoai Chau District	24	1
8	Kim Dong District	16	1
9	Tien Lu District	14	1
10	Phu Cu District	13	1
Total		145	10

(Source: Hung Yen Statistical Yearbook in 2020)

Regarding the human resources of the province's medical sector, the total number of public health workers under the Department of Health assigned by the Provincial People's Committee by the end of 2020 is 4,557. Basically meet the needs of the people for medical examination, treatment and epidemic prevention. In which, the medical staff is 2,217. In 2020, the ratio of doctors per ten thousand people is 9.0 (public 6.33; non-public 2.67). The ratio of university pharmacists per ten thousand people is 2.08 (public is 0.6; non-public is 1.48). 100% of communes, wards and townships meet national standards on health. Improve quality of life, maintain average life expectancy of over 74 years; the ratio of 30 hospital beds and 9 doctors and 2 pharmacists per ten thousand people. The rate of people participating in health insurance is over 90% [5].

The grassroots medical system has well maintained medical examination and treatment activities, continues to develop and improve the quality of technical services. To date, many specialized techniques have been deployed in the province. The benefits in medical examination and treatment of health insurance participants have been gradually expanded, the proportion of people participating in health insurance has increased over the years, the health insurance coverage rate has reached 90.3%. Medical examination and treatment for the poor, policy beneficiaries and children under 6 years of age are concerned. Effectively implement surveillance, proactive detection, and control of epidemics and infectious diseases, preventing epidemics from occurring on a large scale, affecting security, order and economic development. local and provincial society. Well implemented the target programs of health and prevention of non-communicable diseases, the rate of fully immunized with 8 vaccines against diseases for children under 1 year old reached over 95%. 100% of district-level medical centers have been ranked 3rd or higher, fully staffed, equipped with equipment and machinery for medical examination and treatment, such as: 4D ultrasound machine, digital X-ray machine, ... 100% of health stations in communes, wards and townships are recognized as meeting the national criteria for health, 91.9% of medical stations have doctors. working, 100% of villages have village health care. The health stations of 145/145 communes have all been recognized by the Provincial People's Committee to meet the National Criteria on Commune Health for the period up to 2020. Commune health stations have 91.9% of doctors working and 100% of villages have medical facilities. village health, residential group. Every year, medical stations are invested with additional equipment and facilities to serve the initial medical examination and treatment for people. Disease prevention has been effectively implemented.

The province's health system has implemented medical examination and treatment services covered by health insurance at 33/145 commune health stations, and at the same time organized training of family doctors for 114 grassroots medical doctors; expanded vaccination activities are implemented according to the annual plan. Promote communication and education on prevention of micronutrient deficiency for children and mothers in districts, towns, cities and in 100% of communes. Organize micronutrients day every year on 01-02/6 and 01-02/12. The rate of children under 5 years old with stunting (height for age) accounts for 21%. The rate of underweight children under 5 years old (weight for age) accounted for 10.8%. The proportion of people participating in health insurance reached 90.3% (increasing 37.45% compared to 2011). As a result, 145/145 communes (reaching 100%) reached the criterion number 15 on health [6].

3.2. The current situation of rural health service quality in Hung Yen province

The current situation of rural health service quality in Hung Yen province, summarized by the research team from the survey questionnaire. The specific results are as follows:

(1) Reliability

Reliability is the ability to provide accurate and reputable medical services. At the same time, it shows the expected results of people and service providers. The results of people's assessment of trustworthiness are shown in Table 3:

Table 3: People's assessment of trustworthiness*(Unit: %)*

No	Content	Very satisfied	Contentment	Normal	Unsatisfied	Very unsatisfied
1	Patients do not have to wait long to be treated	49.64	22.86	20.54	6.25	0.71
2	Preventive health work meets the needs of the people	53.93	26.43	15.89	3.21	0.54
3	Local medical examination and treatment in accordance with the needs of the people	47.32	22.86	18.21	10.18	1.43
4	People's health status improved after a period of treatment at medical facilities	46.96	25.89	19.11	6.96	1.07

(Source: Summary of the author's survey results)

The above table, we can see:

- People agreed that the patient did not have to wait long to receive treatment with a high consensus rate of 72.5%, a disagreement rate of 6.96%, the rest of the people rated it as normal.

- People agreed that preventive medicine could meet people's needs with a high consensus rate of 80.36%, a disagreement rate of 3.75%, the rest of the people rated it as normal.

- People agree that local medical examination and treatment is suitable to people's needs with a high rate of consensus accounting for 70.18%, disagree rate accounting for 11.61%, the rest of the people rate it as average often.

- People agree the health status of the people improved after the treatment time in units with high proportion accounted for 72.86% agreement, the rate of disagreement accounted for 8.04%, the rest of the people rated it as normal.

(2) Service capacity

Ability to serve as qualifications, competencies, skills and work attitude of our team of doctors performing medical service and management staff. The results of people's assessment of service capacity are shown in Table 4.

Table 4: People's assessment of service capacity*(Unit: %)*

No	Content	Very satisfied	Contentment	Normal	Unsatisfied	Very unsatisfied
1	Team doctors have good qualifications	38.57	32.86	21.61	6.25	0.71
2	The staff guides the application, easy to understand procedures	44.29	31.25	18.57	5.54	0.36

3	The attitude of the medical staff serving the people warmly and wholeheartedly	43.75	24.11	25.36	5.54	1.25
4	Solve people's questions and concerns quickly and in a timely manner	44.11	22.86	27.32	4.82	0.89

(Source: Summary of the author's survey results)

From Table 4 we see:

- People agree on a team of medical professionals with good professional qualifications with a high consensus rate accounting for 71.43%, disagree rate accounting for 6.96%, the rest of the people rated at a normal level.

- People agree about the staff to guide the application, easy to understand procedures with a high consensus rate accounting for 75.54%, disagree rate accounting for 5.89%, the rest of the people rated it at a normal level.

- People agree on the attitude of serving people warmly and devotedly with a high rate of consensus accounting for 67.86%, a rate of disagreeing accounting for 6.79%, the rest of the people rated it at a normal level.

- People agree on solving people's questions quickly and in a timely manner with a high consensus rate accounting for 66.96%, dissenting rate accounting for 5.71%, the rest of the people rated it at a normal level.

(3) Empathy

Empathy shows the attentive care of medical staff to each citizen. Empathy includes accessibility and efforts to understand people's needs. The results of people's assessment of empathy are shown in Table 5.

Table 5: People's assessment of empathy

(Unit: %)

No	Content	Very satisfied	Contentment	Normal	Unsatisfied	Very unsatisfied
1	Staff are always attentive, caring, and sharing with patients	45.18	25.89	21.79	6.07	1.07
2	Patients can easily see their treating doctor when required	43.04	27.5	22.68	6.25	0.54
3	Medical staff receive friendly attitude, and demand to answer questions patients and their families	40.18	28.04	24.11	6.96	0.71

(Source: Summary of the author's survey results)

From Table 5 we see:

- People agree about the staff who always pay attention, care, and share with patients with a high consensus rate accounting for 71.07%, disagree rate accounting for 7.14%, the rest of the people rate it at a low level normal.

- People agree that patients can easily see their treating doctor when required with a high consensus rate of 70.54%, The rate of disagreement accounted for 6.79%, the rest of the people rated it as normal.

- People agree that the receiving medical staff has a friendly attitude when answering questions of patients and family members with a high consensus rate accounting for 68.21%, The rate of disagreement accounted for 7.68%, the rest of the people rated it as normal.

(4) Responsiveness

Responsiveness is the effectiveness of the service, which is the response from the health service provider to the wishes of the people. The results of people's assessment of the responsiveness of health services are shown in Table 6:

Table 6: People's assessment of the responsiveness of health services

(Unit: %)

No	Content	Very satisfied	Contentment	Normal	Unsatisfied	Very unsatisfied
1	Households participating in health insurance	47.32	20.18	28.21	3.93	3.93
2	Average distance from household to nearest health facility (3 km)	53.21	28.93	13.21	4.11	0.54
3	Medical units regularly have people on duty for medical examination and treatment	55.36	27.68	11.61	4.64	0.71
4	Contact medical facilities easily	48.04	33.04	14.46	4.29	0.18

(Source: Summary of the author's survey results)

Through Table 6, we find:

- Households who have participated in health insurance with a high consensus rate accounted for 67.5%, the rate of disagreement accounted for 4.29%, the rest of the people rated it as normal.

- People agree on the average distance from the household to the nearest health facility (3 km) with a high consensus rate of 82.14%, the rate of disagreement accounted for 4.64%, the rest of the people rated it as normal.

- People agree about the health unit that regularly has people on duty for medical examination and treatment with a high consensus rate accounting for 83.04%, disagree rate accounted for 5.36%, the rest of the people rated it as normal.

- People agree on easy contact with health facilities with a high consensus rate of 81.07%, The rate of disagreement accounted for 4.46%, the rest of the people rated it as normal.

(5) Tangible Media

The tangible means of medical services are the presence of working conditions, equipment, attitudes of medical staff and medical examination and treatment facilities. The results of people's assessment of tangible means are shown in Table 7.

Table 7: People's assessment of tangible means

(Unit: %)

No	Content	Very satisfied	Contentment	Normal	Unsatisfied	Very unsatisfied
1	Sufficient medicine in medical examination and treatment	38.75	29.11	4	6.25	0.54

2	The clinic and treatment room are clean and have all the necessary amenities	40	25.71	25.36	7.32	1.61
3	Equipment and machinery used in the examination and treatment of modern, precision	37.86	26.43	26.25	8.04	1.43
4	Medical staff uniforms in accordance with regulations	45.89	40.54	11.61	1.61	0.36

(Source: Summary of the author's survey results)

Through Table 7, we find:

- People agreed on adequate drugs in medical examination and treatment with patients with a high consensus rate accounting for 67.86%, disagree rate accounting for 6.79%, the rest of the people rated it at a normal level.

- People agree that the clinic and treatment room are clean and have all necessary facilities with patients with a high consensus rate of 65.71%, The rate of disagreement accounted for 8.93%, the rest of the people rated it as normal.

- People agree on equipment and machinery used in modern and accurate medical examination and treatment with patients with a high consensus rate accounting for 64.29%, The rate of disagreement accounted for 9.46%, the rest of the people rated it as normal.

- People agree on medical staff uniforms in accordance with regulations with patients with a high rate of agreement accounting for 86.43%, a rate of disagreement accounting for 1.96%, the rest of the people rated it at a normal level.

3.3. Evaluation of the quality of rural health services in Hung Yen province

** Results achieved*

First: Facilities

The grassroots health network is interested in investment. After many years of implementing the National Criteria for Commune Health and the National Criteria for New Rural Communes. Up to now, the infrastructure of the medical stations in the area has been invested and built relatively spaciouly and synchronously.

Second: Service capacity

Communal health care is always interested in investing and implementing health education and communication activities with rich and diverse content and forms, bringing remarkable effectiveness in health care and protection people of the health sector. Health workers at the grassroots level, especially the commune health network, are properly recruited, arranged and arranged.

Third: Medical examination and treatment

The medical examination and treatment at the commune level has been gradually improved, and more and more patients are coming to the health station for examination and treatment. Professional activities are put into order, promoting efficiency, affirming the important position and role of the commune health level in the protection and primary health care of the people.

** Restrict*

In addition to the achieved results, the grassroots health sector in Hung Yen province still has certain limitations.

First: Medical staff

The number of collaborators and village health workers is still lacking, not meeting the requirements of health and population tasks in the current period of renovation of grassroots health services.

The professional qualifications of a part of commune health workers are still limited in medical examination and treatment. The management capacity of health station leaders is not uniform, the percentage of doctors with postgraduate training at the health station is still low, so it directly affects the operation model and the quality of work.

Second: Medical examination and treatment

The quality of medical examination and treatment at commune and district levels has not created trust and has not met the increasing and diverse needs of the people. The proportion of people with medical examination, health management and use of medical services at health stations is still low. The connection and coordination between commune health facilities and higher level medical facilities in service provision has not yet ensured continuity and comprehensiveness.

Third: About facilities

Currently, many commune health stations are in a state of deterioration in terms of facilities, lack of rooms to carry out tasks, especially technical and surgical rooms, and lack of equipment according to the prescribed list.

3.4. Proposing a number of solutions to improve the quality of rural health services, contributing to the construction of an enhanced new rural area and a model new rural area in Hung Yen province.

Based on the current situation of rural health service quality in Hung Yen province. The research team focused on proposing the following solutions:

First: Medical staff

Renovate the training of health workers, develop a plan to train doctors according to the needs of each unit, especially medical staff at commune health stations.

Strengthen the training of both professional and managerial staff by many forms of training: focused training, on-the-job training, attending training conferences, training on demand to gradually improve professional qualifications. subjects, management qualifications, mastery of modern medical equipment, meeting the requirements of assigned tasks.

Continue planning, training, using and developing human resources in the direction of standardization for health workers from the provincial to grassroots levels. Focus on training specialized doctors for leading industries. At the same time, strengthen the training to standardize health workers in terms of expertise, organization, health management, health economic management, and political theory for all levels.

Develop a plan to rotate doctors between the provincial and district levels; at district and commune levels to provide training to improve skills and improve professional skills for grassroots officials.

Well implement regulations on recruitment, management and use of public servants and public employees; arrange and arrange staff according to job positions, in accordance with their training levels, capacity and forte, and streamline the payroll according to regulations. Periodically, medical

facilities need to arrange time to check the professional skills and knowledge of the staff. From there, supplement and update new knowledge for the staff to help them improve their ability and their own qualifications, better serve the operation of the unit. Second: Solution to improve facilities

It is necessary to increase investment, supplement adequate equipment according to the list of medical equipment of district hospitals and equivalent (including types and quantities). Health facilities need to ask the Provincial People's Committee and relevant departments for financial support to buy some necessary equipment. At the same time, create conditions to mobilize capital or associate with organizations and individuals to install machines to perform high technology to ensure that medical equipment maintains operation and provides good and timely service to the public. examination and treatment of patients.

Renovate and invest in facilities and materials for health centers and commune health stations to suit local actual conditions. Prioritize investment in communes with medical equipment and degraded stations. In parallel with the investment in facilities and medical equipment of the units, it is necessary to perform well the technical classification according to the treatment route. Develop high-tech services and expand medical technical services in the direction of diversity, combining public and private sectors to create favorable conditions for people to access and use quality medical services in close proximity. best.

Effectively promote satellite hospital projects and international cooperation projects to take advantage of training and technology transfer from the central level to improve medical examination and treatment capacity in hospitals.

Apply information technology in medical professional activities, focus on deploying IT application in health station operation management. Implement an electronic medical examination queuing system. Upgrading and perfecting the features of currently deployed software to ensure connection, communication, update, exploit and use medical data effectively.

Third: Empathy Solution

Organize training for staff to improve communication skills, culture of behavior, maintain hotlines, comment boxes, contact with patients in the hospital, develop emulation and commendation regulations...

Innovating the service style and attitude of medical staff towards patient satisfaction must first change the attitude of doctors and medical staff. For the patient, it is necessary to respect, warm attitude, warm welcome, attentive care, urgent and timely first aid, meticulous instructions.

4. CONCLUSION

To maintain the achievements of the health sector in building new rural areas and continue to build advanced new rural areas, model new rural areas in a sustainable direction in the province. Hung Yen province needs to focus on improving the professional qualifications of the medical staff. Strengthening training and training for medical staff and doctors at commune level. Promote socialization of medical work, link investment in medical equipment, and serve medical examination and treatment. Invest in the grassroots health system to do well in primary health care, contributing to improving the health of people in the province.

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DETERMINANTS OF DIVIDEND POLICY OF LISTED BANKS ON VIETNAM STOCK EXCHANGE

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Abstract: *Dividend policy is one of the very significant aspects of corporate finance and this is also an issue that is still controversial so far. In Vietnam, the dividend policy of enterprises is of great interest to many researchers, but for the dividend policy of listed banks, the quantitative research results are not much. The objective of this study is to measure the factors affecting the dividend policy of commercial banks listed on Ho Chi Minh City Stock Exchange (HOSE) and Hanoi Stock Exchange (HNX) from 2014 to 2019, so as to enrich the empirical evidence related to this issue. The research results indicate that previous year's dividend, firm size and time of listing have an impact on the dividend payout ratio of banks listed on HOSE and HNX.*

Keywords: *factors, dividend policy, Vietnamese commercial banks*

1. INTRODUCTION

Corporate finance has traditionally been through to consist of two different areas of decision makings: the investment decision, in which investment projects are appraised and sufficient projects chosen, and the finance decision, in which funds are raised to implement the chosen project to be conducted. Both the investment and finance decisions are inextricably tied to the dividend decision, which evaluates the amount of earnings to be retained by the company as well as the amount to be distributed to shareholders. A corporation with few appropriate initiatives, for instance, should increase dividends to redistribute unused money to shareholders.

In recent years, deciding how much earnings to keep and how much to pay out has become a more essential decision in and of itself, to the point where it is now common to refer to three main decisions of corporate finance. When it comes to dividend decisions, directors must consider the perspective and expectations of shareholders and other stakeholders. The availability and cost of internal and external sources of money must be balanced against the shareholders' reaction to changes in the level of dividends paid. In other words, coming to the conclusion of enacting dividend policy depends on a variety of important factors such as return on asset (ROA), sale growth, debt ratio, net cash flow, etc.

Dividends can be paid to shareholders in various forms, such as in cash, in shares or in assets. The choice of different forms of dividends all have certain effects on the book values of shares, company value, investment capital, etc. A reasonable dividend policy can help the enterprise build a positive image, attract more investors and give financial support for its growth.

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Banking is the lifeblood of other businesses' survival and development, and its growth is critical to the country's economic health. The banking business has got numerous attentions in recent years. The banking stocks are still one of the most intriguing investment channels for not only local investors but also foreign ones. However, from the first days they were listed on the stock exchange until now, the banking stocks have experienced many ups and downs along with the whole economy and banking activities. After a period of enthusiastic welcome from investors when they first listed, banking stocks has fallen into a quiet period then gone down. Since the beginning of restructuring until now, commercial banks have gradually come into stable operations, contributing to the recent recovery of banking stocks. Nevertheless, this recovery is not really sustainable because the risk factors are still remained hidden. This makes investors doubtful and pre-cautious when deciding whether or not to invest in banking stocks.

Banking stocks attract a large number of investors in the market due to its high liquidity, 50% of market liquidity focus on banking industry. In Vietnam, recently, there are not many studies related to key factors affecting the value of the stocks of the banking industry. Therefore, it is necessary for investors to make enquiries about dividend policy – one of the most determining factors – which has an impact on the stock value of joint-stock commercial banks.

The study will use a deductive and quantitative research strategy to examine cross-sectional secondary data obtained from a reliable financial information source. With the help of the Stata program, dividend policy and its significant influences will be estimated along with hypothesis testing.

This paper is divided into 5 sections. The first section is Introduction, which includes the reason for the study, the aims and objectives of the research as well as brief description of the method. The following part discusses Literature Review demonstrating main theories of related factors to dividend policy and empirical investigations, as well as review on the connection between dividend policy and performance of listed banks. Methodology is the third chapter, and it explains how the research approach and methodology were chosen to meet the research purposes. Following a discussion of the study technique, section 4 will examine regression data and provide the research findings. Finally, section 5 finishes the research by summarizing research findings as well as compiling what has been accomplished in order to solve the research problem.

2. LITERATURE REVIEW AND THEORETICAL BASIS

The corporate management decides on the dividend distribution policy for shareholders depending on the company's strategy. Dividends are paid out based on the company's financial performance or cash in hand. (Deshmukh *et al.*, 2013; Okafor *et al.*, 2011). Dividends are paid out of the net profit made on each share, which is distributed out in cash or other assets (Nguyen, 2020). Dividend yield and payout ratio are two valuation factors used by investors and analysts to assess firms as dividend income investments.

The study of Dung Viet Tran *et al.* (2018) finds that banks that do not pay dividends have more opacity than banks that do, which contradicts the Dividend-Transparency Channel. However, the more dividends a bank pays out, the more incentives it has to participate in profits management, which is consistent with the Dividend-Opacity Channel.

Truong Dong Loc *et al.* (2015) indicates that earnings per share, controllability (corporate governance) and dividend payment form are all elements that influence HOSE firms' dividend

policies. This study did not uncover a significant correlation between dividend payout ratio and variables such as listing time, debt ratio, solvency, revenue growth rate, state ownership of firm size, contrary to numerous published studies. Whereas, Dang Ngoc Hung *et al.* (2018) proved that the enterprise's revenue growth rate has a negative impact on dividend payout ratio. Besides, financial leverage has no effect on the dividend policy of the corporation.

Dividends provide a better picture of the financial position of the firms in an emerging market like the Pakistani Stock Exchange, where the information provided by the company through other ways appears to be less accurate (Asma Salma, 2019). As a result, an increase in dividends sends a signal that the firm's chances are improving, while a fall in dividends sends a signal that the firm's prospect are deteriorating. Any change in dividends leads to be transmission of information about the firms and, consequently, impacts the value of the firms' stock. As a result, shareholder preference and signaling mechanisms are crucial factors affecting a company's dividend policy. Research in Pakistan also, Faid Gul *et al.* (2012) stated that the bank's risk exposure and dividend payout ratio have a major impact on the bank's performance in Pakistan. It is vital to remember that the dividend payout ratio is an indicator of greater performance and serves as a signal for the bank's success. If its value is altered, it is not an independent variable of the sort that causes the performance to change. The important takeaway for investors from their research is to use the bank's payout ratio to predict on its future performance. Similarly, a bank's risk exposure has a negative impact on its performance. This unfavorable relationship between risk exposure combined with the global financial crisis.

According to a research in Lebanon by Rim M El Khoury (2014), the firm size is substantial and positive, implying that larger banks have easier access to capital and can distribute dividends to shareholders more effectively than smaller ones. The findings also show that major banks want to pay higher dividends in order to reduce agency conflict and preserve their reputation. Understanding the factors that influence dividend policy has a big impact on investors and portfolio managers. Furthermore, when determining the dividend policy of Lebanese listed banks, profitability, growth, past year dividend, firm size and risk should be taken into consideration by the board of directors since these are the most critical aspects that determine the dividend policy of listed banks.

Yanqiong Zhong (2016) examines the dividend payment status of listed banks in China, as a part of the ongoing research on the factors influencing listed bank dividend policies using empirical method. Panel data was used from 2010 to 2013. The findings demonstrate that some publicly traded banks do not pay dividend or payout. Bank dividend payout ratios are typically modest, although state-controlled banks typically have a larger ratio; EPS and asset liquidity have a favorable impact on dividend payout ratio, while debt level has a negative impact. Growth and operating ability, on the other hand, have no bearing on the dividend payment ratio.

Empirical studies have discovered that a company's dividend policy is driven by a series of factors. These elements can be classified as below:

- The company characteristics: size, age, profit, financial leverage, solvency, etc.
- Corporate governance: board membership structure, board independence, ownership structure and ownership concentration of investors.
- Business environment: market risk, investment opportunities, taxes, etc.

3. DATA AND METHODOLOGY

3.1. Source of data

The data of this document was recorded based on commercial banks listed on Vietnam's stock market. Recently, there have been 24 banks listed on three stock exchanges, including Hanoi Stock Exchange (HNX), Ho Chi Minh City Stock Exchange (HOSE) and Unlisted Public Company Market (UpCOM). The data base in this paper includes 14 banks, ensuring a listing period of more than 6 years, from 2014 to 2019. The relevant data comes from KB Securities Vietnam database and the annual reports of the listed banks, with STATA being used for data processing and empirical analysis.

3.2. Data analysis

To estimate the regression equations that I suggested above, I utilized a package of STATA. To begin, bivariate relationships between variables were investigated using correlation analysis. The influence of variables on dividend policy was then investigated using Ordinary Least Square (OLS). Then, between the Fixed Effects Model (FEM) and the Random Effects Model (REM), Hausman's test was used to determine which model was better for the data set. The results indicate that FEM is appropriate for the data in this research. The paper also looked at various important tests for regressive assumptions, including as autocorrelation, multicollinearity and heteroskedasticity, to confirm that the regression is blue.

Finally, the robust option was applied to recalculate standard errors in case the models violated regressive assumptions, which helped me confirm my findings.

3.3. Variables

Dependent Variable

The Dividend Payout Ratio (DPR), which is defined as the dividend paid divided by net income, is the dependent variable in this study, as it was in earlier studies that looked at the primary determinants of dividend payment (Rozeff, 1982; Lloyd, 1985; Amidu & Abor, 2006). This variable indicates how much of the company's profit is distributed to shareholders.

Independent Variables

The explanatory variables in this paper are solely internal variables such as return on assets (ROA), net cash flow, sale growth, financial leverage, firm size, past dividend rate and age.

Table 3.1: Variables with their corresponding symbols and expectations

Variables	Symbol	Description	Exp.
Dividend Payout Ratio	DPR	Cash Dividend/ Net Profit	
Return on Assets	ROA	Net Income/ Total Assets	+
Net Cash Flow	NCF	Total Cash Inflows – Total Cash Outflows	+
Sale Growth	GRO	(Current Revenue - Previous Revenue)/ Previous Revenue	-
Financial Leverage	LEV	Total Debts/ Total Assets	+/-
Firm Size	SZ	Natural Logarithm of Total Assets	+
Previous Year's Dividend	PYD	Previous Year's Dividend Payout	+
Age	AGE	Period of Listed Time	-

The research model is as follows, in addition to impacting the variables of dividend policy of banks:

Where:
$$y = \alpha + \beta_{it}x + e_{it}$$

y : the dividend variable - the firm's dividend payout ratio;

x : the set of explanatory variables – including ROA, NCF, GRO, LEV, SZ, PYD, AGE;

e_{it} : disturbance term;

α : assumed to be constant over time t and unique to each cross-sectional unit I ;

i, t : respectively, the cross-sectional and time-series dimensions;

STATA is used to run all of the tests required for the empirical investigation.

4. RESULTS AND DISCUSSIONS

In 2020, the storm named COVID-19 hit the world, causing the economy to be severely affected, supply chains were broken, production was stalled, and consumer demand was reduced. In that context, the banking industry not only performs well its function of supplying and allocating capital, but also has a more special role – fueling the economy, implementing solutions to support people and businesses to overcome challenges by pandemics and natural disasters. By the end of 2020, banks' profits still grew well, credit growth of the whole banking system reached 12.13%, higher than that of the whole banking system compared with the growth rate of 2019.

In general, big banks with a long history such as Vietcombank (VCB), BIDV (BID), Vietinbank (CTG) and Military Bank (MBB) tend to pay dividends in cash, steadily over many years. This affirms the position of big banks in the market, creates peace of mind for investors, and at the same time shows the development of the business. However, most banks on the stock market pay dividends in shares because the State Bank has a policy of not paying cash dividends. Therefore, the method of paying dividends of banks is mostly by issuing more shares, which means increasing the bank's charter capital. On the other hand, many banks have announced to plans to distribute profits and does not pay dividends with names like TP Bank (TPB), Techcombank (TCB), VP Bank (VPB) and Sacombank (STB)...

4.1. Descriptive statistics

Table 4.1: Descriptive statistics

Variables	Mean	Std. Dev.	Min	Max
DPR	.2037216	.3086756	0	1.587302
PYD	.0302262	.0390101	0	.13
SZ	33.13453	.8718886	31.23753	34.93752
LEV	.9265464	.0224508	.8382256	.9593823
ROA	.8672619	.6134484	.02	2.87
AGE	6.714286	3.41355	0	18
NCF	6637722	2.05e+07	-6.15e+07	1.48e+08
GRO	.1936251	.2584669	-.203676	2.199

Source: Extracting results from Stata

The descriptive statistics of DPR revealed that the average dividend payout ratio in the study data's set is 20.37%, with a maximum of 158.73% and a minimum of 0%. This showed that the selected Vietnam banks in the study's data set mainly pay dividend in shares for shareholders, some banks pay dividends in cash and some of selected banks do not pay dividends for shareholders.

The standard deviation of DPR accounts for 30.87%. This ratio does not span a wide range of values, including positive numbers only.

The values of ROA have shown that the average return on assets in the data set is 86.7%, the maximum ROA is 287% whereas the minimum ROA is 20%. The standard deviation of ROA accounts for 61.3%, which indicates the a significant gap in the efficiency of banks' management at using its assets to generate earning. The size of a firm (SZ) fluctuates very much when standard deviation accounts for 87.19%.

4.2. Regression results

Table 4.2: Table of regression results between dividend payout ratio and related factors according to three models of OLS, FEM and REM

	OLS	FEM	REM
	DPR	DPR	DPR
PYD	7.31916***	7.762934***	7.355798***
SZ	-.0729121***	-.1931578	-.0731495***
LEV	-1.492104	-3.04133**	-1.594295*
ROA	-.0504134	-.1120104**	-.0540487
AGE	-.0071605	.0239554	-.0069023
NCF	-1.72e-10	3.13e-10	-1.10e-10
GRO	-.0069722	-.0164707	-.0063611
_cons	3.875191***	9.124646*	3.977527***
R-sq	0.8055	0.6322	0.8055

Source: Extracting results from Stata

Note: *, **, *** respectively corresponding to the significance level of 10%, 5% and 1%

From the table above, at the 1% significance level, the OLS model has two statistically significant variables including past year dividends (PYD) and firm size (SZ). Similar findings are also found in the REM model, however, in this model there is one more statistically significant independent variable, which is financial leverage (LEV) at the significance level of 10%. In the FEM model, the post-tested model is the most suitable model, showing that, at 1% significance level, there is only one control variable of past year dividends (PYD), and at 5% of significance level includes financial leverage (LEV) and return on asset (ROA) which have statistical meaning.

Table 4.3: Regression result according to FEM model

DPR	Coef.	Std. Err.	t	P > t
PYD	7.762934	.6196213	12.53	0.000***
SZ	-.1931587	.1483288	-1.30	0.198
LEV	-3.04133	1.406921	-2.16	0.034**
ROA	-.1120104	.0514954	-2.18	0.033**
AGE	.0239554	.0244027	0.98	0.330
NCF	3.13e-10	7.42e-10	0.42	0.675
GRO	-.0164707	.064167	-0.26	0.798
_cons	9.124646	4.614448	1.98	0.052*

Source: Extracting results from Stata

Note: *, **, *** respectively corresponding to the significance level of 10%, 5% and 1%

4.3. Inspection of defects of the model

Multicollinearity Phenomenon

Table 4.4: Test of multicollinearity through Variance Inflation Factor (VIF)

Variables	VIF	1/VIF
DPR	5.14	0.1945
PYD	5.66	0.1766
SZ	1.95	0.5128
LEV	1.74	0.5747
ROA	1.93	0.5181
AGE	1.33	0.7518
NCF	1.14	0.8771
GRO	1.11	0.9000
Mean VIF	2.50	

Source: Extracting results from Stata

According to **Table 4.4**, all VIF coefficients are much less than 10, with an average of 2.50. The results from the test table show that the model does not have multicollinearity.

Heteroskedasticity Phenomenon

Table 4.5: Test of Wald for heteroskedasticity phenomenon

Modified Wald test for groupwise heteroskedasticity in fixed effects regression model
H0: $\sigma(i)^2 = \sigma^2$ for all i
chi2 (14) = 2747.79
Prob > chi2 = 0.0000

Source: Extracting results from Stata

Table 4.5 shows that $\text{Prob} > \text{chi}2 = 0.0000 < (= 5\%)$, the study rejects the hypothesis H0 or the model has heteroskedasticity phenomenon.

Autocorrelation Phenomenon

Table 4.6: Test of Wooldridge for autocorrelation phenomenon

Wooldridge test for autocorrelation in panel data
H0: no first-order autocorrelation
F(1, 13) = 18.999
Prob > F = 0.0008

Source: Extracting results from Stata

The result from **Table 4.6** shows that $\text{Prob} > F = 0.0008 < (= 5\%)$, the study reject the hypothesis H0 or the model has autocorrelation phenomenon.

4.4. Fixing defects

Table 4.8: Regression model results between the dividend payout ratio of banks and related factors according to the FEM model after adjustment

Fixed-effects (within) regression	Number of obs = 84
Group variable: ID	Number of groups = 14
R-sq:	Obs per group:
Within = 0.8016	min = 6
Between = 0.4002	avg = 6.0
Overall = 0.6322	max = 6
	F (7,76) = 39.21
Corr (u _i , Xb) = -0.2853	Prob > F = 0.0000
	(Std.Err. adjusted for 14 clusters in ID)

DPR	Coef.	Robust Std. Err.	t	P > t
PYD	7.31916	.7414264	9.87	0.000***
SZ	-.0729121	.0263382	-2.77	0.007***
LEV	-1.492104	.7519766	-1.98	0.051*
ROA	-.0504134	.0302475	-1.67	0.100*
AGE	-.0071605	.0035196	-2.03	0.045**
NCF	-1.72e-10	7.24e-10	-0.24	0.813
GRO	-.0069722	.0317222	-0.22	0.827
_cons	3.875191	1.237921	3.13	0.002***

Source: Extracting results from Stata

Note: *, **, *** respectively corresponding to the significance level of 10%, 5% and 1%

According to Table 4.8, the study shows that the FEM model after adjustment still retains the level and direction of the impact of the regression coefficient. In fact, the post-fixed FEM model still shows that the impact of past year dividend (PYD) on the dividend payout ratio (DPR) of banks is still at 1% significance level. However, the obtained results of financial leverage (LEV) and return on assets (ROA) are only 10% significant, halving compared to the original model. In addition, there are other factors affecting the dividend payout ratio such as the firm size (SZ) as well as the time it is listed on the stock exchange (AGE), with significance at 1% and 5% respectively. For the rest, although the P-Value of the variables all change, it does not change the statistical significance compared to the previous model.

4.5. Research result discussions

Table 4.8 presents the regression results keeping the dependent variable DPR and other independent variables. First, the results show that the past year dividend has the strongest impact on the dividend payout ratio of banks listed on the Vietnam Stock Exchange when considering the overall independent variables included in this study. At the same time, the positive sign of the regression coefficient also shows a positive correlation between the past year dividend and the dividend payout ratio as expected by the author. The regression coefficient of the past year

dividend is statistically significant at 1%, in other words, at 1% significance level, the higher the past year dividend, the higher the dividend payout ratio. Obviously, the dividend payout ratio in previous years plays an important role in the investment decision of shareholders, attracting cash flow to invest in stocks, and at the same time affirming the effective business strategy. Past year dividends are also considered as statistically decisive variable of dividend payout ratios in listed banks in Vietnam. This result is also consistent with the studies of Al-Ajmi and Hussain (2011) and Ahmed and Javid (2009).

The size of bank is a statistically significant determinant of dividend policy. Regression coefficient of bank's size with dividend payout ratio is statistically significant at 1%, as expected by the author. According to the findings of Redding (1997) as well as Fama and French (2001), the probability of paying dividends increases with firm size. Larger company pay high cash dividends for a number of reasons. First, large firms face high agency costs due to fragmentation of ownership (Rozeff, 1992). Second, due to the weak control over management supervision in large companies, large dividend payments increase the need for external funding, thereby leading to increased supervision of creditors by stakeholders. Third, large firms have easier access to capital markets and they can raise capital with lower issuance costs for external financing (Lloyd et al., 1985; Fama and French, 2002). Therefore, large banks are better able to distribute dividends to shareholders than small banks.

Similar to author's expectation, the time of listing on the stock exchange of banks has a relatively significant impact on the dividend payout ratio. Specifically, Table 4.8 shows that the sign of the regression coefficient is negative, showing that it is inversely related to the dividend payout ratio. This conclusion is significant at the level of 5%, a fairly high confidence level in the estimate.

Beside the independent variables that affect the dividend payout ratio of banks, the author also includes four control variables including financial leverage, return on assets, net cash flow and growth. In particular, the study did not find the impact of net cash flow or growth of listed banks on dividend payout ratio. However, the study shows the negative effect of financial leverage with dividend payout ratio at 10% significance level. Obviously, to some extent, the indicators also partly tell the financial health of a business. And if a business has too high a debt ratio, it will cause skepticism for investors and thereby reduce the value of that business in the market. Therefore, if a bank uses more debt, its dividend payout ratio tends to decrease. Besides, for return on assets, although the sign of the coefficient is not as expected, the sign of the coefficient of regression is negative and statistically significant at 10%, according to Table 4.8. ROA is the ratio of return on assets, indicating how many dollars of assets can generate profits for shareholders. A profitable indicator like ROA can completely create a bank's advantage in the market, increasing investors' confidence in the future development prospects of the business. That is why the larger this index, the more efficient the bank is, and the dividend payout ratio of the bank also increases.

5. CONCLUSIONS

The study's primary objective was to examine at the relationship between the dividend payout ratio and a few bank-specific characteristics. From the empirical evidence obtained, the study makes some conclusions as follows:

Firstly, the dividend payment of the previous year are positively correlated with the bank's dividend payout ratio. The majority of shareholders investing in the company expect to pay

dividends, so the dividend policy directly affects the income of shareholders as well as the dividend payment rate of the enterprise. On the other hand, whether the company maintains a stable or unstable dividend payment, regular or irregular fluctuations will directly affect the volatility of the bank's share value on the stock market.

Secondly, this study found a negative effect of bank size on the dividend payout ratio of firms. Specifically, medium-sized banks are expected to bring high profit growth in the future. As these banks aim to expand further, they either don't pay dividends or pay large proportions of stock dividends. On the other hand, banks with a long history, large scale, strong position in the market, good fundamentals, stable and predictable business models often pay cash dividends with modest rate.

Thirdly, the results of the study so far have not been able to determine the impact of dividend policy on bank performance.

This study has improved the development of the research topic by depending on existing literature. For Vietnam, the research focuses on listed banks that play an important role, being the lifeblood of the economy. The sustainability framework shows the strong impact of bank dividend policy on related factors such as capital adequacy ratio (CAR), shareholder engagement with the bank as well as future business prospects. It is noted that the research results not only contribute to the academic literature but also provide implications for managers in deciding dividend policy. On the other hand, the research was carried out in the context of the raging COVID-19 pandemic, banks need to preserve capital to promptly respond to the economy. Dividend policy is one of the important factors affecting investment decisions of investors. In the past time, banking stocks have continuously led the stock market and are on the verge of returning to their heyday, holding bank stocks or buying new is one of the top considerations. The empirical findings of this study may offer implications for improving progress. The positive correlation between past year dividend and dividend payout ratio can lead to investors' decisions. This shows the necessity of dividend policy of banks listed on Vietnam stock exchange.

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SIGNALING, BIRD IN THE HAND EFFECTS IN TRANSPORTATION CONSTRUCTION COMPANIES IN VIETNAM

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Abstract: *The presence of dividends is thought to affect the stock's value in the stock market, but conversely companies that decide to pay dividends also have confidence that their share price will increase as they pay dividends to investors, it seems that this phenomenon is becoming very complicated to be able to decide which direction is at the core. The aim of this study is to provide empirical evidence whether dividends play a major role in the volatility of stock prices or vice versa in the stock market. The study uses survey method, descriptive statistical methods and econometric models to test hypotheses. The results show that dividends have a significant effect on stock prices of 20 selected listed transportation construction companies in Vietnam stock market from 2014-2019, but stock prices do not have a significant effect on the dividends of researched firms. The results of this study partly match the signal effect, the bird in hand effect*

Keywords: *Dividend, Stock Price, Signal effect, Bird in The Hand effect.*

1. INTRODUCTION

Dividends and stock prices of Transportation Construction companies used to be very high about 5 years ago, but no longer. In fact, companies in the industry are constantly changing their dividend levels and stock prices are also fluctuating. The motivations behind these fluctuations are still unanswered. Finding out the effect of dividends on stock prices or vice versa has contributed to empirical evidence for the investors and the businesses in this field as well, especially for the group of stocks that were once highly appreciated in the market.

How stock prices fluctuate in the market remains a debate among academics, capital market practitioners, and especially investors. For investors, the availability of company insider information is critical and most essential to implementing a good portfolio in order to achieve optimal return on their investments. Many studies show that there are several factors that can affect stock prices in capital markets, such as dividends (Abrutyn and Turner, 1990 ; Zaman, 2011; Zakaria, Muhammad and Zulkifli, 2012), Earnings per share (Aboody, Barth and Kasznik, 1999; Srinivasan, 2012), Rate of earnings per share (Srinivasan, 2012),... [2,16,1,14,17].

In fact, (Abrutyn and Turner, 1990), it is argued that dividends are seen as a signal that represents better information about a company's condition or circumstances because insiders or dividend payers have the best information (Wachter, 2003). Through dividends, investors can react by selling or buying shares in the capital market, causing market share prices to change (Black, 1996). Meanwhile, (Easterbrook, 1984) believed that insiders (dividend payers) also believe that they will have a higher share price through the distribution of income as dividends to investors. [2,6,15,8]

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Pettit (1972) states that dividends can be used as one of the methods by the management to communicate private information to the shareholders. However, a rise in dividend could be understood as virtuous information & brighter prospects. Hussainey and Walker (2009) documented a noteworthy increase in share value returns followed by an unexpected boost in dividend payout and vice versa. [13,9]

This study observes the stock price fluctuation of the group of transport construction companies on the Vietnamese stock market in the period of 2014 to 2019 and to find out that whether the share price of companies paying higher dividends during this period have higher stock prices. This study also investigated the relationship between stock prices in the market and the dividends' changes.

The motive of this study is to provide an answer as empirical evidence whether dividends play a major role in the volatility of stock prices or vice versa, the sample studied is the group of transportation construction enterprises on the stock market of Vietnam. The following hypotheses are tested in the paper:

H1: Dividend has statistically significant effect to stock price of the selected companies

H2: Stock price has statistically significant effect to dividend of the selected companies

The rest of the paper is organized as follows: Section 2 shows literature review related to dividend and stock price, signal and bird in hand theory. Section 3 gives information about the database which is used for calculation, as well as research methodology. Empirical results are presented in Section 4. The last section concludes the paper.

2. LITERATURES REVIEW

2.1. Signaling Theory

Easterbrook (1984) explains the signal theory that insiders always believe that if they pay more dividends, their share price in the market will be higher if they see a drop in the price, they are motivated to pay more dividend to make the price get higher. Which means that stock prices are a factor influencing their dividend policy. On the other hand, sometimes investors believe that paying dividends with a change in their investment policy is related to a good future outlook. If this is true, the dividend is treated as a signal for an investor. Easterbrook (1984) also argued that sometimes dividends are not a good way to convey information to investors, whether this is the good times or the bad times, because this can be a poor predictor of future net income and stock price is also a poor predictor of future dividends. Regarding stock prices, Brennan and Thakor (1990) argue that stock prices are not an accurate reflection of a company's outlook. Easterbrook (1984) explains, a well-performing company will always pay dividends year after year, but a company with a record of long-term prosperity will not need any verification available from a dividend signal. But prosperous companies can keep the dividend because they need it as an internal source of finance. Hence, dividends do not differentiate well-managed or prosperous firms from others, but rather are justified to reflect poorly managed or failed firms. According to Black (1996), companies can pay dividends to investors to encourage other investors to buy their new common stock. Aharony and Swary (1980) found that capital markets will respond by announcing dividends, because, although dividend policy is mainly based on management's decision, but in a capital market. Dividends always convey a useful information (La Porta, De Silanes, Shleifer, and Vishny, 2000) that causes stock prices to change immediately after publication. Miller and Rock

(1985) have stated that, since stock prices reflect a firm's earnings and opportunities, dividend statements seem to convey information about earnings prospects in the company's future. But Miller and Rock (1985) then explain that, if the dividends actually convey information about a company's possible future earnings, the managers of the company, it would provide information that is partially missing or limited to the access of the market and become the basis for estimating future income. [3,6,7,8,10,11]

2.2. Bird in The Hand Theory

Easterbrook (1984) explains that the bird in hand reflects the situation where investors use their dividends to switch to other safe channels such as bonds, treasury bills or for consumption rather reinvest in dividends which will received from the same company or in another company. However, if an investor is initially willing not to receive dividends, it does not mean that the investor does not want to receive dividends, but that they are willing to wait for future dividends in case there are good investment opportunities, and this always happens in fast-growing companies (La Porta, De Silanes, Shleifer and Vishn, 2000). Moreover, La Porta explained that, on the contrary, some investors want to receive as much dividends as possible, most likely because of The investor thinks that dividends (bird in hand) is better than retained earnings (bird in dust) that may never be realized as future dividends (birds can fly away). This is similar to the finding of Brennan and Thakor (1990) that, if the personal income tax rate on dividends is not too high, then owners of stocks with low ownership will prefer to receive dividends. As Easterbrook (1984) also argues, on the impact of client effect, if some investors' tax duties are different from others, different groups will have different preferences on dividends, or in other words the taxed group prefers profit as capital gain; and the group that is not taxed will be indifferent. Baker and Haslem (1974) have found that dividends are the most desirable factor for investors, since dividends are assumed to be less, risk more than expected capital return from reinvestment income. Baker and Haslem (1974) also find that it is very difficult to just use dividends to classify investors, because certain types of stocks are attractive to particular types of investors, this has created a client effect (Miller and Modigliani, 1961). Furthermore, Baker and Haslem (1974) classified investors based on their behavior into two distinct categories, those looking for dividends and those looking for an increase in capital value. Dividend seekers are investors who tend to use dividends and financial stability as the basis for their investment decisions, also known as a risk averse investor. Meanwhile, investors looking for an increase in the cost of capital are those who tend to use future expectations as the basis for their investment decisions, or in other words, these investors. willing to sacrifice their current dividends to increase in future prices. [8,7,10,4]

3. DATA AND METHODOLOGY

The study uses survey method to find out the common judgments from related individuals (50 people), then this research uses descriptive statistical methods to generalize the financial situations and dividend policies of companies in the sample. Finally, the economic regression model is used to test random effects and fixed effects factors to find out the statistic meaning of the investigated relationships. This study uses 20 construction companies listed on the Vietnam Stock Exchange for the period 2014-2019 as sample data and all calculations are done in Microsoft Excel 2010 and Stata.

Respondents are investors holding at least one stock code of a group of construction companies (30 people), a group of directors of some public transportation construction (5 people) and

some financial experts from universities and securities consulting companies (15 people). The total number of people surveyed is 50 people.

All experts were interviewed for their views on the impact of stock prices on dividend policy and vice versa by 5 levels: Very strong (5 points), strong (4 points), normal effect (3 points), little effect (2 points) and no effect (1 point)

Companies in the sample are transportation construction companies that have been listed on the stock exchange for at least 6 years, during those 6 years, the companies have paid dividends at least 4/6 years. The company's data is publicly available on the website of the stock exchange. After data are collected from the financial statements, the econometric model is used to test assumptions.

In this research, Panel data approach was used to find the relationship between dividend yield and Stock Price.

In the first test, Stock price was taken as dependent variable while Independent variables was dividend policy (represented by Dividend Yield)

In this model, the following equation is used:

$$P_t = \alpha_0 + \alpha_1 DY_t + \alpha_2 ROA_t + \alpha_3 Size_t + \alpha_4 Lev_t$$

Where:

P_t is the Stock Price in the year t

DY is the Dividend Yield in the year t (the same year)

ROA, Size, Lev are control variances

Variable	Unit	Define
P _t	1000 VNĐ	Average Stock Price
D.Y	%	Dividend/ Par Value of Stock
ROA	%	Return on Asset
Size		Natural Logarithm of Asset
Lev	%	Total debt/Total Asset

Table 1. Variable of the first test for H1

In the second test, dividend policy was taken as dependent variable while Independent variables was Stock price

In this model, the following equation is used:

$$DY_{t+1} = \alpha_0 + \alpha_1 P_t + \alpha_2 EPS_t + \alpha_3 Size_t + \alpha_4 Age_t$$

Where:

P is the Stock Price in the year t

EPS, Lev, Previous D.Y, are control variances

DY_{t+1} is the Dividend Yield in the year t+1 (the next year)

Variable	Unit	Define
P _t	1000 VNĐ	Average Stock Price
D.Y	%	Dividend/ Par Value of Stock

EPS	1000 VNĐ	Earning Per Share
Size		Natural Logarithm of Asset
Age		Number of Years of operating

Table 2. Variable of the second test for H2

4. RESULTS

4.1 Survey results

After contacting the selected people to survey via email, phone and face-to-face meeting, the author collected the opinion of the surveyed individuals as follows: Regarding the relationship that dividend policy affect stock prices, the survey results are as follows. The average score is 3.72.

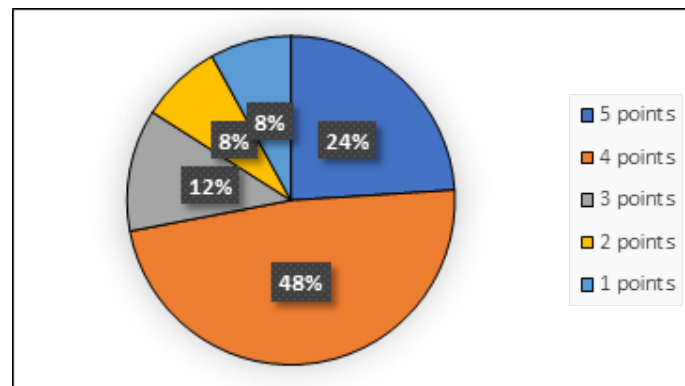


Chart 1. How dividends affect stock prices of the same year

As can be seen from the graph, most of the surveyed people believe that the level of influence is strong and very strong leading to their average score of 3.72 points.

The relationship that stock price affects dividend policy, the survey results are as follows. Average score value is 3.0

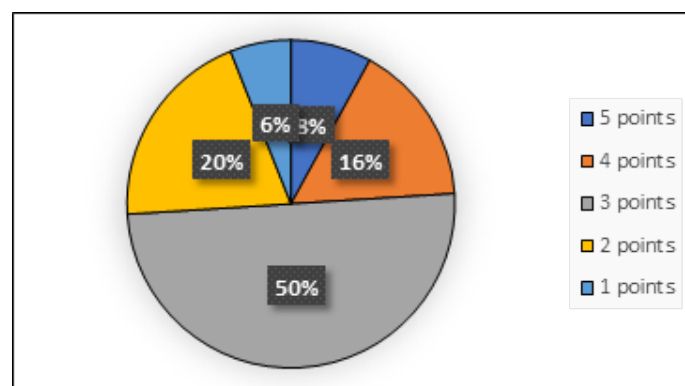


Chart 2. How stock price affects dividend policy of the next year

The graph shows that the surveyed people believe that stock prices only have an influence on the decision to pay dividends at normal level, the average is around 3.0 points. Thus, it can be said that the share price also has an influence on the decision to pay dividend, although the level of influence is not as strong as the way that the decision to pay the dividend affects the share price, but it can still can be considered significant from the view point of surveyed individuals.

4.2. Overview of financial situation of the selected companies

The two financial ratios mentioned in the study are stock price and cash dividend yield.

The following chart shows the stock price and dividend yield of the same year and next year's and the relationships between them.

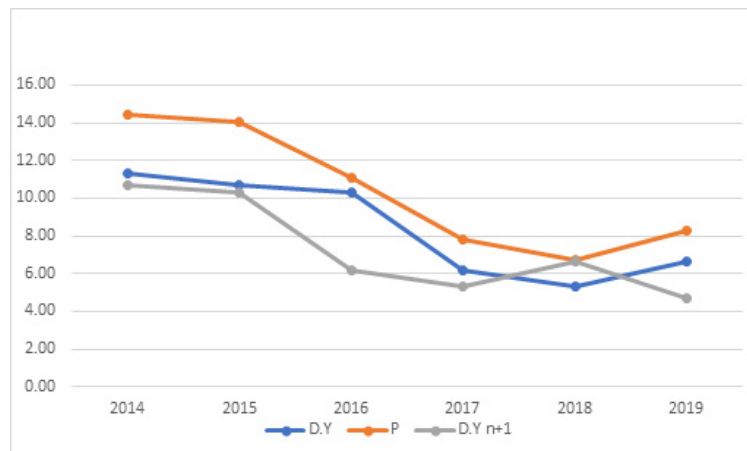


Chart 3. Stock Price and Dividend Yield of selected companies

It has witnessed a significant decline in the data in 2017 and 2018. The year of 2016 can be considered as the year when the stock prices of enterprises are the best during the researched period of the sample. According to the Ministry of Construction, this was the year when the interest rate level was low, the real estate market increased strongly, the demand for building large infrastructure was the foundation for businesses and investors to have good prospects to enter the market. However, in 2017, there was a significant decline on the whole sample size, reflecting the great volatility of the market. In fact, many shares of large enterprises began to be listed on the stock exchange, bringing more options to domestic investors, along with the entry of many foreign investors. Transportation construction stocks became less attractive. Trade-related industries, and supply chain and logistics are key for the year. Since 2018, along with the State's support in making related policies, dividend policy and stock price have seen a little positive change. However, Covid pandemic 19 caused the whole economy to recession, leading to sharp decrease in the price and dividend yield of the selected companies.

The graph shows the relatively clear relationship between the stock price and the company's dividend rate of the same year and the relationship between the share price of that year and the the dividend yield of the next year was followed by an unclear trend.

4.3 Results of econometric model

After using some robustness test to check the model defects and fix the defects of the model, FEM and REM models are used to test the Hypotheses 1 and 2. In a fixed effects model, the unobserved variables are allowed to have any associations whatsoever with the observed variables. In a random effects model, the unobserved variables are assumed to be uncorrelated with (or, more strongly, statistically independent of) all the observed variables.

a/ The Dividend Yields affect the Price

After conducting FEM and REM test, Hausman Test is used to choose between these two model, results show that, because $p\text{-value} = 0.2249 > 0.05$, we can not reject the H_0 hypothesis

with the significance level of 5%, concluding that there is no difference between FEM and REM is statistically significant, so it is more appropriate to use the REM model.

Random-effects (within) regression	Number of obs	=	109
Group variable: MCK	Number of groups	=	20
R-sq: within = 0.6274	Obs per group: min	=	5
Between = 0.6907	avg	=	5.9
overall = 0.6635	max	=	6
	Wald chi2(5)	=	0.128
corr(u _i , Xb) = 0 (assumed)	Prob > chi2	=	0.0000

Price	DY	ROA	Size	Lev	_cons	sigma_u	sigma_e
Coef.	102.3433	146.4232	0.164932	4.231332	4.776435	.4265772	.3316292
P> z	0.002	0.107	0.201	0.814	0.056		

Table 3. Random Effect Regression Result of H1

Regression equation become: $P = 4.776 + 102.343 \times D.Y.$

R square = 0.6635 shows that Dividend Policy explains 66.65 % of variation in share price. It can be said that the effect of dividends on stock prices is statistically significant and this relationship is positive, meaning that when a firm increases or decreases its dividend, it will affect the stock price of that year, it is a positive relationship.

b/ The Prices affects the Dividend Yields of the next year

After conducting FEM and REM test, Hausman Test is used to choose between these two model, results show that, because p-value = 0.4109 > 0.05, we can not reject the Ho hypothesis with the significance level of 5%, concluding that there is no difference between FEM and REM is statistically significant, so it is more appropriate to use the REM model.

Random-effects (within) regression	Number of obs	=	109
Group variable: MCK	Number of groups	=	20
R-sq: within = 0.4274	Obs per group: min	=	5
Between = 0.3907	avg	=	5.9
overall = 0.4056	max	=	6
	Wald chi2(5)	=	0.131
corr(u _i , Xb) = 0 (assumed)	Prob > chi2	=	0.0000

D.Y	P	EPS	Size	Cur	_cons	sigma_u	sigma_e
Coef.	.125225	.054354	.001643	.044252	.016443	.422726	.936292
P> z	0.602	0.107	0.261	0.324	0.256		

Table 4. Random Effect Regression Result of Test 2

No statistically significant relationship was found between dividend price and next year's dividend policy. That means although in theory, the business owner will likely use the dividend policy as a signaling tool to investors and will decide to pay high dividends when the price declines, which means that a fall in prices affects dividend-paying behavior in the way that business owners are being encouraged to give out higher dividend yield rates as good signals for investors. However,

in the observed sample, the effect of the stock price on the investor's decision is the relationship is not statistically significant.

5. CONCLUSION

It shows that the dividend policy has a strong impact on the dividend price but the opposite relationship is not found in the model, that is, the dividend price has no strong impact on the decision to pay the dividend in the next year of the businesses.

It can be considered as a good decision on profit distribution because the fact that if transportation construction enterprises in Vietnam use Dividend Policies as a tool to promote stock prices, they would face many risks in the long run. Construction industry typically has a long payback period, payment and acceptance process lasting over many years and many stages. While dividend payments are made on a regular basis and paid in cash, decisions on dividend payments based on realized and retained earnings are made annually. This difference makes the use of dividend policy to satisfy the bird in hand effect or to signal that the business is doing well is helping the business to achieve its goal of boosting corporate value through stock valuation, but it brings long-term risks to construction firms in the Vietnamese market. Even if the transportation construction enterprises want to increase their dividend payment to increase the company's reputation, it is not easy because the cash source as well as the profits earned are unstable.

Moreover, with the situation of the stock market which still fluctuates like Viet Nam, an emerging market, people do not have much confidence in businesses in the stock market. Although a transportation construction company has had many years of experience and achievements, the listing timing of most companies is still low, thus the belief from the investors is not high.

From the above, the author gives some of the following suggestions:

For the investors, it is necessary to consider the industry specifics of the transportation construction firms and consider investments based on analysis of information from multiple sides such as planning, firm size, and businesses through projects, instead of just focusing on Dividends of this group of businesses. Investors should include this type of stock in their long-run portfolio and should not pay too much attention on bird in hand theory. With the right choice, investors will have huge returns in the future.

For the businesses, it is necessary to build trust of investors and choose how to signal investors through proven strength over a long period of time, thereby reinforcing more resources for its large-scale and long-term projects. Transportation construction businesses face many risks compared to other businesses such as policy risks, the risk of cost increases over time but with the location being built in a long time. So that, they should limit the frequency and extent of using this tool. For dividend policy decision-making, there are many reasons why a firm will make a decision to increase or decrease its dividend other than the share price. That means that stock price should not be the primary prerequisite for owners to make dividend decisions.

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ANALYSIS OF FACTORS AFFECTING CUSTOMERS' INTENTION TO USE MOBILE MONEY SERVICES IN HANOI

PhD. Pham Quynh Mai¹, Duong Thi Yen Nhi², Nguyen Thi Quynh Nga³

Abstract: *The development of mobile money is an inevitable need along with the explosion of telecommunications and financial services. In Vietnam, Mobile Money has been licensed by the government to operate. The existence and development of this service is still facing many opportunities and challenges. By using the qualitative research methods and quantitative research method, the authors have identified four factors that affect intention to use Mobile Money service including (1) Reason; (2) Utility; (3) Risk; and (4) Satisfaction. Research using SEM multi-structure model to analyze the impact of factors on the intention to use mobile money services of customers in Hanoi.*

Key words: *Mobile money, Intention to use, factors, financial service.*

1. INTRODUCTION

The definition of “Mobile Money” varies in each industry because it covers many overlapping applications (Dermish et al., 2011; GSMA, 2013). But in general, mobile money is a term that describes electronic financial services performed through mobile phones.

According to GSMA statistics by the end of 2019, Mobile Money has 290 types of transactions in 95 global countries with 1.04 billion registered accounts. Mobile money transfer agents have 7 times more reach than ATMs and 20 times more than bank branches. By the end of December 2019, there were an average of 37.1 billion transactions via Mobile Money channel, total transaction value up to 690.1 billion USD, up 26% over the same period last year. Money market research organizations predict Mobile’s economic scale can reach 12 billion USD by 2024, the annual growth rate is estimated at 28.7%.

With its characteristics, Mobile Money becomes a solution for electronic payments in rural, remote and isolated areas, where bank branches and the Internet have not yet developed strongly. It has helped change the lives of billions of people around the globe. World Bank (WB) CEO Sri Mulyani Indrawati said that Mobile Money will be an important stepping stone to escape poverty and towards equality.

In Vietnam, according to decision 316/QĐ-TTg issued on March 9, 2021, Prime Minister Nguyen Xuan Phuc signed a Decision approving the pilot implementation of mobile money. Thus, the form of payment by mobile payment is still in preparation for deployment. However, this service has the potential to help the people of Vietnam in general and Hanoi in particular to make flexible transactions and make quick payments for financial products, services, and payments in the medical field., education, finance, employment support or compensation, social security, product payment or even in the agricultural sector.

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In particular, Hanoi with more than 8 million people (General Statistics Office, 2019), has a population density of 2398 people/km² (ranked second after Ho Chi Minh City), accounting for the majority of students. members – young people who have quick access to the day-by-day advances of science and technology. Besides, Hanoi is the capital of Vietnam, an important economic, political, cultural and scientific center of the country. Therefore, Hanoi is a perfect choice to increase the accuracy, popularity and applicability of this topic.

With the purpose of evaluate the opportunities as well as the challenges of mobile money's development in Hanoi, the research is conducted to analyze the factors affecting intention to use mobile money services among customers living in Hanoi.

2. LITERATURE REVIEW

Stephen C. Rea and Taylor C. Nelms (2017) demonstrated the evolution of context-specific mobile money. Mobile networks covering all countries are the basis for the development of mobile money. Developing countries often have low levels of access to financial services in terms of the number of bank accounts, the number of ATMs and bank branches, the number of mobile phone users, and the exchange rate. high percentage of mobile phone users. high remittance/GDP ratio... Besides, countries always encourage reducing the amount of cash in circulation, promoting the digital economy. These are the potentials for the growth of mobile money services.

The success of countries like Kenya and the Philippines also poses many challenges for other countries. The success of M-Pesa takes place in a country with a specific population base, economic activity, urban-rural family connections, and extensive banking infrastructure. Expansion of the M-Pesa model outside of Kenya will need to take these specific characteristics into account and be tailored to the local context. This “transfer” role for mobile money services will largely depend on the stakeholders (private sector, government, international organizations, NGOs, etc.) approach is appropriate for a particular context.

In addition, the lack of resources due to innovators creates a mismatch between mission and organizational capacity or preparedness (Bangens & Soderberg, 2008; Alampay & Bala, 2010; Heyer & Mas, 2011). Developing a customizable value proposition (Sgriccia et al., 2007; Tobbin, 2010) also creates challenges for mobile money development.

In Viet Nam, the research about mobile money is still limited. Hoang Cong Gia Khanh et al (2019) analyzed factors affecting the development of mobile money as a means of promoting financial inclusion including: (1) Financial access channels main replacement; (2) Popularity of mobile phones; (3) Potential demand for financial services; (4) The provisions of the law..

3. RESEARCH MODEL

3.1. Methodology

To evaluate the factors affecting the intention to use mobile money services, The study used the model, the method of analyzing the EFA discovery factors and the multivariate regression method on Stata: This is the method commonly used in econometric models. This method is used to measure the factors affecting the intention to use mobile money services.

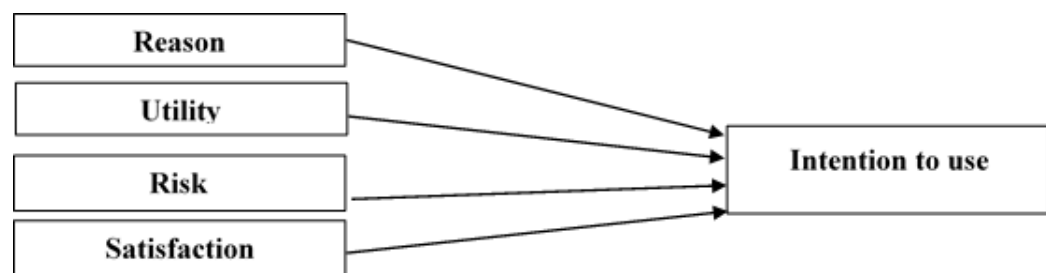
Through the investigation process, the research team has collected a total of 280 observations from people in Hanoi. Because the data collection process is done online through Google Form,

there are still many invalid answers. After review, the team eliminated 9 invalid observations and simultaneously included the remaining 271 observations in the analysis.

The questionnaire used by the team to collect data includes 5 factors and a total of 29 questions. All analysis factors include at least 3 measurement variables. Therefore, according to Stevens (2002), Habing (2003), all factors are considered reliable to conduct the analysis. In addition, with the number of 27 questions, the sample size must be at least 145 observations. In fact, the team collected 271 valid observations, meeting the minimum sample size requirement.

3.2. Proposed model

The research model proposed by the authors is summarized as follows:



Source: the authors propose

Figure 1. Research model

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Table 1. Synthesis of variables in the research model

Source: the authors propose

Symbol	Description
Rea	Reason
Uti	Utility
Satis	Satisfaction
Risk	Risk
ItU	Intention to use

3.3. Description of the study sample

Of the 271 valid observations included in the analysis, 197 females (72.7%) and 74 males (27.3%).

Regarding age: the age group under 18 has 5 survey participants, accounting for 1.85%, the age group 18-22 has 220 survey participants, accounting for 81.18%, the age group 22-40 has 35 participants. Survey participants accounted for 12.91%, the remaining age group, over 40 years old, had 11 survey participants, accounting for 4.06%.

In terms of living area: In the inner city of Hanoi, there are 143 survey participants, accounting for 52.77%, in the suburbs of Hanoi, there are 128 survey participants, accounting for 47.23%.

Regarding education level, 191 survey respondents had university/college degree, accounting for the highest percentage (70.48%), high school graduation level with 52 survey respondents, accounting for 19.19%, graduate level has 28 survey participants, accounting for 10.33% of the total.

Regarding occupation: students accounted for a high proportion (74.91%) with 203 survey participants, the group of lecturers/teachers with 21 survey participants accounted for 7.75%. The remaining occupational groups are workers, office workers, freelancers, jobholders, employees, soldiers, accountants, marketers, technicians, engineers/architects, respectively. Medicine, pharmacist, nursing, market research, sales staff make up a relatively small percentage of the total.

For income: income under 3 million accounts for a large number of 176 with the rate of 64.95% and 3-5 million is 29%, accounting for 10.7%. Next is 5 - 15 million, including 58 people, 21.40%, more than 15 million, accounting for 2.95%.

3.4. Evaluation of measurement model

The final scale test results of the factors (component questions) include: Reasons for using mobile money services (4 variables); The utility of mobile money service (4 variables); Risk level of mobile money service (6 variables); Satisfaction with mobile money services (4 variables); Intention to use mobile money service (5 variables). Most of the scales have Cronbach's Alpha reliability greater than 0.7 and two variables greater than 0.6. At the same time, all observed variables have total correlation coefficients greater than 0.3. Thus, the scales are reliable and 23 variables are kept for inclusion in exploratory factor analysis to test the scale's value.

3.5. Exploratory factor analysis (EFA) results

For factors belonging to two models TPB and IDT, factor discovery analysis EFA was conducted twice to discover hidden structures between observed variables. The number of observed variables for each variable has changed but the order of variables does not have any change. Four variables were explored including: Rea (03 variables), Uti (04 variables), Risk (06 variables), Satis (03 variables).

For SEE model factors, EFA factor discovery analysis was conducted twice to discover hidden structures among observed variables. In this analysis, 04 observed variables were included in the analysis with Principal Axis Factoring method and Promax rotation. Kaiser-Meyer-Olkin coefficient (KMO), pvalue value, total variance extracted indicating the level of explaining the variability of the data are all suitable. (KMO = 0.871; pvalue = 0.000; total variance extracted is 78.855%).

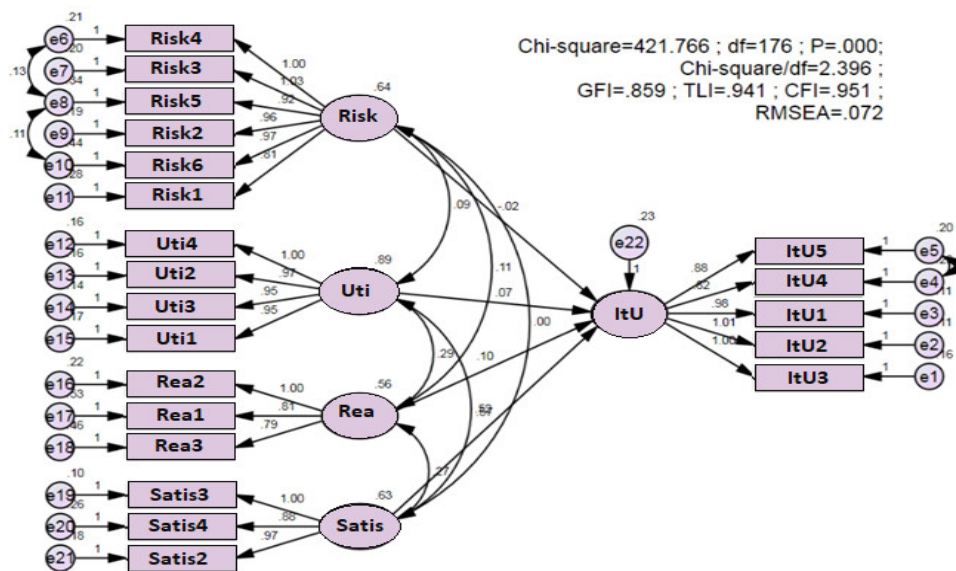
For the factor of intention to use mobile money services, the EFA factor discovery analysis is also conducted only once as the exploratory analysis for variables in the SEE model to discover hidden structures. between the observed variables. In this single analysis, 05 observed variables were included in the analysis with Principal Axis Factoring method and Promax rotation. Kaiser-

Meyer-Olkin coefficient (KMO), pvalue value, total variance extracted indicating the level of explanation of the variation of data are all suitable (KMO = 0.847, pvalue = 0.000, total variance extracted is 79.51%). Among the 05 observed variables included in the analysis, none had a factor loading factor less than 0.5. In addition, this factor has an eigenvalue greater than 1.

3.5. Confirmatory factor analysis (CFA) results

The results of the CFA confirmatory factor analysis showed that the chi square tests reached the critical value with pvalue = 0.000<0.05, the Chisquare\df = 2.396 <3, the CFI and TLI indexes were all larger 0.9, RMSEA= 0.072<0.08; GFI=0.859 > 0.8. Thus, the criteria are satisfactory, this measurement model is consistent with the actual data, and there is no correlation between measurement errors, so it achieves monadism. The normalized weights are all greater than 0.5, so there is statistical significance, so the concepts achieve convergent values.

3.6. Structural Equation Analysis (SEM) results



Source: AMOS

Figure 2. Structural Equation Analysis (SEM) results

The Structural Equation Analysis (SEM) results showed that chi square tests reached the critical value with pvalue = 0.000<0.05, Chisquare\df = 2.339 < 3, CFI indexes, TLI are all greater than 0.9, RMSEA index = 0.06 < 0.08. Thus, the criteria are satisfactory, this measurement model is consistent with the actual data.

Table 2. Results of testing the effect between factors by SEM

			Estimate	S.E.	C.R.	P	Label
ItU	<---	Risk	-0.023	0.044	-0.523	0.001	Accept
ItU	<---	Uti	0.070	0.053	1.316	0.028	Accept
ItU	<---	Rea	0.103	0.059	1.738	0.032	Accept
ItU	<---	Satis	0.572	0.071	8.041	***	Accept

Source: AMOS

3.7. Results and Discussion

The detailed analysis results show that there are 04 factors affecting the intention to use mobile money services through the impact of the factors of Reason, Utility, Risk and Satisfaction.

All three factors Reason, Utility and Satisfaction positively affect the intention to use mobile money service of customers in Hanoi. However, the Satisfaction factor has a stronger impact than the Reason and Utility factors.

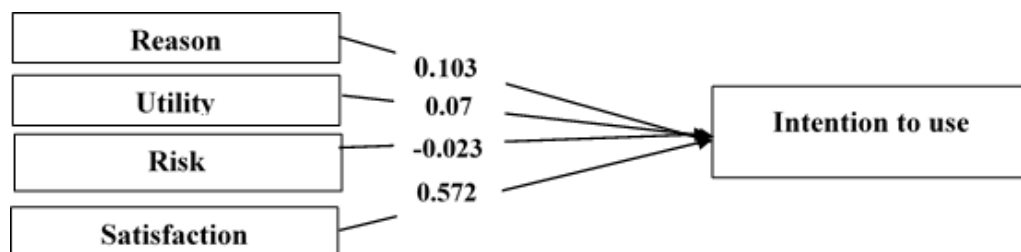
The Satisfaction variable affects 57.2% of the intention to use mobile money service (strongest linear relationship). The majority of customers appreciate the value that mobile money brings, Therefore, the Satisfaction factor has the greatest influence on the intention to use mobile money services.

The Reason variable has 10.3% influence on intention to use mobile money service (2nd strongest linear relationship). The majority of customers are influenced by external factors such as family, friends, colleagues, ... Therefore, Reason factor has the second biggest influence on intention to use mobile money services.

The Utility variable has 7% influence on the intention to use mobile money services. The majority of customers are satisfied with the benefits that mobile money services can bring... Therefore, the Utility factor only has a great influence on the intention to use mobile money services.

Risk factor has a negative impact on the intention to use mobile money services of customers in Hanoi. This explains that customers accept small risks to use the mobile money service.

The research model proposed by the authors is summarized as follows:



Source: The authors' calculation

Figure 3. Result of research model

4. CONCLUSION

By many methods of analysis, evaluation, synthesis of research shows that customers have the intention and willingness to use Mobile money service in Hanoi city. Through advantages such as easier and simpler means of payment; promote the implementation of social programs; secure payment; reducing transaction costs thereby contributing to economic growth; increase savings and investment...

The results of the survey also show that the influence of intention to use mobile money on consumers is positive. Customers find it easy to use mobile money and satisfy their desires in making payments, transferring, depositing and withdrawing; High satisfaction is also an advantage for using mobile money services. This is an opportunity to replicate and develop mobile money services in Hanoi.

Some proposals

Based on the data analyzed above about the current situation of Mobile money service in Vietnam and the survey results of the author group about the demand for using Mobile money service, we have collected the evaluation of the Survey participants about the benefits as well as the risks that Mobile money services can bring. From there, as a basis to propose appropriate solutions to develop Mobile Money service in Vietnam as well as in Hanoi, including specific orientations as follows:

- Developing the mobile money service management model in Vietnam.
- Building the information channel that customers often approach to promote Mobile money services.
- Building an appropriate legal framework.
- Setting up clear and effective service management measures.
- Serving customers in a dedicated and personalized manner.
- Paying attention to the investment and development of technical infrastructure for mobile money services.

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APPENDIX

Table 1: Results of the final reliability assessment of the scale

Variable Observable	Scale mean if item deleted	Scale Variance if item deleted	Corrected item-Total correlation	Cronbach's Alpha if item deleted
1. Reason for use mobile money service: Cronbach's Alpha= 0.760				
Rea1	10.27	4.722	0.484	0.745
Rea2	9.80	4.291	0.699	0.626
Rea3	9.91	4.466	0.611	0.674
Rea4	9.42	5.037	0.454	0.757
2. Utilities of mobile money service: Cronbach's Alpha= 0.954				
Uti1	11.04	8.013	0.881	0.942
Uti2	10.95	7.901	0.888	0.940
Uti3	10.98	8.026	0.893	0.938
Uti4	10.99	7.748	0.891	0.939
3. Risk level of mobile money service: Cronbach's Alpha= 0.930				
Risk1	13.94	17.108	0.724	0.926
Risk2	13.82	16.235	0.815	0.915
Risk3	13.87	15.849	0.819	0.914
Risk4	13.92	15.678	0.863	0.909
Risk5	13.77	15.844	0.813	0.915
Risk6	13.56	15.677	0.753	0.924
4. Satisfaction level of mobile money service: Cronbach's Alpha= 0.906				
Satis1	10.72	5.631	0.730	0.900
Satis2	10.89	5.358	0.835	0.862
Satis3	10.86	5.395	0.864	0.852
Satis4	10.93	5.766	0.732	0.899
5. Intention to use mobile money service: Cronbach's Alpha= 0.935				
ItU1	14.46	8.338	0.827	0.920
ItU2	14.42	8.222	0.828	0.920
ItU3	14.55	7.952	0.862	0.914
ItU4	14.61	8.379	0.779	0.929
ItU5	14.57	8.283	0.841	0.918

Source: SPSS

Table 2: Results of factor analysis to discover the group's final TPB factors and IDT

Variable	Component			
	1	2	3	4
Risk4	0.912			
Risk3	0.854			
Risk5	0.849			
Risk2	0.848			
Risk6	0.795			
Risk1	0.740			
Uti2		0.919		
Uti3		0.909		
Uti4		0.900		
Uti1		0.893		
Satis3			0.968	
Satis4			0.763	
Satis2			0.761	
Rea2				0.739
Rea1				0.697
Rea3				0.680
Eigenvalues coefficient	5.665	4.334	1.654	1.045
Total variance extracted (%)	78.855%			
KMO	0.871			
P value	0.0000			

*Source: SPSS***Table 3: Result of last exploratory factor analysis of intention to use mobile money services**

Variable	Component
	1
ItU3	0.901
ItU5	0.874
ItU2	0.866
ItU1	0.862
ItU4	0.809
Eigenvalues coefficient	3.976
Total variance extracted (%)	79.51%
KMO	0.847
P value	0.000

Source: SPSS

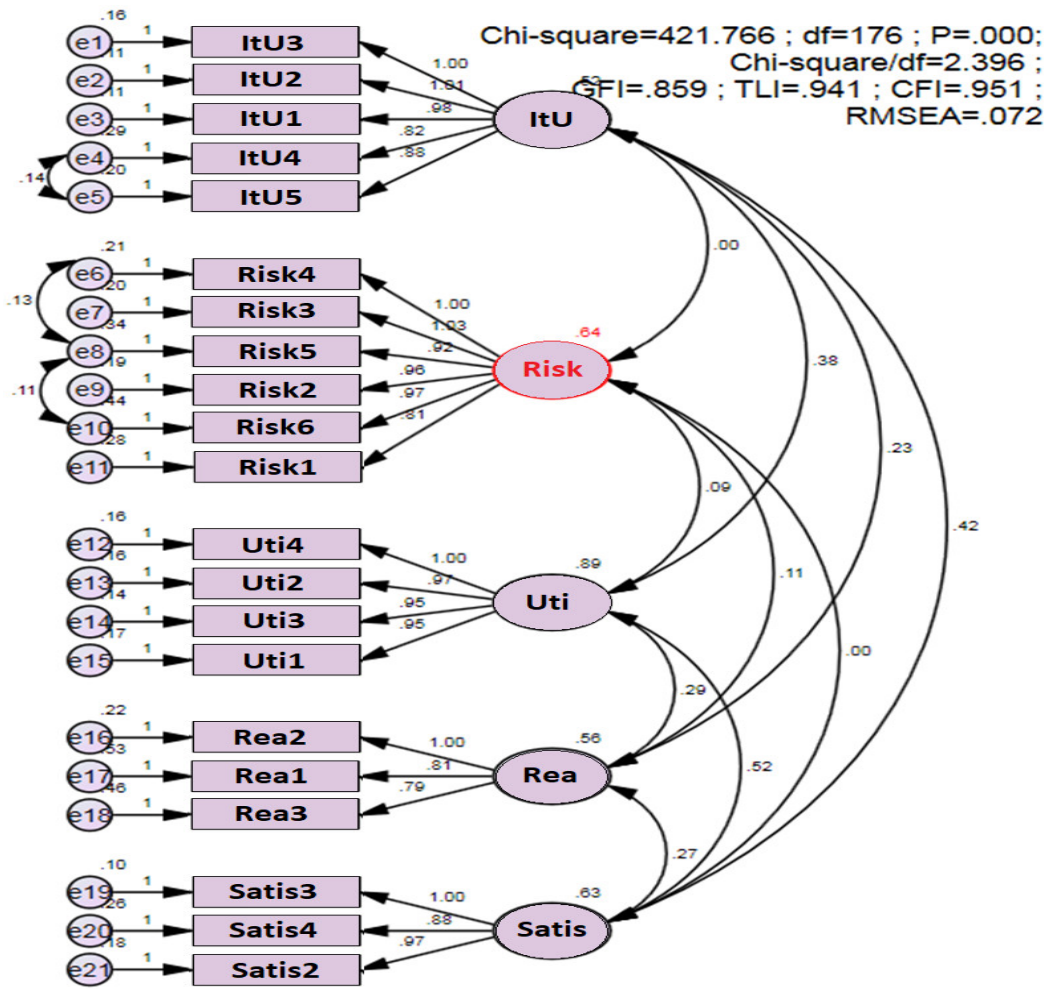


Figure 1. Model measures concepts in the model (normalized)

Source: SPSS

A LITERATURE REVIEW ON ACCOUNTING THEORIES RELATED TO CONSOLIDATED FINANCIAL STATEMENTS

Dr. Nguyen Thu Hoai¹

Abstract: *In Vietnam, the establishment of state-owned economic groups and private economic groups has raised the issues of accounting practices for groups and the preparation of consolidated financial statements. However, accounting for groups and the preparation of consolidated financial statements are always complicated issues, leading to the fact that groups are currently facing many difficulties in preparing their consolidated financial statements. Theoretically, there are four popular theories regarding consolidated financial statements, including proprietary theory, parent company theory, parent company extension theory and entity theory. Preparing consolidated financial statements applying different consolidation theories could lead to different valuation and presentation of items on financial statements. In the process of preparing consolidated financial statements, accountants need to clearly determine which theory is applied, thereby clarifying the content of the items presented in the consolidated financial statements, thus creating the information and data collecting process and appropriate accounting techniques.*

Keywords: *Consolidated financial statements (CFS), theory, application, Vietnam*

1. INTRODUCTION

Currently, there are many economic groups found in Vietnam. A group need to prepare and present their annual CFS to provide information about the group's financial position and group performance. In fact, the Ministry of Finance has issued a system of accounting standards and other documents guiding the implementation of standards regarding the preparation of CFS. However, accounting for groups and the preparation of CFS are always complicated issues. In fact, corporations in Vietnam currently face many difficulties in preparing CFS both theoretical and practical domain. This paper will discuss four popular theories regarding the CFS, thereby defining clearly which theory should be applied in the current Vietnamese accounting system with the aim of clarifying the theoretical basis for the methods, procedures and techniques for preparing the CFS as prescribed and guided in the current accounting standards and accounting regimes in Vietnam.

2. CONTENT

2.1. Accounting theories related to CFS

The accounting literature has developed several theories regarding CFS, including proprietary theory, entity theory, parent company theory and parent company extension theory. The differences among these theories occur when the parent company does not own 100% of a subsidiary organization. This is because these theories focus on assessing the portion of non-controlling interest in the CFS.

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2.1.1. Proprietary theory

According to Arthur (1964), proprietary theory states that the owners (shareholders of parent company) are the most important, therefore, CFS should be prepared to provide information about the assets, liabilities, equity, income and expenses of shareholders of the parent company (controlling shareholders). The proportionate share of non-controlling shareholders' assets are omitted from consolidated financial statements. Therefore, there are several implications that could be drawn from this theory as follows:

- The consolidated statement of financial position only represents the portion of net assets owned by the controlling shareholders. The consolidated unit includes the parent company and the net assets owned by the parent company (the portion of assets, liabilities, and equity of the subsidiary belongs to the parent company). The interest of non-controlling shareholders is not recognized because it represents the interests of the subsidiary which is not owned by the parent company.

- Non-controlling shareholders are identified as external entities, therefore, non-controlling shareholders' interests are not presented in the financial statements, including non-controlling shareholders' ownership of the subsidiary's net assets as well as a non-controlling shareholder's share of the subsidiary's net results.

- The consolidated statement of profit/loss only includes profit/loss of the parent company and profit/loss of subsidiaries owned by the parent company.

- Gains and losses from internal transactions only exclude the parent company's corresponding share for both forward and reverse transactions.

- When the parent company divests but still holds control, the difference between the selling price and the divestment is determined as profit or loss in the period.

** Applying proprietary theory in practices*

- At the acquisition date, the subsidiary's equity (net assets) in proportion to the parent company's rate of interest should be assessed at fair value (Silvia and Giuseppe, 2014). The subsidiary's net assets in proportion to non-controlling interests are not reflected in the consolidated financial statements (proportional consolidation). Goodwill is the difference between the cost of consolidation and the parent company's share of the equity (net assets) of the subsidiary at fair value.

- After the date of acquisition, the interests of non-controlling shareholders are not presented in the CFS. The reported amount of revenues, cost of capital, cost of subsidiaries included in CFS is only part of the benefit of the parent company. Internal transactions only exclude the portion corresponding to the parent company's interests.

This method was first born in the US when the parent company owned almost all of the capital of the subsidiary. However, when the parent company does not own the entire subsidiary, this theory reveals many disadvantages, so it is rarely used in practice.

Example 1 (currency unit: 1,000 VND): On 31st December 20X8, company P bought 80% of the common shares of company S and became the parent company of company S with the total purchase price of 2,500,000 paid by cash at bank.

Assuming that financial statements of companies P and S as at 31st December 20X8 after reflecting the transaction of Company P buying Company S are as follows:

Report on financial statements as at 31st December 20X8			
Items	Company P	Company S (Book value)	Company S (Fair Value)
Cash	500 000	1 000 000	1 000 000
Receivable from customers	1 000 000	350 000	350 000
Inventories	900 000	500 000	600 000
Intangible fixed assets	1 300 000	150 000	200 000
Tangible fixed assets	1 400 000	700 000	900 000
Investing in subsidiaries	2 500 000		
Total assets	7 600 000	2 700 000	3 050 000
Liabilities	800 000	250 000	200 000
Owner's equity	4 500 000	1 500 000	
Retain earnings	2 300 000	950 000	
Total capital	7 600 000	2 700 000	

To prepare the CFS on the date of acquisition (31st December 20X8):

- Applying proprietary theory, the assets, liabilities, and equity of Company S are combined with company P according to the ownership proportion of P in S which is 80%.

- Determining goodwill:

+ Net assets of Company S at fair value: $3,050,000 - 200,000 = 2,850,000$

+ Goodwill: $2,500,000 - 80\% \times 2,850,000 = 220,000$

- Consolidated entries at acquisition date:

(1) Adjust differences between the fair value and the carrying amount of the assets and liabilities at Company S (the portion corresponding to Company P's interest in Company S) :

Debit Inventory: $100,000 \times 80\% = 80,000$

Debit Intangible fixed assets: $50,000 \times 80\% = 40,000$

Debit Tangible fixed asset: $200,000 \times 80\% = 160,000$

Debit Liabilities: $50,000 \times 80\% = 40,000$

Credit Revaluation: 320,000

(2) Eliminate the amount of the investment in the subsidiary:

Debit Owner's equity: $1,500,000 \times 80\% = 1,200,000$

Debit Retain earnings: $950,000 \times 80\% = 760,000$

Debit Revaluation: 320,000

Debit Goodwill: 220,000

Credit Investment in Subsidiaries: 2,500,000

Summary table of consolidated items (Proprietary theory)						
Items	Company P	Company S	total	Adjust		Amount
				Debit	Credit	
Cash	500 000	800 000	1 300 000			1 300 000
Receivable from customers	1 000 000	280,000	1 280 000			1 280 000
Inventories	900 000	400 000	1 300 000	80 000(1)		1 380 000
Intangible fixed assets	1 300 000	120 000	1 420 000	40 000(1)		1 460 00 0
Tangible fixed assets	1 400 000	560 000	1 960 000	160 000(1)		2 120 000
Investing in subsidiaries	2 500 000		2 500 000		2 500 000(2)	
Goodwill				220 000(2)		220 000
Total assets	7 600 000	2 160 000	9 760 000			7 760 000
Liabilities	800 000	2 00 000	1 000 000	40 000(1)		960 000
Owner's equity	4 500 000	1 200 000	5 700 000	1 200 000(2)		4 500 000
Retain earnings	2 300 000	760000	3 060 000	760 000(2)		2 300 000
Revaluation				320 000(2)	320 000(1)	
Total Capital	7 600 000	2 160 000	9 760 000			7 760 000

2.1.2. Parent company theory

The parent company theory recognizes that although the parent does not have direct ownership of the assets or direct responsibility for the liabilities of the subsidiary, it has the ability to exercise effective control over all of the subsidiary's assets and liabilities, not simply a proportionate share. Therefore, the assets and liabilities of the subsidiary could not be explicitly separated for the parent company and other non-controlling shareholders. Thus, CFS should give a better view on the financial position and financial performance of the group by including both portion of the subsidiary's net assets belonging to non-controlling shareholders (Beams et al, 2009) as follows:

- In the CFS, the consolidated entity is considered to include the parent company and the portion of net assets controlled by the parent company even though part of such net assets is owned by non-controlling shareholders. Therefore, the assets and liabilities of the parent company are combined with the assets and liabilities of the subsidiaries. The interest of non-controlling shareholders is recognized, it represents the share of ownership in the net assets of the subsidiary that does not belong to the parent company.

- Non-controlling shareholders' interests are reflected in the liability portion of the CFS.

- Gains and losses from internal transactions are eliminated in full if it is a forward transaction and in proportion to the parent company's ownership for the reverse transaction.

- When the parent company divests but still holds control, the difference between the selling price and the divestment is determined as profit and loss in the period.

* Applying parent company theory in practices

- At the date of acquisition, the subsidiary's net assets are allocated to the parent company at fair value and to non-controlling shareholders at book value. Goodwill only counts the portion corresponding to the parent company's interests. The net assets (equity) of the subsidiary to be allocated to non-controlling shareholders are presented in the consolidated balance sheet as a

liability (considering non-controlling shareholders as external lender).

Example 2: Using the same information given in example 1, now, CFS will be prepared using parent company theory

To prepare the CFS on the date of acquisition (31st December 20X8):

- Applying the parent company theory, all assets, liabilities, and equity of Company S are combined with those of company P.

- Determining goodwill:

+ Net assets of Company S at fair value: $3,050,000 - 200,000 = 2,850,000$

+ Goodwill: $2,500,000 - 80\% \times 2,850,000 = 220,000$

- Consolidated entries at acquisition date

(1) Adjusting for the difference between fair value and carrying amount of assets and liabilities at Company S (the portion corresponding to Company P's interest in Company S):

Debit Inventory: $100,000 \times 80\% = 80,000$

Debit Intangible fixed assets: $50,000 \times 80\% = 40,000$

Debit Tangible fixed assets: $200,000 \times 80\% = 160,000$

Debit Liabilities: $50,000 \times 80\% = 40,000$

Credit Revaluation: 320,000

(2) Elimination the amount of the investment in the subsidiary:

Debit Owner's equity: $1,500,000 \times 80\% = 1,200,000$

Debit Retained earnings: $950,000 \times 80\% = 760,000$

Debit Revaluation: 320,000

Debit Goodwill: 220,000

Credit Investment in Subsidiaries: 2,500,000

(3) Non-controlling shareholder interests at the acquisition date:

Debit Owner's equity: $1,500,000 \times 20\% = 300,000$

Debit Retained earnings: $950,000 \times 20\% = 190,000$

Credit non-controlling shareholders' interest: 490,000

Summary of consolidated items (Parent company theory)						
Items	Company P	Company S	total	Adjust		Amount
				Debit	Credit	
Cash	500 000	1 000 000	1 500 000			1 500 000
Receivable from customers	1 000 000	350 000	1 350 000			1 350 000
Inventories	900 000	500 000	1 400 000	80 000(1)		1 480 000
Intangible fixed assets	1 300 000	150 000	1 450 000	40 000(1)		1 490 000
Tangible fixed assets	1 400 000	700 000	2 100 000	160 000(1)		2 260 000
Investing in subsidiaries	2 500 000		2 500 000		2 500 000(2)	

Goodwill				220 000(2)		220 000
Total assets	7 600 000	2 700 000	10 300 000			8 300 000
Liabilities	800 000	250 000	1 050 000	40 000(1)		1 010 000
Non-controlling shareholders' interest					490 000(3)	490 000
Owner's equity	4 500 000	1 500 000	6 000 000	1 200 000(2)+300 000(3)		4 500 000
Retain earnings	2 300 000	950 000	3 250 000	760 000(2)+190 000(3)		2 300 000
Revaluation				320 000(2)	320 000(1)	
Total Capital	7 600 000	2 700 000	10 300 000			8 300 000

2.1.3. The parent company extension theory

The parent company theory expands on the same view as the consolidation view from the parent company theory. However, scientists who support this theory believe that the CFS will more accurately reflect the financial position of the Group when the net assets belonging to non-controlling shareholders are also measured at fair value as follows:

- In the CFS, assets, liabilities and equity of parent company are combined with those of the subsidiary. The assets and liabilities of the subsidiary are measured at fair value. Goodwill is determined and allocated to the parent company only.

- Non-controlling shareholders' interest is presented as an item on the Consolidated Balance Sheet. Non-controlling shareholders' interest are determined on the percentage of non-controlling shareholders' interests and the net assets of the subsidiary at fair value. Once the parent-subsidiary relationship is established, the non-controlling shareholders' interests may change based on the net profit presented in the profit/loss statement and the subsidiary's comprehensive income.

- Profits and losses from internal transactions are eliminated 100% if it is a forward transaction and then allocating to the parent company; are eliminated 100% if it is a reverse transaction and then allocating it to the parent company and non-controlling shareholders.

- When the parent company divests but still retains control, the difference between the selling price and the divestment is recorded in the share premium.

** Applying the parent company extension theory to prepare CFS*

At the acquisition date, the subsidiary's net assets are allocated to the parent company and non-controlling shareholders at fair value. Goodwill only counts the portion corresponding to the parent company's interests. The subsidiary's net assets attributable to non-controlling shareholders are presented in the consolidated statement of financial position.

After the acquisition date, the unrealized internal gain (loss) is completely eliminated. The increase or decrease in interest of non-controlling shareholders after the acquisition date is determined by its proportion of profit (loss) on the profit/loss statement and comprehensive income statement of the subsidiary

Example 3: Using the same information given in example 1, now, CFS will be prepared using parent company theory

To prepare the CFS on the date of acquisition (31st December 20X8):

- Applying the parent company extension theory, all assets, liabilities, and equity of Company S are combined with Company P.

- Determining goodwill:

+ Net assets of Company S at fair value: $3,050,000 - 200,000 = 2,850,000$

+ Goodwill: $2,500,000 - 80\% \times 2,850,000 = 220,000$

- Consolidated entries at acquisition date

(1) Adjustment for the difference between the fair value and the carrying amount of assets and liabilities at Company S:

Debit Inventory: 100,000

Debit intangible fixed assets: 50,000

Debit tangible fixed assets: 200,000

Debit Liabilities: 50,000

Credit Revaluation: 400,000

(2) Elimination the amount of investments in the subsidiary:

Debit Owner's equity: $1,500,000 \times 80\% = 1,200,000$

Debit Undistributed net profit after tax: $950,000 \times 80\% = 760,000$

Debit Revaluation: $400,000 \times 80\% = 320,000$

Debit Goodwill: 220,000

Credit Investments in Subsidiaries: 2,500,000

(3) Separating non-controlling shareholders' interests at the acquisition date

Debit Owner's equity: $1,500,000 \times 20\% = 300,000$

Debit Undistributed net profit after tax: $950,000 \times 20\% = 190,000$

Debit Revaluation: $400,000 \times 20\% = 80,000$

Credit Non-controlling shareholders' interest: 570,000

Summary of consolidated items (Parent company extension theory)						
Items	Company P	Company S	total	Adjust		Amount
				Debit	Credit	
Cash	500 000	1 000 000	1 500 000			1 500 000
Receivable from customers	1 000 000	350 000	1 350 000			1 350 000
Inventories	900 000	500 000	1 400 000	100 000(1)		1 500 000
Intangible fixed assets	1 300 000	150 000	1 450 000	50 000(1)		1 500 000
Tangible fixed assets	1 400 000	700 000	2 100 000	200 000(1)		2 300 000
Investing in subsidiaries	2 500 000		2 500 000		2 500 000(2)	
Goodwill				220 000(2)		220 000
Total assets	7 600 000	2 700 000	10 300 000			8 370 000
Liabilities	800 000	250 000	1 050 000	50 000(1)		1 000 000
Non-controlling shareholders' interest					570 000(3)	570 000
Owner's equity	4 500 000	1 500 000	6 000 000	1 200 000(2) + 300 000(3)		4 500 000
Retain earnings	2 300 000	950 000	3 250 000	760 000(2) + 190 000(3)		2 300 000
Revaluation				320 000(2) + 80 000(3)	400 000(1)	
Total Capital	7 600 000	2 700 000	10 300 000			8 370 000

2.1.4. Entity theory

The entity theory focuses on the firm as a separate economic entity, rather than on the ownership rights of the shareholders, therefore, the annual CFS are prepared for the entire group as a single economic entity (Arthur, 1964). Advocates of this theory believe that non-controlling shareholders and the parent company are both shareholders of the subsidiary, therefore, the method of determining the economic interests of non-controlling shareholders must be the same as that of the parent company (Beams et al, 2009) as follows:

- CFS provide value for all parties with interests in consolidated entities and treat the consolidated entity separately from its owners. Under the entity theory, the controlling shareholders, non-controlling shareholders, and consolidated entity are considered equal, with no preference or emphasis given to group. On the consolidated financial position statement, assets and equity combine the assets and equity of the parent company those of the subsidiary. Assets and liabilities of the subsidiary are measured at fair value and goodwill determined and amortized for a given percentage of ownership in the subsidiary (Walsh, 2006-7).

- The interests of non-controlling shareholders are determined based on fair value. Non-controlling shareholders' interests are disclosed in the equity section of the CFS.

- Profits and losses from internal transactions are eliminated 100% if it is a forward transaction and then allocating it to the parent company; are eliminated 100% if it is a reverse transaction and then allocating it to the parent company and non-controlling shareholders.

- When the parent company makes a divestment but still holds control, the difference between the selling price and the divestment is recorded in the share premium.

** Applying entity theory to prepare CFS*

According to this theory, the parent company and non-controlling shareholders are treated similarly.

- At the date of acquisition, the subsidiary's net assets are allocated to the parent company and non-controlling shareholders at fair value. Goodwill counts for both the parent company and non-controlling shareholders. The net assets of the subsidiary attributable to non-controlling shareholders are presented in the statement of financial position in the equity section.

- After the date of acquisition, the unrealized internal profit (loss) is completely eliminated. Profit on the consolidated statement of profit and loss and consolidated comprehensive income statement total includes net income of the parent company and the subsidiary and then allocates the controlling and non-controlling share of subsidiary net income accordingly.

Example 4: Using the same information given in example 1, now, CFS will be prepared using parent company theory

To prepare the CFS on the date of acquisition (31st December 20X8):

- Applying entity theory, all assets, liabilities, and equity of Company S are combined with Company P.

- Determining goodwill:

+ Non-controlling shareholder interests: $30,000 \times 21 = 630,000$

+ Net assets of Company S at fair value: $3,050,000 - 200,000 = 2,850,000$

+ Goodwill: $2,500,000 + 630,000 - 2,850,000 = 280,000$

- Consolidated entries at acquisition date

(1) Adjustment for the difference between the fair value and the carrying amount of assets and liabilities at Company S:

Debit Inventory: 100,000

Debit intangible fixed assets: 50,000

Debit tangible fixed assets: 200,000

Debit liabilities: 50,000

Credit Revaluation: 400,000

(2) Eliminate the investment in the subsidiary:

Debit Owner's equity : 1,500,000

Debit Undistributed profit after-tax: 950,000

Debit Revaluation: 400,000

Debit Goodwill: 28 0.000

Credit Investment in Subsidiaries: 2,500,000

Credit non-controlling shareholder interest: 630,000

Summary of consolidated items (Entity theory)						
Items	Company P	Company S	total	Adjust		Amount
				Debit	Credit	
Cash	500 000	1 000 000	1 500 000			1 500 000
Receivable from customers	1 000 000	350 000	1 350 000			1 350 000
Inventories	900 000	500 000	1 400 000	100 000(1)		1 500 000
Intangible fixed assets	1 300 000	150 000	1 450 000	50 000(1)		1 500 000
Tangible fixed assets	1 400 000	700 000	2 100 000	200 000(1)		2 300 000
Investing in subsidiaries	2 500 000		2 500 000		2 500 000(2)	
Goodwill				280 000(2)		280 000
Total assets	7 600 000	2 700 000	10 300 000			8 430 000
Liabilities	800 000	250 000	1 050 000	50 000(1)		1 000 000
Non-controlling shareholders' interest					630 000(2)	630 000
Owner's equity	4 500 000	1 500 000	6 000 000	1 500 000(2)		4 500 000
Retain earnings	2 300 000	950 000	3 250 000	950 000(2)		2 300 000
Revaluation				400 000(2)	400 000(1)	
Total Capital	7 600 000	2 700 000	10 300 000			8 430 000

2.2. Applying consolidation theories in Vietnam in the current context

Currently, VAS 11 - Business combinations and VAS 25 - Financial Statements and Subsidiary Investments do not specify the determination of interests of non-controlling shareholders. VAS 25 simply defines "non-controlling shareholders' interest is a portion of the net results and the net

asset of a subsidiary for interest that is not owned by the parent company directly or indirectly”. However, the Circular 202/2014/TT-BTC dated December 22, 2014 on stated that “Ownership of the parent company and non-controlling shareholders in net identifiable assets subsidiaries at the acquisition date must be presented at fair value as follows:

- The net assets of the subsidiary at the acquisition date are recognized in the consolidated balance sheet at fair value. If the parent company does not own 100% of the subsidiary, the difference between the carrying amount and the fair value must be distributed to both parent company and non-controlling shareholders.

- After the acquisition date, if the assets of the subsidiary at the acquisition date (with a fair value different from the carrying amount) are depreciated, liquidated or sold, the difference between the fair value and the carrying amount is adjusted to:

- + Undistributed post-tax profit corresponding to the share owned by the parent company;

- + Non-controlling shareholders’ interests corresponding to the ownership of non-controlling shareholders”

The circular 202/2014/TT-BTC also stated that non-controlling shareholders’ interests is presented as an equity item on balance sheet. Goodwill is determined and allocated to the parent company only.

Since the interests of non-controlling shareholders at the acquisition date are measured accordingly to the fair value of net assets of the subsidiary, the interests of non-controlling shareholders at the acquisition date are recognized at the acquisition date by two entries, which eliminate the amount of the investment in the subsidiary and the separate the interests of non-controlling shareholders.

(1) To eliminate the amount of the item “Investments in subsidiaries” in the parent company’s financial statements, accountants must calculate the value of the parent company’s ownership in each item of equity at the acquisition date of the subsidiary. At the same time, accountants should calculate the arising goodwill (or profit from the acquisition if any) at the acquisition date, determine the difference between the fair value and the carrying amount of each subsidiary’s assets and liabilities at the acquisition date.

- If the fair value of the subsidiary’s net identifiable assets is higher than the carrying amount:

- Debit Equity items that have positive value (according to book value)

- Debit Goodwill (in case of arising goodwill)

- Debit Asset items (if fair value is higher than book value)

- Debit Liability items (if fair value is lower than the book value)

- Credit Liability items (if fair value is higher than book value)

- Credit Asset items (if fair value is less than book value)

- Credit Other income (in case of arising profit from acquisition)

- Credit Investments in Subsidiaries

- Credit Non-controlling shareholders’ interests

- Credit Deferred Income Tax payable

Credit Equity items that have negative value (according to book value)

- If the fair value of the subsidiary's net identifiable assets is less than the carrying amount:

Debit Equity items that have positive value (according to book value)

Debit Goodwill (in case of arising goodwill)

Debit Asset items (if fair value is higher than book value)

Debit Liability items (if fair value is lower than the book value)

Debit Non-controlling shareholders' interests

Debit Deferred Income Tax asset

Credit Liability items (if fair value is higher than book value)

Credit Asset items (if fair value is less than book value)

Credit Other income (in case of arising profit from acquisition)

Credit Investments in Subsidiaries

Credit Equity items that have negative value (according to book value)

(2) Separation of non-controlling shareholders' interests at the acquisition date at book value

Debit Equity items that have positive value (according to book value)

Debit Share capital

Debit Share premium

Debit Undistributed post-tax profit

Debit Other reserves

....

Credit Non-controlling shareholders' interests

Credit Equity items that have negative value (according to book value)

It is clear that the parent company extension theory is currently applying in Vietnam to prepare CFS.

3. CONCLUSION

The foundation and development of groups in Vietnam raises the issue of business consolidation accounting practices and the annual CFS. Although the Ministry of Finance has issued a system of accounting standards and other documents that give guidance on the preparation and presentation CFS, many groups are currently facing several problems in the preparing CFS. Therefore, accountants need to distinguish between different theories related to the preparation of CFS and then apply it in practice of preparing CFS. At the same time, accountants also need to comprehend which theory are current applying in Vietnamese accounting system in order to improve the preparation and presentation of CFS for groups.

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MANAGEMENT ACCOUNTING WITH SUSTAINABLE BUSINESS DEVELOPMENT - SOME PROPOSES FOR BUSINESS

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Abstract: *In the enterprise, managers at all levels carry the role of operating and managing all aspects of the business's activities. With the ever-increasing sensitivity to social and environmental issues, modern businesses are constantly under pressure to conduct their business activities environmentally friendly. Businesses are forced to look for means that allow them to run their businesses socially and environmentally sustainable without sacrificing their economic benefits and efficiency. Only Managerial Accounting can help businesses in this. The study uses qualitative methods from previous researchers and practices in enterprises to summarize the importance of management accounting for the sustainable development of enterprises and give some suggestions, ideas for businesses to develop sustainably.*

Keywords: Management accounting; Sustainable Development; Sustainable business development

1. INTRODUCTION:

In the enterprise, managers at all levels have the role of operating and managing all business activities of the enterprise. For effective management, it is necessary to have the information to make the right decisions to stand firm and to sustain development in the market. However, to achieve max efficiency, it is necessary to have the information to make the right decisions for effective and sustainable business development.

Governments and regulators worldwide are tightening related rules and regulations to force companies to become more socially responsible and mindful of the environmental and social impact of their corporate actions. In this context, businesses are forced to look for means that allow them to run their businesses socially and environmentally sustainable without sacrificing their economic benefits and efficiency. Therefore businesses need to have the information to make the right decisions for effective and sustainable development.

The information on the reports received by the managers, which is provided by the management accounting system is the primary source of information for the managers. The decisions made by the managers, besides achieving the profit goals of the business, must also ensure the sustainability of the business's operations and the external market environment outside the business. Because, if we only aim for the immediate profit without paying attention to the influence it will garner for the following years, what will it result in? Will it affect the business environment?... will it affect the long-term strategy, the sustainability of the business and the business environment... Therefore, managers need useful information to make the best decisions available.

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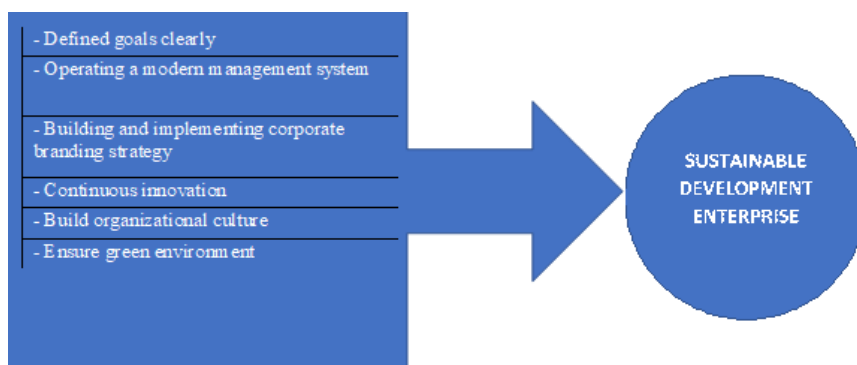
2. MANAGEMENT ACCOUNTING WITH SUSTAINABLE BUSINESS DEVELOPMENT.

For businesses with a suitable modern business environment, administrators will understand very well the importance of the information required by managers on management accounting reports.

2.1. Sustainable business development

Over the past two decades, sustainable development has been a momentary trend for a few businesses or corporations. Sustainable business management is an indispensable requirement, and businesses can only succeed sustainably when they build an effective business model and bring lasting value to the community.

For a business enterprise, sustainable development means adopting business strategies and practices that meet the needs of the business and its stakeholders in the present while protecting, maintaining and enhancing resources and natural resources that will be needed in the future. (According to iisd.org). To realize the sustainable development of enterprises, it is necessary to pay attention to the selection and orientation of industries, technological innovation, institutional reform and corporate culture building, capacity building for market development without affecting the ecological environment with a modern management system. Conditions for enterprises to develop sustainably are shown in the following model:



(Sources compiled by the author)

Diagram 1: MODEL OF CONDITIONS FOR SUSTAINABLE BUSINESS DEVELOPMENT

Studies show that sustainable development brings benefits when it is integrated into business activities such as: Improving brand image and competitive advantage; Improve productivity and reduce costs; Increased ability to comply with the law; Attract employees and investors; Reduce waste; Satisfy shareholders. Besides, sustainable development can easily improve the business reputation: The world is developing rapidly thanks to efforts to reform and apply scientific and technological achievements, but it is still facing many problems such as increasing distance rich and poor, environmental pollution, climate change... Part of the cause of these problems is also caused by development. Therefore, prosperous growth coupled with environmental sustainability and social inclusion is the main pillars of developed and developing countries, including Vietnam. In the traditional economy, manufacturers exploit natural resources in the form of raw materials to create products and services. Then, waste from production and consumption is buried or even released into the environment

Being recognized as a “sustainable enterprise” will help many businesses improve their reputation, affirm their brand value and open up new business opportunities through increasing the trust of partners, investors and shareholders. In addition, businesses will be more beneficial in attracting human resources, improving competitiveness, and contributing to the development of the green economy. Sustainable development has helped businesses effectively exploit resources, use energy rationally, and move towards clean and renewable energy. This helps businesses optimize costs, limit the systemic factors of environmental protection and many social issues affecting businesses.

The reality shows that Covid-19 has caused great impacts on the socio-economy when trade is difficult, supply chains are at risk of disruption, incomes decrease... Many economic experts say Sustainable development will be a “vaccine” for businesses to protect themselves in the context of Covid-19 in particular and difficulties in general (natural disasters, rising trade protectionism, trade war, ...). According to Deputy Prime Minister Vu Duc Dam at the “Vietnam Sustainable Business Forum 2020”, Vietnam has about 700,000 businesses, but currently, only 2,000 are members of the sustainability development business community in Vietnam and about 100,000 businesses have access to information on sustainable development. (according to <https://vnexpress.net>)

This is a very small number of businesses that have approached the sustainable development model. However, those enterprises in the context of Covid-19 that have built governance models towards sustainable development are proved to be more resilient than any other business, while also pursuing sustainable development orientation in the context of difficulties, still finding opportunities to break through and overcome, providing secure jobs for employees, expand markets, contribute to the budget and contribute to growth. ...During this time, some enterprises like Vinamilk still achieved consolidated revenue of VND 59,723 billion while still ensuring a sustainable development model. Vinamilk has been evaluated by the multidisciplinary financial analysis company Plimsoll (UK) in the list of 50 largest dairy companies in the world. (according to <https://vnexpress.net>). Besides, some other enterprises such as some manufacturing enterprises still ensure quality and environment such as: Coca Cola, Heineken® Beer... Typical of these businesses is the green production environment of the factory without smoke and dust, ensuring the health of workers and consumers, limiting waste to the environment when using recycled bottles... However, this model needs to be expanded further to Vietnamese businesses.

2.2. Management accounting and its relationship with the management system

Management accounting is a new branch of the accounting industry and is becoming a new trend of modern accounting. Management accounting is the department that plans and prepares information to be presented on management reports and records to provide data on the financial situation and all aspects of production and business activities, which can be measured... measure for managers to make short-term and long-term decisions. The information of management accounting is measured, analyzed, interpreted and provide data for administrators to find the necessary objectives to bring the most effective and optimal business plans. Management accounting information is especially important in operating an enterprise, and at the same time, it serves to control and evaluate that business towards future goals. There are two types of information that management accounting will provide including financial information and non-financial information. All of this information is collectively referred to as management information. The information that management accountants provide is not just financial information, before providing information, management accountants need to know the purpose of such information.

The relationship between the manager function and management accounting

In enterprises, the stages of the management process and the management accounting process have a close relationship with each other. For each enterprise, after determining the general goals, they will be realized by specific economic indicators. These targets will be the basis for formal planning. Based on that accountants prepare documents and deploy General plans and detailed estimates to serve as a basis for organizing, monitoring, checking and evaluating the implementation of the plan. After that, accountants collect performance results and overcome issues/weaknesses in the implementation stage.

The purpose of management accounting is to provide relevant information to managers in their planning, evaluation, control and decision-making processes. In that context, management accounting can play an important role in an organization by integrating all functions and providing relevant information for management decision making. The management cycle and the management accounting process move continuously and iteratively in business management activities. Thus, management accountants and managers have a close and intimate relationship with each other to use aggregated data to analyze business and propose the most optimal business decisions.

3. MANAGEMENT ACCOUNTING WITH SUSTAINABLE BUSINESS DEVELOPMENT - SOME PROPOSES FOR BUSINESS

With increasing sensitivity to social and environmental issues, businesses are now under more and more pressure to conduct their business in an environmentally friendly manner. The view of various experts and the general public is that businesses - who play an important role in the modern global economy - are the entities causing the greatest damage to biological sustainability. Our state (Ball & partner 2009). Global warming, ozone layer depletion, deforestation, acid rain and toxic waste are examples of ecological damage caused by corporations. Governments and regulators around the world are tightening relevant rules and regulations to make businesses socially responsible and pay more attention to the environmental and social impact and action of businesses.

In this context, businesses must look for supporting tools that allow them to run their businesses, develop a social culture in an environmentally sustainable manner. However, they face the challenge of achieving their goals without sacrificing their economic well-being. Balancing the economic performance of a business with social and environmental performance may not be an easy task, and performance may not always coincide. Therefore, it is important for enterprises to make management decisions based on reliable information and to conduct business activities with a greater strategic focus. In this area, by providing relevant, accurate and timely information to managers, management accounting can play an important role in achieving sustainability.

Management accounting plays an important role in making business plans of enterprises and contributes to enhancing the sustainable business development of enterprises.

Management accounting data for planning: In management accounting, financial information and non-financial information are presented weekly, every two weeks to the board of directors. This presentation includes forecasting, budgeting, and in-depth analysis. Therefore, it assists management in planning business operations.

Management accounting helps managers make the right decisions: Because management accounting presents different charts, forecasts and analysis, management uses it to make decisions.

Management accounting helps managers recognize early signs of problems that pose a risk or are more effective for the business as well as for the environment: If a product is not performing

well, management can identify the product early because accounts are presented regularly. This will help to overcome the limitations early and avoid future losses.

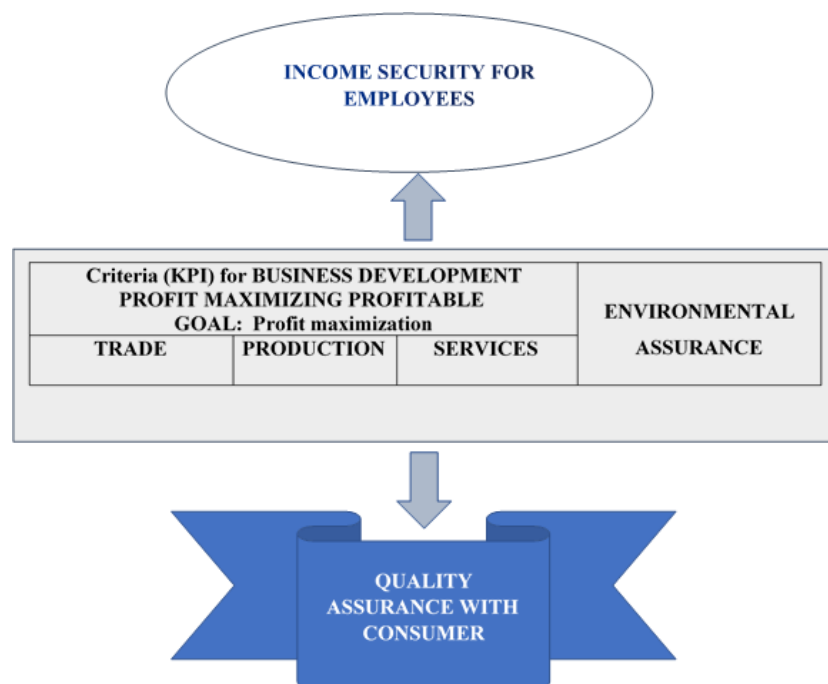
Based on the information presented in management accounting, management can make decisions about continuing to manufacture a product or modifying sales strategies. Since management accounting is not governed by any law, the board of directors can decide the areas that need more analysis and investigation, and from there come up with a strategy...

➤ **Management accounting with decision making for sustainable business development.**

To develop a sustainable business, the decisions of the managers must ensure the optimal purpose. To do this, it is necessary to build a system of useful indicators using which criteria of management accounting provide. Businesses must aim to maximize profits, grow in scale... while still ensuring income and taking good care of employees, ensuring quality for consumers (safety, sustainable), besides do not affect the environment.

Based on the business field of each enterprise, the enterprise establishes goals for the development of production and business activities, based on the sustainable development criteria of each enterprise (For example, for 1 enterprise, specific criteria for enterprises to develop sustainably will be: Raw materials, new production processes..., new initiatives, a modern waste treatment system, etc. Besides, it must ensure job creation and taking care of the lives of employees, quality commitment to consumers, policies to ensure quality - safety - environment ...)

It can be summarized by the following diagram 2:



(Sources compiled by the author)

Diagram 2: PROCESS OF SUSTAINABLE BUSINESS DEVELOPMENT ORIENTATION

Thus, to develop a sustainable business, management accountants need to pay attention to collecting and analyzing data related to the following two basic aspects:

First: Ensure the goal of profit maximization for sustainable business development

To achieve this, managers need analytical data of the indicators to decide to make their own or buy technical improvements? What criteria should be used to evaluate business performance? to make the right business decisions?

- Decide self-implement or buy out assets and services

In a market economy, an important choice that an organization should regularly make is whether it is more practical to do the work in-house or to buy it from outside. The components used to address these options include accessibility and costs incurred so that they can be calculated and compared. The board bookkeeping generates some knowledge that takes into account the choices made in key and operational aspects. In some cases, it is more economical for organizations to fabricate parts for items in their own factories. In any case, under different circumstances, there is coordination that makes re-aligning work for different organizations gradually pointless.

So to make the right decision for a self-manufacturing plan (self-created product), it is necessary to have data collected and analyzed from management accounting through the following indicators:

TABLE 1: SUMMARY OF PROJECT IMPLEMENTATION COSTS

Project / Plan	Expense										Total	
	Crafting materials					Labor costs				Cost of environmental treatment	
	Available		Not available			Available		Not available				
Necessary expenses to fund the project	..											
Amount cost												
Saving Amount												
Extra expense (additional money)												

(Sources compiled by the author)

Through the cost summary table based on historical data and information, combined with the analysis from the balanced scorecard on the contexts of the business to create its own assets such as: Finance, Implementation process, Energy implementation effort, the customer provides the necessary services from which to have a plan to balance between the cost of implementation and the purchase cost, and to choose whichever option is more profitable. Based on that, the administrator has the best plan that can both take advantage of the resources in the unit as well as ensure the quality of the product while still ensuring the environment. This will both bring sustainable development for businesses and ensure environmental sustainability.

- Management accounting serves to evaluate business performance to promote sustainable development.

To evaluate the business efficiency of the enterprise as a basis for making effective business plans, it is necessary to develop criteria as a basis for evaluating the profit rate. Because: At a time when an organization is starting a business that requires significant speculation, it needs to analyze its predicted rate of return (ROR). If an organization has more than two venture opportunities, there are different issues to consider. These include the expected time to equal the initial investment for the commitment, how to choose the most profitable projects, the expected cash flows, etc.

The management accounting system is a powerful machine to help answer these questions. The ROR and return on investment (ROI) of specific ventures are important to determine if there

are reasonable alternatives. Speculation can include extreme choices to make. That is the basic reason to calculate to find out which alternative is the best. This will address the best investment options for your organization. It is important to decide on a range of variables to figure out which joint venture is the best alternative for your organization. Management accounting can accomplish that goal fully when these issues are understood.

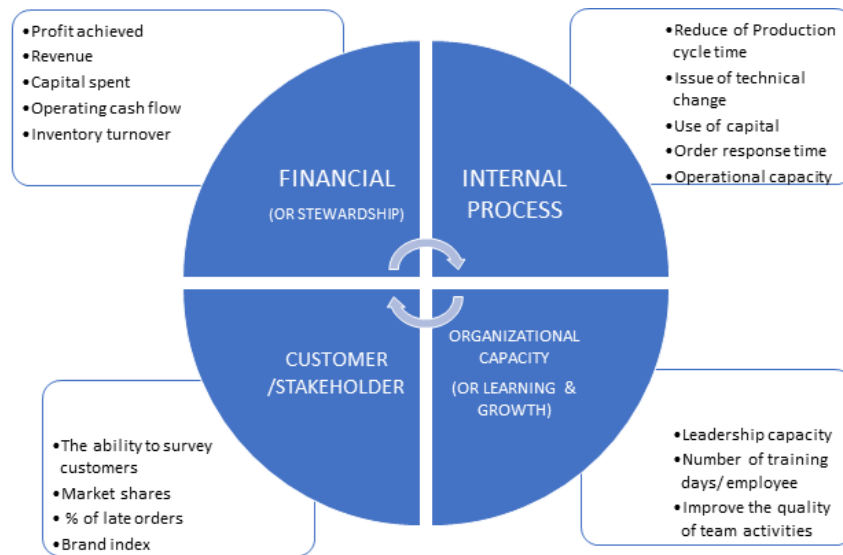
In business Profit margin is the number that any business or business organization has as the top goal (except for non-profit organizations). This is also one of the basic measures to evaluate the profitability as well as the effective activities of the company, which is determined by the formula: Profit = Revenue - Cost. So to achieve the goal of sustainable development, managers need to have data on revenue and expenses collected from the perspective of management accounting. The revenue information is built according to the estimate of management accounting based on the estimate of the number of products, goods, services, services is expected to be implemented for the next period with a detailed summary of figures at the request of the administrator, which will help the administrator to make a viable business plan. To achieve sustainable development goals, managers need to have data on revenue and expenses collected from a management accounting perspective.

In management accounting, to have the desired profit, it is necessary to predict the revenue based on the selling price of products, goods, services, etc., which are set based on the consumption volume ... of each item or product. service products that have useful information for managers. Besides, the implementation can determine the expected cost, the relationship between cost - volume - profit to determine the break-even point, determine the desired profit without affecting the following accounting periods. (must ensure the sustainable development of the business). The criteria for analyzing information to evaluate the business performance of the administrator provided by the accountant on request will be very useful for making business decisions according to the manager's goals. To achieve this, it is necessary to have a system of information collected according to the purposes of the administrator by management accountants about the detailed and aggregated data of the previous accounting periods.

If aiming for the desired profit, it is necessary to know the information about the volume of service products that need to be consumed to get the desired profit? How much capital and expenses must be spent to get that revenue? How is the rate of increase in revenue compared to the ratio of expenses? Should we aim to increase the volume of products consumed, increasing costs? Financial resources, labour, processes.... enough to satisfy the extended model? Managers must have an overview of the picture of the whole industry, compare the profit ratio to the total average of the whole industry of that enterprise, to know the level and productivity of their business. By actively monitoring the plan to identify whether it will bring profit or loss according to the calculation formula, from which adjustment is the right strategy.

Many units, because they see favourable product consumption, do not take into account the ability of the unit to provide favourable conditions on related issues and do not determine whether the consumption is sustainable in terms of sustainability. product sustainability, market demand, competitors, and substitutes? That affects the imbalance of supply and demand in the market. That may impact subsequent financial years.

Based on the relationship of the balanced scorecard, it is possible to build the appropriate criteria necessary to balance Finance; Procedure; capacity; customers to make the right decisions. According to the basic model from <https://balancedscorecard.org> can be summed up as follows:



(Source amalgamated from <https://balancedscorecard.org>)

Diagram 3: BALANCED SCORE

Based on the balanced scorecard, balanced data is collected through Financial indicators; Procedure; Capacity; Client. The indicators collected for analysis and implementation show the balance between the resources of the unit to ensure the criteria for business development in Figure 2, and to ensure the objectives set by the enterprise in 4 aspects. From there, it helps managers see the strengths and weaknesses of the unit when implementing new goals

- Management accounting helps managers predict the future

Management accounting helps managers get the database, the way to answer and solve questions such as whether the organization should or should not undertake the projects of the future, secure the other operations of the unit and strengthen into new markets, etc. These are incredibly important questions that executives need to answer. It is also attractive in predicting future business models based on the balanced scorecard of the four dimensions of the business.

Without management accounting, there would be no chance to know the fate of the business world. In any case, this is currently doable depending on current measurements and past samples. Bookkeeping is a fundamental part of the procedure as it includes various metrics identified with the organization's cash issues. That, therefore, can help the future successful ventures of the business.

Second: In addition to achieving the profit goal, it is very important to pay attention to the ecological system.

Not only achieving the goal of maximizing profits, but still developing sustainably in terms of the position it is necessary to make decisions to ensure the environment provided by environmental management accounting. Analysis and calculation aimed at determining quantitatively with certain accuracy the increase or deterioration of the environment, natural resource reserves in a certain period brought about by development activities. expressed in monetary terms.

Management accounting determines the data and information about the current state of environmental resources of the projects that have been, are and will be operated through measured data that has been adjusted through monetary units. This is a newly developing field to find and provide important and necessary information about costs and revenues related to the environment, guide businesses, project owners in economic decision-making, encouraging them to make efforts in us-

ing resources, including man-made natural resources, effectively and minimizing environmental damage, minimizing waste and pollution, change behaviour towards living environment. Management accounting supports not only the purpose of making decisions to maximize profits but also helping managers in managing environmental issues within each business unit.

First: cost savings for businesses. It is to identify, manage, research and cut costs related to the environment in the enterprise. For example, do research, find cost-effective, eco-friendly alternatives; research the waste treatment system, search for recycling sources, ensure efficiency in the overall operation of the enterprise. Businesses that accept to spend research and production costs with environmentally sustainable development can create greater value in the future.

Second, improve the competitiveness of enterprises. Management accounting helps to provide more accurate, complete and comprehensive information to measure the implementation process, thereby improving the image of the enterprise with stakeholders, avoiding costs such as fines, expenses. Risk costs to overcome... limit input factors such as raw materials, energy, and labour that are consumed in the process of creating pollution, increase the efficiency of resource use, and increase competitive advantage. By reducing production costs, it helps managers make important decisions such as reducing production costs, increasing productivity, investing in machinery and equipment for better and cleaner production, bringing new quality.

Third, enhance the status of the business, strengthen and satisfying relationships. Enterprises with good attitude and behaviour towards the environment will be a great advantage in the process of development, raising the position of enterprises in the domestic and global markets, helping enterprises to integrate into the international market quickly, an easier way to satisfy and strengthen the trust with stakeholders because state agencies, environmental organizations are always interested in economic development coupled with environmental protection.

CONCLUSION

Thus, to develop a sustainable business, it is necessary to provide the information provided by the management accounting system. When making the right decisions in line with the goals, it is necessary to have the most realistic database on the whole business in terms of finance, operations, resources, ... to ensure the quality of products, services, ensure the rights of employees as well as ensure a green environment while still bringing profits to businesses. Only management accounting can help managers develop sustainable businesses.

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STATUS OF CREDIT CAPITAL RESOURCES FOR SUSTAINABLE AGRICULTURAL DEVELOPMENT IN VIETNAM

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Abstract: Sustainable agriculture and rural development is Vietnam's orientation in the agricultural restructuring plan for the period 2021 - 2025. The green credit growth trend in the agricultural sectors aiming at "dual" goals is the growth focusing on economic growth associated with environmental protection, which has also been received attention in the current period. In recent years, sustainable agricultural production models in the direction of green and clean have attracted more and more attention from credit institutions with many preferential credit packages. By analyzing existing policies and regulations on rural agricultural credit and using data collected from relevant reports, this research analyzes the current status of access to and use of green agricultural capital in Vietnam; thereby proposing a number of recommendations to lenders, capital users, and the State Bank of Vietnam with the aim of promoting capital resources for sustainable agricultural development.

Keywords: credit capital, sustainable agriculture, agricultural lending

1. INTRODUCTION

In order to implement the Resolution of the 7th Party Central Committee of The Communist Party of Vietnam, term X on agriculture, farmers, and rural areas, the Vietnamese government has issued the plan on restructuring the agricultural sector for the period of 2021 - 2025. Accordingly, the goal of this plan is to continue restructuring the agricultural sector towards sustainable agricultural development; up to 2025 Vietnam has three product groups: the national product group; key product groups at the provincial level; and the last one is the group of local specialties. One of the important factors which can affect sustainable agriculture is the capital resources and lending policy. With the aim to develop recommendations to promote credit capital for sustainable agricultural development, the article examines the characteristics of credit capital for agriculture in general; at the same time, in Vietnam, the article analyzes the current situation of credit capital in two groups: capital for agricultural programs and capital for agricultural production households.

2. THE CREDIT CHARACTERISTICS FOR THE AGRICULTURAL SECTOR

Agricultural credit refers to one of several credit vehicles used to finance agricultural transactions. These vehicles include loans, notes, bills of exchange, and banker's acceptances. This type of financing is specially adapted to the specific financial needs of farmers and allows them to secure equipment, plant, harvest, marketing, and do other things that are necessary to keep their farms running.

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Lending to agriculture in rural areas is different from lending in the rest of the economy, including:

- **Diverse lenders:** Entities participating in granting credits to rural households include both official and unofficial lenders. The official lenders can be commercial banks, saving banks, cooperative banks, development banks, and microfinance institutions. On the other side, unofficial lenders include relatives, friends, and Credit Unions. In certain circumstances, when rural households cannot access official financial resources, nor can they borrow from friends and relatives, they are forced to borrow from loan sharks. These loan sharks are ready to meet the capital needs of rural households, with flexible terms but in return for a very high interest rate.

- **Diverse borrowers and loans with high potential risk.** In many developing countries, rural households account for a large proportion of the population structure, so the financial system that provides credit to this sector is quite diverse in composition. Credit provision for agricultural households with small scale and seasonal quantity makes the bank's lending costs high. Commercial banks have more opportunities to invest/lend in more attractive areas such as commerce or industries with growth potential with low risk, instead of lending to agriculture and rural areas with low profitability. In many countries, the Government regulates the application of credit floors for rural agriculture. In the case of applying the floor credit line to agriculture, commercial banks tend to fulfill their responsibilities quite reluctantly or find a way around when only lending to businesses operating in the field of commercial agricultural products (eg import and export of agricultural products,..); or operating in the field of agricultural product processing. Thus, small-scale agricultural production, especially at the rural household scale, has more or less difficulty in accessing official capital. To solve this problem, many countries allow the establishment of a number of commercial banks specializing in agricultural and rural lending. These types of banks have access to cheap capital, low discount/rediscout interest rates.

- The issue of debt settlement often has to consider the conditions of agricultural production because agricultural production has many environmental risks, so farmers often have difficulty in repaying debts when suffering from natural disasters or epidemics.

3. THE CURRENT SITUATION OF AGRICULTURAL CREDIT CAPITAL IN VIETNAM

3.1 Credit policies for agriculture and rural areas

- Credit policy to purchase agricultural products for export

Export of agricultural products has brought great value to the economy, related to employment and income of many households. Therefore, the timely response of capital for this field has positive impacts in many ways, especially in ensuring the rice purchasing price for farmers, as well as the national development strategy of this industry. Regarding the implementation of the pilot loan program for agricultural development under Resolution 14/NQ-CP of the Government, the State Bank has coordinated with relevant agencies (Ministry of Agriculture and Rural Development, Ministry of Agriculture and Rural Development, Science and Technology), selected 28 enterprises nationwide to deploy 31 enterprises to participate in the pilot loan program of linkage model and application of high technology in agricultural production. Selected enterprises operate mainly in the following fields: rice trading; aquaculture and processing of aquatic products for export; high-tech agricultural production in the cultivation and animal husbandry industry; safe vegetable

production; planting and processing sugar cane; catching, purchasing, processing, and consuming seafood products; produce other agricultural products, such as rubber latex, tapioca starch, corn. These enterprises operate in 22 provinces and cities in Vietnam, spread across regions: the Red River Delta, the Mekong River Delta, the Central Highlands, the Southeast, the North Central Coast and the Central Coast; Northern Midlands and Mountains.

- Support policies to reduce losses in agriculture according to Decision No. 68/2013/QĐ-TTg dated 14/11/2013 of the Prime Minister are also showing many positive results.

- Credit policy for coffee replanting in the Central Highlands region, the Bank for Agriculture and Rural Development strongly implemented this program, held a seminar in Dak Lak, a forum in Lam Dong.

- Credit policy for shrimp and pangasius farmers according to Decision No. 540/QĐ-TTg, dated April 16, 2014, by the Prime Minister, the Governor of the State Bank issued Circular 26/2014/TT - The State Bank, dated September 16, 2014, regulations on the refinancing of Vietnamese commercial banks to credit institutions in Vietnam dong. Besides, credit institutions continue to promote new lending and lending to effective projects in this area.

- Credit policy to support fishermen in offshore fishing according to Decree No. 67/2014/NĐ-CP, dated 07-07-2014 of the Government on a number of fisheries development policies, dated 15/8-2014, The Governor of the State Bank has issued Circular No. 22/2014/TT-NHNN guiding the implementation of this policy; at the same time, coordinate with a number of localities and related ministries and sectors to organize on-site implementation conferences to better disseminate policies, as well as grasp difficulties and take measures to solve them.

- Credit policy for implementing the Program “one commune, one product”, the State Bank of Vietnam has specified the task of implementing the Program “directing and guiding commercial banks, Investment Banks and commercial banks”. Vietnam Development, Bank for Agriculture and Rural Development of Vietnam, Bank for Social Policies of Vietnam support enterprises, cooperatives and production households to access loans to organize production” in Guidelines No. 4488/NHNN-TĐ dated 15-06-2018, requesting credit institutions, State Bank branches in provinces and cities to focus on directing the implementation of the content and tasks in order to promote the people’s access to credit capital, thereby creating favorable conditions for enterprises, cooperatives and production households to access loans, contributing to the successful implementation of the program “one commune, one product”.

3.2 Loans to individual households and organizations in service of agricultural and rural development

In order to match the actual capital needs for agricultural production, in Decree No. 116/2018/NĐ-CP dated September 7, 2018 of the Government amending and supplementing Decree No. 55/2015/NĐ - The maximum unsecured loan limit of some individual and household customers has been adjusted up; at the same time, for organizations and individuals that have projects and plans for production and business with high technology application and association in agricultural production, they will be considered for loans without collateral up to 70-80% value of the business plan. In Decree No. 116/2018/NĐ-CP, organizations and individuals are allowed to borrow business capital for agricultural and rural development by various methods and appropriate lending procedures depending on the plan and project, projects for production and business, serving life,

and the purpose of using loans of customers, in order to create maximum favorable conditions for customers such as seasonal loans, loans according to credit lines, loans each time. and other lending methods in accordance with the law.

Table 1: Credit limit specified in Decree No. 116/2018/ND-CP

Subject	Maximum credit (million dong)
Individuals and households residing outside of rural areas but engaged in agricultural production activities	100
Individuals and households residing in rural areas	200
Individuals and households growing industrial crops and perennial fruit trees	20
Cooperative groups and business households	300
Aquaculture or offshore fishing households that have signed consumption contracts with processing and direct export organizations	500
Cooperatives, farm owners on a rural area or agricultural production activities	1.000
Aquaculture or offshore fishing cooperatives, aquaculture farm owners	2.000
Union of cooperatives for aquaculture or offshore fishing	3.000

Source: The Government (2018), Decree No. 116/2018/ND-CP

3.3. Some evaluations

Diverse loan programs and policies help increase opportunities for people and businesses to access credit in agriculture. For agricultural and rural loans, credit institutions have developed credit products and forms of credit granting with increasingly simple procedures, through the application of seasonal loans, loans through credit books, lending through groups and groups of socio-political organizations, deploying mobile banks to the area to lend and collect debts instead of people having to go to the bank's headquarters... with simple procedures, suitable for the characteristics of this field. In the World Bank's Doing Business Report 2020, Vietnam's credit access index increased 7 places compared to 2019, from 32nd to 25th, ranking 25/190 countries. In addition, for the past 5 consecutive years, the State Bank of Vietnam has always led in the PAR index among ministries and sectors. This reflects the efforts of the actors to improve credit access for customers.

In recent years, agricultural and rural credit grew quite well. The average credit growth for agriculture and rural areas in the period 2016-2019 reached 19.83%, higher than the overall credit growth of the economy (16.02%). Despite facing many difficulties due to the impact of the Covid-19 epidemic, climate change, drought, saltwater intrusion, and African swine fever, etc., credit to the agricultural and rural sectors still growth considerably, by the second half of 2020 reaching over VND 2.16 million billion with over 14 million customers with outstanding loans, an increase of 5.84% compared to the end of 2019 and an increase of 2.5 times compared to the beginning of 2016. Accounting for nearly 25% of the total credit outstanding balance of the economy.

However, there are still some drawbacks, including:

- Credit providers participating in agricultural and rural loans have a wide network but have not fully met the production capital needs of the people. Vietnam currently has more than 80 credit institutions and 1,181 people's credit funds participating in agricultural and rural lending, with a

wide network of branches and transaction offices reaching villages, rural areas, and remote areas to provide capital for the development of this field. However, a lot of evidence shows that people still have to access unofficial loans with high risks.

Table 2: Percentage of people borrowing from Vietnam and other countries in 2018

Unit: %

Criteria	Vietnam	Low middle income countries	East Asian and Pacific countries
From family or friends	29.5	30.4	29.6
From a financial institution	21.7	9.8	21.5
Other borrowings	49.0	42.9	46.8

Source: WB (2018), The Little Data Book on Financial Inclusion.

The statistics in the table above show that, in the form of borrowing, the percentage of people borrowing from financial institutions is still lower than in other forms such as borrowing from family, friends, or other borrowing methods. This is quite similar to the group of low-middle-income countries or East Asia and Pacific countries. The question is, while credit services provided by formal financial institutions are less commonly used compared to other methods? The reasons indicated are similar to the case of people saving savings, namely: geographical distance; conditions, and loan process (WB, 2018).

- There is still the use of informal, high-risk capital

In Vietnam, the lending process of credit institutions has been significantly improved, customers can access some loan products, even instant. However, the constraints to ensure risk reduction cause banks and financial institutions to tighten loan conditions. Many farmers are unable to access these supporting credit sources because of the complicated and inconsistent processes such as minimum domestic rate requirements for machine loans, production linkage problems, consumption of agricultural products, and use of agricultural machinery services with cooperatives, households, and individuals, etc.

Meanwhile, lenders in the form of black credit have been known to take advantage of fast loans, no appraisal, and simple procedures to hit the psychology of the majority of the population. With black credit, borrowers do not have to wait long, leaflets, advertisements, and phone numbers of lenders are glued and hung everywhere, from the stump of an old tree on the road to every alley in the street. In rural areas, people will see classified ads right on the fence or gate of their house. If they use mobile phones or devices connected to the network, the information access is even easier. Ease of access, ease of use, and the expected loan amount are what make black credit so widespread. Black credit is like big and small storms, it sweeps from big cities, industrial parks, export processing zones to rural and remote areas. Estimated data for 4 years from 2013 to 2017 was announced at the online conference on implementing credit policies for agricultural and rural development, limiting black credit of the State Bank of Vietnam (SBV) showed that the whole country had about 7,624 crimes related to black credit, of which 56 cases of murder, 398 cases of intentional injury, 629 cases of property robbery, 1,809 cases of fraud. In 2018 alone, the country witnessed 84 murders, 855 intentional injury cases, 105 property robberies, and over 1,309 black-credit-related fraud cases. In general, encouraging and improving the conditions for people to access loans provided by formal financial institutions is becoming essential.

4. DISCUSSION AND RECOMMENDATIONS

** For borrowerers*

- Support to improve labor productivity for borrowers

In order to access and use loans for agriculture and rural areas with high efficiency, borrowers need coordination, households need to be supported to improve labor productivity and awareness of financial management. In particular, the support to improve labor productivity for households needs active coordination between the government, banks, and agricultural extension organizations. The agricultural extension organization is the unit that organizes programs to guide production and business, and transfer modern technologies. Meanwhile, local authorities are responsible for mobilizing and propagating people to participate in programs and exchange production experiences. On the bank's side, officials need to monitor and promptly record households who are borrowers who have difficulties in production and business, and are still technically weak, in order to bring subjects to participate in programs. Technical exchange, skill instruction with functional units.

- Helping to improve borrowers' awareness of financial management

Solutions to support raising awareness of financial management need active participation from banks and loan groups. With limited financial awareness, households face many difficulties in loan management and effective use of loans. Banks need to organize meetings between loan teams and representatives of households. During the meetings, the main content will revolve around the issue of how to use borrowed money effectively, save and accumulate loans to repay the bank. At the same time, the bank and loan team also closely support households in the process of making loan documents, developing and implementing debt repayment plans. Besides, not only mentioning the problems of borrowing capital, loan groups and banks also need to guide people on saving methods in daily life, effective investment, and profitability. On the other hand, households also need to understand and raise their awareness of credit incentive programs in new rural construction, be well aware of the importance of the program so as not to rely on loans, to be responsible for more capital use.

** For official capital providers*

Commercial banks are considered a key player in developing countries, but with their own characteristics, banks will focus on serving customers above the poverty line and people with stable incomes. Thus, in the customer segments from the poverty line and below, it is necessary to have service delivery models suitable to the income and awareness of the people. Cooperative banks, policy banks, agricultural banks, people's credit funds, microfinance institutions, in particular, policy banks play a major role in the banking system for the provision of financial services for the poor (Tran Huu Y, 2018). They are also financial institutions with large networks in rural areas, and governments often use them only to promote credit and savings in areas of less commercial interest and to carry out social programs. However, despite having a wide network, these organizations are still under pressure due to high operating costs, creating good services at affordable prices for the poor is a big barrier, especially the problem of lending rate. Except for the case with support from the State as in the case of the Bank for Social Policies.

This can be easily observed through the deposit and lending interest rates of the Bank for Social Policies compared to the joint-stock commercial banks, especially when compared to the private joint-stock commercial banks. Correspondent banks or financial companies, fintech companies have a pervasive role and bring financial services closer, easily accessible, and at a cheaper cost to those who cannot directly reach the banks. Financial intermediaries such as commercial banks.

The advantages of this type of financial service are reflected in its instant access, low cost, safety, diversified products and distribution channels.

** For the State Bank of Vietnam*

Continue to advise the Government on measures to promote access to and use of agricultural and rural loans, review legal regulations to limit barriers to formal loans. On the other hand, the State Bank, within its authority, should promote the implementation of the National Strategy for Financial Inclusion, which is essentially a holistic approach to ensure that everyone in the economy continues to access and use formal financial services in a convenient, appropriate and sustainable manner. This strategy unifies the pillars to promote effective and sustainable financial inclusion. Focusing on promoting the development of financial services on a digital technology platform, including shifting government payment programs to digital services and platforms; providing financial services to rural areas and ethnic minorities that are still backward or where poverty rates are higher than the national average; consumer protection and financial literacy help a new generation of consumers better equipped with modern financial services.

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INCREASING BRAND AWARENESS FOR VIETNAMESE ELECTRONICS SUPERMARKETS IN HANOI CITY

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Abstract: According to David Aaker (1996), "Brand awareness refers to the ability of a customer to recognize or remember a brand as a constituent element of a certain product". Brand awareness is one of the significant components that create customer-oriented brand value. To improve the brand value of a product or company in the market in general and for electronics supermarkets in particular, retailers have to raise brand awareness among customers. To improve brand awareness for electronics supermarkets in Hanoi, we need to research to clarify the content of customer-oriented brand awareness such as: the nature of brand awareness, the status of brand awareness of Vietnamese electronics supermarkets in Hanoi and suggestions for solutions.

Keywords: Brand, Brand awareness, electronics supermarkets

1. INTRODUCTION

The current expansion of electronics supermarkets in Vietnam in general and Hanoi in particular shows that the retail market of electronic products is increasingly attractive to domestic and foreign retailers. This not only indicates the business potential of the industry, but also puts Vietnamese electronics retailers in a more fiercely competitive environment. As a result, it is inevitable that Vietnamese enterprises improve their competitiveness to sustainably develop in the context of international integration. Brand building and development is one of the sharp and effective competitive tools. According to Aaker (1996), brand value is constituted by four key factors, including brand awareness. Therefore, raising brand awareness is a prerequisite for businesses to enhance brand value.

2. LITERATURE REVIEW

To understand the content of brand awareness, we first need to clarify what brand value is? According to Keller (1993), there are two standpoints when studying brand value, namely the financial perspective and the customer's perspective. In this paper, we approach brand value from a customer-oriented perspective (CBBE). According to Keller (1993) and David Aaker (1996): "Brand equity is the differential effect of brand knowledge on customers' response to brand marketing activities".

Keller stated that brand knowledge in customers consists of two main components: brand awareness and brand image. Brand awareness refers to the consumer's ability to recognize a brand under various conditions, including brand recall and brand recognition. Brand image is the perception of the brand that is reflected by the brand associations stored in the customer's memory.

According to Aaker, brand value is determined by key factors such as: (1) brand awareness, (2) brand loyalty, (3) perceived quality, (4) brand associations and other brand assets. The elements constituting brand value are described by David Aaker in model 1.1.

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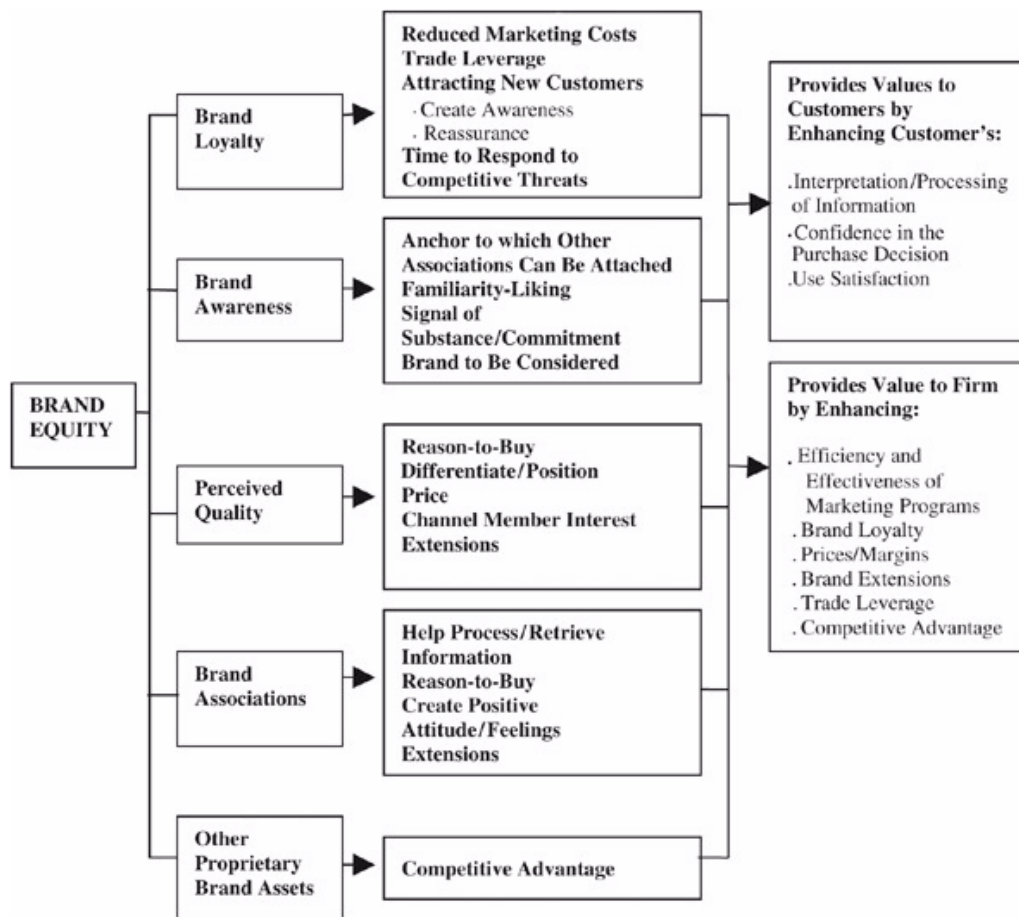


Figure 1.1. Aaker's brand equity model

From the research model in Figure 1.1, David Aaker (1996) introduced the concept of brand awareness as follows: "Brand awareness refers to the ability of a customer to recognize or remember brand as a constitutive element of a given product".

Figure 1.1 also shows that brand awareness in customers is expressed through (1) Cohesion of other associations, (2) Familiarity, (3) Tangible signals, and (4) Considered brand.

In 2013, Calvo-Porrall et al, based on the research model of brand value of David Aaker (1996), studied 362 consumers in the Spanish market with 5 large retailers showing brand awareness. The study proved that brands are formed in the minds of customers based on three main factors: reputation, commercial image, and price image of the retail store. Consumer price judgment is understood as their calculation of the benefits they gain and the costs they have to spend to obtain the expected benefits when deciding to make a purchase at a specific retail store. Accordingly, an image of the price of each retail store will be formed in the minds of customers and consumers.

Thus, brand awareness includes brand identity and brand recall. Brand identity reflects the consumer's ability to remember the elements of a brand such as: name, symbol, logo, tagline, etc. Brand recall is the ability of consumers to recognize a brand when exposed to brand-related signals such as: product, product portfolio, logo, etc.

Brand awareness helps customers become familiar with the brand and makes them think of the brand when intending to buy an item. Customers often choose to purchase goods from brands that they know well as they feel more assured and safer. Generally, a well-known brand is more reliable and of higher quality. The highest level of brand awareness is the prominence of the brand name

to almost any customer when recalling a certain product or business. Brand awareness helps brand managers identify the values that connect customers' memories with visual signs of the brand.

From the above theoretical bases, within the scope of this paper, we will study and evaluate the level of brand awareness of consumers with Vietnamese electronics supermarkets in Hanoi city by the following elements: Brand identity kit; Occurrence density, location and shopping space; Product portfolio and product brand; Salesperson.

3. METHODOLOGY AND PROPOSED MODEL

After studying the brand awareness theories and Nguyen Thu Huong's research model on brand equity (2020), the authors presented a research model with two main parts. The first part is the independent variable, which is the brand characteristics of the retail business that consumers can associate with brand recognition. The second part is the dependent variable, which is the customer-oriented brand awareness of the electronics supermarket. Therefore, the authors recommended a model to study the current status of brand awareness of Vietnamese electronics supermarkets. (generalized in Figure 2.1).

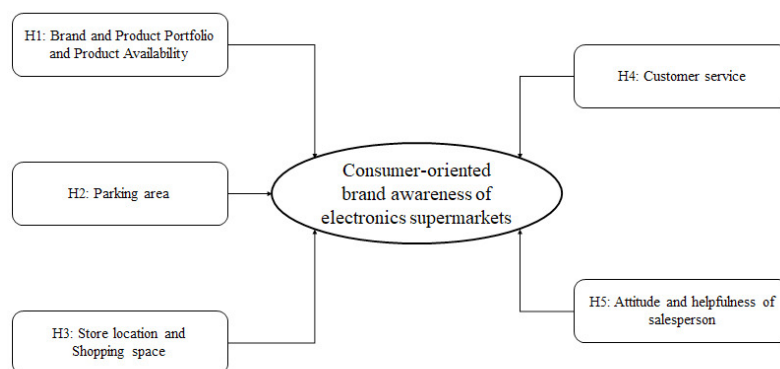


Figure 2.1: Brand awareness of Vietnamese electronics supermarkets model

From the model mentioned above, the subject develops five following hypotheses, namely:

H1: “Brand and product portfolio and product availability” has a positive impact on the customer-oriented brand awareness of electronics supermarkets

H2: “Parking area” has a positive impact on the customer-oriented brand value of electronics supermarket.

H3: “Store location and shopping space” has a positive impact on the customer-oriented brand awareness of electronics supermarkets.

H4: “Customer service” has a positive impact on the customer-oriented brand awareness of electronics supermarkets.

H5: “Attitude and helpfulness of salesperson” has a positive impact on the customer-oriented brand awareness of electronics supermarkets.

The brand awareness model of electronics supermarkets includes five independent variables, namely: (1) Brand and product portfolio and product availability; (2) Parking area; (3) Store location and shopping space; (4) Customer service; (5) Attitude and helpfulness of salesperson. The dependent variable is the customer-oriented brand awareness of electronics supermarket. The observed variables are built based on the results of previous studies on the brand value of retail businesses by Nguyen Thu Huong (2020). Observed variables are sorted and adjusted based on qualitative research results.

The scale used in this study, which is a multi-variable scale to measure key concepts, has proven to be appropriate in terms of reliability and validity in previous studies. The observed variables are measured by a five-point Likert scale, which is 1 – Strongly disagree; 2 – Disagree; 3 – Neither agree nor disagree; 4 – Agree; 5 – Strongly agree. The observed variables in the model are specified in box 2.2.

Brand and product portfolio and product availability

1. This electronics supermarket has many different kinds of goods
2. I can buy different electronics products at this supermarket
3. This supermarket sells many different brands of the same product
4. This electronics supermarket always has the goods that I want
5. The goods at this electronics supermarket are of high quality
6. The goods at this electronics supermarket are of clear origin

Parking area

1. I can easily park/get my vehicle at the parking space of this electronics supermarket
2. I can move into the electronics store quickly after parking my vehicle
3. The parking area is reasonably arranged
4. The parking attendants show the necessary courtesy

Store location and shopping space

1. I feel that the interior decoration in the electronics supermarket is reasonable
2. I feel that the music and scent in the electronics supermarket is reasonable
3. I can easily move in the electronics supermarket
4. The electronics supermarket has a reasonable counter/booth location design

Customer service

1. This electronics supermarket has good customer service
2. This electronics supermarket has a flexible delivery time and suits my demand
3. The staff's attitude is polite and acceptable
4. The employees are knowledgeable about the products
5. The employees work professionally and responsibly

Attitude and helpfulness of salesperson

1. The staff of this supermarket have good attitude and communication skills towards customers
2. I am satisfied with the support from this supermarket's staff
3. This supermarket's employees have in-depth knowledge of the electronics products they are in charge of.
4. This supermarket's staff are available when I need their advice
5. The staff of this electronics supermarket are willing to answer all of my questions

Customer-oriented brand awareness of the electronics supermarket

1. I always call the right brand name of electronics supermarkets
2. If I need to buy an electronic product, I will choose this electronics supermarket
3. This is the first electronics supermarket I think of when I need to buy an electronic products
4. This supermarket will be my only option
5. I will recommend this electronics supermarket to my acquaintances

The authors adjusted according to Nguyen Thu Huong (2020)

Box 2.2: Observed variables in the model

From model 2.1 and box 2.2, to assess the situation of brand awareness of Vietnamese electronics supermarkets in Hanoi, the authors conducted a survey with 370 customers by convenience sampling, 353 results of those were valid. Collected data were processed using SPSS 22 software.

3. RESEARCH RESULTS AND DISCUSSIONS

3.1. Research Results

From the results of Cronbach's Alpha analysis and exploratory factor analysis (EFA), extracted factors are included in the multiple linear regression model to test the research hypotheses about the positive or negative relationship between the 5 independent variables and the dependent variable (customer-oriented brand awareness of electronics supermarkets). The analysis results of multiple linear regression model are presented in Table 3.1.

Model Summary ^b							
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson		
1	.655 ^a	.430	.418	.49796	2.167		
a. Predictors: (Constant), KGMS, TDNV, DVKH, DMTH, KVTX							
b. Dependent Variable: GTTH							
ANOVA ^a							
Model		Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	71.533	5	10.219	36.059	.000 ^b	
	Residual	94.972	383	.248			
	Total	166.505	390				
a. Dependent Variable: GTTH							
b. Predictors: (Constant), KGMS, TDNV, DVKH, DMTH, KVTX							
Coefficients ^a							
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	.303	.292		1.040	.299		
DMTH	.128	.033	.193	3.851	.000	.593	1.687
KVTX	.257	.053	.284	4.848	.000	.734	1.300
KGMS	.217	.048	.198	4.492	.000	.763	1.310
DVKH	.103	.046	.115	2.235	.026	.563	1.776
TDNV	.561	.042	.525	13.189	.000	.939	1.065
a. Dependent Variable: GTTH							

Table 3.1: Model estimation results using ordinary least squares (OLS) method

It can be seen from the results in Table 3.1 that:

(1) ANOVA test is used to confirm the appropriateness of the research model. Based on the data results, the ANOVA test with Sig. < 0.05 indicates that the multiple linear regression model is consistent with the data set of the study.

(2) The value of Durbin–Watson coefficient is used to determine whether there is autocorrelation between the independent variables. Based on the analysis results, the Durbin – Watson coefficient has a value of 2,167, ranging from 1 to 3, showing that autocorrelation cannot be confirmed.

(3) The VIF value is used for multicollinearity test, if $VIF < 2$, there will be no multicollinearity. Based on the analysis results, all VIF values are acceptable (< 2), it can be confirmed that there is no multicollinearity in the data set of this study.

(4) The coefficient of determination R^2 and adjusted R^2 are used to reflect the goodness of fit of the model. More specifically, they measure the percentage of variation in the values of the dependent variable that can be explained by the variation in the independent variables. In multiple linear regression models, the adjusted coefficient of determination R^2 is often used to explain the variation of the dependent variable. Based on the analysis results, the adjusted coefficient of determination R^2 reached 0.418, showing that the independent variables in the research model can explain 41.8% of the variance of the dependent variable.

Based on the results of model estimation using the OLS method, the tested research hypotheses are presented in Table 3.2.

Table 3.2: Research hypothesis test results

Hypotheses	Standardized Coefficients	t	Sig	Correlation		Conclusion
				Partial	Semi	
H1	.193	3.851	.000	3.851	.000	Accepted
H2	.284	4.848	.000	4.848	.000	Accepted
H3	.198	4.492	.000	4.492	.000	Accepted
H4	.115	2.235	.026	2.235	.026	Accepted
H5	.525	13.189	.000	13.189	.000	Accepted

The results in Table 3.2 indicate that all hypotheses are accepted. The research model of the customer-oriented brand awareness of electronics supermarkets includes 5 independent variables. Quantitative research results describe the impact level of the above factors, which is arranged in order from highest to lowest as follows:

- (1) Attitude and helpfulness of sales staff (0,525)
- (2) Parking space (0,284)
- (3) Shopping space (0,198)
- (4) Product – brand portfolio and the availability of goods (0,193)
- (5) Customer services (0,115)

Thus, the attitude and helpfulness of the sales staff is the variable that has the strongest impact on the brand value as this is the factor that sets an electronics supermarket apart from its competitors.

3.2. Discussion

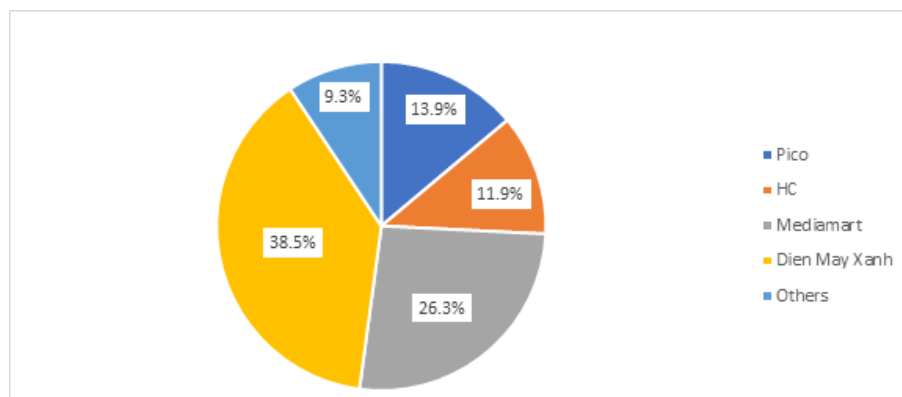
The authors conducted a survey with 370 customers living in Hanoi about Vietnam's major electronics supermarkets such as Pico, HC, Mediamart, Dien May Xanh and some other electronics supermarkets.

The survey results show that customers mainly choose one of the four electronics supermarkets, namely Pico, HC, Mediamart and Dien May Xanh. Therefore, the paper concentrates on analyzing the survey results from the 4 supermarkets mentioned above to draw the following conclusions:

Regarding the level of awareness through “Brand identity kit”: In general, Vietnamese electronics supermarkets in Hanoi city have created a certain level of brand awareness for consumers through their “Brand identity kit”. The brand awareness is measured by the consumers’ ability to recognize and name the brand name. The survey results show that 100% of the respondents answer that they know and call the brand name correctly along with other elements in the “Brand identity kit” of the above electronics supermarkets.

In fact, calling the right brand name plays an important role in customers’ decision making to select a supermarket. The other supermarkets, which only a few customers are able to recognize, are Nguyen Kim, Tran Anh, etc.

Occurrence density, location, and shopping space: Regarding Dien May Xanh and Mediamart, the brand recognition is supported through the placement of selling points on the main streets, the attractive layout with the brand’s distinctive tones. The increase in the number of electronics supermarkets of Dien May Xanh and Mediamart has helped to improve their brand awareness. HC and Pico, on the other hand, are not as popular with customers and also have a smaller number of selling points compared to Dien May Xanh and Mediamart. Although customers who have had a shopping experience at HC are highly appreciative of the supermarket’s product portfolio (85.7%), only 11.9% of customers choose HC. Meanwhile, Dien May Xanh and Mediamart have a lower percentage of customers evaluating their product portfolio (71.3% and 65.6%) but have a higher percentage of customer selection, 38.5% and 26.3% respectively (Figure 3.3).



Source: Survey results from research team

Figure 3.3: Percentage of customers choosing Vietnamese electronics supermarkets in Hanoi city

The primary reason is due to the location of these two supermarkets is close to the residence of customers, and they have high density of appearance. This indicates that increasing the number of retail outlets and selecting suitable business location is more essential than product portfolio in attracting customers due to its convenience.

Product portfolio and product brand: The product portfolio and product brand are expressed through the diversity of business products, the level of customer satisfaction in a single purchase and the origin of products. Among surveyed electronics supermarkets, Dien May Xanh and HC are

the two brands having the highest rating on this criterion by customers. Specifically, regarding the diversity of business products, HC has 85.7% of customers rating agree and strongly agree; this index of Dien May Xanh is 71.3%. Regarding the origin of products and product brand, the rate of HC and Dien May Xanh are 90% and 73.5% respectively. If the occurrence density, location and shopping space of the supermarket are essential in attracting customers, the product portfolio and product brand are crucial in improving customer satisfaction as well as repeat purchase rate (Table 3.4).

Electronics supermarket	Diversity of business products	The origin of products (Product brand)	Satisfaction level	Repeat purchase rate
HC	85,7%	90%	97,6%	88%
Dien May Xanh	71,3%	73,5%	75%	75,7%
Pico	69,4%	71,4%	74,9%	71,4%
Mediamart	65,6%	66,7	73,1%	62,4%

Source: Survey results from research team

Table 3.4: Relationship between product portfolio and customer satisfaction

Regarding brand awareness via salesperson:

The image of a salesperson is expressed through the attitude and communication skills towards customers, the willingness to answer all questions of the customers, the understanding of products... This is also a factor valued by customers. According to the survey results, most supermarkets are highly appreciated by customers on this criterion, which indicates that brand managers are considerably aware of the importance of this factor.

The above results show that large electronics supermarkets have initially created a certain level of brand awareness with consumers. However, it mainly stops at calling the right brand name, while deeper recognition through other factors has not yet been as expected. Brand recognition is mostly achieved through the number of supermarkets, business locations and brand colors. As a result, it is difficult to create good brand associations. If there is no change, the “brand awareness” of consumers about the Vietnamese electronics supermarket chain will tend to vanish when international retail groups enter the Vietnamese market. Currently, especially in 2020 and 2021, due to the impact of the COVID-19 pandemic, electronics supermarkets have become less concerned about improving brand awareness of consumers in Hanoi city.

In fact, if the level of brand awareness is not high, it is a challenge to improve brand loyalty, perceived quality, brand associations and other brand assets effectively. Therefore, in the coming time, Vietnamese electronics supermarkets, especially those that do not have high brand value such as Tran Anh, Nguyen Kim, etc., need to find reasonable solutions to increase their brand awareness in the minds of target customers.

4. SOLUTIONS FOR BUSINESSES THAT OWN A CHAIN OF ELECTRONICS SUPERMARKETS

From the status of brand awareness of Vietnamese electronics supermarkets in Hanoi, the paper suggests these following solutions:

Firstly, Develop a supermarket brand positioning strategy in line with business goals.

To increase brand awareness of electronics supermarkets in the long term, companies need to create “key highlights” so that when it comes to electronics supermarkets, consumers and the

public can immediately recall and easily imagine the typical characteristics of the considered electronics supermarket. However, research results show that consumers in Hanoi city still do not really remember the characteristics of each electronics supermarket they choose when shopping. The reason is that supermarkets do not have a suitable positioning strategy. A good positioning strategy helps the brand manager to identify the outstanding differences that needs building. This is an important factor to increase brand awareness among customers.

Secondly, Develop an effective brand management strategy

A good brand management strategy specifies the objectives, orientations, content, and methods of increasing brand awareness of electronics supermarkets in the face of changes in the competitive environment, especially in the current context. The brand strategy has to be consistent with the above-mentioned brand positioning results.

According to Dao Thi Minh Thanh and Nguyen Quang Tuan (2016) in the *Brand Management* textbook, for successful brand management, Vietnamese electronics retailers should operate in accordance with the following process: (1) Conduct the analysis and assessment to determine the appropriate vision, mission and core values of the brand; (2) Specify the characteristics and image of the brand; (3) Analyze and evaluate to upgrade the brand identity kit of the supermarket (4) Prepare a marketing plan to protect and develop the brand performance.

Thirdly, Define the demand for human and material resources... necessary to meet the requirements of the brand management of electronics supermarket in each period. Specifically, human resources play an important role because they can harness other resources to raise brand awareness in particular and brand development in general. Especially in the context of a volatile business environment, making use of digital technology advances, in business in general and in raising brand awareness in particular, will be significantly useful in increasing brand value. This places a requirement on highly qualified human resources.

Fourthly, Organize and operate activities providing services to customers at points of sale. Specifically:

- Make it as easy as possible for customers to access the electronics supermarket. Survey results in all four supermarkets show that over 70% of customers appreciate the parking space of the supermarket. Vehicle parking area should be large enough and reasonably arranged so that customers do not spend too much time on parking and getting their vehicles at the end of their visit to the supermarket. Therefore, depending on the location and the space that they can use, the supermarket managers should improve the service quality necessary to create the first impression for customers.

- Organize the shopping space to suit the characteristics of target customers in the business area. Research results prove that customers are more interested in where and how they can make a purchase than what they actually buy. For that reason, the shopping space, the layout of the stalls, the arrangement and display of goods and the interior decoration of the store such as color, sound and light combined with images, advertising items... have high value in portraying images in the minds of target customers, thereby creating a deeper level of brand awareness.

- Manage and closely monitor the quality of product services, especially in-process and after-sales services. This creates a positive impression with customers thereby increasing brand awareness.

Fifthly, Raise the awareness and understanding of the staff for the brand and business activities of the electronics supermarket.

Raising awareness of employees and managers about the importance of brands to the electronics supermarket chain is a foundation that determines employees' attitudes towards customers. Hence, they will provide the best service experience to customers, contributing to improving the awareness level of the electronics supermarket. In addition, it is also important to resolve customer complaints as soon as possible. The survey results show that this criterion is rated considerably low by customers, implying that more attention needs to be paid in dealing with customers' responses.

Finally, Harness integrated communication tools to improve the performance of brand communication.

Communication plays an important role in helping customers immediately recognize the brand identity kit of each supermarket. Whether they have purchased goods at that supermarket or not, high-quality communication activities will present the brand's image in the minds of target customers faster and more sustainably.

Conclusion: Brand awareness in customers is the first factor that helps Vietnamese electronics supermarkets create reminders when customers have demand for electronic products. The highest level of brand awareness is making customers think the brand name of the supermarket first when they intend to make a purchase. Therefore, raising brand awareness is not only valuable in attracting and persuading consumers to choose a company, but also is crucial in helping businesses shape and develop the brand for their supermarkets in a sustainable way.

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ASSESSMENT OF FACTORS AFFECTING FINANCIAL EFFICIENCY OF POST – CLEARANCE AUDIT

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Abstract: After nearly 20 years of development, post-clearance audit is gradually showing its effectiveness, affirming its important role in customs reform and modernization in Vietnam. However, the financial efficiency of post-clearance audit has not actually been analyzed and evaluated specifically to serve as a measure for post-clearance audit activities in Vietnam. In this article, the author discusses the factors affecting financial efficiency of post-clearance audit, builds a regression model of factors affecting financial efficiency of post-clearance audit, and implements assessment of the impact of factors on financial efficiency of post-clearance audit in Vietnam.

Keywords: financial efficiency, post – clearance audit, factors

I. INTRODUCTION

In Vietnam, the post-clearance audit was officially launched in 2002, after the 2001 Customs Law took effect. Nearly 20 years of establishment and development, post-clearance audit has affirmed an important role. Post-clearance audit not only ensure strict management of import and export activities, effectively prevent tax loss and commercial frauds, but also contribute to facilitating international trade, helping to reduce the time and cost of state management of customs. At the same time, post-clearance audit directly and indirectly affects the raise of law awareness and compliance of enterprises that involve in import and export activities, thereby creating a fair competitive environment for all enterprises engaged in international trade.

With an increasingly important role as well as its position as one of the three main pillars of modern customs management, the enhancement of efficiency of post-clearance audit (including financial efficiency of post-clearance audit) is an essential requirement. To improve financial efficiency of post-clearance audit, we should understand what financial efficiency of post-clearance audit is, the factors affecting financial efficiency of post-clearance audit and how these factors affect financial efficiency of post-clearance audit.

II. LITERATURE REVIEW AND PREVIOUS RESEARCH STUDIES

There are some typical studies and research in the field of post-clearance audit that have theoretical and practical significance, which can be mentioned: *Guidelines for Post Clearance Audit* (2012) by World Customs Organization; *Post Clearance Audit: Reference and Implementation Guide* (2011) by David Widdowson và Rob Preece; *Post Clearance Audit* (2005) by Kazunari Igarashi; *ASEAN Post Clearance Audit Manual* (2006) and *The Blueprint of ASEAN customs post clearance audit* (2006) by Nobuyuki Shokai; etc... These studies have mentioned the theoretical subjects of

¹ General Department of Vietnam Customs.

post-clearance audit such as: concepts of post-clearance audit, objectives of post-clearance audit, the role of post-clearance audit in modern customs management; and at the same time they point out and analyze the characteristics, content and process of post-clearance audit. The studies also discussed the requirements for post-clearance audit and the factors affecting post-clearance audit.

In the field of efficiency and financial efficiency of post-clearance audit, there are also several studies which have approached and given some views about efficiency in general as well as efficiency of post-clearance audit in particular, which refers to the concept of efficiency, points out the influencing factors. At the same time, these research have presented some reasonable methods of efficiency assessment and carried out the evaluation of the efficiency of public spending and customs administration activities. Some typical studies and research could be mentioned as: ASEAN customs capacity building working group (2011), *Compilation of Key Performance Indicators of Customs Services (KPIs)*, *Strategic Plan of Customs Development on Customs Reforms and Modernization*; D. Sagareva (2013), *Features of the post clearance audit in Ukraine*; Economic and Financial Affairs (2008), *The effectiveness and efficiency of public spending*; Robert Ireland, Thomas Cantens and Tadashi Yasui (2011), *An Overview of Performance Measurement in Customs Administrations*; etc...

III. RESEARCH RESULTS

1. The concept of financial efficiency in post-clearance audit

“Financial efficiency of post-clearance audit” can be understood as the relationship between the results achieved through the post-clearance audit and the costs and resources used to serve the PCA activities, expressed in money or in other forms of value.

Accordingly, if the resources spent on post-clearance audit activities remain constant, the greater the results obtained from post-clearance audits, the higher the financial efficiency of post-clearance audit will be and vice versa, the smaller the results obtained from post-clearance audit, the lower the financial efficiency in post-clearance audit will be.

However, the results obtained here are not merely the state budget revenue via each post-clearance audit. State budget revenue from each post-clearance audit or each period/cycle of post-clearance audit is just one of the specific indicators showing the results of post-clearance audit. Financial efficiency should be approached on the perspective of effective state management of customs, not only in terms of how much money is collected from that activity. This is not like a profit-making business like businesses. Stemming from the nature and characteristics of post-clearance audit, financial efficiency of post-clearance audit is approached in this thesis as follows:

Firstly, resources spent on post-clearance inspection audit. Resources include three factors: human, financial, material. Human resources are resources from customs officers to perform post-clearance audit in the customs system. Financial resources are expenses spent on carrying out post-clearance audit activities, specifically shown in state budget expenditures for post-clearance audit. Material resources are physical foundations and equipment for post-clearance audit.

Secondly, the results obtained from the post-clearance audit. The results here are shown in: (i) the amount of tax arrears and the amount of fines for administrative violations collected from the post-clearance audit; (ii) the sense of compliance with the law of post-clearance audit subjects and related subjects; (iii) the effect of state management in the field of customs.

2. Factors affecting financial efficiency of post-clearance audit

Post-clearance audit is an important step in the process of state management of export and import goods. It is in the close relationship between customs authorities, import and export enterprises and other specialized agencies. Therefore, the financial efficiency of post - clearance audit is also affected by many factors, including the following subjective and objective factors:

2.1. Subjective factors

Firstly, Post-Clearance Audit Model

Post-clearance audit model includes organizational model and business model. The organizational model consists of the organizational structure, personnel, and inter-relationships between departments. Post-clearance audit includes many steps associated with each appropriate department, thus a good organizational model helps this chain of activities to be highly specialized, which improves work efficiency, thereby improving high capacity for post-clearance audit. At the same time, a reasonable and lean organizational model will contribute to reducing resources and costs for post-clearance audit activities, thereby improving financial efficiency of post-clearance audit. The business model includes input (audit object), process, output (assessment of tax arrears and compliance level) and supporting tools. In the business model, the most important step is to select the objects to audit. The selection of audit objects is performed in steps, such as making records of potential audit objects, assessing risks and identifying audit objects. Making records step is done through activities of collecting, classifying and analyzing information to assess the risk level of potential audit subjects. The result is a data system that full of information about potential audit subjects. In addition to the selection of objects to be audited, the rate of selection of objects for audit also greatly affects the financial efficiency of post-clearance audit. The rate of selection of subjects for audit is based on risk assessment criteria, of which the most important ones are import, export turnover and payable tax amount.

Secondly, the professional capacity and skills of post-clearance audit officers.

In the field of post-clearance audit, customs officers must have general and in-depth knowledge and skills related to many fields such as: (i) customs valuation, origin of goods, goods classification and applying the HS codes; (ii) Knowledge of accounting and auditing as well as skills in inspecting accounting books and financial statements; (iii) Having the ability to use and apply information technology to perform audit on the enterprise's computer system; (iv) be able to use foreign languages to understand the content of commercial correspondence and other documents related to import and export transactions. Therefore, the human resource factor has a great impact on financial efficiency of post-clearance audit, especially in modern customs management, which requires increasingly high quality of post-clearance audit officers to commensurate with the increase in the number and complexity of post-clearance audits.

Thirdly, Methods and techniques for performing post-clearance audit

Post-clearance audit methods and techniques are measures and tricks used in the post-clearance audit by customs authorities on the basis of the content of post-clearance audit in order to fulfill the audit purposes. Post-clearance audit methods and techniques are one of the factors that directly affect financial efficiency of post-clearance audit. Modern and appropriate inspection methods and techniques will help to reduce the time and cost of post-clearance audit activities, thereby improving

financial efficiency of post-clearance audit. Because the nature of the post-clearance audit is a customs audit, the post-clearance audit process is essentially the process of applying technical and professional methods to specific audits in order to collect sufficient and appropriate audit evidence as a basis for the assessment of the audited subjects. Through information analysis on the basis of applying risk management and compliance management, post-clearance audit officers can select enterprises, fields and types of import and export with high risk level, thereby focusing on examining those businesses, fields and types. This not only contributes to reducing costs and time, but also significantly improves financial efficiency of each post-clearance audit. At the same time, while conducting post-clearance audits, on the basis of developing and applying new inspection methods and techniques in terms of information analysis, pre-audit survey techniques, checking customs documents techniques, checking bank documents techniques, checking accounting books techniques combined with the application of information technology, customs officers can reduce time, effort, therefore improve audit efficiency. Besides, the method of working with enterprises will improve the spirit of cooperation of enterprises, thus greatly affecting the financial efficiency of post-clearance audit.

Fourthly, Facilities and application of information technology

Adequate facilities create a professional, efficient and convenient working environment for customs officers, which improves the financial efficiency of post-clearance audit. In addition, the application of risk management techniques on the basis of modern information technology is the key point of a modern customs inspection model. The application of information technology in the post-clearance audit process helps customs officers to search for data and documents accurately, completely and effectively. At the same time, the application of information technology will help customs officers analyze the information and data quickly and accurately, contributing to shortening the time for post-clearance audit, reducing costs incurred during the audits.

Fifthly, Spending norm for post-clearance audit activities

Spending norms are necessary costs such as materials, labor or construction machinery to complete a certain amount of work or project.

The spending norms for post-clearance audit are the necessary costs for post-clearance audit activities. This expenditure norm is shown specifically in the level of business expenses for post-clearance audit officers, the level of rewards for post-clearance audit officers who perform their duties well.

The spending norm for post-clearance inspection is also one of the factors affecting financial efficiency of post-clearance audit. If the level of business expenses for post-clearance audits is satisfactory and appropriate, it will create favorable conditions for officers to perform their duties well. If the level of reward is satisfactory with the achievements and commensurate with the efforts that the post-clearance audit officers have spent, it is a motivation for them to complete their tasks better, more effectively; and their voluntary dedication will increase.

2.1. Objective factors

In addition to subjective factors, financial efficiency of post-clearance audit is also influenced by objective factors. These factors include:

Firstly, the system of policies and laws

The policy and law system is the legal environment for post-clearance audit activities, it includes international regulations (conventions, treaties, bilateral and multilateral agreements) and national regulations (laws, decrees and circulars). The level of completeness, transparency, consistency,

synchronization and stability of the policy and legal system will create an equal and fair competitive environment for businesses and protect those doing genuine business. The level of transparency, consistency, synchronization and stability of the policy and legal system is also one of the important prerequisites to ensure the compliance of enterprises. The higher the completeness, transparency and stability of the legal document system, the greater the efficiency of post-clearance audit, or vice versa, the lack of publicity and transparency in the legal document system will make it difficult for customs officers to apply and implement, which leads to low efficiency in implementation. Accordingly, policies and laws will affect the quality and efficiency of post-clearance audit. In addition, any small changes in policy or law will also affect the content, scope and methods of auditing, thus directly affecting the financial efficiency of the post-clearance audit.

Secondly, the sense of compliance with the law and the awareness of enterprises about post-clearance audit. Subjects of post-clearance audit are enterprises engaged in export and import activities and related entities (third parties) such as banks, customs brokers, domestic buyers, etc. Therefore, the sense of law compliance of enterprises greatly affects the financial efficiency of post-clearance audit. If the compliance with the regulations is high, businesses are willing to cooperate with customs authorities in providing documents as well as accountability during post-clearance audit, thereby shortening time and pressure for the post-clearance audit force. In addition, a full and clear awareness of the meaning and importance of post-clearance audit for businesses will have a significant impact on the implementation of post-clearance audit, especially when performing post-clearance audit at the enterprise's headquarters. It can be said that the sense of compliance with the law and the awareness of enterprises about post-clearance audit is the basis and a good foundation for financial efficiency of post-clearance audit.

Thirdly, Transparency of the accounting system and financial statements of the enterprises

To carry out post-clearance audit, customs authorities use many different tools and measures, but one of the effective tools for post-clearance audit are accounting and auditing tools. Through the post-clearance audit, the customs officers can obtain quite enough information about the transactions which are reflected in the accounting books and financial statements of enterprises. This shows that the use of accounting and auditing tools in post-clearance audit is indispensable, so some countries call post-clearance audit a customs audit or a customs inspection on an audit basis. Especially when the traditional tools that customs often use to control the movement of goods, such as registration/notification of the use of raw materials, and contract liquidity have been replaced by submit settlement report to the customs authority according to the principle of "import, export, inventory". The transparency of the accounting system, the financial statements of the enterprise - important internal management tools of the enterprise, will greatly affect the financial efficiency of post-clearance audit. The effectiveness of post-clearance audit depends greatly on skills in using accounting and auditing tools in post-clearance audit. Therefore, if the enterprise's accounting and financial reporting system ensures transparency, it will make it easier for the customs authorities to access internal information of the enterprise, thereby post-clearance audit will achieve higher efficiency; and violation detection will be more accurate and violation handling will be easier.

Fourthly, the diversified development and extensive integration of economic relations. The fact shows that as economic relations are increasingly diversified and integrated, along with it are acts of tax evasion and commercial fraud becoming more and more sophisticated; the scale and

scope of frauds is also broader. This directly affects the financial efficiency of post-clearance audit because the cost, human resources, auditing time, number of audits and tax collected are also set in the newer context and situation. This is also a big challenge when calculating and measuring financial efficiency of post-clearance audit.

3. MODEL OF THE FACTORS AFFECTING FINANCIAL EFFICIENCY OF POST-CLEARANCE AUDIT

The objective of this content is to evaluate some factors affecting financial efficiency of post-clearance audit based on the survey statistics from the customs officers who carry out post-clearance audit at the Post-Clearance Audit Department, Hanoi Customs Department, Ho Chi Minh City Customs Department and Hai Phong Customs Department. This assessment helps to identify which factors affect financial efficiency of post-clearance audit, how those factors affect as well as the importance of each influencing factor. Thereby, proposing appropriate measures to improve financial efficiency of post-clearance audit.

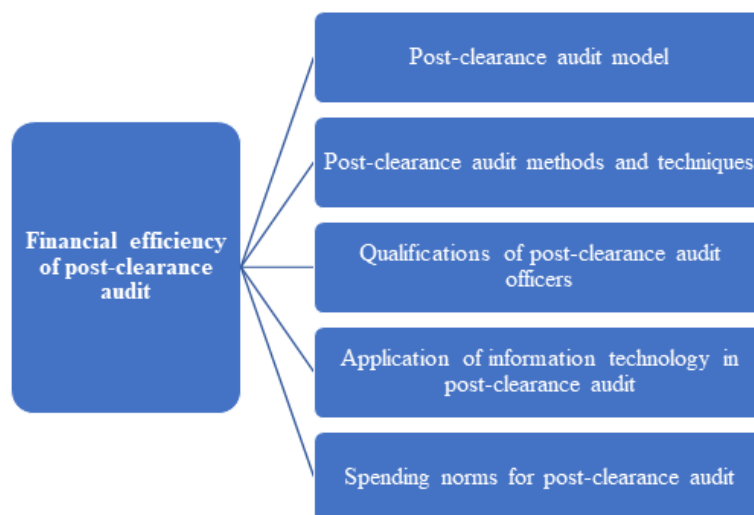
The data collection tool is a survey questionnaire (details in the Appendix). In the study, the author used Likert scale (from 1-5) to measure the factors. Specific observed variables are measured using a 5-point Likert scale, from level 1 = Totally disagree to level 5= Totally agree.

The questionnaire was designed and sent in hard copy to the customs officers of the 04 Customs Departments mentioned above. The time of the survey is July 2021. The the number of valid questionnaires collected are 219 questionnaires that have been entered into an Excel spreadsheet. Collected samples were classified according to groups by descriptive statistics techniques and using the statistical software SPSS 25.

Tác giả đánh giá các nhân tố tác động đến hiệu quả tài chính trong kiểm tra sau thông quan thông qua mô hình dưới đây:

The author evaluates the factors affecting financial efficiency of the post-clearance audit through the following model:

Figure 1. Model of factors affecting financial efficiency of post-clearance audit



Evaluate the reliability of the scale

The scale is tested using Cronbach's Alpha reliability coefficient, the results are as follows: The research model includes 5 factors with 21 observed variables of independent variables. After testing the official scale, the coefficients of Cronbach's Alpha of the total variables are all greater

than 0.6 (generally accepted level). The correlation coefficients of the total variable and the component variables are all greater than 0.3. Therefore, these scales achieve reliability.

EFA analysis

Rotated Component Matrix^a

	Component			
	1	2	3	4
Q17		0.632		
Q18		0.728		
Q20	0.675			
Q21	0.786			
Q22	0.683			
Q23		0.662		
Q24		0.565		
Q25		0.599		
Q27	0.718			
Q28	0.779			
Q29				0.871
Q30				0.809
Q32	0.785			
Q33	0.602			
Q34	0.642			
Q35	0.683			
Q36	0.715			
Q37		0.549		
Q39			0.758	
Q40			0.808	
Q41			0.545	

The results of the rotation matrix show that 21 observed variables are grouped into 4 factors, all observed variables have Factor Loading coefficients greater than 0.5.

The results of EFA analysis of new groups of factors are:

Group 1 includes factors Q20, Q21, Q22, Q27, Q28, Q32, Q33, Q34, Q35, Q36 (10 variables), denoted by X1;

Group 2 includes factors Q17, Q18, Q23, Q24, Q25, Q37 (6 variables), denoted by X2;

Group 3 includes factors Q39, Q40, Q41 (3 variables), denoted by X3;

Group 4 includes factors Q29, Q30 (2 variables), denoted by X4;

Multivariate linear regression analysis

Theoretically, it is known that the following factors: Post-clearance audit model, Post-clearance audit methods and techniques, Qualification of post-clearance audit officers, Application of information technology in post-clearance audit, Spending norms for post-clearance audit have an

impact on financial efficiency of post-clearance audit. In other words, we consider them as causal variables (independent variables) and Financial efficiency of post-clearance audit is the outcome variable (dependent variable). To test this relationship, we use multiple linear regression analysis with the ordinary least squares methods. The analysis results from the research data are as follows:

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.616 ^a	.380	.368	.49212	1.782
a. Predictors: (Constant), X4, X2, X3, X1					
b. Dependent Variable: Y					

In the above table, the adjusted R squared value is 0.368, which means that the linear regression model fits the data set at about 36.8%. This also means that 36.8% of the variation in financial efficiency of the post-clearance audit is generally explained by the independent variables in the model. Although the adjusted R squared value is not high, it is still reliable and acceptable for analysis and evaluation.

Durbin-Watson coefficient = 1.782 is in the range of 1.5 to 2.5, so there is no autocorrelation occurs.

ANOVA ^a						
	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	31.735	4	7.934	32.753	.000 ^b
	Residual	51.837	214	.242		
	Total	83.572	218			
a. Dependent Variable: Y						
b. Predictors: (Constant), X4, X3, X2, X1						

In the above table, we see that the Sig. is equal to $0.000 < 0.05$, thus the multiple linear regression model is suitable for the data set and can be used.

Coefficients ^a								
Model	B	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		Std. Error	Beta				VIF	
1	(Constant)	.390	.341		1.141	.255		
	X1	.243	.108	.184	2.248	.026	.433	2.312
	X2	.573	.099	.464	5.798	.000	.452	2.214
	X3	.001	.055	.001	.017	.986	.711	1.406
	X4	.108	.053	.120	2.018	.045	.878	1.138
a. Dependent Variable: Y								

In the table above, it can be seen that the VIF coefficients of the independent variables are all less than 10, so there is no multicollinearity. Factor X3 was excluded from the regression analysis model because its Sig. > 0.05 . The remaining factors X1, X2, X4 in the model are all suitable at a relatively small Sig. level (< 0.05) and do not violate the phenomenon of multicollinearity.

The regression equation representing the relationship between the variables can be rewritten as below:

$$Y = 0.243 X1 + 0.573 X2 + 0.108 X4 + e_i$$

With an adjusted R square of 0.368, the model conclusions are as follows: the factors X1, X2, X4 have statistical significance over 95% and explain 36.8% of the variation of the dependent variable Y. The remain 63.2% of the variation due to the factors outside the this model affects the change of Y.

Table 1. The effects of factors Xi on Y are as follows

Variables	Level of impact	% impact on Y	Order	Explain the impact
Y				
X1	0.184	23.96%	Second	When X1 changes by 1 unit, Y changes covariably by 0.243 units assuming other factors remain constant
X2	0.464	60.42%	First	When X2 changes by 1 unit, Y changes covariably by 0.573 units assuming other factors remain constant
X4	0.12	15.63%	Third	When X1 changes by 1 unit, Y changes covariably by 0.108 units assuming other factors remain constant

Thus, through the analysis of the regression model, we can see the influencing factors as well as the level of impact of these factors on financial efficiency of the post-clearance audit. Specifically, along all the factors affecting financial efficiency of post-clearance audit, post-clearance audit model, application of the compliance management method in the post-clearance audit and enhancing the partnership between customs and business have the strongest impacts on financial efficiency of post-clearance audit. With a lower level of influence, the following factors also have significant impacts on financial efficiency of post-clearance audit: Post-clearance audit methods and techniques; Qualifications and skills of post-clearance audit officers; The application of information technology in post-clearance audit. Meanwhile, the seniority of customs officers as well as the qualifications and seniority of the audit team leader has the smallest impact on financial efficiency of post-clearance audit. Along with that, we also see that the factor of spending norms for post-clearance audit does not have much impact on financial efficiency of post-clearance audit.

At the same time, the regression model also shows that the factors mentioned above can only explain 36.8% of the impact on financial efficiency of post-clearance audit, the remaining 63.2% are due to the other factors outside the model. These factors can be: The compliance level of audited enterprises; The awareness of customs law and tax law of audited enterprises; The legal policies and regulations about post-clearance audit; Physical and technical infrastructure for post-clearance audit; The impact of the socio-economic context on the import and export activities of enterprises as well as the post-clearance audit....

4. CONCLUSION

In summary, the study and assessment of the impact of factors on financial efficiency of post-clearance audit helps to rank the impact level of the factors from high to low. On that basis, the author could propose directions as well as solutions to improve financial efficiency in post-clearance inspection, specifically:

Firstly, the solution focuses on improving the observed variables of X2 first, which are the the post-clearance audit model, applying the compliance management method in post-clearance audit and enhancing customs – enterprises relationship.

Secondly, the solutions to improve the observed variables of X1, focusing on the following contents: Methods and techniques for performing post-clearance audit; Qualifications and skills of post-clearance audit officers; Application of information technology in post-clearance audit.

The third is the solutions to improve the observed variables of X4, focusing on the seniority of post-clearance audit officers and the qualifications of post-clearance audit team leaders.

The fourth is a group of solutions to improve financial efficiency of post-clearance audit through influencing factors outside the analyzed model such as the regulations about post-clearance audit, the compliance level of audited enterprises, the impact of socio-economic context, etc...

ANNEX

SURVEY FORM

ASSESSMENT OF FACTORS AFFECTING FINANCIAL EFFICIENCY OF POST-CLEARANCE AUDIT IN VIETNAM

Please answer according to your level of agreement with the statements below by circling the corresponding levels (the higher the agreement, the higher the score):

1. *Totally disagree*; 2. *Disagree for the most part*; 3. *Agree about half of the statements*; 4. *Agree for the most part*; 5. *Totally agree*.

No.	Contents of questions	Level of agreement				
I. Post-clearance audit model						
Q16	There is a close connection between the post-clearance audit model and financial efficiency of post-clearance audit	1	2	3	4	5
Q17	Reasonable and lean organization model will contribute to reducing resources and costs for the operation of post-clearance audit.	1	2	3	4	5
Q17	The organizational model of the post-clearance audit force at the moment is lean, reasonable, and ensure the effective implementation of post-clearance audit.	1	2	3	4	5
II. Post-clearance audit methods and techniques						
Q19	There is a close connection between Post-clearance audit methods and techniques and financial efficiency of post-clearance audit	1	2	3	4	5
Q20	Modern and appropriate methods and techniques will reduce the time and costs of the audit activities.	1	2	3	4	5
Q21	Applying risk management method in the post-clearance audit will focus resources on auditing high-risk businesses, fields, and types of import and export.	1	2	3	4	5
Q22	While conducting the post-clearance audit, on the basis of application of new methods and techniques in terms of information analysis, pre-inspection survey techniques, customs documentation inspection techniques, checking bank documents techniques, accounting books audit techniques could reduce time, costs and improve audit efficiency.	1	2	3	4	5
Q23	Building a partnership between customs and businesses will improve cooperation of enterprises, thereby reducing compliance costs of enterprises and reducing costs of customs inspection.	1	2	3	4	5
Q24	The modern customs management method on the basis of compliance management will positively affect the classification of enterprises according to the level of compliance, the mechanism of facilitation in inspection and supervision, and the reduction of operating costs of customs management.	1	2	3	4	5

COMPANY DIVIDEND POLICY: EXPERIENCE FROM DEVELOPED NATIONS AND LESSON FOR VIETNAM

MA. Dinh Thi Len¹

Abstract: This study reviews company dividend policies in the United States, Australia, and Japan. From the findings, I offer some valuable lessons when planning dividend policy for joint-stock companies in Vietnam.

Keywords: lessons, dividend policy, developed countries, Vietnam

1. INTRODUCTION

Over the past decade, company dividend policy attracted attention of many economists and practitioners. They presented conflicting views on the policy and debates are unending around the world. This shows the complexity of theories surrounding dividend policy. Nevertheless, these theories laid the foundation and suggested the application of dividend policies for companies worldwide. Along with the development of the economy, companies constantly look for solutions to improve their dividend policy. They aim for a balance between current dividends and future growth to maximize the value of the share value of the company. To be specific:

2. IN THE UNITED STATES (US)

The United States is a developed economy, hosting powerful economic groups that have influence all over the world. Economists often use the US economy as experimental field for their research and conclusions. Therefore, studying the dividend policy of companies in the US should not to be missed.

Figure 1: Average profit after tax of US companies from 1930 - 2020

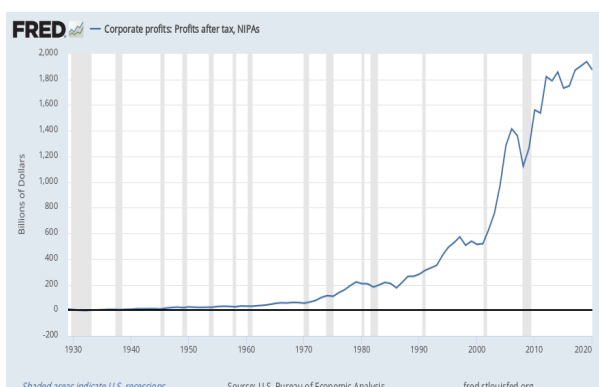
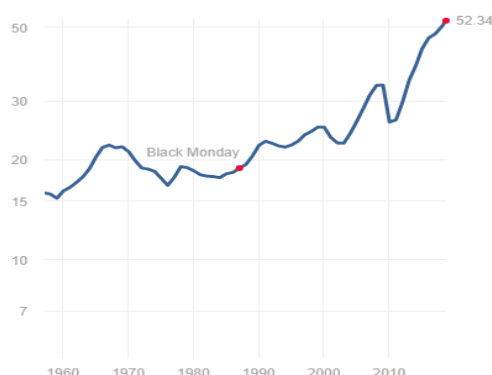


Figure 2: Dividend per share in the US 1960-2015



Nguồn: Fred Economic Data và multpl.com

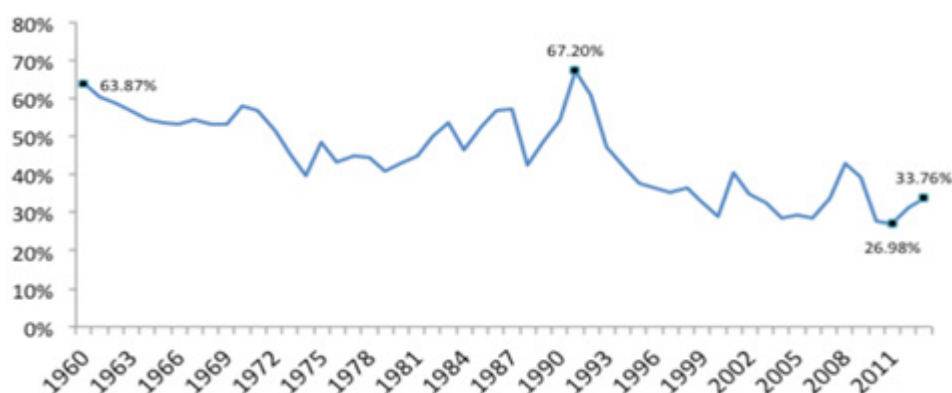
¹ Academy of Finance.

Figure 1 and Figure 2 show that the dividend policy of US companies has some notable points:

First, *dividend of a share tends to fluctuate with the profit, but the volatility of the dividend is lower than that of the profit*; ie, a dividend increase usually preceded by an increase in profits, and conversely, a dividend cut sometimes followed a decrease in profits.

Second, *in the period 1960 - 2015, dividend had a rising tendency while the dividend payout ratio had a declining trend (Figure 3)*. Specifically, dividend per share increased from \$16.52 in 1960 to \$52.34 in 2015; while dividend payout ratio in 1960 was 63.87%, reduced to 33.76% in 2015. This shows that companies in the US have a stable dividend policy and pay great attention to profit retention to create steady growth in the long run.

Figure 3: Dividend payout ratio in the US from 1960 to 2015



Source: longrundata.com

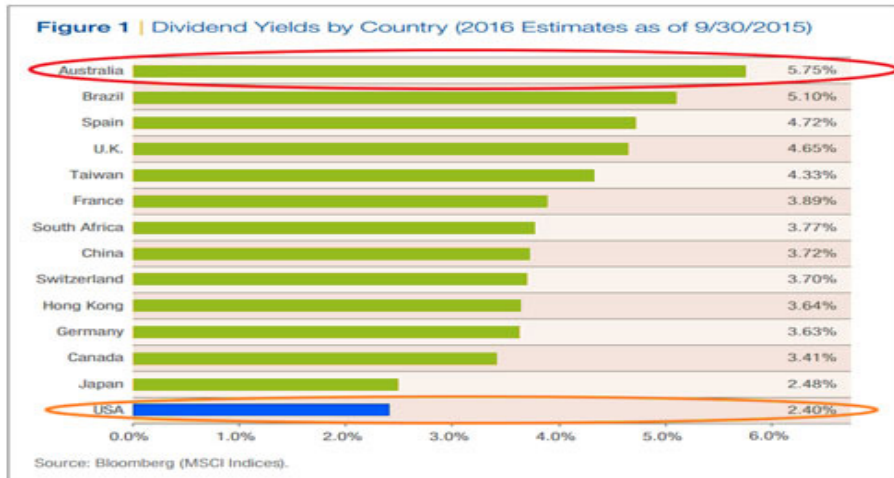
Third, *dividend per share is stable because companies rarely changed dividends*. They increased dividends when there was certainty about long-term returns. However, even when profits fell, companies avoided cutting dividends because it greatly affected the psychology of shareholders and investors in the future.

2. IN AUSTRALIA

Australia has one of the highest dividend yields and payout ratios in the world (Figures 4 and 5). During the global financial crisis 2007 – 2008, as banking systems collapsed, stocks fell, and the currency depreciated, dividend payout ratio of companies in Australia decreased and remained at the lowest level of 40%, but in 2008, this rate increased to 61% and continuously stayed at a high level for the following years. This shows that corporate managers tried to limit shareholder dividend cuts.

Unlike other countries, the Australian Government applies a tax policy that encourages companies to pay dividends in cash to shareholders and investors only have to pay tax once when receiving dividends (applied from 1987), they are subjected to personal income tax, and not corporate income tax.

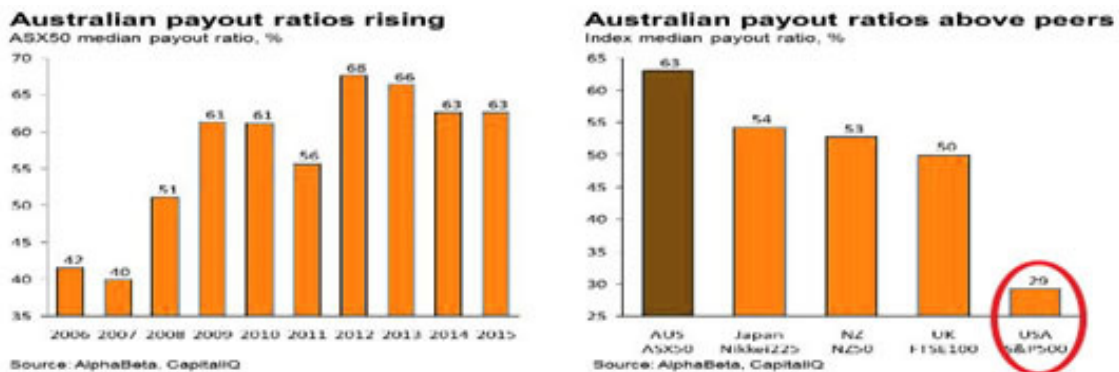
Figure 4: Average dividend yield of Australia and some countries around the world



Source: Bloomberg (MSCI Indices)

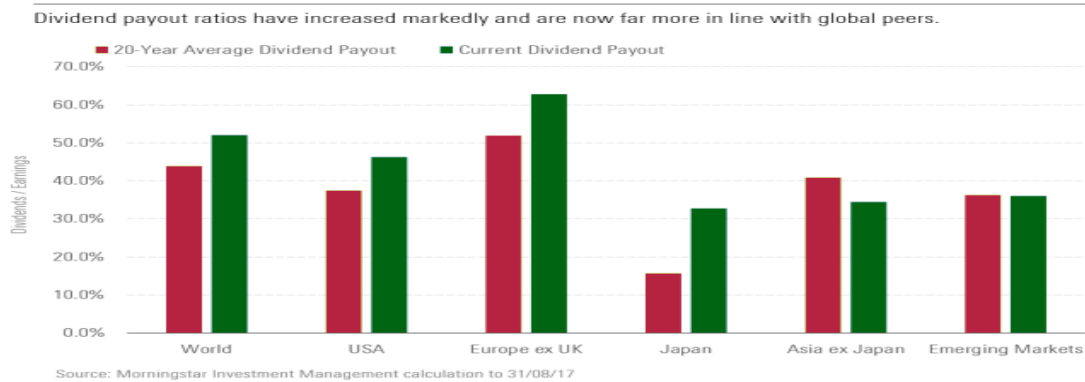
In addition, common forms of dividend distribution to shareholders of Australian businesses are cash dividends and share reinvestments. However, Australian companies prefer share buyback because this form both ensures income for shareholders and can increase share prices in the future. This form allows shareholders to reinvest their dividends in the company, thereby resolving the conflict between the company’s desire to retain profits and the shareholder’s desire to receive a payment. This form has been widely used since the late 1980s.

Figure 5: Dividend payout ratio in Australia and other countries around the world

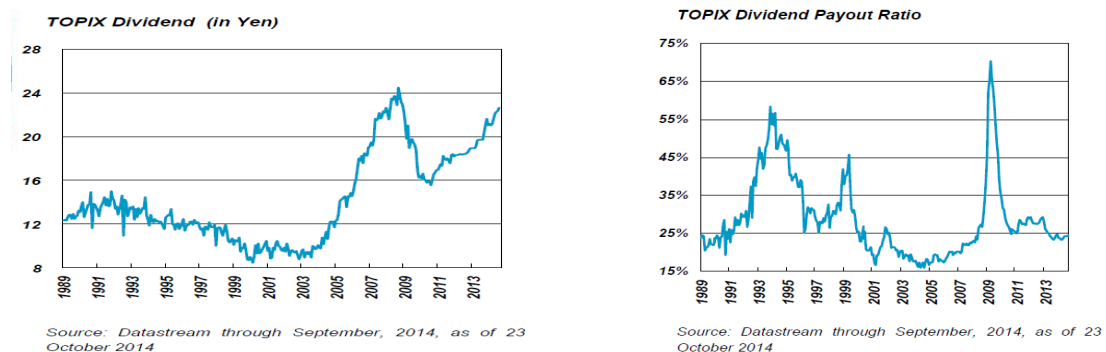


3. IN JAPAN

Compared to companies in the US, Europe, and Asia, Japanese companies pay relatively low dividends. As of August 31, 2017, the dividend payout ratio of companies in the US is about 38%; in Europe (excluding the UK) and Asia (excluding Japan), the rates are 52% and 41%, respectively, while in Japan it is only 17% (Figure 6).

Figure 6: Dividend payout ratio of Japan and some countries in the world

Since the Second World War, in Japan, cross-shareholding (interdisciplinary share ownership) appeared between companies. According to the Tokyo Stock Exchange, cross-equitization is “listed companies that hold shares of other listed companies for pure investment purposes.” This form has created large corporations with large scale and strong financial potential, but this makes companies dependent on each other. Besides, the performance of the companies is not effective due to the low independence of the board of directors. Japanese companies often have less than 10% board members from independent boards (according to ISS/Macquarie research). In contrast, companies in the US, Germany, Switzerland, and Australia typically have around 50% independent board members. In addition, many Japanese companies prefer a stable dividend policy, i.e. a dividend payout ratio based on a fixed percentage of the company’s profits. This has led to volatility in dividend payouts as earnings change. (Figure 7)

Figure 7: Dividend level and dividend payout ratio of Japanese companies from 1989 – 2013

However, in recent years, the Japanese government has begun to emphasize the importance of dividend payments, because there was an increase in dividend payments will attract more domestic and foreign investors in Japanese securities. In June 2015, the “Japanese Corporate Governance Code” was enacted to boost the economy and promote corporate governance reform. One of the main goals of this law is to promote transparent, fair, timely, and efficient decision-making by Japanese businesses. Companies are encouraged to appoint at least two independent directors, disclose the number of cross-shareholdings, and conduct a large cross-ownership check every year.

4. LESSONS FOR VIETNAM

Research on dividend policies of countries around the world shows several useful experiences that Vietnamese joint-stock companies can appreciate when making dividend policies:

Firstly, joint-stock companies with investment opportunities should pay stable dividends at a low level, which both ensures a part of shareholders' current income and provides an accumulated source for reinvestment.

Second, joint-stock companies need to avoid sudden changes in dividend levels and should maintain dividend payments according to a stable dividend model. When earnings fluctuate strongly, the company should keep dividends from being fluctuated too much. Specifically, it is not advisable to cut dividends if profits decline intermittently. Any drop in dividends is a sign of business instability and often causes stock prices to drop. The company should also not pay high dividends when there is no certainty of stable profit growth in the long term. To do that, it is necessary to have a long-term strategy and calculate the possibility of a share of earnings from which to determine a reasonable dividend.

Third, companies may consider share buybacks as a form of redistribution to shareholders instead of paying dividends. This can prevent shareholders from being taxed on income. However, to implement this method, it is necessary to base on the regulations of the State management agencies in each period.

Conclusion

Dividend policy is one of the important financial policies of joint stock companies. Learning from the experience of dividend policies of companies in some countries is very useful for Vietnamese companies to perfect their dividend policy. However, it should also be noted that each country and each business has its own characteristics that need to be carefully selected.

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DETERMINANTS OF WORKING CAPITAL MANAGEMENT EFFICIENCY: AN EMPIRICAL STUDY ON STEEL FIRMS IN VIETNAM

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Abstract: *The main objective of this research is to assess some determinants of working capital management efficiency of steel companies in Vietnam over a 10-year period from 2009 to 2018. Panel data regression has been used, as a result, there is a positive impact of economic growth, firm size, and profitability on working capital management efficiency of steel companies in Vietnam. On the contrary, tangible fixed assets proportion has a negative influence. Thus, the study suggests some policy recommendations to enhance working capital management efficiency of steel companies in Vietnam, especially in times of crisis.*

Keywords: *Working capital, ROW, economic growth, firm size, efficiency, management.*

1. INTRODUCTION

There has been a host of studies in the world as well as in Vietnam which affirm that working capital management efficiency has a robust impact on profitability of companies. Financial performance in high-efficient working capital management companies outweighs that in low-efficient working capital management ones (PwC, 2018).

Working capital is the amount of cash or cash equivalents necessary for daily operation of a business (Mann, 1918). Garcia-Teruel and Martinez-Solano (2006) define working capital as the total value of short-term assets in a firm, including: cash and cash equivalents, short-term financial investments, short-term receivables, inventories, other short-term assets. James Sagner (2011) affirms that working capital management is the art - and increasingly the science - of organizing a company's short-term resources to sustain ongoing activities, mobilize funds, and optimize liquidity.

Due to characteristics of the industry, steel companies usually have a large proportion of working capital. Working capital management efficiency, as a result, would highly influence the efficiency of total capital management and performance of a steel firm. In Vietnam, steel is the cornerstone of the economy, which is reflected by the fact that the total production value of the industry in 2016 accounted for about 5% of the country's GDP. However, working capital management efficiency of steel companies has been not only low but also unstable: return on working capital has kept decreasing, cash conversion cycle has been inclined to increase and invariably higher than the average of Vietnamese firms. This has negatively affected the efficiency of capital management and operational performance of steel enterprises in Vietnam.

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Working capital management efficiency, on the other hand, is affected by a wide variety of determinants. If those determinants can be pinpointed, especially for steel companies in Vietnam, this will help business leaders to improve the efficiency of working capital management. Thus, this research is conducted in the hope of being a contributory basic for policy makers, steel companies to manage working capital in an appropriate way.

2. LITERATURE REVIEW

There are a wide variety of determinants which affect the working capital management efficiency. Empirical and theoretical studies in the world have pointed out the subjective and objective factors affecting working capital management efficiency of enterprises. Summarizing the studies, we can see typical subjective factors such as firm size, sales growth, financial leverage, profitability, capital expenditure, cash flow, proportion of tangible fixed assets, and industry. Examples include the research of Kieschnick, LaPlante, and Moussawi (2006); Mansoori and Muhammad (2012); João Russo (2013); Zariyawati et al. (2010)... However, it is not entirely consistent with the research results of the above scholars. Specifically:

Kieschnick, LaPlante, and Moussawi (2006) studied large US corporations between 1990 and 2004. Using CCC as a proxy for working capital management efficiency, the authors pointed out positive relationship between firm size and CCC. That means the bigger the company is, the longer the number of cash conversion days will be, the less efficient use of working capital. In addition, the study also showed a negative relationship between CCC and the characteristics of business lines and the proportion of tangible fixed assets.

Ahmed Elbadry (2018) also showed similar results when finding that the size of enterprises had a positive impact on cash flow, while the proportion of tangible fixed assets had a negative impact on cash flow. The study was conducted on a sample of 138 small and medium-sized companies from Egypt between 2010 and 2013. However, unlike the research of Kieschnick, LaPlante, and Moussawi (2006), Ahmed Elbadry (2018) determined that industry of a business had a positive relationship with cash flow. In addition, this study also showed that profitability and financial leverage factors had a negative relationship with CCC.

Having different results from the above study, Mansoori and Muhammad (2012) proved a positive relationship between profitability and efficiency of using working capital in a research paper with a sample of 94 companies in Singapore over the period of 2003-2010. The authors noted that companies with high profitability often had the potential to expand commercial credit, thereby extending cash flow. In addition, the factors of cash flow and capital expenditure investment also had a negative impact on CCC.

In the above studies, the dependent variable Cash Conversion Cycle (CCC) continued to be selected by scholars as a comprehensive proxy for working capital management efficiency. However, a number of other authors also used indicators such as Working capital requirements (WCR) or Net liquidity balance (NLB) as a representative measure of working capital management efficiency, especially in studies on impact of capital expenditure on efficiency of using working capital. Typical examples include: A study of Appuhami (2008) in Thailand with a sample of 416 listed companies in the period of 2000-2015, the result: the efficiency of using working capital and capital expenditure had an inverse relationship; A study of Muhammad Ilyas (2014) in Pakistan with a sample of 109 listed companies from eight different industries in the 2006-2010 period,

showed that capital expenditure had a positive relationship with WCR, but opposite to the NLB. Unlike the results of the two studies, Assl et al. argued that there was no significant relationship between WCR, NLB and capital expenditure. The study was conducted on 132 companies in Tehran (Iran) between 2004 and 2008.

The above result was also different from Meryem Bellouma (2011) with the analysis of data from 386 small and medium-sized companies collected from the Tunisian Export Center in the period 2001-2008. The results showed that the NLB had a positive relationship, while the WCR was negatively related to the capital expenditure of companies.

Amarjit Gill (2011) used data collected from 166 listed companies in Canada from 2008 to 2010 and found the different impact of factors on the efficiency use of working capital, which was represented by WCR, between service and manufacturing sectors. Specifically, in both service and manufacturing sectors, two factors, Operating Cycle, return on assets (ROA), had a positive impact on the WCR; Meanwhile, firm size had an opposite impact on WCR. When separating each industry, then in the manufacturing sector, financial leverage was positively related to WCR. In the service sector, financial leverage has the opposite effect of WCR.

Nazir and Afza (2009) had the results of the study confirming that financial leverage had a strong negative relationship with WCR. The study was conducted with 132 manufacturing companies with 14 different industries in Pakistan between 2004 - 2007.

Regarding *objective factors* affecting the efficiency of using working capital, studies have shown that GDP had a significant impact on the efficiency of working capital use, but in different directions. Zariyawati et al. (2010) argued that GDP had a positive relationship with CCC, while Mansoori and Muhammad (2012) showed the opposite, that was GDP was in contrast to CCC. João Russo (2013) even said that there was no significant relationship between these two indicators.

Zariyawati et al. (2010) also pointed out two more objective factors that could affect the efficiency of using working capital, namely Consumer Price Index (CPI) and Inflation. Accordingly, CPI and Inflation had a negative impact on CCC variable. The study also assessed the impact of the size of board of directors of a company and percentage of independent board members on the efficiency of working capital use, but did not find any statistical significance of these factors.

3. METHODOLOGY AND DATA COLLECTION

The study uses STATA software to analyze and test the panel data regression model. For panel data, regression can be carried out by 3 methods: (1) Pooled Ordinary Least Square - Pool OLS; (2) Fixed Effects Model - FEM; (3) Random Effects Model - REM.

The research collects secondary data from the audited consolidated financial statements of 26 steel companies in the sample, including those listed on the Hanoi Stock Exchange (HNX) and the Ho Chi Minh Stock Exchange (HOSE), as well as other large enterprises in the industry. The research period is 10 years between 2009 and 2018, ensuring data transparency and continuity. Each variable collected exists as two-way panel data over time (10 years) and by firm (26 firms), creating a panel of 260 observations.

26 firms were divided into different groups based on Business Sector - Key Products.

Figure 1: Groups of firms in the sample, based on Business Sector - Key Products

No.	Business Sector - Key Products	Number of Firm	Proportion within the sample
	Construction Steel Production Firms	10	38%
	Galvanized Steel - Steel Pipes Firms	6	23%
	Stainless Steel Production Firms	3	12%
	Steel Trading Firms	7	27%
	Total	26	100%

4. VARIABLES AND HYPOTHESIS

Variables have been chosen according to previous studies of authors in the world and Vietnam on working capital management efficiency. In addition, the way to choose the dependent variable is also based on the concept of working capital efficiency and characteristics of steel industry. Hence, variables are illustrated as follows:

Dependent variable:

One of the indicators to measure working capital management efficiency that has been used by many studies is the cash conversion cycle (CCC) (Verlyn and Eugene, 1980; Eugene and Joel, 2007; Firer et al., 2008). However, when approaching working capital management efficiency with the ultimate goal of maximizing profitability with minimum costs, the variable CCC does not fully show this meaning. Meanwhile, the Return on Working capital (ROW) could reflect the aggregate efficiency of working capital management. ROW indicates how much working capital is needed to generate a profit, so the higher the ROW, the greater the profitability of working capital, the better working capital management efficiency and vice versa. With that in mind, in this study, ROW is used as a proxy for working capital management efficiency.

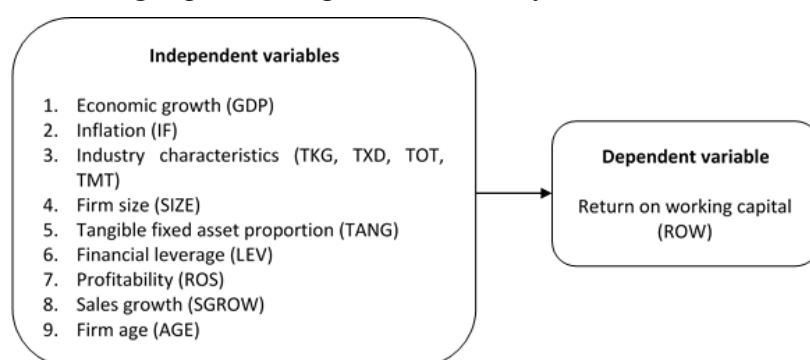


Figure 2: Variables in the model

Independent variables:

The independent variables represent the determinants which may affect working capital management efficiency of enterprises in the steel industry. There are objective determinants and subjective determinants. In which, objective determinants include: Economic growth, inflation, industry characteristics. Subjective determinants include: firm size, tangible fixed asset proportion, financial leverage, profitability, sales growth, and firm age.

- *Economic growth (GDP)*: Economic growth is the increase in gross domestic product (GDP) or gross national product (GNP) or the size of national output per capita (PCI) over a given period

of time. Most studies show a positive relationship between economic growth and profitability of enterprises. However, with the effective use of physical resources, scholars around the world have different results for each period of economic development, or with different research samples in different countries. With steel enterprises in Vietnam, the author hypothesizes:

H1: There is a positive impact of economic growth on working capital management efficiency of steel firms in Vietnam.

- *Inflation (IF)*: Inflation is measured by tracking the changes in prices of a large number of goods and services in an economy, typically based on the annual consumer price index (CPI). Zariyawati et al. (2010) and Pambayun et al. (2019) both used CPI as a proxy for inflation when assessing the determinants affecting the efficiency of working capital management. Zariyawati et al. (2010) suggested that when inflation increased, the efficiency of working capital management also increased, while Pambayun et al (2019) showed the opposite result. The author hypothesizes for Vietnamese steel enterprises as follows:

H2: There is a negative impact of inflation on working capital management efficiency of steel firms in Vietnam.

- *Industry characteristics (Dummy variables TKG, TXD, TOT, TMT)*: Industry characteristics make many differences in the scale of the working capital of enterprises. Steel manufacturing enterprises will have much larger inventory capital than steel trading enterprises, leading to different ways of consuming inventory. Meanwhile, that steel trading enterprises have a loose or tight credit policy is much different from steel manufacturers. Even in steel manufacturing enterprises, enterprises producing Construction Steel, Galvanized Steel - Steel Pipes, Stainless Steel will also have different markets, customers, and different scales of working capital. This leads to different policies on working capital, resulting in different efficiency of working capital management. To assess the impact of industry characteristics on the efficiency of working capital management, the author will use 4 dummy variables corresponding to 4 groups of steel enterprises classified by business sector - key products, then compare working capital management efficiency of those groups. Specifically, the variable TKG represents the Stainless Steel group; variable TXD represents construction steel group; TOT variable represents the group of Galvanized Steel - Steel pipes; The variable TMT represents the Steel Trading group. In which, the variable TKG is a dummy variable with the base property. The statistically significant relationship of ROW between groups will demonstrate the different effects of industry characteristics on working capital management efficiency of enterprises. Therefore, the author hypothesizes:

H3: Working capital management efficiency of Construction Steel firms is higher than that of Stainless Steel firms.

H4: Working capital management efficiency of Galvanized Steel - Steel pipes firms is higher than that of Stainless Steel firms.

H5: Working capital management efficiency of Steel Trading firms is higher than that of Stainless Steel firms.

- *Firm Size (SIZE)*: Firm size is a measure of the size of the business, it is expressed in the size of assets, total revenue, equity or human resources... To reflect the size of the enterprise, Charitou et al. (2010) used total revenue, while Amarjit Gill (2011) and Ahmed Elbadry (2018) used total

assets. Within the scope of this research, the criterion included to represent the size of enterprises is total net revenue. The author hypothesizes:

H6: There is a positive impact of firm size on working capital management efficiency of steel firms in Vietnam.

- *Financial leverage (LEV)*: The level of financial leverage in enterprises is shown in the debt ratio. A company with a high debt ratio shows that it has a high level of financial leverage and vice versa. Many scholars have studied and shown the negative relationship between financial leverage and the efficiency of working capital management (Chiou et al., 2006; Rahman and Nasr, 2007; S. Baños-Caballero et al., 2010). Nazir and Afza (2009) also confirmed that financial leverage has a strong negative relationship with the efficiency of working capital management. However, research by Amarjit Gill (2011) has shown that financial leverage has a positive relationship with the requirement for working capital in manufacturing firms while in the service industry it has a negative effect. To test at enterprises in the steel industry in Vietnam, the author, therefore, hypothesizes:

H7: There is a negative impact of financial leverage on working capital management efficiency of steel firms in Vietnam.

- *Tangible fixed asset proportion (TANG)*: The proportion of tangible fixed assets is considered as an indicator showing the asset structure of an enterprise. This indicator is determined by the value of tangible fixed assets over the total value of assets. Kieschnick et al. (2006) and Ahmed Elbadry (2018) agrees that the proportion of tangible fixed assets has a negative impact on the cash conversion cycle (CCC) as a proxy for the efficiency of working capital management. And João Russo (2013) has the opposite view when he finds that these two factors have the same impact on each other. That is, the higher the proportion of tangible fixed assets, the higher the number of days of the CCC, leading to a decrease in the efficiency of using working capital. The hypothesis is put forward as follows:

H8: There is a negative impact of tangible fixed asset proportion on working capital management efficiency of steel firms in Vietnam.

- *Profitability (ROS)*: Profitability of an enterprise can be specifically calculated through 3 basic criteria: return on sales (ROS), return on assets (ROA), return on equity (ROE). Most of the studies in the world and in Vietnam have used ROA and ROE as variables representing the profitability of enterprises (Charitou et al., 2010; Gill, Biger and Mathur (2010); Dang Phuong Mai, 2016...). However, with the characteristics of Vietnam's steel industry during the research period, the return on sales (ROS) has a great impact on the efficiency of using working capital of steel enterprises. Therefore, within the scope of this research, the author will use the ROS variable as a proxy for profitability of enterprises. The hypothesis is:

H9: There is a positive impact of profitability on working capital management efficiency of steel firms in Vietnam.

- *Sales growth (SGROW)*: Sales are the total value of economic benefits earned by an enterprise in an accounting period, arising from normal business and production operation, contributing to the development of owner's equity. Sales growth is the rate of increase in sales of the previous year compared to the following year. Charitou et al (2010) and Makori and Jagongo (2013) both used this variable to evaluate the relationship with profitability and efficiency of working capital management. Therefore, the author hypothesizes:

H10: There is a positive impact of sales growth on working capital management efficiency of steel firms in Vietnam.

- *Firm age (AGE)*: A firm age is calculated by the number of years since the establishment of the enterprise, showing the experience in corporate governance in general and capital management in particular, including working capital. There are two research results that are shown to be opposite when comparing the relationship between the efficiency of working capital management and the age of enterprises: (1) Enterprises with short operating seniority are often cautious in capital management in general and has good growth potential, so the efficiency of working capital management is higher than that of established enterprises; (2) On the contrary, enterprises that have been in operation for many years often have more experience in capital management, so the efficiency of working capital management will be higher. For Vietnamese steel enterprises, the author hypothesizes:

H11: There is a positive impact of firm age on working capital management efficiency of steel firms in Vietnam.

Regression analysis using panel data helps the author to have more information in the study population, more variability, less multicollinearity between variables, more degrees of freedom, and higher efficiency. Inheriting previous studies, the author uses the Ordinary Least Squares (OLS) model and the Fixed Effect model. Accordingly, the regression model is written as follows:

$$\begin{aligned} ROW_{i,t} = & \beta_0 + \beta_1 GDP_{i,t-1} + \beta_2 IF_{i,t-1} + \beta_3 TXD_{i,t-1} + \beta_4 TOT_{i,t-1} + \beta_5 TMT_{i,t-1} \\ & + \beta_6 SIZE_{i,t-1} + \beta_7 LEV_{i,t-1} + \beta_8 TANG_{i,t-1} + \beta_9 ROS_{t-1} + \beta_{10} SGROW_{t-1} \\ & + \beta_{11} AGE_{t-1} + \varepsilon_t + F_i + Y_t \end{aligned}$$

5. DESCRIPTIVE STATISTICS AND CORRELATION ANALYSIS

The characteristics of the research variables are shown in Figure 3, thereby providing information including mean, maximum, minimum and standard deviation, coefficient of variation of independent variables in the model.

Figure 3: Descriptive statistics results

VARIABLES	(1) N	(2) mean	(3) sd	(4) p25	(5) p50	(6) p75
GDP	260	6.149	0.601	5.422	6.226	6.679
IF	260	6.617	4.740	3.520	5.651	8.862
SIZE	260	6.146	1.223	5.568	6.003	6.915
LEV	260	0.653	0.147	0.559	0.655	0.748
TANG	260	0.251	0.173	0.128	0.198	0.348
ROS	260	0.022	0.044	0.003	0.014	0.038
SGROW	260	0.219	0.834	0.256	0.000	0.433
AGE	260	11.846	2.870	10.000	11.000	14.000
ROW	260	0.052	0.152	0.012	0.044	0.1

The descriptive statistics above shows the average ROW of steel firms in the sample is 5.2% with a standard deviation of 15.2%. This means that the value of ROW can deviate from the mean on both sides by 15.2%. Enterprises in the sample have the largest ROW value of 10% and the smallest value of 1.2%. Relatively strong fluctuation in ROW shows the difference in efficiency of working capital management in different periods.

The average value of firm size is 6.146 with a standard deviation of 1.2, showing a rather big difference in terms of size among enterprises in the sample. This is because some enterprises in the steel industry have very large scale such as Hoa Phat, Hoa Sen, Pomina... while many other steel enterprises have small capital scale.

Before conducting the regression, the correlation relationship between the variables in the model was determined to predict the impact of determinants on the efficiency of working capital. The correlation coefficients among the variables are shown as follows:

Figure 4: Matrix of correlation coefficients between variables

	ROW	GDP	IF	SIZE	TANG	LEV	ROS	SGROW	AGE
ROW	1								
GDP	0.0636*	1							
IF	-0.0280	-0.304***	1						
SIZE	0.132*	0.121	-0.0927	1					
TANG	-0.198**	-0.172**	0.0411	0.255***	1				
LEV	-0.440***	-0.0755	-0.0018	0.162**	0.360***	1			
ROS	0.818***	0.0374	-0.0264	0.297***	-0.111	-0.423***	1		
SGROW	0.0957	0.271***	-0.107	0.121	0.0894	0.139*	0.151*	1	
AGE	0.00610	0.00453	-0.0024	-0.0467	-0.32***	0.0837	0.0091	0.0296	1

In which, *, **, *** represent the significance level of 10%, 5%, 1%, respectively.

The results of the correlation relationship among the variables show that Economic Growth, Firm Size and Profitability are variables that have a positive relationship with ROW. The proportion of tangible fixed assets and financial leverage have a strong negative relationship with ROW.

6. EMPIRICAL RESULTS

We have the results according to 4 models, of which: Model (1) no effects; Model (2) Year Fixed Effects; Model (3) Firm Fixed Effects and Year Fixed Effects; Model (4) only Random Effects. We can see the impact of factors of economic growth, inflation, industry characteristics, firm size, proportion of tangible fixed assets, profitability, financial leverage, sales growth and firm age on the working capital management efficiency. In which, the symbols *, **, *** represent the confidence level at 10%, 5% and 1%, respectively. The T-Test is reported in brackets.

Figure 5: Estimation results of the regression model

VARIABLES	(1)	(2)	(3)	(4)
	ROW	ROW	ROW	ROW
GDP	0.00003*	0.00003**	0.00003*	0.00003*
	(-0.36)	(-0.000)	(-0.53)	(-0.36)
IF	-0.001	-0.001	-0.001	-0.001
	(-0.38)	(-0.32)	(-0.16)	(-0.38)
TXD	0.056***	0.056***	0.056***	0.056***
	(-2.97)	(-2.95)	(-2.58)	(-2.97)
TOT	0.037*	0.037*	0.037*	0.037*
	(-1.66)	(-1.66)	(-1.76)	(-1.66)

TMT	0.022	0.023	0.023	0.022
	(-1.05)	(-1.04)	(-1.26)	(-1.05)
SIZE	0.016***	0.016***	0.016*	0.016***
	(-3.09)	(-3.02)	(-1.95)	(-3.09)
TANG	-0.088**	-0.089**	-0.089	-0.088**
	(-2.03)	(-2.02)	(-0.87)	(-2.03)
LEV	-0.034	-0.038	-0.038	-0.034
	(-0.72)	(-0.81)	(-0.75)	(-0.72)
ROS	2.940***	2.934***	2.934***	2.940***
	(-18.56)	(-17.43)	(-4.79)	(-18.56)
SGROW	-0.001	-0.006	-0.006	0.001
	(-0.07)	(-0.33)	(-0.50)	(0.06)
AGE	-0.001	-0.001	-0.001	-0.001
	(-0.24)	(-0.24)	(-0.20)	(-0.24)
_cons	0.115***	0.123***	0.110*	0.123***
	(3.21)	(3.32)	(2.01)	(2.79)
Firm FE	No	No	Yes	No
Year FE	No	Yes	Yes	No
RE	No	No	No	Yes
P	0	0	0	0
N	260	260	260	260

It can be seen from the Figure 5 that:

First, economic growth has a positive relationship with working capital management of enterprises in the steel industry in Vietnam. In all four models, the GDP variable as a proxy for economic growth rate has a regression coefficient of 0.0003 with the significance level at 5% and 10%. Specifically, for every 1% increase of economic growth, return on working capital of enterprises will increase to 0.00003%. Although the significance level is not too high and the rate of alteration is quite small, it also shows that the economic growth rate has a positive impact on working capital management efficiency of steel enterprises. This result is similar to the study of Mansoori and Muhammad (2012). In fact, in the period of economic development, enterprises have good growth opportunities, revenue increases rapidly, capital turnover is high, profit obtained from it is also higher. This leads to an improved working capital management efficiency. Therefore, we accept hypothesis H1.

Second, industry characteristics have an impact on the efficiency of working capital management of Vietnamese steel enterprises. We see that the variable TXD representing construction steel enterprises has a regression coefficient of 0.056 in all four models with a significance level of 1%, which means that TXD has a strong positive correlation with ROW, and at the same time, ROW of the variable TXD is 0.056 times higher than TKG variable. In other words, working capital management efficiency of Construction Steel enterprises is 0.056 times higher than that of Stainless Steel enterprises, therefore, we accept hypothesis H3. Similarly, the variable TOT representing Galvanized Steel - Steel Pipe has a regression coefficient of 0.037, significance level of 10%. Therefore, working capital management efficiency of Galvanized Steel - Steel Pipe enterprises is 0.037 times higher than that of Stainless Steel enterprises, from which, the hypothesis H4 is accepted. The variable TMT has a regression coefficient ranging from 0.022 - 0.023 but has not found statistical significance. This proves that there has not been found a statistically significant relationship between the efficiency of working capital management of the Steel Trading group compared with the Stainless Steel group. Therefore, we reject hypothesis H5.

Third, firm size has a positive relationship with working capital management efficiency of enterprises in the steel industry in Vietnam. The SIZE variable has a regression coefficient of 0.016 in model (1) (2) (4) with a confidence level of 1%, and a confidence level of 5% in model (3). This result shows that a 1% increase in the size of the enterprise leads to an increase in the rate of return on working capital of 0.016%. Large-scale enterprises often have a more organized and professional financial-accounting management apparatus, and financial management is performed better, which is a prerequisite for a higher efficiency of working capital management. In addition, large-scale enterprises often have a strong investment in technology, machinery lines, operation and management, so they create more advantages than small enterprises. Large enterprises also have great advantages when it comes to economies of scale, bargaining power, credit policies and credit granting. All of these create a driving force for large-scale enterprises to manage working capital more effectively. This result is consistent with the studies of Zariyawati et al (2010), Amarjit Gill (2011), Mansoori and Muhammad (2012), Haron and Nomran (2016). Therefore, we accept hypothesis H6.

Fourth, the proportion of tangible fixed assets has a negative relationship with working capital management efficiency of enterprises in the steel industry in Vietnam. Specifically, the variable TANG has a regression coefficient ranging from -0.088 to -0.089, the significance level is from 5% in models (1) (2) and (4) and has no statistical significance when running according to the model. model (3). This means 1% increase in the proportion of tangible fixed assets leads to a decrease in the rate of return on working capital from 0.088-0.089%. Thus, the hypothesis H8 is accepted. This result is similar to the study of João Russo (2013). This recommends that Vietnamese steel companies, when increasing tangible fixed assets such as machinery and equipment, factories, technological lines, etc., must also increase investment capital for other current assets, thereby helping to maintain a stable ratio of tangible fixed assets to total assets.

Fifth, profitability has a strong positive impact on the efficiency of working capital management. The ROS variable has a regression coefficient ranging from 2,934 to 2,940 with a significance level of 1% in all four ways of running the model. This shows that 1% increase of ROS leads to an increase of 2.934% - 2.94% of working capital management efficiency. This result is similar to the studies of Amarjit Gill (2011), Mansoori and Muhammad (2012), João Russo (2013). Therefore, accept hypothesis H9.

Sixth, the results cannot pinpoint the statistically significant relationships between inflation, financial leverage, sales growth, firm age and working capital management efficiency of Vietnam's steel industries. The variables IF, LEV, SGROW, and AGE all have negative regression coefficients but are not significant. This proves that, in the period of 2009 - 2018, for Vietnamese steel enterprises, these factors do not have a significant impact on the efficiency of using labor. The reason may be that the global economic recession (2009 - 2015) has greatly affected the business activities of all enterprises. In the context of an unfavorable economic environment (the market is narrow, many businesses have to cut costs, maintain moderate operations with difficulty), the regression results did not clearly show the impacts variables of inflation, financial leverage, sales growth and firm age. In addition, during the research period, there were companies that had to trade-off profits for short-term sales with the goal of winning market share. This leads to a period of time when sales increase, but profits may not increase but even slow down, in return, in the following period, businesses will regain profits to compensate for the period of market expansion. The result of inflation has no effect on the efficiency of working capital management, consistent

with the study of Haron and Nomran (2016) and João Russo (2013). Haron and Nomran (2016) also show that financial leverage and sales growth have no impact on the efficiency of working capital management during a recession. Thus, rejecting hypothesis H7 H10 H11.

7. CONCLUSION

The study was carried out on 26 Vietnamese steel enterprises in the period from 2009 to 2018. Based on the analysis of regression results with panel data, the author has shown:

- Determinants that have a positive impact on working capital management efficiency of enterprises in the steel industry in Vietnam are: economic growth, firm size and profitability.
- Determinants that have a negative impact on working capital management efficiency of Vietnamese steel enterprises are: The proportion of tangible fixed assets.
- Determinants specific to business lines have an impact on working capital management efficiency of Vietnamese steel enterprises.
- Determinants that do not have a statistically significant relationship with working capital management efficiency of Vietnamese steel enterprises are: inflation, financial leverage, sales growth and firm age.

These results are consistent with some previous studies, but there are also different results. The reason is due to the difference in the number of samples, enterprises, time and space to carry out the research.

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STATE AUDIT - AN EFFECTIVE TOOL IN ANTI-CORRUPTION, CONTRIBUTING TO SUSTAINABLE ECONOMIC DEVELOPMENT

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Abstract: *This article aims to confirm the role of the State Audit Office of Vietnam (SAV) in anti-corruption, thereby contributing to sustainable economic development. The achievement on audit activities of SAV since the establishment from 1994 until now reaffirms the role and position of SAV. The author recommend basic solutions to improve the capacity and effectiveness of the SAV in anti-corruption such as: (1) continuing to affirm and improve the independence of the SAV; (2) improving audit quality; (3) flexibly applying audit methods and procedures; (4) maintaining professional ethics of state auditors; and (5) effectively coordinating with agencies and organizations in the fight against corruption.*

Keywords: *State audit, corruption, sustainable development*

1. THE ADVERSE IMPACTS OF CORRUPTION ON SUSTAINABLE DEVELOPMENT

There is no universal or comprehensive definition as to what constitutes corrupt behavior, the most common definitions emphasize corruption as the abuse of public power or position for personal gain. Transparency International defines corruption as “the behavior on the part of officials in the public sector, whether politicians or civil servants, in which they improperly and unlawfully enrich themselves, or those close to them, by the misuse of the public power entrusted to them”. According to the Asian Development Bank: “Corruption involves behavior on the part of officials in the public and private sectors, in which they improperly and unlawfully enrich themselves and/or those close to them, or induce others to do so, by misusing the position in which they are placed”. Law on Anti-Corruption No. 36/2018/QH14 of Vietnam defines: “Corruption means an office holder’s abuse of his/her official capacity for personal gain.”

Corruption exists in most countries, differing only in degree. Corruption is recognized as an obstacle to economic growth and sustainable development of a country which is reflected in the following main aspects:

Firstly, corruption causes economic damage

Corruption manifests itself in many different forms and methods such as embezzlement; bribery; abuse of position or power for appropriation of assets; abuse of official capacity during performance of official duties; abuse of power during performance of official duties; abuse of official capacity to influence others, etc. but ultimately, all for economic gain. With self-seeking motives, corrupt people have taken advantage of their position in the state apparatus to commit acts of appropriation of public property, turning public property into private property. Corruption

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causes damage, loss, and waste of a large amount of state property. It is estimated by the United Nations Office on Drugs and Crime (UNODC) that corruption costs the global economy more than USD3 trillion annually. In Vietnam, a report at the national conference summarizing 10 years of implementation of the Law on Anti-corruption said that in nearly 10 years (2006-2015), economic losses due to corruption cases were nearly VND60,000 billion.

Secondly, corruption creates an unfair competitive environment

Most corruption cases are directly or indirectly related to mechanisms and policies. Corruption in form of political lobbying to influence mechanisms and policies is receiving more and more attention due to its long-term harmful effects. Distorting policies or creating more favorable mechanisms for some people not only benefits the nefarious groups but also affects the overall environment of the economy. Law-abiding investors face a business disadvantage due to reduced competitiveness. Corruption becomes a major obstacle to development by inhibiting the participation of economic actors.

Thirdly, corruption erodes the prestige of the state, reduces the trust of businesses and people in the state

Corruption draws special attention from society. According to a survey of World Bank, 75% of respondents indicated that they are interested or very interested in corruption (World Bank, 2013). People consider corruption as a serious problem. Uncontrolled or increased corruption reduces the trust of businesses and people in the State, causing discontent and resentment, and even people's reactions to the government. Many riots have originated from corruption.

Fourthly, corruption reduces the effectiveness of the public administration and makes the use of public finance and public assets less efficient.

Effective management and use of public resources including public finance and public assets directly affect people's quality of life. Corruption reduces the efficiency of using public resources due to loss and waste. The consequence of corruption is to turn a large amount of public resources into private property or a waste of society. In addition to that, the openness and efficiency of the public administration is also affected, causing economic bottlenecks, hindering economic activities. Reducing corruption and waste will contribute to improvement of the quality of public administration and promoting the transparency and soundness of the national financial system.

The above-mentioned basic economic harms do not only create motivation for economic growth but also affect the economy's stability in the future. Detecting and dealing with corrupt acts in a timely manner is one of the fundamental solutions to create motivation and maintain the sustainable development of the economy of all countries. Anti-corruption is always a complicated issue due to the variety of motives, methods, and types of corruption. Therefore, it is necessary to involve many agencies, organizations, units, and the public so that the problem of anti-corruption is understood in a unified way, and the proposed solutions are comprehensive, synchronous implemented and achieved the highest efficiency. The supreme audit institutions of countries are gradually being respected and developed to become an effective tool for anti-corruption.

2. LITERATURE REVIEW ABOUT THE ROLE OF SUPREME AUDIT INSTITUTIONS OF COUNTRIES IN ANTI-CORRUPTION

In the world, there have been many scientific studies confirming the position and role of the supreme audit institutions in fighting corruption.

Marie Chene (2018) affirmed that the supreme audit institutions have an important role in the fight against corruption through two main aspects: prevention and detection. The supreme audit institutions contribute to anti-corruption by promoting an effective public financial management system based on reliable reports and sound control mechanisms, which increase transparency and accountability in the public sector. The supreme audit institutions provide the public with information that has been evaluated on the basis of acceptable standards of financial management, thereby, raising public awareness of the risks of corruption. The disclosure of information also has the deterrent effect in fraudulent or corrupt behavior.

Although detection and investigation of corruption is the main task of other agencies such as police, procuracies, and organizations specialized in anti-corruption, the supreme audit institutions are also considered to play an important role in detecting illegal acts and corruption. The state audit institutions can be considered as the initial control force to detect corruption. The state audit institutions are actively participating in the prevention of corruption by proposing the improvement of policies and laws, and fix legal loopholes.

Musa Kayrak (2008) also affirmed that the supreme audit institutions not only prevent and deter corruption but also detect corruption. The supreme audit institutions carry out audit activities on the basis of financial, organizational, professional and functional independence which are stipulated in the Constitution and laws, thus, they have an important role in prevention of corruption through promoting accountability, openness and effective public financial governance. Furthermore, the supreme audit institutions also detect suspected cases of corruption even though most of supreme audit institutions do not have the power to investigate corruption.

Dye, K.M. (2007) asserted that corruption occurs in the public sector due to lack of transparency and lack of accountability. This situation will be overcome with the participation of the supreme audit institutions. The supreme audit institutions use many types of audits to detect and prevent corruption, but the effectiveness and purpose of each type of audit are different.

Assakaf, E.A., Samsudin, R.S., & Othman, Z. (2018) viewed that the independence during implementation of the audit, system of standards and professional auditors are important factors for the supreme audit institutions to contribute to the fight against corruption.

Gustavson, M., & Sundstrom, A. (2016) detected the impact of auditing on the level of corruption in the public sector. Scholars pointed out that the effectiveness of the supreme audit institutions has a positive effect, reducing the level of corruption. Research by scholars also showed the factors belonging to the supreme audit institutions that affect anti-corruption activities, which are: the independence of the supreme audit institutions from the government, the professionalism in the operation of the supreme audit institutions which is demonstrated through a team of auditors with appropriate skills and education, and the communication of audit results to the general public. *Gherai, D.S., Tara, I.G., Matica, D.E. (2016)* used statistical methods to examine the relationship between the activities of the supreme audit institutions and the control of corruption in European countries. The results showed that the more extension of the works of the supreme audit institutions, the more positive contributions the supreme audit institutions have in reducing corruption. The activities of the supreme audit institutions and the control of corruption affect the quality of life of taxpayers. *Dipietro, W.R. (2011)* conducted a multi-disciplinary study in 130 countries in 2008 and stated that the higher the quality of audits, the greater the reduction in corruption. In other words,

audit activities contribute positively to the fight against corruption. *Schelker, A., & Eichenberger, R. (2010)* asserted that the audit activities of the supreme audit institutions increase transparency and provide important information about the implementation of public policy, thereby reducing wasteful expenditures.

3. THE ROLE OF STATE AUDIT OF VIETNAM IN ANTI-CORRUPTION

In Vietnam, the SAV is a newly established agency compared to the supreme audit institutions of many countries with a history of hundreds of years of development. The development process of the SAV is associated with the improvement of professional qualifications and the improvement of legal status. On the basis of professional and legal background, it can be affirmed that the SAV has all the conditions to develop the role of anti-corruption.

The first condition is the professional duties of the SAV. The SAV is a specialized agency that audits the management and use of public finance and public assets. During the course of management and use of these two public resources, the loopholes in legislation, management, and civil service ethics, etc. often occur, creating an enabling environment for corruption. Auditing the management and use of public finance and public assets creates a chance to detect corruption cases. Although the SAV is not an investigative agency, it is considered the first force to detect signs of corruption.

The next condition is the independence of the SAV. The independence of the SAV is stipulated in the Constitution and the law. Since the SAV only complies with laws and professional regulations during the audit process, the audit findings are objective, true and reliable.

The additional condition is the SAV has a resource of high-qualified professional state auditors. From an organization without predecessor, up to now, the SAV has more than 2,000 auditors who specialize in public finance and public assets and have the ability to analyze and evaluate to draw conclusions about signs of corruption. The professional qualifications and ethics of the state auditors become the strengths of the state auditors and create favorable conditions for the state auditors to become tools for detection and prevention of violations.

The SAV's ability to detect corruption cases is also derived from the fact that the legal mechanism creates an appropriate environment for the SAV to promote its professional strengths. The legal status of the SAV has been increasingly substantiated and enhanced. The SAV was established on 11 July 1994 according to Decree No. 70/1994/ND-CP of the Government. In the early stage of operation, the SAV was governed by sub-law documents. In 2005, the first Law on State Audit was promulgated, confirming the status of the SAV as an agency established by the National Assembly, only operating in accordance with the laws. In particular, on 28 November 2013, the 13th National Assembly approved the Constitution of the Socialist Republic of Vietnam, in which, Article 118 stipulated the legal status of the SAV: "The SAV shall be established by the National Assembly, operate independently, abide only by the laws, and audit the management and use of public finance and assets." Accordingly, the SAV has changed from a statutory body to a constitutional one, helping to enhance the position, role, and responsibilities of the SAV in auditing the management and use of public finance and public assets. According to the Constitution 2013, the promulgation of the Law on State Audit No. 81/2015/QH13 and Law No. 55/2019/QH14 amending and supplementing several articles of the Law on State Audit have created a solid basis for the SAV to enter a new period of development in both breadth and depth, clearly affirm its role

as an effective tool of the Party and State, make many important contributions to improvement of the effectiveness, efficiency, enhancement of transparency in the management and use of public finance and assets. Regarding the task of preventing and combating corruption, the Law on State Audit No. 55/2019/QH14 defined that the SAV shall “perform the task of preventing and combating corruption in accordance with the provisions of the Law on Anti-corruption”. The Law on Anti-Corruption No. 36/2018/QH14 has specified the anti-corruption task of the SAV. Accordingly, the SAV, through its audit activities, is responsible for proactively detecting corrupt acts, handling them according to its competence or proposing handling according to the provisions of laws and taking responsibility before the laws about its decision.

In summary, the above professional and legal conditions have created the basis for the SAV to participate and play an important role in anti-corruption. The reality shows that the SAV has promoted its role well and has gradually become an effective tool for the Party and State to detect, handle and prevent corruption.

Over the past time, through audit activities, the SAV has actively contributed to the prevention and fight against corruption. Since its establishment in 1994, the SAV has carried out more than 3,000 audits. Through audit activities, the SAV has detected errors, omissions and violations of laws related to the use of public finance and public assets. The SAV’s recommendations on financial settlements have increased over the years. During 1994-2020, the SAV proposed the financial settlement of VND657,541 billion, about VND25,290 billion per year on an average. An increase in budget revenue of more than VND135,760 billion and a reduction in budget expenditure, including reduction of recurrent expenditure and capital expenditure, of VND149,300 billion were proposed. Financial errors and omissions recommended by the SAV are valid and must be implemented, thereby contributing to the sustainability of the state budget by increasing revenue and reducing budget expenditure.

Not only detecting corruption or recommending financial settlements, the SAV also coordinates with relevant state agencies to handle cases with signs of law violation. The SAV transfers the dossiers of cases with criminal signs and proposes the investigation agency to examine and prosecute the criminal case, and at the same time notifies the People’s Procuracy of the same level in writing. The SAV has transferred dozens of illegal cases to the investigation agency, many of which are related to major and key cases that are monitored by the Central Steering Committee for Anti-Corruption. The SAV also provides thousands of dossiers and documents and information to elected agencies for them to carry out supervision, to investigation and adjudicating agencies for them to perform its activities in the fight against corruption. The information provided by the SAV is objective and true because the independence is ensured in state audit activities and the audits are performed by a team of highly qualified and ethical state auditors.

A fundamental cause of corruption is the existence of legal loopholes. The legal loopholes create conditions for public servants and public employees to take profiteering out of the procedure of management and use public resources. Clearly identifying the problem, the SAV does not only recommend financial settlements but also legal recommendations. Through the audit, the SAV has detected many legal documents that are contrary to regulations, inconsistent, or unsuitable to reality. Every year, the SAV recommends competent state agencies to issue new or amend, supplement, or remove legal documents that are contrary to regulations or unsuitable to reality. In addition, the SAV has proposed to amend, supplement, replace, and annul thousands of legal

documents that are inconsistent with the regulations or not in line with reality. Only during the latest 3 years (2018-2020), the SAV proposed to the National Assembly, Government, ministries, and localities to promulgate new, amend, supplement, remove or replace 563 documents, including: 06 laws, 14 decrees, 84 circulars, 67 resolutions, decisions, 392 other legal documents. Besides, the SAV also proposed many valuable opinions to improve a number of legal documents such as the Law on State Budget, Law on Public Property Management, Law on Land, Law on Tax Administration, Law on Public Investment, Law on Anti-Corruption, Law on Social Insurance, etc., making practical contributions to the construction of a socialist rule of law state.

Although many of positive results have been achieved as mentioned above, the reality and expectations of the Party and State towards the SAV in the fight against corruption pose higher requirements and challenges to the SAV. Solutions need to be implemented synchronously so that the SAV can become a really effective tool in anti-corruption, contributing to sustainable economic development.

4. SOLUTIONS TO IMPROVE THE EFFICIENCY AND EFFECTIVENESS OF ANTI-CORRUPTION BY THE SAV, CONTRIBUTING TO SUSTAINABLE ECONOMIC DEVELOPMENT

Firstly, continuing to affirm and improve the independence of the SAV, ensuring conditions for corruption detection.

The basis of the operation of the supreme audit institution is independence. The SAV can only fulfill the task of detecting and handling corruption on the basis of maintaining its professional independence. The independence of the SAV has been enshrined in the Constitution and laws. However, independence cannot only exist in superficial form which is legal regulations but must be maintained in all professional activities of the SAV as well as in the practical implementation of steps in the audit process, including audit planning, audit execution, audit report preparation and follow-up of the implementation of the audit conclusions and recommendations. External interventions can distort audit results, reducing the ability to detect violations of the law. Maintaining and ensuring independence is a prerequisite for the existence and development of the SAV; is the foundation for the implementation of professional audit. Maintaining the independence of the SAV relates to the responsibilities of the entities involved in the audit activities of the SAV.

Secondly, improving audit quality, ensuring accuracy, objectivity and truthfulness of audit findings related to corrupt acts.

Audit quality is the goal, but also the requirement of audit activities. Audit quality determines the position and reputation of the SAV. In the fight against corruption, conclusions must be based on sufficient and appropriate evidence and controlled to ensure accuracy, objectivity, and truthfulness. The audit quality control system of the SAV should be developed to cover the steps in the audit process and be implemented at 5 levels (State Auditor General, Chief Auditor, Chief of Audit Delegation, Audit Team Leader and Auditor). The SAV also needs to have a statement on audit quality and a commitment to anti-corruption. The commitment is to demonstrate the SAV's responsibilities and goals towards anti-corruption.

Thirdly, flexibly applying audit methods and procedures.

According to current regulations, the SAV uses 8 main audit methods and procedures: observation; reconciliation; external confirmation; recalculation; investigation; inquiry; analytical

procedures; and re-performance. Each method has its own advantages and limitations and is suitable for use in specific situations. For anti-corruption audit, it is necessary to focus on investigative methods. The investigative audit answers the audit questions clearly: Who? When? By what measures?, etc. has committed violations in order to take profiteering from the process of management and use of public finance and public assets. Investigative methods are rarely used by state auditors, and investigational audit techniques are therefore incomplete. The great combination of investigative procedures with external confirmation and analytical procedures will improve the detection of corruption cases.

Fourthly, upholding the professional ethics in auditing of state auditors.

Along with the focus on professional development, establishing and maintaining the professional ethics of auditors must always draw SAV's concern. The independence, authority, and responsibility of the SAV places high ethical requirements on itself, its state auditors and other personnel participating in its audit activities. Ethical behavior of the state auditor is one of the important conditions to ensure the audit reputation and quality and the ability to detect corrupt acts of the state auditors. The state auditors must maintain integrity, independence, and objectivity. During the performance of audit procedures and formation of audit conclusion, the state auditor is not influenced or affected by any material or spiritual interests. Auditing professional ethics becomes a necessary basis for detecting cases of corruption.

Fifthly, strengthening the coordination between the SAV and relevant state agencies in anti-corruption.

Anti-corruption is the task of the entire political system, involving many organizations and agencies. The SAV is considered to have favorable conditions to effectively carry out the task of detecting corruption and coordinating with agencies in investigating, prosecuting and adjudicating corruption cases. The result of coordination among agencies, organizations is an important factor that directly affects the effectiveness of anti-corruption. The SAV should always be aware of its responsibility in prevention and fight against corruption and be ready to cooperate to handle corruption cases in accordance with the law. However, the mechanism on cooperation in dealing with corruption cases between the SAV and the Government Inspectorate, the Supreme People's Procuracy, the Supreme People's Court, the Investigation Police Agency should be developed and regularly reviewed to supplement and improve the foundation for comprehensive and effective cooperation among agencies in anti-corruption.

5. CONCLUSION

The supreme audit institutions play an important role in anti-corruption. The SAV fully meets the professional and legal conditions to perform the task of anti-corruption, thereby contributing to sustainable economic development. The SAV should pay attention to ensuring true independence when performing audits; improving audit quality; maintaining the auditors' ethics; applying appropriate audit methods and coordinating with agencies and organizations in anti-corruption. If the above solutions are focused, the ability to detect violations of law will be improved, thereby contributing to sustainable economic development.

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POLICY RECOMMENDATIONS TO IMPROVE THE SUSTAINABILITY OF PUBLIC DEBT IN VIET NAM

Msc. Luu Huyen Trang¹, Nguyen Tien Dung², Nguyen Thi Thao Van³

Abstract: *In the current economic precedent, Vietnam's public debt is significantly increasing. Public debt in 2020 has been about VND 3.63 billion and is estimated to increase to VND 4 billion in 2021. Thus, on average, each Vietnamese person in 2020 bears a debt of 37 million VND and in 2021 that number is estimated to reach 40 million VND. The research has used VAR model to evaluate the impact of macro factors on the sustainability of Vietnam's public debt in the period of 2001-2020. Based on the results, the authors have proposed a range of policy recommendations such as keeping the budget expenditure according to the plan, control government-guaranteed debts and select SOE projects when granting government guarantees, reduce foreign debt, gradually replace foreign debt with domestic debt, have a clear strategy on domestic and foreign debts, build an effective and transparent public debt management system and implement combined macro policies to ensure stable inflation in the economy while still ensuring an increase in output.*

Keywords: *Public debt, exchange rate, state budget deficit, GDP growth rate, inflation rate*

1. INTRODUCTION

In the period 2008-2009, Vietnam's economy faced many difficulties from the consequences of the global financial crisis. The government applied fiscal easing measures (increasing spending, implementing bailout packages, etc.) and tax breaks. The problem of spending is increasing, but the state budget is not enough to support it, leading to government borrowing. During that period, they should predict the sustainability of public debt. Macro factors, such as GDP growth rate, inflation, market interest rates, and exchange rates, are constantly changing.

According to a report by the Ministry of Finance, Vietnam's public debt reached 61% of gross domestic product (GDP) as of September 2016 and this number increased to approximately 65% by 2017-2018. According to experts, the government annually has to pay 14% of the total government debt and government guarantee debt. In 2020, Vietnam needs to mobilize 39.5 billion USD for investment and development. According to the assessment of the World Bank and the International Monetary Fund, Vietnam is not the country with high debt burden. However, the efficiency of public debt management and use is still low.

To solve the problem of effective management and use of public debt, the government needs to have a strategy to control investment in the public sector, reduce the budget deficit to control foreign debt. Many suggestions have been given including improving the investment efficiency of the state-owned enterprise sector, linking public debt management with macroeconomic

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management, predicting factors affecting debt size, such as interest rates and exchange rates, in order to minimize risks. Currently, public debt risk in Vietnam depends on key factors such as GDP growth rate, inflation, interest rates, current account deficit and foreign exchange reserves of the country. Therefore, these factors need to be in control to minimize the risk of public debt. To limit the risks related to the safety of Vietnam's public debt, it is necessary to find out the level impact of macroeconomic factors on Vietnam's public debt in recent years. The VAR model was chosen to give accurate estimation results. Based on these outcomes, the authors make proper policy recommendation ensuring improve the sustainability of Vietnam's public debt in the coming time.

2. LITERATURE REVIEW AND PREVIOUS RESEARCH STUDIES

Imimole, Imoughele and Okhuese (2014) studied the impact of factors including trade rates, foreign debt obligations/exports of goods and services, openness of the economy, budget deficit, FDI, GDP growth and foreign debt exchange rate of Nigeria from 1986 to 2010 base on error correction mechanism (ECM) model and Johansen cointegration test. The research shows that the factors of GDP growth, foreign debt obligations and exchange rate are the major factors determining the amount of increase or decrease in foreign debt in Nigeria.

The study of Abdullah et al. (2015) has analyzed based on verification by ARDL model to assess the impact of macro factors on Nigeria's external debt. Research results show that factors including interest rates, exchange rates and budget deficit have negative affects both in the short and long term on external debt. Although these factors have a relationship with each other in the long run, the short-term change mechanism is still not tight enough. The study also explains the reason Nigeria is a country with a rapidly and continuously increasing foreign debt balance in the past 3 decades, because of the impact of factors such as high interest rates, savings, and high interest rates, Low, weak exchange rate and prolonged budget deficit.

Research by Swamy V. (2005) focuses on analyzing the factors affecting government debt in groups of countries and economies. By testing causal analysis for panel data, the author has established a causal relationship between the factors affecting government debt. From there, the results are that real GDP growth, foreign direct investment, government spending, inflation and population growth have a negative impact on public debt of the economy and countries in particular. Besides, other factors such as total fixed capital formed, final consumption expenditure, and trade openness have positive effects on public debt.

Belguith, S. and Omrane, H (2017) are a group of authors who have studied and assessed the impact of macroeconomic factors on public debt in Tunisia through the analytical VECM model for series data for the period 1986. -2015. The variables used in the model include GDP variable, total fixed capital formation, trade openness, inflation, budget deficit, real interest rate. The goat results show that factors such as interest rates, budget deficit, trade openness increase public debt and the most important factor affecting Tunisia's public debt is the budget deficit.

In the Institute-level scientific research report "Evaluating the impact of some macroeconomic indicators on public debt in Vietnam" by Nguyen Thi Thuy (2016), the author has shown the correlation between debt and debt. Public and macroeconomic factors including state budget deficit, economic growth, interest rates, inflation and exchange rate of Vietnam in the period 2011-2014 through the ECM model used to find out long-term and short-term relationships. The research process encountered some limitations, as the author aggregated the data from many sources and the data collection time was short. With a few samples, the Engle-Granger methods will cause the

estimated parameters to be biased and have large errors. The study has not forecast future public debt scenarios in relation to macroeconomic factors.

Research results of the ministerial-level scientific research project “Factors affecting the efficiency of public debt management in Vietnam”, author Nguyen Thanh Binh used a combination of qualitative and quantitative analytical methods to find out the factors that help improve the efficiency of public debt management. In the qualitative method, the author has interviewed with 12 experts to collect aim information, giving the factors and aspects inside each factor affecting the effectiveness of public debt management. Finding out 5 factors that positively affect the effectiveness of public debt management, including: policies, control systems, human resources, legal documents, and technological infrastructure.

Through the review of international and domestic works on the impact of macroeconomic factors on public debt, it is clear that there are still a range of limitations such as the data or limited variables. Therefore, the authors have decided to do this research to evaluate the impact of macroeconomic factors on the sustainability of public debt based on the longer period of time and with more variables.

3. DATA AND PROPOSED MODEL

Proposed Model

According to Ley’s research in 2010, debt includes domestic debt and foreign debt. The most commonly used index to measure the sustainability of debt is Total Debt / GDP. Total debt is determined by the following formula:

$$D_t = D_t^D + e_t D_t^F$$

In which:

D_t: Total public debt at time t;

D_t^D: Domestic debt at time t;

D_t^F: External debt at time t;

e_t: The exchange rate of the local currency against the borrowed foreign currency at time t.

Transforming and combining according to the theory of budget constraints over time, the model of John Cuddington (1996) and the model of the IMF (2005), formula (1) is written in the following form:

$$\Delta d \approx \underbrace{(gexp - t)}_{\text{Public debt/GDP}} + \underbrace{\frac{(i^d - \pi) \cdot d^d}{(1+g)(1+\pi)}}_{\text{Impact of state budget deficit}} + \underbrace{\frac{(i^f - \pi^f) \cdot d^f}{(1+g)(1+\pi)}}_{\text{Impact of real interest rates}} + \underbrace{\frac{g(d^f + d^d)}{(1+g)(1+\pi)}}_{\text{Impact of economic growth}} + \underbrace{\frac{(\pi^f + \frac{\Delta s}{e} - \pi) \cdot d^f}{(1+g)(1+\pi)}}_{\text{Impact of exchange rates}}$$

Thus, the change in the public debt to GDP ratio is the result of the basic budget deficit and the factors affecting public debt (debt dynamics) including real interest rates, real economic growth, changes in the public debt ratio, and changes in the public debt ratio. prices and other macroeconomic factors.

Based on the theory, the research model is established as below:

$$GD = f(GDP, CPI, EXR, GBR, SBD)$$

Table 1. Table describing variables

Variable	Measurement method	Source
Dependent variable		
$\ln(GD_t)$ - Public debt/GDP year t	The natural logarithm of the public debt-to-GDP ratio in year t	Ministry of Finance
Independent variables		
$\ln(GDP_t)$ –Growth of GDP	The value of the natural logarithm of Vietnam's GDP at time t	General Statistics Office
$\ln(CPI_t)$ – Vietnam's inflation rate	The value of the natural logarithm of Vietnam's inflation at time t	General Statistics Office
$\ln(EXR_t)$ – exchange rate VND/USD	The natural logarithm of the VND/USD exchange rate year t	The State Bank of Vietnam
$\ln(GBR_t)$ – Real interest rate of public debt	The natural logarithm of the real interest rate on public debt in year t	General Statistics Office
$\ln(SBD_t)$ – State budget deficit in year t	The natural logarithm of Vietnam's state budget deficit ratio according to GFS classification to GDP in year t	General Statistics Office

Source: Compiled by the author

Description of the data

The data were collected from the Ministry of Finance, the General Statistics Office, the World Bank, the State Bank of Vietnam from 2001-2019, with the number of observations in the model: 114 (observations).

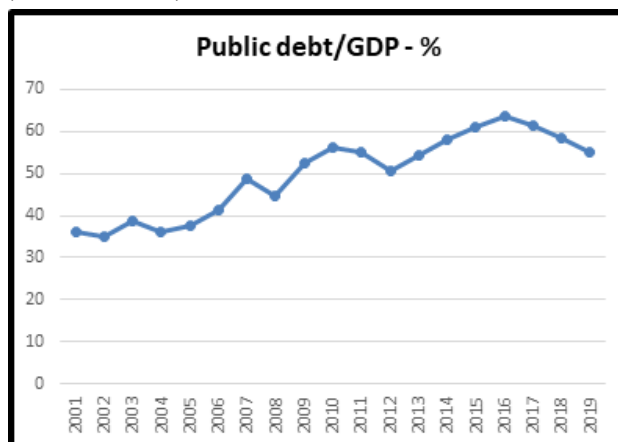


Figure 1: Vietnam's public debt to GDP in the period of 2001 - 2019

Comment: Vietnam's public debt/GDP tends to increase in the period 2001-2016 and decrease slightly in 2016-2019

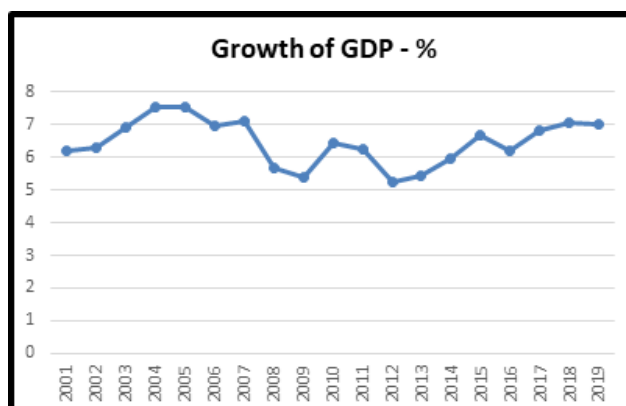


Figure 2: Growth rate (%) from 2001 to 2019

Comment: Vietnam's GDP growth rate fluctuates unevenly over the years due to the influence of many factors

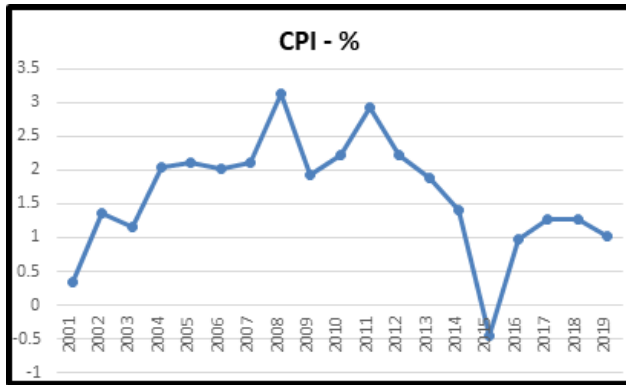


Figure 3: Inflation rate (%) from 2001 to 2019

Comment: Vietnam’s inflation rate witnessed the significant up and down trend during the researching period

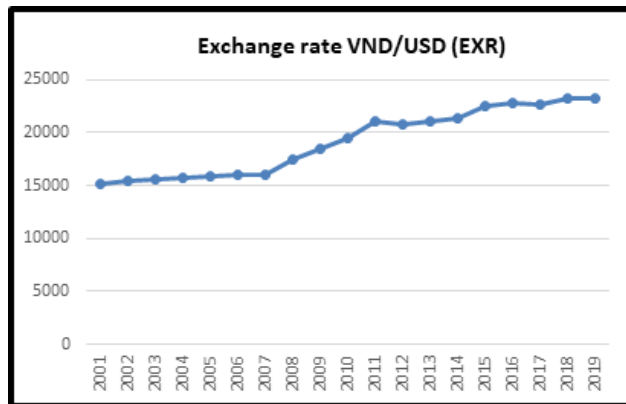


Figure 4: Exchange rate VND/USD from 2001 to 2019

Comment: Vietnam’s VND/USD exchange rate increased steadily in the first 5 years, get a sharp rise in next 5 years and fluctuated for the remaining period.

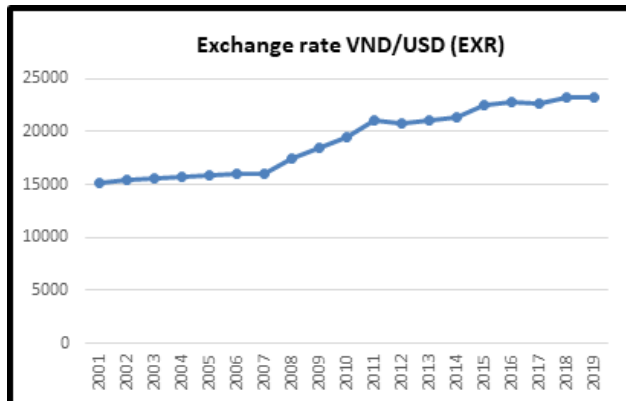


Figure 5: Real interest rate of public debt 2001 – 2019

Comment: The real interest rate of public debt was stable from 2001-2006, then increased in the 2007-2011 period, and decreased sharply in the 2012-2019 period

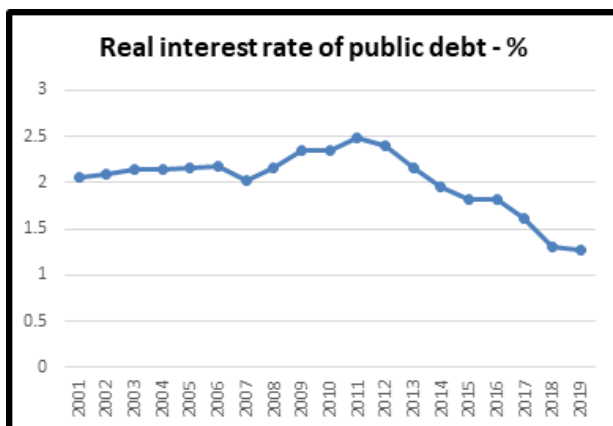


Figure 6: State budget deficit (VND billion) for the period 2001 – 2019

Comment: State budget deficit increased from 2011-2016, from 2016-2017 there was a sharp decrease before a rapid rise in the last two years.

4. METHODOLOGY AND RESEARCH RESULTS

Model testing and methodology

Stationarity test

Augmented Dickey-Fuller (ADF) Unit root tests and Phillips-Perron tests were used to test the stationarity of the variables. Testing the stationarity of the series at a 5% significance level, using the unit root test method ADF and Phillips-Perron shows that at the 5% significance level (**), we see the time series of GD, GDP, CPI, EXR, SBD stop when taking the first difference. GBR time series stop when taking the first difference at a 10% significance level (*)

Optimal latency test

Table 2: Optimal latency test results

Lag	LogL	LR	FPE	AIC	SC	HQ
0	64.56837	NA*	4.10e-11*	-6.890396	-6.596321*	-6.861164*
1	101.6277	43.59917	4.94e-11	-7.015019*	-4.956492	-6.810398

Source: Extracted from Eviews

Based on AIC (Akaike’s information criterion), the results show that the model has an optimal lag of 1.

From the results, the time series of data are stationary and the optimal lag is 1, the VAR model is selected as the appropriate model to analyze the impact of factors on the sustainability of public debt. VAR is a system of equations of variables, but in the objective model to analyze the impact of variables on the sustainability of public debt, the analytical equation should be selected as follow:

$$LnGD_t = a_0 + a_1.LnGDP_t + a_2.LnCPI_t + a_3.LnEXR_t + a_4.LnGBR_t + a_5.LnSBD_t + \epsilon_t$$

In which is the coefficient matrices, represents the factors affecting the sustainability of public debt.

The stability of the model

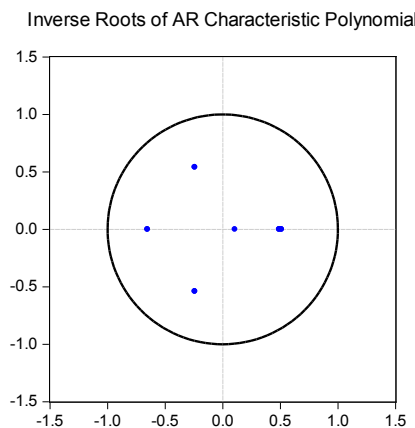


Figure 7: Check the stability of the model

Source: Extracted from Eviews

The results of testing the stability of the VAR model through the Inverse Roots of AR Characteristic Polynomial test. The eigenvalues are all in a single circle (or they are all less than 1), which implies that the VAR model is stable and the estimated results from the VAR model can be trusted.

Residual autocorrelation test

At the significance level of 0.05, there is no autocorrelation.

Results and Discussion

Granger causality test

In the multivariable VAR model, the Granger causality test tells us which variable a change in the model is affected by. The results of the causality test in the VAR model are as follows:

Table 3: Results of causality test Granger

Dependent variable	DL(GD)	DL(GDP)	DL(CPI)	DL(EXR)	DL(GBR)	DL(SBD)
DL(GD)		2.406096**	1.596744***	0.229262**	0.351723*	1.707045*
DL(GDP)	0.087342*		3.329957*	2.776170*	2.102949	2.163469
DL(CPI)	2.841574*	3.127488*		1.623875	1.903383	0.003926
DL(EXR)	2.655140	0.257436**	1.245510*		2.480189**	0.337762
DL(GBR)	0.259795**	1.312197*	1.639408***	1.409827**		0.699819
DL(SBD)	4.001673*	0.021276*	1.044555	0.024998	0.703186	
Overall	5.511329*	4.625349	9.847750*	5.071363	4.451415	6.914275

Note *, **, *** mean 10%, 5%, 1% respectively

Source: Extracted from Eviews

This result shows GDP growth rate (GDP), inflation rate (CPI), VND/USD exchange rate (EXR), real interest rate on public debt (GBR) and state budget deficit (SBD) all have an impact on Vietnam's public debt/GDP.

This result once again confirms that the factors mentioned above are really the causes of fluctuations in the public debt growth rate, which are themselves influenced by each other and of public debt.

Analysis of the push reaction

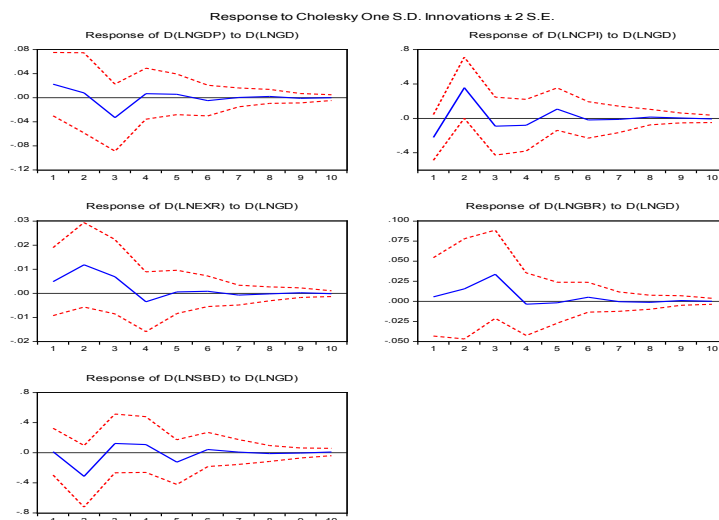


Figure 8: Result of push reaction

Source: Extracted from Eviews

The results of the push reaction show that GDP initially caused public debt/GDP to decrease dramatically in the three first years, then increased in year 4, from year 5 it decreased and remained stable. The reason is that the 3-year period from the 3rd, 4th, 5th years, the state borrowed a lot of debt for development investment, leading to the growth rate of public debt higher than the growth rate of GDP. From the 5th year, investment expenditures from debt are effective, growth rate of GDP is higher than the rate of public debt, thus ensuring the sustainability of public debt in the following period.

Falling inflation increases public debt in the first 2 years, then when inflation gets higher rate, public debt decreases sharply in year 3, then volatility increases in years 4 and 5 due to falling inflation. From year 6 onwards the value of public debt experience a stable increase. This result reasonably explains that high inflation can reduce the public debt because inflation reduces the value of debt. High inflation means lower real interest rates. A large GDP slippage means a lower real GDP growth rate. Theories, as well as practice, show that inflation is a consequence of monetary policy and is related to domestic debt. It is entirely possible for governments to influence debt levels and debt burdens by influencing inflation (for example, printing money), thereby informally reducing the government's debt obligations. Vietnam's inflation rate over the years in the period 2010-2020 has a strong change from double-digit inflation in 2011 to single-digit inflation and remains stable at 4% in the period 2016-2020. Vietnam is a developing country, so it is acceptable to have inflation at a stable level, but the government will not let high inflation reduce public debt obligations because of the risks and challenges of inflation. Inflation in Vietnam is relatively stable at 4% due to the government's operating policies, which explains the stable increase in public debt in the later period.

The results of the push reaction show that the VND/USD exchange rate causes public debt/GDP to increase in the first 3 years. However, it decreased in year 4, increased in year 5, From the 5th year, there was a decrease and then a steady increase. This result is completely consistent because when the VND/USD exchange rate increases, public debt/GDP also increases because in the first stage, borrowing from foreign currencies is relatively large. Since 2007, due to the massive increase of indirect investment cash flow into Vietnam, the supply of USD has increased sharply. In fact, in the first half of 2007 to early 2008, the foreign exchange market in Vietnam had an oversupply of USD, making the exchange rate stable. Starting in 2008, when the world economic crisis began to affect Vietnam's economy, inflation increased, making the exchange rate fluctuate very strongly, along with the economic decline, investment flows. indirectly into Vietnam has begun to reverse.

The real interest rate on public debt increases, causing the public debt/GDP ratio to increase in the first 3 years, decrease in year 4 and increase in year 5, then remain quite stable. The reason is that in the first stage, the relatively high-interest rate cannot mobilize domestic loans, and in the later stage, the interest rate close to the market level helps the government to mobilize domestic capital. In recent years, interest rates have gradually decreased, helping to maintain a stable source of loans for the government. Besides, the government also has solutions to structuring debt sources, mainly the government borrows long-term loans of 10-20 years, and 5-year loans are gradually reduced, ensuring sustainability in the short term for public debt.

The growth of the budget deficit in the first stage causes the public debt to GDP to decrease, then increase sharply in the next 2 years, and reduce from the 3rd and 4th years. In the first year,

the budget deficit may be due to the government spending budget to repay loans, and in the 2006-2007 period, GDP growth is relatively high and stable, so public debt is maintained at a safe level. However, since 2008, the impact of the crisis has forced the government to borrow to maintain economic stability, causing public debt to increase sharply while GDP in these years has slowed down. In the following years, with the government's reasonable investment policy and thorough implementation of reasonable budget-balancing measures, public debt/GDP gradually decreased and stabilized.

Analysis of the variance

Table 5: Analysis of the analysis of variance

Period	S.E.	D(LNGD)	D(LNGDP)	D(LNCPI)	D(LNEXR)	D(LNGBR)	D(LNSBD)
1	0.082889	100.0000	0.000000	0.000000	0.000000	0.000000	0.000000
2	0.090988	83.49116	8.712816	0.174419	0.148743	2.218834	5.254032
3	0.100850	69.17718	9.034769	0.246571	1.607073	8.679532	11.25488
4	0.104160	67.35268	9.124653	0.232996	1.984180	8.454393	12.85110
5	0.105212	66.13042	9.918108	0.452887	2.006531	8.563642	12.92841
6	0.105275	66.12001	9.912338	0.462404	2.004966	8.567367	12.93292
7	0.105346	66.05942	9.899595	0.466963	2.007698	8.615791	12.95053
8	0.105386	66.01000	9.893675	0.469711	2.023323	8.620203	12.98308
9	0.105428	65.97035	9.899815	0.469941	2.022567	8.636050	13.00127
10	0.105436	65.96361	9.901471	0.470051	2.023086	8.635672	13.00610

Cholesky Ordering: D(LNGD) D(LNGDP) D(LNCPI) D(LNEXR) D(LNGBR) D(LNSBD)

Source: Extracted from Eviews

The results of the analysis of variance show that public debt is greatly affected by the shock created by itself. The explanatory level of public debt to period 10 is 65.96% of its own shock; The second most influential factor is the state budget deficit: contributing up to 13.0061% of the increase in public debt/GDP and the third is GDP growth of 9.901471%; followed by the inflation rate with 8.64% and the VND/USD exchange rate contributing 2.023%. The last shock was inflation affecting 0.47% of public debt. This result is completely reasonable because public debt is unsustainable due to the outstanding balance of previous years, which increases accumulated public debt. Public debt originates from the state budget deficit, when the deficit increases in the context of limited domestic revenue, the government is forced to increase public debt. Meanwhile, the GDP growth rate will help improve the government's debt repayment capacity, so Vietnam's public debt will be more sustainable. The reason why the exchange rate makes a small contribution is that Vietnam's debt structure has changed a lot when domestic debt is increasing and foreign debt is decreasing, so it is no longer affected by the exchange rate too much. Regarding the interest rate policy, it has more or less impact to help attract domestic debt sources, when Vietnam has a more growing economy, borrowing loans also need more binding conditions and the interest rates are somewhat less favorable. Finally, and the inflation rate has the smallest impact because high inflation is often associated with risks and challenges, the Vietnamese government often uses this macro factor to control public debt.

5. SOME POLICY RECOMMENDATIONS

Firstly, the Government must keep the budget expenditure according to the plan, if there is an increase in revenue, it will be used to reduce the overspending. Ministries and localities should pay attention to budget expenditures that are only allowed within the estimated budget limit. Any case of expenditure exceeding the plan is not accepted and the head of the unit with the budget estimate must be held responsible if there is an overspending situation. It is necessary to implement clear and strict fiscal discipline to avoid persistent and high budget deficits, which adversely affect public debt. The audit regime also plays an important role in monitoring public spending. The supervision of government spending also needs to be institutionalized and enforced to avoid improper spending, spending exceeding the allowable level of public spending.

Secondly, control government-guaranteed debts and select SOE projects when granting government guarantees. The government's decision to bail out rejected projects also means accepting the risk that the investment is underperforming in the first place. To limit this, the Government must have clear priority areas in spending using public debt, which is an investment in building public infrastructure and social security services. In addition, it is necessary to classify according to each function of SOEs. Non-commercial SOEs need Government support and guarantees to carry out their social functions. For commercial SOEs, the State needs to divest capital for domestic and foreign investors and recover State capital to invest in priority areas.

Thirdly, reduce foreign debt, gradually replace foreign debt with domestic debt to limit default risk and national financial safety, and restructure loans. Domestic debt is mobilized through bond issuances with appropriate interest rates to mobilize idle capital from the population. Therefore, domestic debt mobilization can adjust the public debt structure in a safe direction, and at the same time reduce adverse exchange rate fluctuations when borrowing foreign debt. On the contrary, if the public debt structure is towards reducing the proportion of domestic debt, we will face difficulties in paying foreign debts because the incentives from ODA capital into Vietnam will decrease sharply, which forces the Government to commercial loans at foreign banks.

Fourthly, have a clear strategy on domestic and foreign debts, loan sources, terms, and corresponding financing activities from debt sources. It is necessary to strengthen the utilization of domestic financial resources, reduce dependence on capital from outside through the improvement and development of the domestic financial market to find out the suitable source. Regarding foreign currency debt, the current effective long-term solution is to focus on developing the domestic debt market and improving the financial capacity and convertibility of the Vietnamese dong to proceed to issue more debt in VND.

Fifthly, build an effective and transparent public debt management system. One of the key things to limit the risks related to national credit when borrowing and increase market awareness about Vietnam's public debt situation is to enhance transparency and timeliness information about Vietnam's public debt.

Sixthly, implement combined macro policies to ensure stable inflation in the economy while still ensuring an increase in output. In the context of continuing to implement the goal of economic expansion, inflation is an inherent problem of developing countries, especially those with high public debt. To ensure the realization of the dual goals of growth and inflation, the government needs to use a reasonable combination of macroeconomic, in particular, monetary and fiscal

policies. The government need to control and maintain a stable and reasonable inflation rate at a low and reasonable level, avoiding abnormal fluctuations that may push up the public debt balance.

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UNDERSTANDING INTERNATIONAL BUSINESS STRATEGIES IN THE VIETNAMESE BEVERAGE INDUSTRY

MBA. Tran Thi Tuan Anh¹

ABSTRACT: *Globalization and the rapid development of the Internet offer high opportunities for Vietnam enterprises to expand operations and increase sales activities in different markets around the world. Therefore, the international business strategy plays an important role while formulating strategies as it determines to a large extent whether firms achieve success globally. With a long history of development, the Vietnamese beverage industry obtains remarkable achievement in the domestic market. However, the number of firms entering foreign markets is still limited despite the enormous potential of this industry. This article explores how Vietnamese beverage companies select targeted markets to compete globally, generate substantial revenue and enhance their branding and deeply investigates the industry using SWOT analysis.*

Keywords: *International business; business strategy; beverage industry; international strategy; global markets*

Xu hướng toàn cầu hóa cùng với sự phát triển mạnh mẽ của Internet đã tạo điều kiện thuận lợi cho các doanh nghiệp Việt Nam mở rộng thị trường và đẩy mạnh kinh doanh tại nhiều quốc gia trên thế giới. Chiến lược kinh doanh quốc tế của doanh nghiệp đóng vai trò rất quan trọng, quyết định sự thành bại của họ trong hành trình vươn ra quốc tế. Ngành đồ uống Việt Nam với lịch sử hình thành và phát triển lâu đời đã thu được nhiều thành tựu đáng kể tại thị trường nội địa nhưng nhìn chung số lượng doanh nghiệp đầu tư ra nước ngoài vẫn còn ít cho dù tiềm năng rất lớn. Bài báo này không chỉ khai thác cách thức các doanh nghiệp kinh doanh đồ uống Việt Nam chọn thị trường mục tiêu trong quá trình xây dựng thực hiện các chiến lược kinh doanh quốc tế, mà còn nghiên cứu về ngành đồ uống này thông qua phân tích SWOT để giúp các doanh nghiệp này cạnh tranh toàn cầu, tạo doanh thu bền vững và nâng cao hình ảnh tại thị trường quốc tế.

1. INTRODUCTION

The whole world has become a global village (Taylor, 2010). However, global markets have specific and diverse characteristics and requirements that cannot be satisfied uniformly by regional markets (Valenzuela, Mellers, & Stebel, 2009). As a result, firms need to set various and appropriate business strategies for each of the international markets in which they operate. Many studies have sought to understand the global business strategies of multinationals. One of the most frequently researched topics in international business over the past 40 years is the internationalization process of firms (Fletcher, 2001). The decision relating to international market selection (Sakarya et al., 2007) and entry mode selection (Brouthers and Nakos, 2004) are considered to be the most critical

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for a firm's success abroad (Agndal and Chetty, 2007). Therefore, international business strategies that firms follow could strongly impact on their performance in the selected markets.

The Vietnamese beverage industry and the food industry currently account for about 15% of GDP and is predicted to become even more important in the future (Vietnam Report). Vietnam also can export beverage products and currently boasts well-known and competitive enterprises that dominate the domestic and export market.

The advancement of digital technologies and cross-border businesses offers high chances for Vietnamese beverage companies to develop in foreign markets despite the globally competitive pressure. Pursuing the appropriate international business strategies helps Vietnamese enterprises do business effectively and elevates their branding to a higher position.

Although the significance of understanding international business strategies becomes a crucial concern in the development roadmap of beverage firms, a few researches are focusing on this issue. This article aims to explore targeted markets that Vietnamese beverage firms have concerned with and analyze the SWOT of this industry. The SWOT analysis is a tool developed for strategic analysis, it consists of a confrontation between external developments and internal capabilities. Based on the confrontation between the two, strategic options or even a new strategic course can be identified for the organization (Johnson and Scholes, 1999). Therefore, SWOT is a suitable method to deeper understand the Vietnam beverage industry. In addition, this article sought to investigate which international strategies that they follow and implement, then suggest some recommendations to help beverage enterprises gain more success in the future.

2. CONCEPTUAL FRAMEWORK

International Business can also be referred as globalization, shifting toward a more integrated and interdependent economy. In order to conduct business overseas, multinational companies need to separate national markets into one huge global marketplace (Daniels, Radebaugh, and Sullivan, 2007). A central opinion of international business researches is that there is no single international strategy (Harzing, 2000). For decades, strategy and strategic management have been an important management field in the business sector (Grandy and Mills, 2004). Strategy determines an enterprise's basic long-term goals and objectives, and the adoption of courses of action, and the allocation of resources necessary for carrying out these goals (Chandler, 1962). Business strategy illustrates how a company pursues to compete in the market compared to its competitors (Varadarajan and Clark, 1994). The strategic direction represents a company's posture towards its behavior and performance (Talke, 2007). Multi-national firms need to select the appropriate strategies based on their resources, capabilities, and market conditions.

International business strategies have been classified into the following four categories: international strategy, multi-domestic strategy, global strategy, and transitional strategy (Bartlett and Ghoshal, 1989). The appropriateness of each strategy depends on pressures for cost-reduction and the local responsiveness in each country served. This relationship is described in Fig 1.

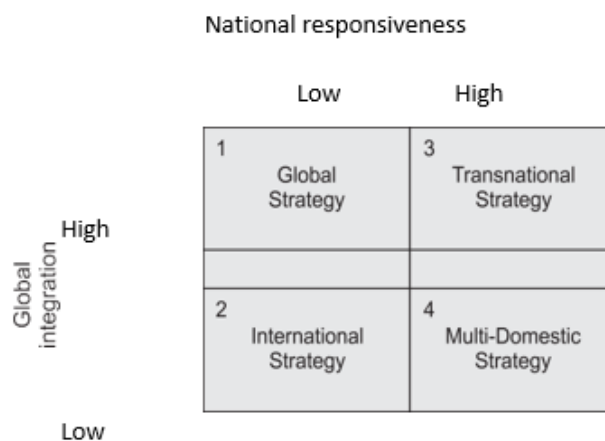


Fig 1. Relationship of International Business Strategies

Source: Christopher A. Bartlett and Sumantra Ghoshal, *Managing Across Borders : The Transnational Solution*, 2nd ed. (Boston : Harvard Business School Press, 1998)

For example, if there are high cost pressures and high demands for local responsiveness, enterprises should pursue the transnational strategy. At the same time, firms that experience high-cost pressures should use the global strategy, a low-cost strategy, to benefit from scale economies in production, distribution, and marketing. Foreign subsidiaries usually appear when entering vital markets although they are usually used late in internationalization (Dicken, 2003). In other hand, organizations with valuable core competencies that host-country competitors do not possess will follow international strategy. A global strategy is that internationally scattered subsidiaries act independently and operate as local companies, with minimum coordination from the parent company.

3. FINDINGS

3.1. The development of the Vietnamese Beverage Industry

According to EuroMonitor International Report, the Vietnamese beverage industry experiences high growth in profit and revenue recently. The products are divided into two categories: alcoholic beverages such as beer, wine, spirits, and non-alcoholic beverages such as coffee, tea, milk, carbonated soft drinks, and bottled soft drinks. In Vietnam, alcoholic beverage is the largest sector, accounting for more than 70% of the total value of the beverage industry. Due to hot and humid climate conditions and the food culture imported from the West, Vietnam regularly tops the list of the countries that consume big amount of alcoholic beverages in the world. Additionally, Vietnam has a young population, mostly ranging from 15-40 years old, the age group that is considered to have the highest demand for alcoholic beverages. Beer is the most popular alcoholic, occupied 98% of volume and 91% of sales in this category. In contrast, wine and spirits make up only 2.3% and 8.8% of sales volumes, respectively. For non-alcoholic beverages, milk and coffee are the most popular products. They are gradually becoming the first and indispensable choice of consumers, along with traditional drinks of Vietnamese people – green tea.

Vietnam's beverage industry has just experienced two major crises in 2020. The Covid-19 pandemic and Decree No. 100/2019/ND-CP² disrupted the activities of businesses in this field. The alcoholic beverage group was affected the most by Decree No.100. At the same time,

The impacts of the epidemic also vary among different product groups in the industry. Over 50% of customers have increased spending on clean and healthy drinks that strengthen the immune system, while 63.7% of customers have reduced expenditures on beer and alcohol. Therefore, Vietnamese beverage businesses also need to adjust their operation methods accordingly.

Along with developing in the domestic market, Vietnamese beverages have also entered the global market for a long time. Products of Vietnamese beverage firms successfully appear in over 60 countries around the world. Especially the export of beer and wine has been promoted in recent years. Despite facing hard competition, Vietnam's beer exports have grown, from only 1.47 million liters (8.93 million USD) in 2010 to 63.79 million liters and earned 81.55 million USD in 2018 (VIRAC, United Nation Trade Statistics, 2019). Additionally, other products such as tea, milk, and coffee are also considered the strength of Vietnam beverages in the international market.

3.2. Targeted markets, SWOT analysis, and pursued international strategies

In the context of globalization and regionalization, international business activities are increasingly expanding and developing. Vietnamese enterprises in general and enterprises in the beverage industry, in particular, are gradually improving its ability to integrate and adapt to the global business environment. In recent years, to develop business in foreign markets, Vietnamese firms have been extending their operations to many regions, from Asia such as Korea, Taiwan, Singapore to Europe such as Russia, France, etc. and even tricky markets such as the US, New Zealand. Typically, the pioneers are major companies such as Vinamilk (milk), Trung Nguyen (coffee), Habeco (beer and wine) and Tan Hiep Phat.

In general, Vietnamese beverage companies have approached foreign markets that have certain advantages and disadvantages. Vietnamese firms often select some main regions, namely Southeast Asia, Europe, North America, and the Middle East. **Table 1** describes the pros and cons that enterprises often face when entering these international markets.

Region	Pros./Cons.	Characteristics
South-Asia	Pros.	Cultural similarities, customer requests Short geographical distance Enterprises easily learn similar partners' business experiences in the region before starting their own operations in these markets.
	Cons.	Inadequate infrastructure Complicated payment and logistics Poor-skilled labor
Europe and North America	Pros.	These are markets with large purchasing power so businesses can sell products at very high prices. Good infrastructure, simple payment and shipping methods High-skilled labor
	Cons.	Demanding customer base Fierce competition which requires careful planning and high-quality products
Middle East and South America	Pros.	These are usually markets with high growth rates and potential. Less competition which allows firms that enter these markets to quickly increase sales volumes
	Cons.	Purchasing power is usually low Businesses often face pressure on costs

Table 1. Pros and Cons of Vietnamese beverage enterprises in foreign markets

When penetrating global markets, Vietnamese firms need to understand the strengths, weaknesses, opportunities, and threats of the beverage industry to have appropriate strategies through SWOT analysis as below.

Strength	Weakness
Wide variety of products	Lack of human resources and financial resources
Clear business strategies of firms in targeted markets	Many short-coming of administrative procedures
High growth rate	Poor product quality compared to requirements of some fastidious markets
Opportunities	Threats
High export potential when Vietnam joins international trade organizations and signs free trade agreements.	Weak competitiveness of Vietnamese firms compared to local enterprises of the same industry
Constantly increasing demand for beverages in the world market	Uncertainties and lack of clarity in Vietnam's export policies
Gradual elimination of trade barriers and trade restrictions	
The Vietnamese Government's open-door policy encouraging collaboration with foreign partners	

Table 2. SWOT Analysis of Vietnamese beverage industry

In the process of reaching out to the world market, Vietnamese beverage firms apply different international business strategies based on their stages of development and their target products. However, with the current scale, Vietnamese enterprises mainly choose the international strategy through export and franchising. This is to optimize the core competencies of Vietnamese enterprises in markets where competitors do not have, or have weak capabilities, difficulties to catch up with or imitate. To implement this business strategy, the headquarters of companies located in Vietnam plays a central role.

Vinamilk is a typical beverage company that is very successful with the international strategy through export with nearly 40 years as the leading nutrition corporation in Vietnam and 23 years of experience in the global market. Currently, Vinamilk's products are presented in more than 50 countries, in many continents and regions, with a total export turnover of 2.2 billion USD. In 2020, despite being heavily affected by the COVID-19 epidemic, Vinamilk still signed a contract to export 20 million USD of milk to the Middle East during the Gulfood Dubai International - one of the three largest fairs in the world in agricultural products, food and beverages with a transaction volume of up to billions of USD/year. Like Vinamilk, Habeco and Trung Nguyen also use international strategy through export - as the leading business strategy to reach foreign markets. Habeco has successfully exported its beer products to Taiwan, Japan, etc. Trung Nguyen coffee products and G7 instant coffee have been exported to more than 60 countries, including the US, China, etc.

Besides, exports franchising is another common form of market penetration among Vietnamese beverage businesses. Trung Nguyen is one of the pioneer enterprises in the franchising field with a network of nearly 1,000 domestic franchised coffee shops and many overseas stores in the US, Japan, Singapore, etc. Especially in the US market, Rice Field has officially been Trung Nguyen's agent since 2003.

For the majority of Vietnamese beverage firms, the international strategy is appropriate initially. However, when markets become more fiercely competitive, the international business strategy quickly proves to be inadequate. Some Vietnamese beverage firms also apply multinational strategy, global strategy, or transnational strategy when the tastes and preferences of consumers are

not the same in different regions. However, currently, not many enterprises choose to pursue these strategies due to high costs and the fact that these companies are not large or competitive enough in the international market. Therefore, basically, the principal approach is the international strategy through exporting and franchising.

3.3. Recommendations

Firstly, the Government needs to maintain stability in terms of policies, especially policies on taxes and fees. For Vietnamese beverage enterprises to adapt and adjust, these policies need to be stable for at least five years.

Secondly, there is a need for deeper support of Vietnam's Beverage Association (VBA). VBA should regularly organize seminars, seminars, training programs concerning foreign market information, free trade agreements, new legal policies etc.

Thirdly, it is recommended that beverage firms should diversify and improve the efficiency of international business strategies. Enterprises pursue traditional strategies such as international strategy through export and franchising and also need to research and develop other strategies such as multinational strategy, global strategy, and transnational strategy.

Fourthly, beverage enterprises should promote communication activities to enhance their branding. Firms need to diversify adverts as well as improve advertising effectiveness. Solutions include using newspapers, television, and social networking sites in local languages to help customers understand more about Vietnamese beverage brands, and strengthening public relations activities and offering more sales promotions at fairs, supermarkets, or trade centers.

Fifthly, beverage enterprises need to improve other aspects of operations such as logistics, distribution, and human resource management to maximize investment efficiency. Firms need to set up accurate goals and plans they are able to allocate resources appropriately.

Sixthly, beverage enterprises need to comply with current legal regulations on international business. Firms should work closely with government agencies and departments to recommend and adopt policies that facilitate favorable conditions to expand to the world market. Additionally, beverage firms need to plan international business strategies methodically and coordinate with other enterprises in the industry to jointly implement projects with the aim of building brands in foreign markets.

CONCLUSION

To support Vietnamese beverage companies to gain more achievements globally, this article has proposed some recommendations concerning international business strategies that relating parties should consider. The research also provides the Vietnamese beverage industry's actual situation, which could benefit others who plan to enter the international markets in the coming time. In the future, the next study could investigate more deeply on international business strategies for each sub-sector of food and beverage such as beer industry, wine industry, coffee industry, etc. to help enterprises have more apparent views and more specific approaches.

Globalization and the Internet have created many chances for Vietnamese enterprises to access the international environment, and Vietnam's beverage industry is a large-scale, high-growth field, with many advantages compared to other industries. Therefore beverage firms should seriously focus on foreign markets, especially after Decree 100 of the Government implemented has resulted

in the downtrend of domestic revenues. Along with formulating appropriate business strategies, enterprises also require setting and enhancing operations in foreign markets. Additionally, the beverage industry also needs to receive more attention from the Government, affiliated agencies, and the active support of associations to get better results while competing globally.

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IMPACT OF BOARD CHARACTERISTICS ON CORPORATE SOCIAL RESPONSIBILITY REPORTING

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Abstract: *In recent decades, there have been many empirical studies about impact Board characteristics on CSR reporting. However, the conclusions of the studies are inconsistent about this effect. Therefore, this study aims to investigate the influence of Board characteristics on CSR reporting of Vietnam-listed companies. The data were collected from 323 non-financial listed companies on Ho Chi Minh (HOSE) and Hanoi (HNX) Stock Exchange from 2013-2019. At the statistical significance level of 1%, 5%, and 10%, respectively, the results of REMTobit regression showed that Board independence and the proportion of women on Board positively influence CSR reporting. On the contrary, CEO duality negatively influences the level of CSR reporting. Based on the findings, several policy implications are proposed to increase the level of CSR reporting for Vietnamese listed companies.*

Keywords: *Board Characteristics, Board Independence, CSR Reporting, CEO duality, Gender diversity, REMTobit*

1. INTRODUCTION

Corporate social responsibility (CSR) reporting has been rapidly increasing by public interest entities (PIEs) since the financial crisis 2007-2008. Given the heterogeneous use of the term “CSR”, we refer to the famous triple bottom line concept and the business case model, indicating that economic, environmental, and social aspects are equal within sustainable and stakeholder-oriented management (Carroll, 1999). As a complement to traditional financial accounting (e.g. financial statements, corporate governance reports), CSR reporting represents the main element of stakeholder management (Hahn & Kühnen, 2013). The main goal of CSR reporting is to increase stakeholder trust to analyze CSR performance (Murphy & McGrath, 2013). On the one hand, the literature states that the quality of CSR reporting has increased because of stakeholder awareness and pressure (Moneva et al., 2006).

The Stakeholder theory (Freeman, 1984) proposed that the firm can only exist and develop sustainably if ensuring stakeholders’ benefits. Many previous studies show the benefits of CSR implements and reporting. According to Haniffa and Cooke (2005), CSR reporting in society and environment respects increase firm’s reputation, creating stakeholders’ truth and increasing financial performance (Allouche & Laroche, 2006), increasing customer’s purchase level (Brown & Dacin, 1997), quickly approaching to low-cost loans and growing benefits for shareholders (Roberts, 1992), attracting more investors (Laufer, 2003), helping help the government has complete and accurate information to make the decisions and policies for firms (Moon & Vogel, 2009). Besides, globalization has been happening strongly, creating more opportunities and challenges for firms, including increased competitive pressure on firms because of the trade barriers. Many countries

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protect domestic production by using non-tax measures instead of taxes. For example, setting technical standards, environment and labor standards, against commercial fraud, anti-dumping measures and anti-subsidy solutions. So, more and more firms have to enhance CSR reporting.

Agency theory argues that representative manager used other people's money rather than their own. So, they tend to behave outside of shareholder interests. Moreover, information asymmetry between representative managers and shareholders occurs and will lead to the need for an appropriate governance control mechanism in general and the Board, in particular, to prevent the abuse by the management representative while reducing risks for the company. According to the Enterprise Law in 2014, the Board is the top management department of a joint-stock company. The Board has full authority to decide and execute the rights and obligations that are not within the authority of the General Meeting of Shareholders. The Board has from 03 to 11 members, and the company will be specific regulations about the number of Board members. According to Akhtaruddin et al. (2009), the Board included the persons who make policies and strategies for the firm. If the policies and strategies are suitable, the firm's performance is highly efficient, and the shareholders' value would be maximized. However, the Agency theory (Jensen & Meckling, 1976) stated that there is always a conflict about benefits between shareholders and managers because shareholders and managers' benefits are not always unified. The managers use the firm's resources to benefit themselves rather than firms. This theory guarantees to solve the conflict between management representatives and shareholders by some solutions such as increasing Board independence, separating two positions of CEO and chairman of board, and increasing board diversity. Analyzing the impact of Board characteristics attributes on CSR reporting is a growing empirical research topic from an international perspective (Hahn & Kühnen, 2013).

The development of the Vietnam stock market with the continuously increasing number of listed firms leads to a requirement for firms to increase CSR information in general and CSR information, in particular, to comply with Circular No. 155/2015/TT-BTC. Board attributes as internal corporate governance variables and measures of voluntary CSR reporting have been included in empirical-quantitative research designs during the last decade (Sharif & Rashid, 2014). In addition, the impact of some characteristics of Board and voluntary CSR reporting have been found in many empirical studies in the world. In recent years, many studies about the influence of Board characteristics and CSR reporting have been carried out in developing countries, including Vietnam. However, research results are still inconsistent. There has not been a serious empirical research about the influence of Board characteristics on voluntary CSR reporting in Vietnamese. The results are characterized by a high level of heterogeneity, indicating both a positive and negative relationship, and some researchers also found insignificant results. Vietnam is a developing country, so there are some different characteristics from other countries about the development level of the stock market, cultural characteristics, legal documents system. So, Vietnam-listed firms' voluntary CSR awareness and CSR reporting are also different from other countries. Therefore, the research "*The influence of Board characteristics on voluntary CSR reporting in Vietnam*" is conducted in the hope of clarifying the influence of some characteristics of Board on CSR reporting of Vietnamese listed firms. Based on findings, some policy implications are suggested about characteristics to improve voluntary CSR reporting of Vietnam listed firms in the future.

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1. Board independence and voluntary CSR reporting

Agency theory proposed that increasing Board independence could increase the board's level and effectiveness of independent supervision. Board independence is a necessary condition for monitoring measures with CSR reporting that fulfils the stakeholders' information needs. The level of Board independence was measured by the percentage of non-executives directors who did not undertake any positions in the corporate executive department. According to Ngo My Tran (2017), in Vietnam, non-executive directors had not a "*private benefit*" relationship with the company, so they would protect the general benefits of the firm. Therefore, non-executive directors would tend to support information in general and CSR information in particular as much as possible.

Firms with higher board independence are presumed to encourage more CSR activities and disclosure on them (Muttakin et al., 2015; Zaid et al., 2019). In doing so, they facilitate a higher level of transparency (Chau & Gray, 2010) and are likely to promote long-term performance objectives (Ibrahim et al., 2003). However, another argument that the percentage of non-executive directors did not affect CSR reporting level (Habbash, 2015; Fadhilla, 2017). Even a high percentage of non-executive directors decreased the CSR reporting level (Haniffa & Cooke, 2005; Al-Moataz & Hussainey, 2012). In Vietnam, the regulations on non-executive directors of the board of joint stock companies have been gradually in Corporate law to increase the highest level of protection for all stakeholders. Currently, Vietnamese listed companies have a mean percentage of non-executive directors about 63%, higher than the one third standard in the Company law. Therefore, it is expected that the percentage of non-executive directors positively affects the company's CSR reporting. Concerning the mixed theoretical and empirical research results, the following hypotheses are stated:

H1: A higher proportion of non-executive directors is positively related to CSR reporting

2.2. Board size and voluntary CSR reporting

From the perspective of Agency theory, an appropriate amount of Board members seems to be most important to guarantee a good quality of Board effectiveness (Jensen, 1993). But large Board can also result in flawed incentives to engage in free-rider behavior (McConnell & Servaes, 1990). Thus, Board size is a controversial corporate governance variable. Moreover, monitoring requirements within the Board increase along with Board size, which requires more resources with respect to time and special experience. Insofar, an "optimal" Board size is related to individual firm factors and may be the best board characteristics indicator to influence CSR reporting.

Furthermore, the empirical results about Board size were mixed. Omair Alotaibi & Hussainey (2016) found a positive impact of Board size on CSR reporting. According to Abduh & AlAgeely (2015), Board size was negatively related to CSR reporting. Giannarakis (2014) stated that when a company had a large number of Board members, the CSR reporting level would decrease. The reason was that having too many Board members would increase the risks of conflict among members (because each member represents the different shareholder's groups) and would reduce the level of CSR reporting. With regard to the mixed theoretical and empirical research results, the following hypotheses are stated:

H2: Board size is positively linked to CSR reporting

2.3.CEO duality and voluntary CSR reporting

From the Agency theory, if the Chief Executive Officer (CEO) and the Chairman are one person (CEO duality). This would reduce the effectiveness of independent supervision of the Board. Thus, the level of CSR reporting would also decrease (Gul & Leung, 2004). The chairman is the person who leads and establishes the contents of meetings and plays an important role in the appointment and evaluation of the CEO's capacity. So, CEO duality status will lose the independent supervising role of the Board. As a main influencer in the Board, the opinions of the CEO, who also was a chairman, would easily be passed by Board. Samaha et al. (2015) also argued that CEO duality reduced information and voluntary information demands. The lack of separation of ownership rights and management rights would make highly focusing power on the CEO, leading to a lack of reporting and asymmetric information. However, Finkelstein & D'aveni (1994) conclude that acting as a chairman of the board and CEO is not always inefficient (in terms of board vigilance). With respect to transparency, literature provides contradicting results. Some empirical findings suggest that the level of voluntary CSR information is lower when CEO duality exists (Chau & Gray, 2010)

The CEO duality model is rather popular among companies in Asian countries, including Vietnam. Recently, Vietnamese listed firms tend to separate the role of the CEO and the chairman. Furthermore, the regulation on separation Chairman of the Board and CEO according to Decree 71/2017/ND-CP has been officially applied in August, 2020 that is a positive and improvement sign in corporate governance and also partly shows that the Vietnamese listed companies increase more and more aware of the importance of separating ownership and management right. This follows the Organization for Economic Co-operation and Development (OECD) recommendations to increase the effectiveness of corporate governance.

With regard to the mixed theoretical and empirical research results, the following hypotheses are stated:

H2: CEO duality is negatively linked to CSR reporting

2.3. Gender diversity in Board and voluntary CSR reporting

From Agency theoretical perspective, a balanced mix of capabilities and experiences is essential for the board to exercise an effective monitoring function, assess management practices, and evaluate management strategies and their influence on CSR (Hillman & Dalziel, 2003). Boards with higher female participation are supposed to be more transparent and superior in monitoring management activities. Firms with higher proportions of female directors display better-earning quality and encourage more public reporting (Gul et al., 2011). In this context, Adams & Ferreira (2009) notice that the behavior of female directors differs from that of male directors and that gender diversity is an indicator of board effectiveness. However, the collective experiences and backgrounds of the directors determine the board's effectiveness; the significant role of a director overflows into public responsibility (Forbes & Milliken, 1999). Given the importance of gender diversity on boards, UK Corporate Governance Code 2014 encourages female participation on boards of directors to facilitate effectual functioning and maintain effective relationships with key stakeholders. In the context of decision-making, a diverse board is more likely to provide a better platform to share a wider range of opinions, beliefs, networks, and backgrounds to balance the firm's financial and non-financial objectives and address the demands of different groups of

stakeholders with conflicting needs (Liao et al., 2015). Females on boards are likely to bring an additional independent view that enhances the decision quality (Colaco et al., 2011).

Therefore, board gender diversity forms a new governance dimension, as females differ from males in terms of communication skills, personality, commitment, diligence, and being less self-interest oriented Huse & Grethe Solberg (2006). Thus, female participation on corporate boards is likely to influence the effectiveness of a firm's social and environmental profile (Bear et al., 2010; Liao et al., 2015). Hence, it is expected that boards with gender diversity have enhanced their ability to respond effectively to a firm's social and environmental obligations and report on them. With regard to the mixed theoretical and empirical research results, the following hypotheses are stated:

H3: Gender diversity is positively linked to CSR reporting

3. RESEARCH METHODOLOGY

3.1. Approach for measuring CSR reporting variable

The content analysis measures the voluntary CSR reporting data from the related content presented in CSR reports or in the firm's annual reports. The content analysis includes two-step: (1) identifying the information structure that relates to CSR information in annual reports; (2) searching for this information and encoding information from qualitative to quantitative scales that can use for the next statistical analysis. The content analysis involves gathering information for designed indexes that are compatible with the research objectives.

The scales with three levels are used to measure voluntary CSR reporting variables. The score is 0 when no CSR information is presented. The score is 1 when CSR information is presented but, in general, not specific and has no proof. The score is 2 when CSR information is presented in detail, specific, clear, evidenced by pictures, figures, charts, and detailed analysis. Total CSR score by taking the sum of scores of the CSR component aspects (economic-ECO; environment-ENV; employees-EMP; community-COM; product/customer-PROCUS). The higher the total CSR information scores, the more CSR information is presented in the annual report.

3.2. Data collection method

The study uses secondary data taken from annual and corporate governance reports for seven years continuously from 2013 to 2019 of 323 Vietnamese non-financial listed firms, excluding financial institutions such as finance, bank and insurance firms because of their information reporting policies and routines are so different from non-financial sectors. The sample is all non-financial listed firms that must be achieved standards including (1) having number of years for listing is at least 7 years; (2) having annual and corporate governance reports for 7 years from 2013-2019 that have data including CSR reporting data, Board characteristics and some control variables in the model. These reports are taken from www.cafef.com; www.Vietstock.vn; www.cophieu68.com and some other securities websites.

3.3. Data analysis method

The scores of the dependent variable is CSR information variable is from 0 to 2. This variable is a censored variable and the value is blocked. So, the Tobit regression model is used for analysis. The Tobit regression model is used to estimate the linear relationship between variables when the dependent variable has left or right censorship.

The analysis data is panel data, so the study uses two estimation models simultaneously, including pooled Tobit regression and Tobit regression with random effect (Random effects model-REM Tobit). Then, based on the absolute value of Log likelihood, choose an appropriate

estimation model for presenting and discussing research results. the REM Tobit model is chosen to present and discuss the analysis results. The estimation model has the following form:

$$CSR = \beta_0 BSIZE + \beta_1 IND + \beta_2 BOTH + \beta_3 WOB + \beta_4 LNSIZE + \beta_5 YEAR + \beta_6 ROA + \beta_7 LEV + \varepsilon \quad (*)$$

The variables in the model (*) are detail explained in table 1 below:

Table 1. Interpretation variables in the research model (*)

Variables	Variable code	Measuring variables	Reference source	Expected sign
Dependent variable		Measuring voluntary CSR information through		
Corporate Social Responsibility information	CSR	the total CSR information scores (CSR scores) and 5 components of CSR information including (1) economics (ECO); (2) environment (ENV); (3) community (COM); (4) employees (EMP) and (5) products/customers (PROCUS)	Bayoud et al. (2012); Kansal et al. (2014); Dias et al. (2017)	
Independent variables				
Non-executive directors	IND	Percentage of non-executive directors per board members	Ntim & Soobaroyen (2013)	+
CEO duality	BOTH	Dummy variable: 0 = duality, 1 = no duality	Samaha et al. (2015)	-
Board diversity	WOB	Percentage of women per board members	Byron & Post (2016)	+
Control variables				
Firm size	LNSIZE	Natural logarithm of total assets	Rosli et al. (2016) Chakroun et al. (2017)	+
Firm age	YEAR	Number of years since the first year of operation		+
Profitability	ROA	Profit after tax on total assets	Luethge & Guohong Han (2012)	+
Financial leverage	LEV	Total debt per total assets	Razak, 2015)	-

4. RESULTS AND DISCUSSION

4.1. Descriptive statistics

Table 2. Descriptive statistics for variables in the model (1)

Variables	Transparent rate (%)	Mean	Minimum	Maximum	Standard deviation
CSR	51.88	31.129	9	60	11.273
ECO	88.74	8.874	3	10	1.308
ENV	35.23	5.636	1	16	3.925
EMP	56.186	7.866	1	14	3.515
COM	41.64	4.164	1	10	2.833
PROCUS	45.89	4.589	1	10	3.033
SIZE (VND billion)		2,500	19.8	102	6,560
LNSIZE		27.436	23.708	32.254	1.392
AGE		31.285	12	68	13.791
ROA		0.047	-1.759	0.784	0.1

LEV	0.528	0.002	0.996	0.224
IND (%)	65.048	0	100	17.637
WOB (%)	13.675	0	80	16.167
CEO duality	0.725	0	1	0.446

Source: analysis output from 323 listed companies in HOSE and HNX (period 2013-2019)

Table 2 presents the mean, minimum, maximum and standard deviation of variables in the research model. The mean assets is 2,500 VND billion; The mean age is 31.3 years; The mean ROA is 0.047; The mean financial leverage is 0.53; The mean Board size is 5.5 members; The mean percentage of non-executive directors is 65.05%, higher than the standard (at least 1/3 of the Board size according to Vietnam corporate law); 72% of companies have non CEO duality status and 13.66% of companies have CEO duality status. This is a good sign of corporate governance in Vietnam. This is partly according to Decree 71/2017/ND-CP in guiding corporate governance for public companies, two positions must be separated between the chairman of the Board and CEO. This regulation is officially effective on August 1st, 2020. The separation of the company's two top positions is considered good corporate governance practice in the world. Accordingly, the Board plans the strategy and supervises the implementation. At the same time, the Board of Directors is led by the General Director (CEO), who plays the role of operating the business and implementing the strategy. Therefore, when separating two positions, corporate governance will become more effective.

In addition, table 2 also reports descriptive statistics of the overall CSR disclosure scores and five-component aspects. Table 2 shows that the overall CSR scores in a range from 9 to 60 scores. The mean transparency ratio is 51.88% of the maximum level. Besides, the ECO ranges from 3 to 10 scores, about is 88.74% of the maximum level; the ENV ranges from 1 to 16 scores, about is 35.23% of the maximum level; the EMP ranges from 1 to 14 scores, about is 56.19% of the maximum level; the COM ranges from 1 to 10 scores, about is 41.64% of the maximum level; the PROCUS ranges from 1 to 10 scores, about is 45.89% of the maximum level.

In general, in 2013-2019, the CSR information transparency scores are just above average in Vietnamese listed companies. The transparency percentages of the five aspects are unequal. Specifically, the ECO transparency percentages are highest; Secondly, the EMP transparency percentages; Thirdly, the PROCUS transparency percentages; Fourthly, the COM transparency percentages and Finally, the ENV transparency percentages are lowest. These findings is almost suitable with Hossain et al. (2006) and Ibrahim & Hanefah (2016), stating that the transparency level of ENV aspects is the lowest among all aspects, even quite a few listed companies do not present any information about the environment. The reason may be that companies still think that their firm's activities do not affect the environment. So, they don't need to report information about it (Tagesson et al., 2009). In addition, the regulations of legal documents in penalizing for acts harmful to the environment are still not appropriate and clear. This is also why many Vietnamese listed firms have still not paid attention to CSR implementation and reporting.

4.2. Analysis of the effect of Board characteristics on CSR reporting

Table 3: REMTobit regression results of the effect of Board characteristics on CSR reporting of Vietnamese listed firms

Variables	CSR	ECO	ENV	EMP	COM	PROCUS
Firm age	0,1505*** (0,0422)	0,0123 (0,0084)	0,0514*** (0,0138)	0,0293** (0,0138)	0,0272*** (0,0105)	0,0296** (0,0120)

Lsize	2,4842*** (0,2117)	0,3493*** (0,0607)	0,6304*** (0,0726)	0,7222*** (0,0874)	0,5145*** (0,0544)	0,3394*** (0,0557)
ROA	3,4388** (1,1153)	0,6689* (0,3478)	2,2352*** (0,3857)	-0,6455 (0,4859)	1,2321*** (0,2679)	-0,0110 (0,2805)
LEV	-4,8505*** (0,9512)	-0,7889*** (0,2980)	-1,6622*** (0,3277)	-1,1124 (0,4050)	-1,5964*** (0,2330)	0,1941 (0,2475)
CEO duality	1,8704*** (0,3172)	0,2786*** (0,1047)	0,3374*** (0,1089)	0,6068*** (0,1374)	0,3072*** (0,0768)	0,4622*** (0,0801)
IND	0,0645*** (0,0085)	0,0164*** (0,0028)	0,0199*** (0,0029)	0,0131*** (0,0037)	0,0126*** (0,0021)	0,0065*** (0,0022)
WOB	0,0187* (0,0097)	0,0039 (0,0032)	-0,0013 (0,0033)	0,0105** (0,0042)	-0,0012 (0,0023)	0,0057** (0,0025)
Log likelihood	-6889,6144	-2709,4754	-4598,7415	-4796,5324	-3728,6454	-3370,8732
Giá trị Chi ²	441,79	202,06	416,06	148,24	419,38	251,09
p-value của giá trị Chi ²	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000

Source: data analysis results from 323 non-financial listed companies in the period 2013-2019 Note: (***), (**)
and (*) are statistically significant at 1%, 5% and 10%, respectively.

Regression results with the REMTobit estimate for the overall CSR transparency scores and five-component aspect scores are presented in Table 3. The results show that statistically significant at 1%, 5%, and 10%, respectively, the firm age, firm size, ROA, non-CEO duality, percentage of non-executive directors, and percentage of women on Board positively affect the overall CSR transparency scores. However, the financial leverage negatively affects the overall CSR transparency scores. This finding fully supports the proposed hypothesis and is consistent with other studies such as Chau & Gray (2010); Jizi et al. (2014); Kiliç et al. (2015), and Alotaibi and Hussainey (2016). Besides, the findings are also consistent with stakeholder theory and agency theory, stating that separating two positions two top positions of the companies will increase the effectiveness of corporate governance. Accordingly, the Board plans the strategy and supervises the implementation, while the Executives officer is led by CEO who plays the role of operating the business and implementing the strategy. On the other hand, when the percentages of non executives directors is high, it will increase the degree of independence between the Board and Executive officer. From there, the information needs for managers' decision-making increases. Thereby increasing the level of CSR information reporting. On the other hand, unlike men who only focus on profit activities, women are often more interested in community and charitable activities. So, diversifying the Board gender with the presence of women on the Board will increase the level of CSR reporting.

When regression analysis with REMTobit estimate for five-component aspects, in turn, the results in Table 3 show that there are mixed results. Specifically:

The firm age, the board size, the percentage of women on the Board do not affect the ECO aspects. Similarly, the Board size, the percentage of women on the Board do not affect ENV aspects. The profitability, financial leverage, board size do not affect EMP aspects. The percentage of women on the Board does not affect COM aspects. The profitability, the financial leverage, the board size do not affect PROCUS aspects.

The firm size, profitability, non CEO duality, and percentage of non executive director positively affect ECO aspects. The firm age, firm size, profitability, non CEO duality, and percentage of non executive directors positively affect ENV aspects. The firm age, the firm size, the non CEO duality, the percentage of non-executive directors, and the percentage of women on Board positively affect EMP aspects. The firm age, firm size, profitability, non CEO duality, and percentage of non executive directors positively affect COM aspects. The firm age, the firm size, the non CEO duality, the percentage of non-executive directors, and the percentage of women on the Board positively affect PROCUS aspects. However, the financial leverage negatively affects to ECO aspects, ENV aspects, and COM aspects. This result is similar to the studies of Yusoff et al. (2016) and Ananzeh (2020), stating that corporate governance characteristics have a different impact on CSR component aspects.

5. CONCLUSION AND POLICY IMPLICATIONS

The study was conducted to analyze the influence of the board characteristic factors on CSR reporting of Vietnam companies. The sample is all non-financial listed firms that must be achieved standards, including (1) having a number of years for listing is at least 7 years; (2) having annual and corporate governance reports for 7 years from 2013-2019 that have data including CSR reporting data, Board characteristics and some control variables in the model. The content analysis is used to collect CSR collects information from firm's annual reports and corporate governance reports. The REMTobit regression method is used to analyze the impact of Board characteristics on CSR reporting because the dependent variable is blocked. The results of descriptive statistics show that the mean, minimum, maximum, and standard deviation of variables in the research model. The mean assets is 2,500 VND billion; The mean age is 31.3 years; The mean ROA is 0.047; The mean financial leverage is 0.53; The mean Board size is 5.5 members; The mean percentage of non-executive directors is 65.05%, higher than the standard (at least 1/3 of the Board size according to Vietnam corporate law); 72% of companies have non CEO duality status and 13.66% of companies have CEO duality status.

Besides, the REMTobit regression for overall CSR transparency scores and five-component aspects are presented in Table 3. The results show that in statistically significant at 1%, 5%, and 10%, respectively, the non-CEO duality, the percentage of non-executive directors, and the percentage of women on Board positively affect the overall CSR reporting scores. Based on findings, some policy implications are proposed to improve CSR reporting of Vietnamese listed companies as follows:

Firstly, the results indicate that the independent supervision level of the Board influences the CSR reporting level. Therefore, to increase the level and effectiveness of independent supervision of the Board, companies should increase the percentage of independent members. However, in Vietnam, the concept of “*independence*” in corporate governance has not been completely understood and applied. So, most independent members have not really been independent. Therefore, the government needs to promulgate clear legal provisions on independent members of the Board for joint-stock companies, especially public companies and listed companies, that avoid unrealistic implementation of the Vietnam listed companies. It will improve the corporate governance quality for Vietnam-listed joint-stock companies.

Secondly, the companies should separate the CEO position and the chairman position in order to enhance the objectivity of corporate governance. On the other hand, the government needs to issue mandatory regulations about this problem to avoid the situation of one person holding both CEO and chairman positions at the same time. This improves the efficiency of corporate governance and increases the CSR reporting level.

Thirdly, the results indicate that the higher the presence of women on the Board, the greater the level of CSR reporting. So, the companies should increase the participation level of women on the board by creating more opportunities for women who have management skills to join the Board.

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STATE AUDIT ROLE AND PRACTICES OF SOME INTERNATIONAL AUDIT INSTITUTIONS

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Abstract: *Over 25 years of establishment and development, the State Audit of Vietnam (SAV) has made many positive contributions to the cause of building a transparent and sustainable national finance. Since then, the State Audit of Vietnam has consolidated its position and contributed to the audit development of the Supreme Audit Institutions (SAIs) in Asia (ASOSAI). With the urgent and huge requirements, the State Audit Office of Vietnam needs to consult and learn from SAI's practical experiences in public finance budget management in Vietnam.*

Keywords: *State Audit; SAIs*

INTRODUCTION

Currently, Vietnam is a member of the International Organization of Supreme Audit Institutions (INTOSAI) and the Asian Organization of Supreme Audit Institutions (ASOSAI) since January 1997. has been actively participating in the process of international integration. Therefore, studying and understanding the characteristics of the State Auditors of the world plays an important role in assessing and drawing out the strengths and limitations of the Vietnamese Auditors on the path of integration. The article focuses on analyzing the characteristics of the State Audit of Vietnam in 7 typical countries in the world that have had a long history of developing the historical accounting industry to reflect and review the State Audit of Vietnam.

METHOD

The authors mainly use qualitative research methods based on documents (legal documents) to understand and analyze the research objects, specifically: Research on location, the role of the State Audit following the provisions of the International Organization of Auditing Agencies. The International Organization of Supreme Audit Institutions (INTOSAI) (SAIs), the author's team, has modeled the functional structure and authority of the State Audit, clearly decentralizing and decentralizing operational departments of the Auditor; Second, based on analyzing the characteristics of the State Audit of the countries: China, France, Germany, USA, Korea, Australia, Japan, the authors grouped subjects with developed economies to see the establishment of a macro-economic inspection and control system, in which the owner's representative agency is the State Auditor and Auditor. The roles of these agencies are very clear, decentralizing tasks according to

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the decentralization of federal and state, local or territorial powers to help governments transparent and efficient in budget management; simultaneously, it also recognizes the limitations of auditing activities of developing economies.

The basis for performing the role of a state audit in state budget management control

The role of the State Audit has been focused on and has a relationship in the development career to establish an independent audit role and improve the legal status of the State Audit.

First: The legal position of the state audit

INTOSAI has introduced the concept that “Auditing is the process by which independent and competent experts, with professional skills, collect and evaluate evidence about an entity’s quantifiable information to confirm and report on how well this information fits with established standards’ (INTOSAI, 2004). In addition, the legal position of the State Audit is also reflected in the basic functions and tasks: Confirmation, consulting, arbitration,... helping the State Audit perform well the main role in auditing activities (Economic Council) and bilateral and multilateral cooperation with SAIs in the world.

According to the SAIs, the State Audit plays the highest position in the state’s powerful agencies in inspecting and supervising the state or federal state budget. Depending on the political characteristics of each country and the decentralization of state management, the SAV is directly under the National Assembly (Legislative Body) or the Government (Executive Body) or can operate independently. The State Audit’s activities in serving the legislative and executive branches with diverse characteristics also affect and depend on the organizational characteristics of the audit apparatus in some countries around the world. The legal position of the State Audit is always associated with the constraints of the law, political institutions, and operational organization. The legal position must show the power and legality when promulgating the State Audit Code and the system of sub-law documents and operating practices. (Vuong Dinh Hue, 2012).

In Vietnam, the organization of the state audit apparatus is headed by the State Auditor General, elected, appointed, dismissed, and dismissed by the National Assembly. Since 2006, the State Audit has operated independently and is one of the four highest public agencies established by the National Assembly. The operation of the State Audit Office is independent, only in compliance with the Constitution and the Law; audit results report to the National Assembly, the National Assembly Standing Committee and provide users with information and publicize audit results.

Second: Auditing role of the state audit

In the early years of the twentieth century, economic activity had a real role in making the national finance transparent after the revolution of economic reform and industrialization. State Audit has many names, depending on each country, such as Court of Accountancy of the French Republic, Commission on Auditing and Control of India; The Audit Office of the Russian Federation, the United States General Accounting Agency, the Korean Auditing and Inspection Commission, the Japanese Auditing Commission, etc. These countries have joined an International Organization of Auditing Agencies. International Organization of Supreme Audit Institutions (INTOSAI) (SAIs).

SAIs mentioned the institutional concept used in auditing in the ASOSAI and INTOSAI Congress documents to define the State Audit's role. The institution is: Establishing an order, institution, legal framework, or common practice, independently exercising direct or indirect monitoring of the regular activities of a subject according to the authorized authority institutions for management reform. According to the report of the Institute for Legislative Studies - Standing Committee of the National Assembly of Vietnam (2013), the Report on the study of the relationship between the National Assembly and the State Audit Institution, aiming to amend the 1992 Constitution of Vietnam. This enhances the position of the State Audit of Vietnam, which is independent of the National Assembly and has the same supervisory and control authority as the National Assembly, but is controlled by the National Assembly.

Through studies on the organization of the state audit apparatus with the position of 53 members of INTOSAI statistics, the State Audit Agency under the National Assembly has 10/53 countries such as the UK, the US, Russia, Sweden, and Denmark. Circuit,...; State audit agencies under the Government have 10/53 countries such as:

China, Japan, Chile,...; State Audit agency under the head of state has 11/53 countries such as Korea, India, Nepal, etc...; Independent SAV agencies have 8/53 countries such as Germany, Thailand, and the Philippines, Indonesia, Peru, South Africa, etc. Currently, the State Audit of Vietnam is established by the National Assembly but belongs to the National Assembly, operates independently, only obeys The Constitution and laws are consistent with the principles of SAIs such as Germany, Thailand, Philippines... (Kjell Storlokken, 2007). The 2013 Constitution of Vietnam stipulates: "The State Auditor is established by the National Assembly, operates independently and only obeys the law, audits the management and use of public finances and assets". The provisions of the Constitution ensure compliance with the audit principles and standards outlined in the Lima Declaration (1977) and the Mexican Declaration (2007) of INTOSAI.

The role of an independent controlling institution (audit, management) is to help the National Assembly and the Government indirectly control the management of the state budget and finance; In terms of auditing, the State Audit directly controls the budget management activities of the managing entity.

The model of the role of the state audit in the management of the state budget, public funds clearly demonstrates the functions, tasks, and position of an organization that develops together with the activities of the state audit and is built on the theoretical foundation in the Oxford dictionary, 2007 of the university. Oxford University and the Vietnamese dictionary of Professor Hoang Phe - Center for Dictionaries are as follows.

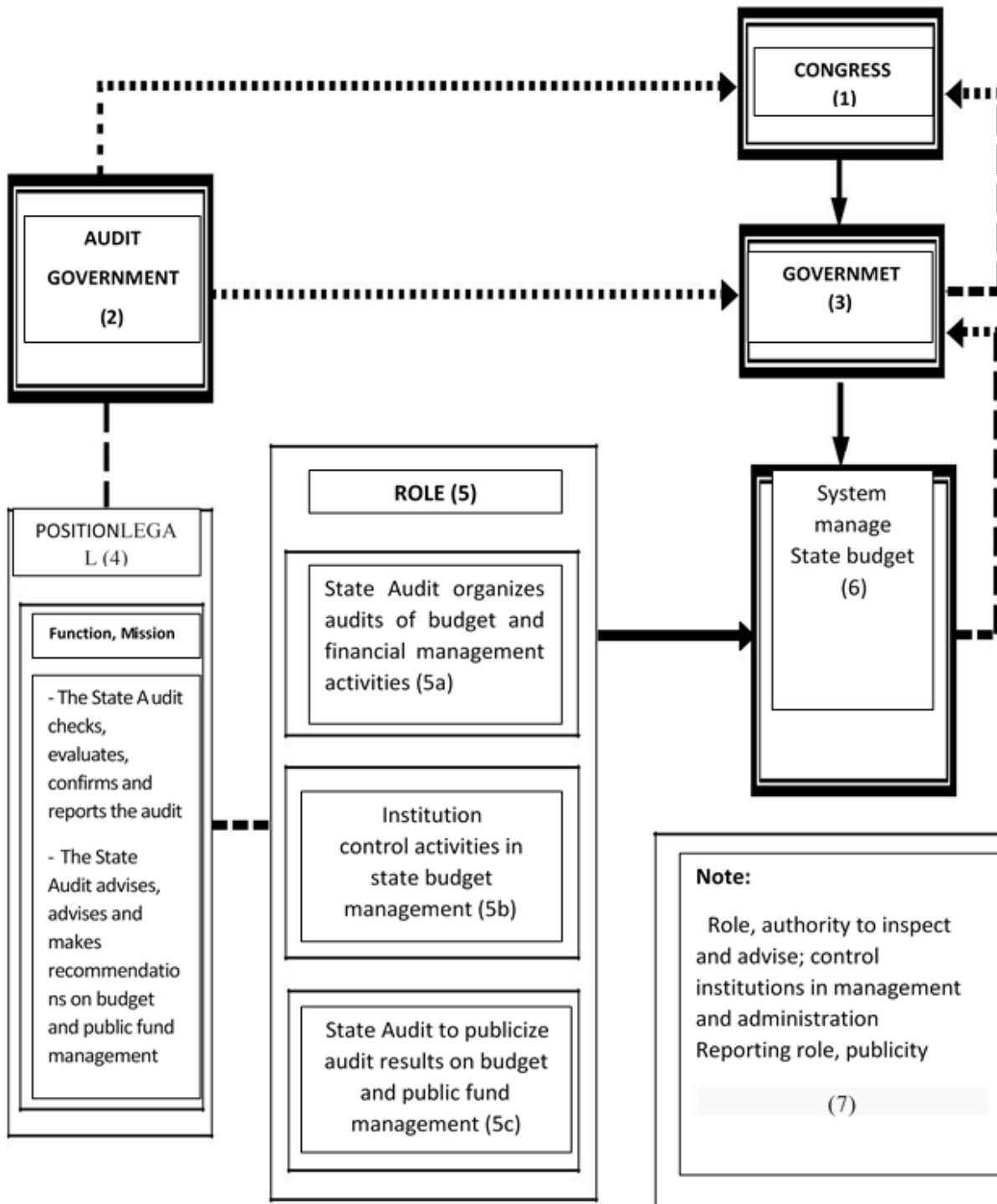


Figure 1: State audit role

Source: Theoretical foundations in the Oxford dictionary, 2007.

In the box (1), (2), (3) is the reporting relationship, publicizing the audit results between the subjects.

The role of the State Audit in the legal position is expressed through the functions, duties and powers of the State Auditor at the gearbox (4), which are: Checking, evaluating and certifying the state budget audit report; advice, advise and recommend policies on budget management and public funds.

The institutional role of the State Audit is shown in boxes (5), (5a), (5b), (5c) as: Auditing organization on budget management, public funds; institutions to control state budget management activities; publicize audit results. The role of the State Audit is also shown in the box (4), (5) when publishing the results of the audit report on the economy, efficiency, effectiveness of budget management and public funds.

As for the state budget management system at the gearbox (6), the State Audit has an active role in this system at the gearbox (7) which is: The role of controlling, managing, operating, inspecting and advising; control institutions; The system of the subject of state budget management also has the role of reporting and publicizing to the National Assembly, the Government and the State Audit.

Third: Control of state budget management (state budget)

State budget is an immutable concept, recognized by SAIs, state budget management is associated with political characteristics and the appearance of the state. To control budget management and public funds, it is necessary to have state intervention to use those resources to allocate resources, coordinate and spend operating budgets, and develop the state apparatus to perform its functions economic management and social security. The state budget is formed at many levels, many objects of management and use. Currently, the concept of state budget still has many different views (Nguyen Thi Thanh Diep, 2016):

i) Nature of State Budget: State budget is understood as an estimate prepared by the Government and submitted to the National Assembly for approval, helping Parliaments to make budget decisions and stabilize politics. In essence, the state budget is like an invisible and invaluable form. The state budget is analyzed, planned, divided for different goals and following the law. The state promulgates regulations to effectively coordinate and use the budget for that purpose and adapt to the adjustment of social relationships. Therefore, the state budget is also regularly adjusted to increase and decrease after each adjustment cycle of social relationships and development tasks and goals. The state budget also plays the role of adjusting the macroeconomy and strengthening the legislation to enforce the law on the state budget, helping the Parliaments (National Assembly) control the macroeconomy, social security and adjust the law.

ii) State budget management subject: The main representative is the apparatus of public authorities at all levels such as the National Assembly, the Government, the People's Committees, the People's Councils at all levels for the people to manage their tax contributions. The subject of re-supervision is the person who directly fulfills the tax obligations and is supervised by the people on the spending and use of society's resources through reporting channels and publicly using the budget of the representative agencies—state budget management. The State Audit is a public agency that acts as an intermediary between the subjects managing the state budget and is considered an arbiter of the supervision and management of state budget revenues and expenditures and public funds. The State Audit can sometimes act as the subject of state budget management which has been constitutionally controlled through the role of controlling independent institutions, subject only to the Constitution and the law.

iii) Requirements on decentralization of state budget management affect the role of the State Audit

Each country has different political characteristics, the economic development is not the same, the decentralization of budget management. State government levels are formed in association with

the decentralization of state budget management at all levels. They are required to be associated with the roles, powers, and responsibilities of that level. The decentralization of state budget management is subject to different laws that affect the role of the State Audit in making decisions on the selection of audit or control topics but must comply with state or federal laws. In some cases where the supreme state law must be complied with, the SAV request must be submitted to the National Assembly, the National Assembly, the Government and the highest competent authorities.

State budget management decentralization requires the assignment of both responsibilities and roles for state budget management from the central level to local governments at all levels, depending on each country's local government organization model. Some countries consider the central budget the federal budget, and the local budget the state budget. With the different management decentralization mechanisms of each country, it is required to be attached to the administrative decentralization mechanism for management. State budget management decentralization solves the relationship between government levels from central to local levels on the principles of budget preservation, efficient use, publicity and transparency, unified centralization of power, independence and autonomy owners in budget management at all levels (Nguyen Thi Thanh Diep, 2016). In Vietnam, the decentralization of state budget management helps the state audit apparatus to also be decentralized to audit and control state budget management activities by territory, region, and region. It requires the assignment of powers and obligations to each control department independent math.

iv) State budget audit organization:

In international terms, the State Audit is the Supreme Audit Institutions - SAIs. The State Audit is the powerful agency of the state apparatus, on behalf of the state to perform its responsibilities, tasks and roles in inspection, supervise public resources, and operates independently according to the law.

The State Audit Office conducts state budget audit organization from the stage of the audit process, in the audit process organization of audit planning is an important starting point. In the operation audit, the organization of the operational audit is more complicated with the set objectives, criteria, and strict compliance with the audit process.

The objective of the budget audit organization is to establish the relationships in budget management between the audit subject and the object. The audit organization also clearly defines the specific audit objectives, scope, and objects in the audit there.

The state budget audit organization has a relationship with the organization of the audit apparatus expressed through methods, processes, capacity, standards and professional ethics. The systematic nature of the audit apparatus organization ensures science, coordination and alignment at each stage of implementation, organization and continuous operation. The state budget audit organization also depends on the operating environment of the audit subject and audit object, the effective audit organization demonstrates the position, function and role of the state audit apparatus.

The role of the state audit in auditing the state budget is very clear, but the role of the state audit in controlling and managing the state budget is still weak. Depending on the organizational structure of the state audit apparatus in different SAIs, the role of the state audit is also different.

First, the role of China's state audit:

The National Auditing Authority of China (CNAO) in 1982, the independent audit and supervision system resolution passed by the National People's Congress in the revised Constitution. Since 1987, the two Party Discipline Inspection and Administrative Supervision agencies have been merged with a two-door model to avoid overlapping in the performance of roles, functions and tasks of inspection, supervision and control economic, administrative and Party control (Do Xuan, 2009).

China's State Audit at the Central Government is in charge of the Minister, like the General State Auditor in Vietnam; The locality also has an administrative State Audit and a provincial State Audit, and there is a State Audit directly under the provincial State Audit. The current popular type of audit is operational and compliance, which is applied to assess the economy, efficiency, and effectiveness of an object's operations rather than the national budget management task. In Vietnam, there are regional SAVs located in provinces and cities.

CNAO belongs to the State Council, performs the task of Auditing financial revenues and expenditures. The role of CNAO is to supervise and check financial revenues and expenditures and open a special investigation when necessary, and has a professional supervisory role through CNAO's internal audit, which is submitted to CNAO at higher levels. Thus, the role of state budget audit of the State Audit of China is less represented by the role of performance audit, but more in favor of compliance audit, accountability audit and prevention of corruption and negativity in financial management and public assets. . In Vietnam, the State Audit is organizing an audit of the economic responsibility of the heads and managers rather than the anti-corruption organization; Particularly for the type of performance audit, it has not been effectively applied (Do Xuan, 2009).

Second, the role of the French state audit:

The administrative system of the French Republic is decentralized and decentralized, where there is a local territorial community, the power is delegated to the locality to manage, the central state does not intervene but only performs the role of control. Control and supervision through public authorities, in which the State Audit plays the role of controlling representative of the French State. The French State also has ministries and branches like Vietnam, ministers, specialized inspection agencies; The locality has the Governor and the Regional Chief, the lower power is the Director of Public Works [18].

The French State Audit Office is known as the Court of Auditors, the Court of Auditors was established with the main operational role of a stronger legal compliance audit. The conclusions of the Trial Court are very powerful and legal as the Court has the right to request opinions for trial. The role of the Trial Court is expressed in higher control than the role of inspection, supervision and control. In Vietnam, the State Audit does not have a court or prosecutor's court role, so all cases are transferred to investigation and trial agencies.

Third, the role of the German state audit:

Germany is a federal state, with three large cities and about 17 states, the division of powers in each state is very clear, the people elect the State Parliament and the Government is elected by the National Assembly. State and federal budgets are not dependent on each other as clearly stated in the Constitution, even the administrative powers are not dependent on each other.

In Germany, there is an Administrative Court to settle disputes and complaints that cannot be resolved internally by the administrative Court. Inspection and supervision activities belong to the federal Government through agencies such as the Bureau of Administration, the Federal Bureau of Statistics, and the Federal Audit. With a democratic economy, each state has a state audit independent of the federal state audit, but there is no independent inspection system, only specialized inspectors [22].

The most commonly applied type of audit is the operational audit. The federal SAV can set up an audit committee. The Federal SAV has a Chairman and they have a great role as defined in the Constitution, Federal Law and State Budget Law. Thus, the role of the State Audit in the Federal Republic of Germany is very clear and independent, the Federal State Audit has the role of inspection and supervision according to the federal law, the State Audit also has the role of inspection and supervision according to the law. state [18].

In Vietnam, the role of SAV in majors and regions is completely dependent on the general role of the SAV through the Economic Activity Act, which has not been performed independently like the State Auditor of Germany and the Federal State Audit of Germany. The type of operational audit applied has not been given as much attention as in the German SAV.

Fourth, US state audit role:

Similar to Germany, the United States has states and federations. The General Accounting Office (GAO) is considered the federal State Audit, established by the National Assembly in 1921 and directly under the National Assembly. The head of the GAO is the Inspector General (in Vietnam called the General Accounting Office). Auditor) appointed by the President for a term of 15 years. GAO has many branches (Offices) located in different localities (states). The type of audit applied is compliance and operational, similar to the German SAV, the most commonly applied type of operational audit [4].

The United States Congress created two Senate and House of Representatives to oversee the GAO's operational role and possibly change the GAO's legal status. The role of the GAO is seen as an independent, executive agency. The role of the GAO helps the National Assembly and the President to control and supervise economic management, federal budget management and the state budget. The type of internal audit in the states of the GAO is also solid, operating and reporting the results of budget expenditure monitoring to the GAO to report to the National Assembly.

Thus, the State Audit in the United States, like the State Audit Office of Germany, has similarities with the State Audit of Vietnam. The difference is that Vietnam does not have an agency to supervise the role of the State Audit, such as the US Senate and the US House of Representatives. The type of operational audit applied to control the management of activities and state budget revenues and expenditures has not been strongly developed, so the inspection and supervision system for the role of the State Audit is still limited.

Fifth, the Korean audit role:

The Board of Inspection and Audit (called BAI) was consolidated between the two Inspectorate and Auditing agencies for the reason that the roles and functions of these two agencies are similar. The Board of Inspection and Auditing is regulated by the Constitution as amended in 1962. The

role of the BAI rests with the President of the Republic of Korea. BAI does not have a regional SAV but has internal audit and local inspection organizations and administrative agencies. BAI has the highest position and role in the state apparatus, based on its role and authority in inspection, supervision and control of the state budget, which BAI fully grasps the fluctuations and development of the economy. The Economic and Planning Board (EPB) is the highest state budget management agency in Korea, but BAI's opinion is required when cutting estimates or adjusting local budgets (INTOSAI, 2007). In addition to inspecting and controlling the state budget, BAI can also conduct administrative inspections at local state agencies and inspect the responsibilities of heads, civil servants, and managers.

Unlike Korea, in Vietnam, the Inspectorate operates independently of the State Audit, when allocating the State budget, the State Audit only has opinions to participate in budget discussions on audit-related contents without making absolute decisions comparable to BAI.

Sixth, the role of the Japanese and Australian state auditors:

The State Audit of Japan is called the Audit Committee of Japan, performing the direct role of supervising and controlling activities in a short period of time for a program, project, or policy rather than supervising budget management activities investment. The most commonly applied type of audit is the audit of investment and development activities to evaluate 05 contents: correctness, legal compliance, economy, efficiency, and effectiveness. For the Australian National Auditing Authority (ANAO), ANAO spends 50% of its human resources and investment budget to audit development investment activities. The specific objective of an audit is to evaluate the economy, efficiency and effectiveness, and legal compliance. Like the Japanese State Audit, ANAO also defines the role of the development investment audit to provide the National Assembly with assured information related to the supervision, inspection and management of Australian Government agencies, programs to support managers in the public sector to promote effective communication administrative activities [11].

With the political economy characteristics of Japan and Australia, the role of the State Audit is shown at the pre-audit stage, which is organized with specific characteristics and is evaluated very effectively. The role of the State Audit has made assessments about the economy, efficiency and effectiveness in the use of public resources for development investment projects and programs. Thus, the State Audit of Japan and Australia have shown the role of controlling, inspecting and supervising in a specific period in a short time to make short and continuous reports (In the type of continuous audit custom). Carry out inspection and supervision right in the early stages of the project's operation, the new development investment program comprehensively assesses the effectiveness and efficiency of future operations. This is a lesson for Vietnam, the SAV is gradually organizing an effective audit to improve the role of the SAV compared to ANAO (Pham Tu, 2013).

Discuss

Based on the analysis and grouping of the characteristics of the auditing activities of countries during the research, the author's group provides the contents when analyzing and noting the superiority in the effectiveness of the audit activities in developed economies. On the other hand, developing economies have not yet converged the values about the framework standards of the international audit. From there, it shows that the ratio between the development of the economy and the position, role, function, and effectiveness of audit activities.

CONCLUSION

In less developed countries in terms of performance audit, including China, they attach more importance to management responsibility audit than performance audit, aiming at anti-corruption rather than economic efficiency and quality. Operation because their economy gradually synchronizes public administration reform, wiping out previous negativity and corruption, etc. They attach great importance to political factors that interfere with economic management; The State Audit and the Party's role are mixed and unclear. Their state audit only performs the function of checking, confirming, and handling, rather than helping the National Assembly, the Government and all levels to control, manage and supervise the activities of the economy.

In countries with developed economies, such as Japan, Australia, USA, Germany, France, etc., the role of the State Audit is focused on organizing the audit of effective development investment activities. They focus on pre-audit, current audit, field audit, accountability audit, environmental audit for a sustainable community. That makes it very useful to evaluate the economy, efficiency, effectiveness and performance, ensuring the big goal of SAIs in the region. They have established a system of inspection and macroeconomic control of the economy, in which the representative agencies are the Inspectorate and the State Audit. The roles of these agencies are clear, decentralizing tasks according to federal and state, local, or territorial decentralization of powers.

For developing countries like Vietnam, the State Audit annually participates in the draft state budget estimates, but promoting the pre-check role in the total annual state budget estimates is still limited and inefficient. This is a lesson for the State Audit of Vietnam to prioritize, focusing on the role and position together with countries with a long history of auditing such as SAIs in the seven regions of the organization of International Auditing Agencies. In Vietnam, the State Audit annually participates in the draft state budget estimate, but the promotion of the pre-check role for the total annual state budget estimate is still limited and inefficient. This is a lesson for the State Audit of Vietnam to prioritize, focusing on the role and position together with countries with a long history of auditing such as SAIs in the seven regions of the organization of International Auditing Agencies.

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THE IMPACT OF FINANCIAL POLICIES ON PRIVATE SECTOR DEVELOPMENT

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Abstract: This article aims to analyze the impact of four financial policies (state budget expenditure policy, tax policy, credit policy and financial policy on land) on private sector development in Vietnam. The authors used the survey method by questionnaire and built a quantitative model using SPSS 22 software to build a regression model to assess the impact of financial policies on private sector development. Based on the research results, the authors have made a number of discussions and assessments on the impact of policies and proposed solutions to improve the financial policies for private economic sector development in Vietnam to 2025, with a vision to 2030 in accordance with the goals and orientations of the Party and State.

Keywords: financial policies, private sector, private sector development

1. INTRODUCTION

The private economy is an essential component of each country's economy. In Vietnam, the role of the private economy in the market economy is reflected in many aspects of social life such as economic development, social development and has a positive influence on the public economic sector. Private sector development is a long-term strategic issue in the development of a socialist-oriented multi-sector economy, making a vital contribution to the implementation of the central task of economic development, industrialization, modernization and improvement of the country's internal resources in international economic integration. In which, financial policies are the key factor affecting and governing the development of this area.

2. LITERATURE REVIEW AND PREVIOUS RESEARCH STUDIES

2.1. The external research

The study “*Private-sector development in a transition economy: The case of Vietnam*” by Schaumburg and Henrik (2005), pointed out Since Vietnam implemented the Doi Moi policy in 1986, the development of the private sector was a policy concern of the Communist Party and Government of Vietnam. The private sector is becoming an important factor contributing to the Vietnamese economy in maintaining economic growth and poverty reduction. But private sector development in Vietnam is still at a low level, on a small scale and facing competition with large state-owned and foreign enterprises. Poverty reduction has been impressive, but inequality remains a challenge for the Vietnamese economy.

The article “*Do government financial and tax policy affect SME's growth?*” written by Roghayyeh Afshari and associates (2012) determined the impact of Government fiscal and tax policies on the growth of small and medium-sized enterprises (SMEs) in Iran. The study used a

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factor analysis method based on data obtained from a survey of 64 SMEs in Iran. The results of the study provide evidence on the ways in which the government's fiscal and tax policies affect the growth of SMEs. Research shows tax incentives for research and development; Reasonable rates of tax exemption, reduction, and deduction are the main determinants for the development of SMEs. The second finding of the study is a direct relationship between the percentage of credit provided to SMEs and their growth. However, the key issue is not low credit rates but interest rates that have a significant impact on SME growth.

The article "*The role of the government policy for supporting the SMEs*" by Ylvije Boriçi Kraja and associates (2019) mentioned the role of government policies government in supporting small and medium-sized enterprises (SMEs). Using the factor analysis method with data collected from a survey of a number of businesses in Shkoder city, Albania, the study showed a correlation between the performance of SMEs and government policies. This means that the support from the Government's policies creates an incentive to encourage SMEs to develop.

The article "*Effects of government taxation policy on the sales revenue of SME in Uasin Gishu County, Kenya*" written by Isaac Kipchirchir Kamar (2015), aims to find the effect of government tax policy on the sales of small and medium-sized enterprises (SMEs) in Kenya and especially in Uasin Gishu province. The data used in this study were collected by means of a survey by questionnaire, interview, and document analysis and statistically analyzed by correlation analysis, descriptive method, and ratio analysis. The results of the study showed that there is a statistically significant relationship between three contents of tax policy (income tax policy, VAT policy, flat tax policy) which have a significant impact on the sales revenue of SMEs in Kenya in both positive and negative directions. SMEs should be taxed lower to help these businesses have enough capital to carry out other activities that contribute to increasing revenue, profit and increase competitiveness.

The article "*The impact of fiscal policy on foreign direct investments. Empiric evidence from Romania*" written by Magdalena Rădulescu and Elena Druica (2014), using the linear regression analysis method, presented the impact of the fiscal and monetary policies on attracting the foreign direct investment (FDI) in Romania, based on a monthly data series during the period 2000-2010. Empirical results have shown that monetary factors such as higher interest rates and higher inflation attracted FDI. Fiscal factors (mainly direct taxes) seem to play a less important role, being relevant only in the long-term. On the basis of economic literature and empirical analysis, the author proposes some orientations for Romania's macroeconomic policy in the short-term in the context of the crisis.

2.2. The national research

The thesis "*Financial policies to support the development of small and medium-sized enterprises in Vietnam*" by Phung Thanh Loan (2019), has analyzed and clarified the situation of small and medium-sized enterprise's development and financial policies to support the development of small and medium-sized enterprises (SMEs) in Vietnam in the period from 2012 to 2017. It focuses on analyzing tax policy, credit policy, and financial policy on land to support the development of SMEs. The thesis analyzed and clarified the current status of financial policies to support the development of SMEs and the results of policy implementation in recent times. Besides, the author used statistical methods combined with regression models with the help of

SPSS 20 software to analyze the impact of financial policies on the development of SMEs; thence, the author proposed a number of possible solutions to develop SMEs in Vietnam by 2030.

The thesis “*Development of the private economy in Thanh Hoa province*” by Nguyen Xuan Hung (2021), analyzed the current situation of private economic development in Thanh Hoa province in recent times and proposed some solutions to develop the private economy in Thanh Hoa in the near future. In which, the author has built a questionnaire to research and assess the impact of factors on the development of the private economy. Regression analysis of survey results in the area of the thesis clearly shows, Legal environment, social awareness; Market the product; Capital, production and business premises; Management qualifications, labor quality; The level of science and technology have had an impact on the development of the private economy in Thanh Hoa over the past time. In which, the product consumption market is the most influential factor.

The thesis “*The impact of the Government’s macroeconomic regulatory policies on the development of small and medium-sized enterprises in Vietnam*” by Tran Thi Van Hoa (2003), has pointed out the important role of Government policies to the development of small and medium-sized enterprises (SMEs) in Vietnam. By the method of interview survey and the method of analyzing the interaction between the Government and enterprises, the study has evaluated the impact of macroeconomic regulatory policies on the development of SMEs. The study draws conclusions about the policies that have the most obvious effects on SMEs such as policies to encourage domestic investment, credit finance policies, and innovation policies for state-owned enterprises. The study also found that the impact of these policies was uneven across all industries and types of businesses.

The series of annual reports on Vietnamese enterprises by the Enterprise Development Institute, the Vietnam Chamber of Commerce and Industry (VCCI) are carried out annually to assess the business environment, the capacity of enterprises, and analyze the real operation status of enterprises according to the selected topic of each year through the results of the survey of enterprises in Vietnam. Therefore, it will build an appropriate direction for business development in Vietnam.

The article “*Impact of tax policy on foreign direct investment in ASEAN countries*” by Nguyen Van Thuan, Nguyen Thi Kim Chi, Tran Xuan Hang, and Nguyen Minh Hang analyzed the impact of tax policy, informed through income tax, consumption tax, and total tax collection in the process of attracting Foreign Direct Investment (FDI) in six developing countries in ASEAN (Cambodia, Indonesia, Malaysia, Philippines, Thailand, and Vietnam) from 2000 to 2017. Therefore, considering the impact of tax policy through income tax and consumption tax variables, total tax revenue on FDI by POLS, FEM, REM, and GLS estimation methods. The empirical results showed that total tax revenue has a negative impact on FDI, and income tax and consumption tax have a positive impact on FDI. On that basis, the study made some suggestions on tax policies to attract FDI for this group of countries.

2.3. Overall evaluation of published researches

To conclude, the above studies have clarified the theoretical basis of the private sector, private sector development, the nature of financial policies, and the impact of financial policies on private sector development. However, the works related to financial policies for private sector development in Vietnam are still limited, there is no research to evaluate the overall financial policies (including

state budget expenditure, tax policy, credit policy and financial policy on land) and their impact on the development of the private sector in the period 2014-2020.

Therefore, this is a gap for the authors to carry out this topic by building a quantitative model to assess the impact of financial policies (state budget expenditure policy, tax policy, credit policy, and financial policy on land) to the development of the private economy, and on that basis, proposing more appropriate orientations and recommendations for the use of these financial policies to develop the private sector in Vietnam in the coming time.

3. METHODOLOGY AND PROPOSED MODEL

3.1. Research hypothesis

Financial policies (state budget expenditure, tax policy, credit policy, and financial policy on land) are factors that directly affect the performance of enterprises, thereby promoting private sector development. Studying these financial policies will help to propose solutions to improve private sector development in Vietnam.

The authors construct hypotheses about the financial policies factors affecting the promotion of private sector development in Vietnam as follows:

State budget expenditure is an important tool in facilitating the private sector to operate, develop through capital support, and orientation of development projects. The development of a rational state budget expenditure policy will promote the operation of enterprises in particular, thereby developing the private sector in general. Thus, we can propose the following hypothesis:

H1: State budget expenditure policy has a positive impact on the development of enterprises

By means of certain impact methods such as reducing tax rates, applying tax exemption and reduction regimes, tax policy can encourage production activities, contribute to business orientation, support and promote business development. Vice versa, when the tax rate increases, it will limit the production and business activities of enterprises. Thus, we can propose the following hypothesis:

H2: Tax policy has a positive impact on The development of enterprises

For businesses, credit policy contributes to improving production capacity and business efficiency through the fact that businesses have access to preferential loans to meet the capital needs of businesses to carry out production and business. From there we can hypothesize:

H3: Credit policy has a positive impact on The development of enterprises

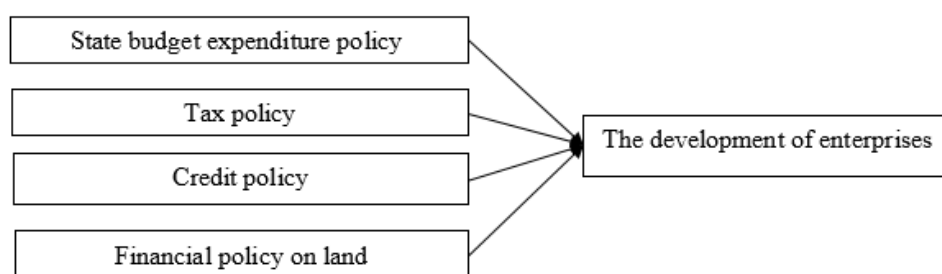
When the State has initial support for land, businesses can shorten construction time, business activities are not interrupted by site clearance, businesses can be somewhat assured to focus on realization their business idea. In addition, incentives for land rent rates, methods of determining land rent, water surface rent, exemption or reduction of land rent are financial support for businesses, helping businesses have more capital to implement the investment in production expansion. From there we can hypothesize:

H4: Financial policy on land has a positive impact on The development of enterprises

3.2. Research model

This research builds a linear regression model with the dependent variable “The development of enterprises”. The observed variables include: State budget expenditure policy, Tax policy, Credit policy, Financial policy on land.

Figure 3.1: Research model of the influence of financial policies on private sector development



3.3. Sample selection and data collection and processing

Due to limited time, the research team designed the questionnaire, sent it via email to more than 500 enterprises and more than 200 businesses submitted answers. After filtering the invalid answer sheets, the research team selected 239 valid answers to build the research model. Although the number of samples is not too large, the diversity of research components is ensured, so it is suitable for modeling research.

4. RESEARCH RESULTS

a. Sample descriptive statistics

Firstly, it is necessary to understand how research patterns are distributed to groups in the following sections: years of operation of the enterprise, the size of the enterprise, and the main business areas of the enterprise.

Described samples	Frequency	Valid Percent	Cumulative Percent
Years of operation of the enterprise			
Less than 1 year	9	3.8	3.8
1-5 years	55	23.0	26.8
5-10 years	107	44.8	71.6
Over 10 years	68	28.4	100.0
The size of the enterprise			
Start-ups	20	8.4	8.4
SMEs	159	66.5	74.9
Large enterprises	52	21.8	96.7
Business households	8	3.3	100.0
The main business areas of the enterprise			
Industry, Construction	84	35.1	31.5
Agriculture, Forestry, Fishery	20	8.4	43.5
Trade and Services	135	56.5	100.0
Total	239	100.0	100.0

Table 4.1: Information description of research subjects

(Source: Analysis and survey results of the authors' team)

b. Descriptives statistics

When looking at the descriptives statistics, it can be easily seen that the enterprises in the research all evaluate the factors that the authors give from the lowest to the highest. This research takes data from many enterprises with different operating times, sizes and fields, so it is natural to have different opinions. The average value (mean) of the independent variables has the difference (mean = 2.368 – 3.879), from here, we can see the different assessment of the level of consent between the independent variables and the dependent variables.

c. Measurement results

The reliability of the scale is assessed through the methods of assessing reliability, analyzing discovery factors. Scale is tested using Cronbach's Alpha coefficients to test the correlation between observed variables. If the observed variable has a correlation with the total variable less than 0.3, it will be disqualified, and if the variable's Cronbach's Alpha is greater than 0.6, the scale will be qualified.

Number	Scale	Cronbach's Alpha
1	State budget expenditure policy (BG)	0.817
2	Tax policy (TX)	0.828
3	Credit policy (CR)	0.889
4	Financial policy on land (LA)	0.811
5	The development of enterprises (Y)	0.739

Table 4.2: Reliability Statistics

(Source: Analysis and survey results of the authors' team)

The results of evaluating Cronbach's Alpha coefficients of observed variables all have correlation coefficients between the total variable (Corrected Item-Total Correlation) over 0.3 and Cronbach's Alpha coefficients of the scales are greater than 0.6.

d. The results of testing research hypotheses

- Verify the correlation among variables

Initially, when analyzing linear regression we consider the linear correlation relationships between the dependent variable and each independent variable as well as between the independent variables. If the correlation coefficient between the dependent variable and the independent variables is large, it proves that they are related to each other and linear regression analysis can be appropriate. On the other hand, if there is a high correlation between the independent variables, it is also an indication that multicollinearity may occur between them in the linear regression model we are considering.

Pearson r correlation test is used to test linear relationships between the independent variables and the dependent variable. Pearson's correlation r has values ranging from -1 to 1 (note the coefficient r is significant only when sig is less than 0.05). If $\text{sig} < 0.05$, the correlation is correlated, the stronger correlation the closer r is to 1, the weaker correlation the nearer to 0; if $\text{sig} > 0.05$ then there is no correlation.

According to the correlation matrix, the variables are all correlated and at the 0.000 significance level ($\text{sig} = 0.000$). The correlation coefficient between the dependent variable which

is “The development of enterprises” and the independent variables is quite high. The factor with the highest correlation with private sector development is tax policy with $r = 0.499$. Next is the factor of credit policy with $r = 0.402$, then the factor of state budget expenditure has a correlation coefficient with $r = 0.39$. Finally, there is financial policy on land with $r = 0.299$. The correlation coefficient between the independent variables and the dependent variable is relatively high, so we need to pay attention to the problem of multi-collinearity when doing regression analysis.

		Y	BG	TX	CR	LA
Y	Pearson Correlation	1	.390**	.499**	.402**	.299**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	239	239	239	239	239
BG	Pearson Correlation	.390**	1	.374**	.257**	.069
	Sig. (2-tailed)	.000		.000	.000	.291
	N	239	239	239	239	239
TX	Pearson Correlation	.499**	.374**	1	.210**	.256**
	Sig. (2-tailed)	.000	.000		.001	.000
	N	239	239	239	239	239
CR	Pearson Correlation	.402**	.257**	.210**	1	.409**
	Sig. (2-tailed)	.000	.000	.001		.000
	N	239	239	239	239	239
LA	Pearson Correlation	.299**	.069	.256**	.409**	1
	Sig. (2-tailed)	.000	.291	.000	.000	
	N	239	239	239	239	239

Table 4.3: Correlation matrix between variables

(Source: Analysis and survey results of the authors' team)

- Verify all correlation regression hypotheses

Testing the regression assumptions for each pair (X_i , Y) shows that there is no violation of assumptions, the variables are suitable for regression analysis. The results of the testing of regression hypotheses have been presented.

e. Multiple linear regression analysis

Regression analysis will determine the causal relationship between the dependent variable (The development of enterprises) and the independent variables (state budget expenditure, tax policy, credit policy and financial policy on land). The regression model will show the degree of influence of policies on the development of enterprises.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.813 ^a	.675	.665	.47627	1.833

Table 4.4: Model Summary

(Source: Analysis and survey results of the authors' team)

The adjusted R² value is 0.665 shows that the independent variables included in the regression model affects 66.5% of the change of the dependent variable, the remaining 33.5% is due to variables outside the model and random error.

Durbin – Watson coefficient is 1.883, in the range from 1.5 to 2.5, so no first order series autocorrelation occurs.

The sig value of the F test was used to test the fit of the regression model. If sig < 0.05, it is concluded that multiple linear regression model fits the data set and can be used.

		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	31.908	4	7.977	35.166	.000 ^b
	Residual	53.080	234	.227		
	Total	84.987	238			

Table 4.5: ANOVA Test

(Source: Analysis and survey results of the authors' team)

Table 4.5 shows the sig of the F test = 0.00 < 0.05, so the regression model is significant.

Estimated linear regression model with non-standardized coefficients expressing the relationship between the development of enterprises (Y) and independent variables: state budget expenditure policy (BG), tax policy (TX), credit policy (CR) and financial policy on land (LA) are shown below:

$$Y = -0.132 + 0.190*BG + 0.352*TX + 0.239*CR + 0.098*LA + e$$

B	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		Std. Error	Beta			
1	(Constant)	-.132	.298		-.443	.658
	BG	.176	.053	.190	3.320	.001
	TX	.501	.082	.352	6.125	.000
	CR	.247	.060	.239	4.090	.000
	LA	.137	.081	.098	1.685	.003

Table 4.6: Coefficients

(Source: Analysis and survey results of the authors' team)

The above linear regression equation helps us to draw the conclusion from the research sample that The development of enterprises depends on four factors: state budget expenditure policy, tax policy, credit policy and financial policy on land.

From the table above, based on the standardized regression coefficient, we also see the importance of each factor to The development of enterprises, in which the factor of tax policy has the strongest influence, followed by credit policy and other capital financing, state budget expenditure policy, and finally financial policy on land.

f. Hypothesis testing results

The hypotheses of the model:

H1: State budget expenditure policy has a positive impact on The development of enterprises. The factor of state budget expenditure policy has beta = 0.190; t = 3.320; sig. = 0.001, so this hypothesis is accepted at all significance levels.

H2: Tax policy has a positive impact on The development of enterprises. The tax policy factor has $\beta = 0.352$; $t\text{-value} = 6.125$; $\text{sig.} = 0.000$, so this hypothesis is accepted at all significance levels.

H3: Credit policy has a positive impact on The development of enterprises. The factor of those has $\beta = 0.239$; $t\text{-value} = 4.090$; $\text{sig.} = 0.000$ so this hypothesis is accepted at all significance levels.

H4: Financial policy on land has a positive impact on The development of enterprises. Factor of other policies has $\beta = 0.098$; $t\text{-value} = 1.685$; $\text{sig.} = 0.003$ so this hypothesis is accepted at all significance levels.

5. DISCUSSION AND CONCLUSION

From the analytical results presented in the above contents, the following conclusions are drawn: the hypotheses of models H1, H2, H3, and H4 are accepted, that is state budget expenditure policy, tax policies, credit policy and financial policy on land have positive impacts on The development of enterprises, thereby promoting private sector development. The stronger these factors are, the more private sector development will be promoted, in which the emphasis of tax policy, and credit policy are the two factors that have the strongest influence on private sector development. Thus, the research results have shown the positive effects of financial policies on the promotion of production and business activities of enterprises, from which the current situation can be assessed and suitable solutions to be given to encourage private sector development in Vietnam.

Besides, based on survey information at enterprises, it can be seen that:

For the state budget spending policy:

Most businesses have difficulty in accessing state-invested projects, and projects in public-private partnership are limited. In addition, most businesses have not been able to access policies and investment support in science and technology. Besides, the management and professional capacity of enterprises are relatively weak, showing that enterprises have not received training support to improve management capacity and professional qualifications from the state budget.

For tax policy:

Businesses have access to preferential policies of tax exemption and reduction in each specific period. However, many businesses wish to apply a lower CIT rate to encourage production and business activities and promote faster development of enterprises, which shows that currently there is no different tax rate, preferential treatment for enterprises in the private sector. In addition, the policy of tax exemption and reduction in each period has been applied, but many businesses do not take advantage of this. Typically, in the past time, when the Covid-19 epidemic caused the activities of businesses to be stagnant and inefficient, leading to losses, enterprises had no profit, so they could not take advantage of the Government's tax incentives.

For credit policy:

The private economic sector still faces many difficulties in accessing capital. Most enterprises participating in the survey have easier access to capital from banks than from preferential capital. Enterprises in the private sector are mainly SMEs with weak financial autonomy and low value of collateral, leading to difficulties in getting loans. In addition, loan procedures are cumbersome and complicated, hindering enterprises' access to capital.

For financial policy on land:

It can be seen that, the land fund for production and business is limited, the land rental price is still high, and the procedures for obtaining land are complicated, making it difficult for businesses to access land.

From the research results on the group, the authors propose some recommendations:

Firstly, complete the state budget spending policy

- Determine a reasonable system to increase state budget spending to develop the private sector in Vietnam: Increase the proportion of state budget expenditure reasonably, increase investment resources from the state budget, increase sharply capital support for the private economic sector in the form of public-private partnerships, and sources outside the state budget so that these sources are really the main sources of finance for investment in enterprises, thereby promoting the private sector development.

- To rationally allocate financial resources from the state budget to develop the private sector in Vietnam and give priority to enterprises in areas with extremely difficult socio-economic conditions; Enterprises apply science and technology; Enterprises carry out socialization activities.

Secondly, complete tax policy

- Continue to apply tax incentives in a reasonable way to promote the development of the private sector by focusing on tax incentives for enterprises in areas with extremely difficult socio-economic conditions; enterprises apply science and technology; enterprises carry out socialization activities; enterprises invest in environmental protection; SMEs.

- Have tax policy to overcome the effects of the Covid-19 epidemic and complete synchronously and improve the efficiency of tax policies by applying a one-stop-shop mechanism when dealing with administrative procedures for taxpayers and enterprises.

Thirdly, complete the credit policy

- Have solutions to support commercial banks participating in implementing targeted policies, ensuring profitability and competitiveness, simplifying loan procedures, and balancing loan sources with interest rates and more reasonable terms for enterprises.

- Expand borrowers to all start-ups, SMEs, enterprises applying high technology, and enterprises investing in environmental protection. Strengthen the activities of the SME Development Fund, the Credit Guarantee Fund, and the Innovative Start-up Investment Fund to support long-term capital with reasonable interest rates for the private sector.

Fourthly, complete the financial policy on land

- Implement equality between land users in accessing land, including financial obligations on land, and overcome difficulties in accessing land of the private sector.

- Take timely measures to support businesses before the impact of the Covid-19 pandemic, especially for SMEs and start-ups.

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HUMAN RESOURCE MANAGEMENT IN STATE MANAGEMENT AGENCIES IN SON LA PROVINCE - CURRENT STATUS AND SOLUTIONS

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Abstract: *Human resources in state management agencies (state management capacity) have typical signs and characteristics of human resources such as human resources working at political, economic, and political organizations of the Party and the State, which are developed on a specific socio-economic background, people are both the subject and the object of human resources. Likewise, to “manage human resources in state management agencies”, it is necessary to apply the general human resource management measures such as planning, selection, use, evaluation, policies, etc. However, As the executors of public power of this group, human resources management in state management agencies has its objectives, requirements, contents, and measures for this group of subjects.*

Keywords: *State management human resources (SMHR); Personnel planning (PP); Industrialization, Modernization; Apparatus organization*

The Resolution of the 11th National Congress of the Party and the national development strategy 2010 -2020 affirms: *People are the central factor in the national development strategy; People and human resources are decisive factors for the country’s development in accelerating industrialization modernization.* This view shows that people are the most critical factor in developing every society, not just economic, technological, or capital factors.

Regarding human resources, especially high-quality human resources, our Party has affirmed: “Repaid development of human resources, especially high-quality human resources, focusing on a fundamental and comprehensive renovation of national education; closely link human resource development with the development and application of science and technology”. As a result of this breakthrough, the 12th National Congress of the Party assessed: “Development of human resources and science and technology achieved positive results”.

The priority of developing high-quality human resources is set out in the Documents of the 13th National Congress of the Party. Our country’s guidelines and policies on human resource development tend to meet the quality and requirements in the world’s current context: Industrial Revolution 4.0, digital economy, competition, international integration, fast and sustainable development, etc. This is also a strategic breakthrough in terms of economic development level. Socio-economic conditions are still low entering the knowledge-based economy, Industrial revolution 4.0, international integration, etc. Therefore, improving the quality of human resources, especially intellectual capacity, is crucial to innovation and sustainable development. In human resources, capital, natural resources, physical and technical facilities, science and technology,

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etc., have a cause-and-effect relationship with each other. Human resources are considered the most critical and dominant resources for the country's socio-economic development. Compared to other resources, human resources with the leading factor of intelligence and gray matter have the outstanding advantage of not being exhausted if they know how to foster, exploit and use them properly.

At the 13th National Congress of the Party, the Party has continued to emphasize human resource development more comprehensively, completely, and precisely. The Political Report of the 13th National Congress adds the priority to "Developing human resources for leadership, management and key areas based on focusing on improving and creating a strong, comprehensive and basic quality of education and training associated with the mechanism of recruitment, use and treatment of talents, promotion of research, transfer, application, and development of science and technology, and creative innovation; arouse the aspiration to develop a prosperous and happy country, promote the cultural values, the human strength of Vietnam, the spirit of solidarity and national pride in the cause of national construction and defense."

In recent years, energy management has attracted much attention from managers, scientists, especially researchers, universities, institutes, etc. There have been many scientific works published into books and magazines, requirements on directions and solutions for human resource management and effective use of human resources in line with socio-economic development strategies such as: "Textbook of human resource economics" by Mai Quoc Chanh and Tran Xuan Cau affirming that human resource quality development is the most essential factor in human resource development; Vu Ba The with the book: "Promoting human resources for industrialization and modernization: International experience and Vietnamese practices", Labour and Social Publishing House, Hanoi in 2005 stated the current status of human resources in our country in recent years that has clarified the current position of the quantity and quality of human resources in our country, in which, focusing on analyzing the advantages, limitations and development trends of Vietnamese human resources in the context the socio-economic development of our country; and clarifying their achievements, regulations and causes. Thereby, orientations and solutions need to be developed to promote human resources to serve industrialization and modernization in the coming time; Scientific article: "Some issues on training and human resource development" by Vo Xuan Tien, University of Economics, University of Danang. This article clarifies the content: Human resources are the most valuable resources of organizations and units, the determining factor for their success or failure in the future. Therefore, organizations and departments are always looking for ways to maintain and develop their human resources. One of the most effective measures to achieve the above goal is to train and develop human resources; "Human resource management in Vietnam, some theoretical and practical issues" by Pham Thanh Nghi and Vu Hoang Ngan, Social Science Publishing House, Hanoi (2004). The book is a collection of research papers, articles, and papers presented at TOPIC KX.05.11 under the State-level Science and Technology Program KX.05 (period 2001 - 2005), with theory, experience, and key recommendations in human resource management in Vietnam. The project is of great significance for our State to effectively manage Vietnam's human resources, promoting industrialization and modernization and implementing the socialist-oriented renovation of the country.

The World Bank has conducted many surveys on human resources from many aspects in many countries worldwide. The World Bank website can provide us with a wide range of human resources, including some notable publications such as Meeting human resources needs by Karen

Lashman; Human resources for health policies: a critical component in health policies by Gilles Dussault and Carl-Ardy Dubois; Managing human resources in a decentralized context by Amanda E. Green; and even the organization's magazine name The World Bank Economic Review is also a publication that provides a lot of articles on human resource issues. These works analyze the role of human resources in socio-economic development in different aspects. The United Nations Educational, Scientific and Cultural Organization (UNESCO) is also very interested in human resources, as demonstrated by published research. "Toward a system of human resources indicators for less developed countries" (Towards a human resource indicator system for less developed countries) by Zygmunt Gostkowski introducing a UNESCO project on human resources research, providing indicators for research and development Human Resources.

Son La province is a strategically important area of socio-economic, national defense, security, and foreign affairs, playing an essential role in the ecological environment of the Northwest region. Son la has potential and advantages for development in agriculture, forestry, hydroelectricity, mining, tourism, and border gate economy; an area with many ethnic minorities living together with a long-standing attachment to their own cultural identity, having a tradition of patriotism, solidarity, resilience against foreign invaders, and many historical and cultural relics, as well as the revolutionary base.

Over the years, the Party and the State have always paid special attention to resources, mechanisms, and policies for Son La Province. However, the province's economic development results have not been commensurate with the potential, strengths, and requirements set forth. Son La province is still a locality with a high poverty rate. The economic structure is still changing slowly, the efficiency is low, and the competitiveness is limited. The conditions for socio-economic development still face difficulty. The number of officials with university degrees belonging to ethnic minorities is still too small, while the contingent of lowland officials working in the province is still not assured of long-term attachment. Investment programs for socio-economic development for the province are not sustainable, unstable, and far from the set targets. The State's investment in the province is not commensurate with budget capital, scientific-technical staff, and skilled workers.

At "Conclusion No. 26-KL/TW dated August 2, 2012 on continuing to implement Resolution No. 37-NQ/TW dated July 1, 2004 of Politburo IX to promote socio-economic development and ensuring national defense and security in the Northern Midlands and Mountains by 2020", the Politburo determines *"to focus on managing, fostering, developing and improving the quality of human resources for localities in the region, especially giving priority to training on-the-spot officials, officials who are ethnic minorities, officials of the grassroots in the political system"*. On that basis, it will create human resources for the public sector that is reasonable in structure, sufficient in quantity, healthy, intellectual, proficient in skills, good in ethics, and flexible and civilized in behavior. Better human resources meet the region's industrialization and modernization requirements to promote socio-economic development, raise incomes, reduce poverty sustainably, and contribute to gaining the Millennium Development Goals, ensuring national defense and security in mountainous areas.

Human resource management in a state management agency consists of all activities aimed at attracting, developing, using, evaluating, and maintaining human resources following the work requirements of the agency or organization in both quantity and quality. Through these activities, agencies and organizations will achieve their set goals.

Human resource management in state management agencies is under the leadership of the Party and complies with the provisions of the law. The policies and practices of human resource management in economic state management agencies must be directed to the agency's or the organization's objectives. Ensure to strengthen the role of the Leader of that agency or organization in achieving the goals set by themselves through human resource management. Human resource management in state management agencies must be associated with training, fostering, and creating opportunities for officials to be promoted according to occupations and achievements.

Human resource management in state management agencies in Son La Province is a diverse and complex activity. To improve its effectiveness, it takes specific time, continuity, analysis, and identification will be performed to identify challenging problems, challenges, and obstacles. Overcome to build a contingent of officials, civil servants, and public employees of Son La province to ensure quantity and improve quality.

This activity should ensure consistency and transparency in human resource management policies of agencies and organizations, from guidelines on salary, assessment, training, and fostering. Ensure sufficient human resources to perform management tasks, an appropriate human resource structure, the quality of human resources to meet the requirements of management tasks.

1. THE CURRENT STATUS OF HUMAN RESOURCE MANAGEMENT PERFORMING THE FUNCTION OF STATE MANAGEMENT IN THE ECONOMY IN SON LA PROVINCE

Implement the direction of the Prime Minister in Decision No. 579/QĐ-TTĐ dated April 19, 2011, on approving the Vietnam Human Resource Development Strategy for the period 2011-2020; No. 1216/QĐ-TTĐ dated 22/07/2011 approving the master plan on human resource development in Vietnam for the period 2011-2020. Son La province has integrated and concretized the goals and development solutions of the Strategy for Human Resource Development and Management into planning, programs, schemes, and plans for developing sectors and fields of localities.

Implementing Resolution No. 42-NQ/TW dated November 30, 2004 of the Politburo (Session IX) on personnel planning; Conclusion No. 24-KL/TW dated June 5, 2012 of the Politburo, term XI on promoting staff planning and rotation to 2020 and the following years, along with guiding documents and guidelines of relevant authorities; The Standing Board of the Son La Provincial Party Committee issued Instruction No. 15-HĐ/TU dated November 30, 2012 showing a number of contents on the planning of leadership and management personnel in the spirit of Resolution No. 42-NQ/TW dated November 30, 2004, Conclusion No. 24-KL/TW dated June 5, 2012 of the Politburo and Guidance No. 15-HĐ/BTCTW dated November 5, 2012 of the Central Organization Committee; Guidance No. 03-HĐ/TU dated November 15, 2016 on implementing the review and supplement of staff planning for the 2015 - 2020 term; formulating the staff planning for the 2020 - 2025 term and subsequent periods; Guidance No. 07-HĐ/TU dated April 12, 2017 on amending and supplementing a number of contents specified in Guidance No. 03-HĐ/TU dated November 15, 2016 on the planning of leaders and managerial officials to direct provincial-level departments and agencies, and subordinate committees to implement the planning work at their respective levels and control the grassroots levels to develop the master plan and at the same time develop the staff rotation plan according to the master plan.

Creating resources and planning officials at the Provincial Party Committee has been implemented by the regulations and guidance of the Government and the province. Approved

personnel to participate in the planning of the Party Committee, the Standing Committee of the Party Committee, key leadership positions at the provincial, district, and commune levels. Ensuring the motto “dynamic” and “open” provides the number of resources included in the planning regarding standards, conditions, the proportion of women, ethnic minorities, and age.

In general, the planning of leaders and managers has been directed and implemented closely by the Standing Board of Son La Provincial Party Committee, ensuring principles, processes, and feasibility; the planning at the party committee level is built on the basis of the planning of leadership and management titles of the affiliated units; it is required to take lower-level planning as a basis for the planning at higher levels, ensuring the connection and cohesion between the plans of the district, city, departments, agencies and mass organizations; between the planning of officials and leaders of departments, agencies, mass organizations, towns and districts with the planning of the Executive Board, Standing Board, Standing Committee of the Provincial Party Committee, Standing Committee of the People’s Council, and the Provincial People’s Committee, meeting the requirements of political tasks of each district, city, department, board, branch, agency, unit and political task of the province. Personnel planning has served well for the personnel organization of Party congresses at all levels, in the election of deputies to the 14th National Assembly and People’s Councils at all levels for the 2011-2016 tenure and 2016-2021 tenure; in the training, appointment, and rotation of staff.

In 2015, 2016, 2017, the People’s Committee organized recruitment in the form of assessment and selection tests (application of information technology in recruitment); results: In 2015, recruited 166/212 targets; 2016, recruited 13/45 targets; in 2017, recruited 38/59 targets. Successful candidates are well-trained, qualified, and capable of meeting the requirements of the task. After training, 100% of civil servants will be assigned to the rank.

Implement Decree No. 140/2017/ND-CP dated December 5, 2017, of the Government on policies to attract and create human resources from excellent graduates and young scientists. The Provincial People’s Committee issued Plan No. 156/KH-UBND on September 4, 2018, attracting and creating human resources from excellent graduates and young scientists. Currently, the province is deploying and directing agencies, units, and localities to detect, synthesize and make a list of outstanding students and young scientists to recruit them into the administrative apparatus of the province.

In 2015-2019, the number of state management officials in Son La Province had changed due to the requirements of downsizing and consolidating the entire apparatus, which is becoming more and more streamlined and reasonable. The number of these staff tends to decline (although the decrease over the years is not similar). Specifically, in 2015, the total number of state civil officials in Son La province was 2523, but by 2016 the figure decreased to 2417 people; in 2017 was 2348 people; in 2018 the number of state civil official in Son La province was 2145 people, and by 2019 it was 2081 people.

From the policy of strengthening the state management in the area economy, the provincial leaders have reviewed the functions and tasks of the agencies, departments, and branches on that basis, with the policy of reforming the apparatus and streamlining the organization, and perform staff redundancy.

Forming a legal framework on conditions and title standards is essential to perform the official organizational work well. Stemming from the practical requirements of official organization work in recent years, the Provincial People’s Committee has decided to direct departments, agencies, and

branches to advise the Provincial People's Committee to promulgate regulations on conditions and standards for titles depending on industry and field. Serving as a legal basis for the Chairman of the Provincial People's Committee, the Directors of the Departments, and the Chairmen of the district-level People's Committees shall consider appointing, planning, evaluating, rotating, and transferring officials and developing training and fostering plans to standardize the contingent of leaders according to each title. Up to now, the Provincial People's Committee has issued a Decision on stipulating the conditions and standards for titles for 20/20 departments, agencies, educational and training careers, radio, and television. According to regulations on states and titles of departments, departments and branches strictly implement rules on official organization work, publicity, and transparency in appointment and re-appointment. Clearly define responsibilities of each level, each unit, and civil servants and public employees, actively study, practice, and strive to rise in their careers.

Sectors and levels have developed mechanisms and policies to encourage and create favorable conditions for officials, civil servants, and public employees to self-study and improve their professional qualifications by various forms of training such as Distance learning, studying, working, working in the evening... Mechanisms and policies are specified in the internal spending regulations of agencies and units. That official has motivated officials, civil servants, and public employees to study actively, voluntarily study, and improve their qualifications in all aspects.

2. SOME SHORTCOMINGS, LIMITATIONS, AND CAUSES

Regarding qualifications and capacity: The province still lacks a team of scientific and technical staff, managers with high professional qualifications, and a lack of good experts in some fields. The foreign language proficiency of the staff, civil servants, and public employees are still limited. Some officials, civil servants, and public employees lack professionalism, manners, working style, discipline, sense of responsibility and have not yet met the requirements of the working environment in the period of industrial promotion, modernization, and international integration today.

Regarding training and fostering: The development of training and fostering plans in some agencies and units has not been given due attention to; The quality management of training and fostering is not strict. The effectiveness of training and fostering is not high. The physical facilities are not synchronized, the teaching conditions of the lecturers, the accommodation and study of the students (especially at the district-level training center) still face difficulties, etc., which has affected the quality of training and fostering. The application of active teaching methods, the ability of some lecturers to provide professional guidance is still limited, and modern teaching facilities have not been fully exploited. The qualifications of some officials and civil servants in the province are still low. They face many difficulties in accessing new knowledge, and especially there are still some commune-level officials and civil servants. They are ethnic minorities and have not graduated from high school level should lead to the limitations in acquiring knowledge on state management, informatics, administrative skills, professional expertise, etc... is still limited. The content and curriculum are still inadequate, with overlapping in objects and contents of training and fostering.

Regarding the recruitment exams for leadership titles: The number of candidates applying for recruitment is not significant. Some titles are not competitive such as Chief of Office, Department of Foreign Affairs, Department of Agriculture, and Rural Development. The preparation and organization of the entrance exams in some agencies and units are still confused; Some candidates have not spent much time researching and studying documents, so the quality of the entries is not high.

Regarding the personnel planning: The planning of several agencies, units, and localities does not make a breakthrough, the feasibility is not high, so the appointment process faces many difficulties; the detection of human resources included in the planning is still limited; the local and closed current status still occurs when implementing the motto “open” in the introduction of planning personnel; most of them are just the insiders. Agencies, units, and localities are less interested in introducing personnel elsewhere to participate in planning at their level, so they can only consider and arrange the number of existing staff in their agencies, units, and localities to list them into the planning. In agencies and units with some staff, the planning is based on age in the current status that the annual input quota is decreasing. The planning shall include the eligible age and removed the retirement age. The quality of personnel planning is not high, and officials’ structure in the planning of some branches and localities is not balanced. There are few young officials and female officials; the structure of 03 age groups has not yet been ensured; The training qualifications, professions, and occupations of officials in many places are not suitable and do not meet the requirements of tasks. Planning has not been associated with training, fostering, rotation, arrangement, and use of staff. Therefore, some places are still passive and confused about officials. Some places have just been planned, but it is still challenging to choose officials when doing human resource work.

Regarding the personnel task: When there is a need for appointment, most of them recommend 01 person for 01 title; The nominated personnel has not yet developed and presented the program and contents of the work to be carried out according to the assigned field if they are appointed or nominated as a candidate; many sources of officials with creativity, in-depth leadership and direction have not been discovered to select virtuous and talented officials for agencies or organizations, civil servants and public employees to appoint to leadership positions, manage; has not created the highest motivation for young officials and civil servants to practice and strive at work and there has not been a breakthrough in selecting the number of young officials who have received basic training and work capacity to appointed to hold the position of Head of Department or higher; The current mechanism of appointment and nomination of candidates, criteria for staff evaluation, and stages of opinion polling and polling by vote of confidence to appoint leaders and managers still have certain limitations. Not all people have been discovered with talents and good moral qualities to hold leadership and management positions.

3. LEADING SOLUTIONS TO IMPROVE HUMAN RESOURCE MANAGEMENT IN STATE MANAGEMENT AGENCIES IN SON LA PROVINCE

3.1. Increasing the training and fostering

- Identifying the proper training and fostering needs.

We need to determine which capacity is the existing force, the required capacity, from which we can decide which competencies need to be trained and fostered. The determination of current capacity is based on assessing labor performance, results achieved at work or daily experiences, etc. The capacity determination should be based on the organization’s strategy, goals, and career planning activities. Besides, suppose you want to determine the difference between the required capacity and the existing capacity. In that case, you can directly interview or distribute questionnaires about the actual current status of each civil servant’s capacity and capacity development needs at a certain time.

- Renovating the content, form, and methods of training and fostering.

Combining training and fostering according to the standards of ranks and grades with the form of training is necessary to improve the quality of the training and fostering process. It is fostering based on employment positions and titles to overcome the current status of training and fostering just to gain enough certificates or degrees to serve the exam for promotion or appointment. Therefore, it is necessary to develop two types of competency frameworks for civil servant ranks and competency frameworks for each specific job position and title. Based on standard competency frameworks, it is possible to develop training and fostering programs for officials and civil servants and appropriate job positions and titles.

It is necessary to have a combination of diverse and rich forms of training and fostering, suitable for each object; at the same time, organize training courses interspersed with training sessions, exchange of management experience.

- Appreciating the self-training process.

Each official and civil servant must consider self-study to improve qualifications and capacity as regular and continuous work. Only then can public managers grasp new achievements of science and technology and keep up with changes in social life.

Each civil servant can develop a self-training plan to improve their capacity by reading books. Reading is a necessary job to accumulate knowledge. In reading, it is essential to find books to read. Getting wisdom is based not only on reading books but also on discussions, seminars, making friends with people who have broad knowledge and experience in management as an essential channel to acquire knowledge. Improve management capacity.

3.2. Capacity building for civil servants at the agency

Capacity building for civil servants is not only performed through training and fostering activities at training institutions. In many cases, applying measures to develop the capacity of civil servants in the workplace in association with the work becomes effective. There are a number of measures to develop capacity with the state administrative environment should be paid attention to such as:

- Mentoring, coaching is the training method of on-the-job capacity development. Each official and civil servant is assigned to an experienced manager or a good professional for being tutored and trained. In addition to observing it, individuals also have to practice and be assigned to perform several important jobs that require the necessary skills.

- Empower subordinates to make decisions. Managers need to empower associates to improve their performance when subordinates have autonomy and self-responsibility for any issue to strive to achieve the best results.

- Assign more tasks to subordinates. The assignment of new tasks beyond their ability requires individual civil servants to research, find new solutions, directions, and approaches to work, and at the same time overcome difficulties to solve newly-arising problems. Through practical work, new capacities of civil servants will be formed and gradually improved.

3.3. Attracting and improving the efficiency of talent use

- Implement the current institutional reform, create a favorable environment to stimulate talents to flourish and develop

Pay special attention to potential human resources trained in new sciences and develop policies to attract them right from their training period at institutions.

- Promote the activities of training and fostering talents
- Attract and use talents effectively based on perfecting the remuneration and reasonable arrangement

3.4. Job analysis as the basis of human resource management

- Perform precise job analysis for each position, each specific title so that the functions and duties of each official and civil servant are made clear and do not appear the overlapping cases.
- Complete the employment standards system in each agency and unit, thereby balancing the implementation resources to consider and assess the task completion level of civil servants, public employees, and employees.
- Develop an accurate job profile of each official to have a basis for year-by-year evaluation
- Innovate the arrangement of civil servants.

3.5. Improving the quality of life, working environment, and building office culture

- Develop the payroll according to specific job titles to create more conditions for the contingent of civil servants and public employees to work in essential fields, requiring the health, intelligence, and capacity of officials, Public servants.
- Create a favorable working environment in the public sector for officials and civil servants to strive to play their abilities and capacities fully.
- Build office culture so that officials and civil servants take it up as a general evaluation criterion when evaluating each specific official.

Over the years, we have issued policies on “Knowledge-based Economy”, “E-Government”. Along with the promulgation of policies, it implements studies on “Information-based Economy”, “Smart Government”. “Knowledge Economy”, “Information Economy”, “E-Government”, “Smart Government” are different levels of development whose success or failure depends a lot on the quality of human resources for state management. That clearly shows the great role and importance of human resources in creating progress in different aspects of social life and the State. With such an important role and significance, the management of state resources is always interested by the Governments of different countries with different philosophies, guidelines, and programs.

In a socialist-oriented market economy (a multi-sector economy), the principle of democratic centralism must be ensured in state management activities in general and state management of the economy in particular. The State focuses on investing resources to implement the orientations, goals, and requirements of the State. On the other hand, the right to freedom of creativity must be ensured in production and business activities that are not prohibited by law to meet market demands; combine the Party and State’s direction with the invention of the whole people. All policies, guidelines, and measures proposed to build a contingent of state management human resources must be based on the practical development needs of society. In the current trend of in-depth international integration, the greater the requirements for professional training, foreign languages, and functional operation capacity. The management apparatus of the state management human resources shall be strict, effective, and efficient; management methods to strengthen inspection and supervision and create conditions for staff to promote their creativity in their work. Management of State management human resources is a collection of activities aimed at strategic orientation and development planning for civil servants, developing policies on training, employing, encouraging, organizing, and deploying such contingents to promote their capacity to serve the socio-economic development goals.

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BARRIERS TO LAND ACCESS OF ENTERPRISE IN HAI PHONG

MA. Pham Thi Bao Thoa¹, Assoc. PhD. Nguyen Ngoc Toan²

Abstract: *Land access has directly affected production costs as well as the performance of businesses. In Hai Phong, the change in mechanism to improve the quality of state management of land has helped enterprises have better land access. However, the process of accessing land of enterprises in Hai Phong still faces some barriers from the institutional and effective land management of local authorities. Some provisions in the land law are still inadequate, causing difficulties for investors and managers. The planning and implementation of administrative procedures on land still have many shortcomings. In order to build a modern business environment to attract domestic and foreign businesses, Hai Phong city needs to focus on further improving the quality of state management of land, proposed amendments to the Land Law in the near future.*

Key words: *Land access, enterprise, Hai Phong*

Land is a special resource, a means of production and a great resource for each country. For enterprises, the cost of accessing land is one of the factors affecting the investment efficiency, even affecting the relocation decision of companies at the place of investment. With the transformational economy of Vietnam and the strong industrialization process, the need for businesses to access and use land is increasing. In recent years, Hai Phong has become a bright spot of the national economy with its economic growth and development achievements. Contributing to that great achievement, it is impossible not to mention the role of businesses in all economic areas in the city. The number and scale of enterprises in Hai Phong is increasingly expanded to increase the city's GRDP and solve many social problems such as labor, employment, and support for security funds....Although the Hai Phong city government has been actively promoting modernization of the business environment, with mechanisms to encourage and attract investment, Hai Phong enterprises still face many barriers that increase investment costs and reduce production efficiency. One of the major barriers for many businesses in the city today is the barrier to land access.

As a locality with important geopolitics in the economic development of the Northern coastal region, as the gateway to international seaports of the whole country, Hai Phong fully converges favorable natural conditions for businesses, especially enterprises in the fields of industry, investment services, and operations. However, the land access index is low; the development of a clean land fund has not met the requirements. The process of land allocation, land lease, and land fund development is still difficult and inadequate... These are big obstacles for businesses to invest in projects and works using land in the city of Hai Phong. Removing barriers and increasing land access for companies are important tasks of the Hai Phong city government in successfully

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implementing Resolution No. 45 of the Politburo and the National Congress of Hai Phong. At the 16th City Conference, strive to turn Hai Phong into a modern, smart and sustainable industrial city of Southeast Asia by 2030 and become a city with a high level of development in the future group of leading Asian and world cities by 2045.

Therefore, this study analyzes the barriers in land access, mainly focusing on the barriers in land policy that enterprises in Hai Phong city have encountered in recent years. By analyzing the data in accessing the clean land fund, implementing the land allocation and land lease regulations of Hai Phong enterprises and comparing these data with some localities across the country, we would like to propose producing solutions to increase business access to land, creating a modern business environment for the city. In addition, the research can contribute important scientific bases to adjust and amend the Land Law in the coming time. The article is divided into 2 parts: Part 1 examines the situation of enterprises accessing land in Hai Phong; Part 2 analyzes the barriers and proposes solutions to overcome the barriers in accessing land of enterprises in Hai Phong.

1. OVERVIEW OF BARRIER TO LAND ACCESS OF ENTERPRISES IN HAI PHONG

1.1. Operational situation of enterprises in Hai Phong city

** Number and size of enterprises in Hai Phong city*

Currently, there are 16,012 operating enterprises (as of December 31, 2019), an increase of 3.03% compared to 2018. In which, there are 85 state-owned enterprises, accounting for 0.53%; non-state enterprises are 15,417 enterprises, accounting for 96.28%; FDI enterprises are 510 enterprises, accounting for 3.19% [6]

Unit: %, Source: [6]

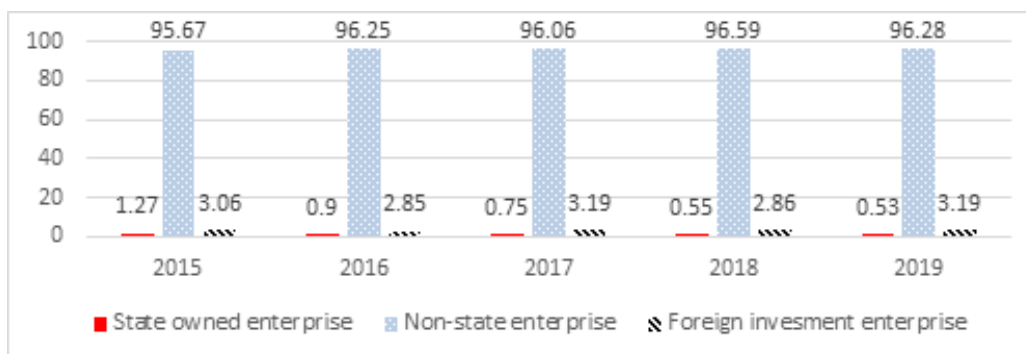


Chart 1: Hai Phong enterprise structure in the period of 2015 – 2019

The number of enterprises in the city, especially non-state and foreign-invested one, has increased. Still, in terms of business scale, there has been no positive progress. With 96.28% of non-state enterprises, the number with a scale of 5000 people or more only accounted for 0.01%. Small, medium and micro-companies accounted for the majority with 37.38% with small scale (less than five people). 32.96% have a size of between 5 and 9 people and 22.14% have a scale of 10 to 49 people [6].

** Contributing to the growth and development of the city*

Net sales of enterprises in Hai Phong city is increased by more than 2.2 times in the period 2015 - 2019, from 382,667 billion VND in 2015 to 859,475 billion VND in 2020. In which enterprises have investment capital. Foreign investment had the highest growth rate, increasing by more than

3.4 times, from VND 106,860 billion to VND 373,227 billion. The increase of enterprises and the growth in revenue has contributed to the increase in budget revenues from producing and trading goods and services, from 13.45% to 16, 30% of total state budget revenue in the city [6].

The labor force working in the non-state sector accounts for the highest proportion with 80%, the foreign-invested sector 11% and the state sector 9% (preliminary data 2020 [6]). . The average monthly income of workers in the enterprise sector is increased from 6,120.7 million VND/month in 2015 to 8,198.5 million VND/month in 2019. In which, the income of workers in the sector the highest State, in 2020 reached 12,064.3 million VND/month; foreign-invested enterprises are 8,045.3 million VND/month, and lastly are non-state enterprises with 7,121.4 million VND. The positive growth from the business sector is an important factor in improving the material life of workers in this area and workers in the city in general.

1.2. Actual situation of enterprises accessing land in Hai Phong city

1.2.1. The city implements the planning and expands the investment attraction planning

With the goal of promoting domestic and foreign investment attraction, since 1994, Hai Phong has planned and established Nomura industrial park - Hai Phong under the investment license No. 1091/GP dated December 23, 1994 of the State Commission Committee on Investment Cooperation. In 2008, Dinh Vu - Cat Hai Economic Zone was established under the Prime Minister's Decision. In 2018, Hai Phong continued to plan 12 more industrial clusters according to Decision No. 2252/QĐ-UBND dated October 1, 2018, of the People's Committee of Hai Phong city. Along with the plan's implementation, the Hai Phong city government has reviewed, adjusted the planning, expanded the space of Dinh Vu - Cat Hai economic zone and industrial zones in the city. Up to now, Dinh Vu - Cat Hai economic zone has a planned area of up to 22,540 ha; 24 industrial parks with an area of 10,960 ha (12 industrial parks are in the economic zone with an area of 6,448 ha, 12 industrial parks outside the economic zone have an area of 4,512 ha). To attract large investment projects from domestic and foreign-invested enterprises between 2021 and 2025, Hai Phong develops and implements the establishment plan of 15 new industrial zones with an area of 6,418 ha. In parallel with the development of industry and services, Hai Phong also develops master plans and plans on land use for hi-tech agricultural zones and areas. The People's Council of Hai Phong City has issued Resolution No. 14 approving the planning of high-tech agricultural zones and areas in Hai Phong city for 2016 - 2025, with a vision to 2030 with a total area of the plan 5,870 ha. Planning and expanding in industrial parks, economic zones and high-tech agricultural development zones are important and favorable conditions for increasing land access for businesses in Hai Phong city. However, in industrial parks, economic zones, housing planning for workers has not been focused on not meeting the needs of investors. For projects according to the old planning but not to be implemented, new projects that want to be replaced by investment need to adjust the planning. While adjusting land planning is often very complicated and costly. Thereby, it was wasting land resources.

1.2.2. Developing land fund, attracting investment enterprises

** Develop clean land fund*

Based on the provisions of the land law and practical conditions in Hai Phong, the clean land fund available in the city to attract investment is still relatively limited, not meeting the requirements of investors. The available clean land fund is usually the land fund that is recovered due to a violation

due to the expiration of the land use term without being renewed. However, this land fund is often used for security, defense, embellishment, urban development, etc. Businesses wishing to invest in areas under the planning for investment projects, such as the planning for industrial parks, economic zones, industrial clusters, etc., must wait for the ground clearance process before being allocated or leased land by the city according to the prescribed forms. According to the 2013 Land Law, the city government can only acquire land for an investment project (Article 62, Article 63). The city will not acquire land, clear the ground, or create a clean land fund that can become available to attract investors. The current land law also does not have a mechanism for the State to recover land according to land use master plans and plans to create a clean land fund to auction land use rights in urban areas. There is no regulation on land acquisition for bidding for land use rights.

** Clearance*

The site clearance work helps businesses organize production and business activities in the city in 2015-2020 with many positive changes. Some industrial parks have fast site clearance and high occupancy rates, such as Nomora and Trang Due industrial parks, with occupancy rates up to 100%. However, the stage of site clearance in the city, in general, has not met the needs of businesses. Compared to provinces and cities across the country, the slow site clearance ranked 50/63 localities in 2019. Although there has been an improvement in 2020 (ranked 35th), this result shows that The site clearance work in the city is still a difficult bottleneck in attracting investment and creating the investment environment of Hai Phong today.

In 04 industrial parks located outside Dinh Vu - Cat Hai economic zone, the total land area is 762.7 ha. However, only 619.2 ha have been cleared, and 143.5 ha have not been cleared. Some industrial parks located in Dinh Vu - Cat Hai economic zone also have quite large uncleared areas and low occupancy rates, such as Non-tariff zone and new Nam Dinh Vu Industrial Park (zone 1). complete technical infrastructure about 519.7 ha/1,329.1 ha of total area, occupancy rate reaching 19.3%; Hai Phong International Gateway Port Industrial Park (Deep C3) was established in 2015 but so far is still conducting site clearance, has not yet attracted investment [1]... Some businesses have advanced payment expenses to speed up site clearance, such as infrastructure investment enterprises in economic zones, Vinfast automobile factory of Vingroup. However, these businesses only account for a very small percentage; most of them often have to wait for site clearance to carry out land lease procedures. The longer the waiting time, the greater the time cost and opportunity for businesses.

In addition, in Hai Phong, there is a situation where businesses have been allocated land, have gone into production and business activities. Still, households have not yet relocated, causing difficulties for businesses (In urban areas, industrial areas, etc.). and VSIP Hai Phong service site clearance has been implemented since 2009. However, so far, there are still households that have not relocated, the city has not issued a decision on enforcement for these households [2].

Currently, the city's demand for land use in non-agricultural production and business is increasing. Specifically, the total land area of Hai Phong city is 152,651.7 hectares (as of December 31, 2020), of which agricultural land accounts for the majority with 81,651.7 hectares, equivalent to 53.33%; non-agricultural land accounts for 44.43%, unused land is 2.24% [6]. The city's non-agricultural production and business land increased significantly from 5.26% in 2018 to 7.43% in 2020. Along with that, the unused flat land area decreased from 4.45% down to 1.68% in the period of 2018 - 2020. From 2021 to 2025, Hai Phong continues to plan and implement the plan

to establish 15 new industrial parks with an area of 6,418 ha [13]. If the slow ground clearance continues, it will be a big disadvantage for the city in attracting investment.

** Land recovery, support and compensation after land recovery for businesses*

Land acquisition activities of enterprises to implement projects in the city are currently facing many problems. Currently, some businesses are requesting to be allocated land to continue production when the State recovers land to implement compensation investment projects. However, according to the 2013 Land Law, there is still no mechanism to return land to economic organizations that are allocated or leased land by the State when the State recovers it to implement economic development projects. Socio-economic conditions to create conditions for economic organizations to continue their production and business activities. The Law does not stipulate that the State will recover land for site clearance and return land to investors when implementing compensation projects [14].

1.2.3. Activities of land allocation and land lease for enterprises

Since 2014, implementing the 2013 Land Law, Hai Phong has allocated and leased land for investment projects using land in the following forms: land allocation, land lease through auction; land allocation, land lease through bidding; land allocation or land lease without auction or bidding for projects using land. From 2014 to now, the area of land allocated or leased to enterprises and investment projects using land has increased significantly. The land allocation area is 1,536.35 ha, the land lease area is 4,365.15 ha, specifically:

Unit: hectare, Source [14]

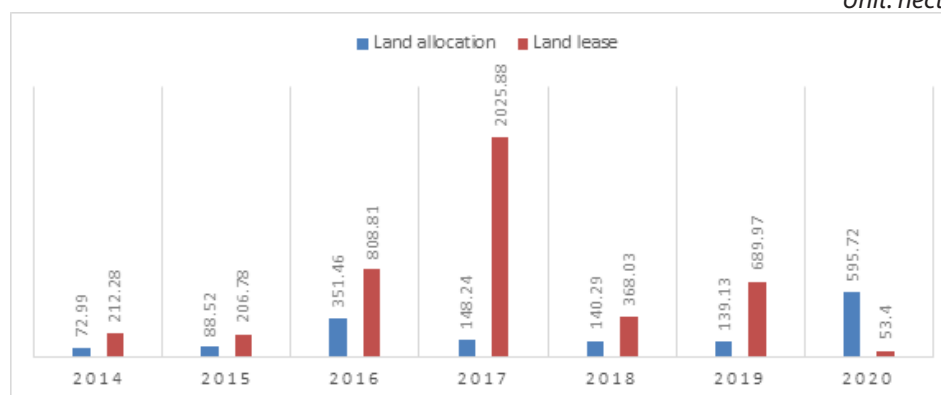


Chart 2: Area of land allocation and land lease for investment projects using land in Hai Phong city

Increasing the area of land allocated or leased to businesses or investment projects using land is of great significance to Hai Phong's socio-economic development. The city government has made efforts to improve land allocation and land leasing efficiency through auctions and bidding for businesses located in industrial parks, economic zones, and outside industrial parks and economic zones. However, besides the advantages of accessing allocated and leased land, enterprises in industrial parks, economic zones, and outside industrial zones in Hai Phong face many difficulties.

First, land allocation and land lease to enterprises in industrial parks and economic zones

Currently, Hai Phong has 12 industrial parks under-investment with 08 industrial parks located in Dinh Vu - Cat Hai economic zone with an area of 4,175 ha and 04 industrial parks outside the economic zone with an area of 762.7 ha.). The city's industrial parks and economic

zones have attracted 570 projects with 403 FDI projects and 167 investment capital from domestic enterprises [2]. Pursuant to the 2013 Land Law, the 2014 Investment Law, Decree No. 82/ND-CP stipulating economic and industrial zones management, Hai Phong has fully implemented investment incentives. Accordingly, implementing incentives in land lease for Vinfast Hai Phong factory in Dinh Vu - Cat Hai economic zone.

For enterprises that are not eligible for preferential policies in land lease, they often sublease from industrial park infrastructure investors. However, in the process of carrying out administrative procedures for land, businesses often receive decisions on land allocation or lease slowly, even when the land has been cleared. In industrial parks located outside Dinh Vu - Cat Hai economic zone, the site clearance area is 619.2 hectares, of which 584.2 hectares have been allocated land to investors, 35 hectares have not yet been decided on land allocation. In Dinh Vu - Cat Hai economic zone, VSIP Hai Phong urban, industrial and service area has 163.5 hectares which have been cleared. Still, no land allocation decision has been made [2]. In general, land allocation in industrial zones after site clearance has been completed is still behind the prescribed time. Usually, it takes 5-6 months from the date of applying land handover.

Second, land allocation, land lease for enterprises outside industrial parks and economic zones

In 2017, although Hai Phong's FDI attraction target did not meet the target set by the City People's Council [15], Hai Phong has attracted investment from large domestic corporations. 35 domestic investment projects with a capital of nearly 70,000 billion VND, of which a number of large projects such as Sun Group invest in building an eco-tourism complex; Vingroup Group implemented the Vineco high-tech agricultural project (201ha), ... which has contributed to increasing the allocated and leased land area in Hai Phong city. Therefore, in 2017, the total leased land area for investment projects using land in Hai Phong was the highest since 2014 to date, reaching 2,025.88ha. In 2020, due to the impact of the Covid-19 epidemic, the growth rate of domestic and foreign investment in Hai Phong city decreased, leading to a decrease in activities for businesses to lease land.

For enterprises outside industrial parks and economic zones, the Hai Phong city government implements land allocation with the collection, leases land through auction and not through auction. According to Articles 55, 56 of the 2013 Land Law: For production and business projects and works that are not subject to land recovery by the State as prescribed in Articles 61 and 62 of the Land Law 2013 but are consistent with master plans and plans on land use already approved by the competent authority. Suppose the State has the authority to approve. In that case, the State will not recover the land (according to Article 73 of the Land Law 2013) but respect the right to equality and voluntary agreement between land users. This regulation aims to create a democratic environment and protect the rights of land users. However, it also causes certain difficulties for businesses when they have to make agreements with all households.

1.2.4. Land financial obligations for businesses

Currently, with the rapid growth and economy, the real estate market in Hai Phong has many fluctuations; the city government has promptly adjusted the land price list in order to narrow the gap between the land price set by the State and the real estate market in Hai Phong, and market prices. This is a necessary activity to ensure the legitimate rights of the land users. However, for businesses, especially small, medium and micro enterprises - which account for the majority in the city, the above trend causes the cost of land use and land rental to increase, resulting in higher land rental costs, increased production costs, reduced investment efficiency.

Based on the Government's regulations on the land price bracket, in 2014, the Hai Phong City People's Committee issued a 5-year land price list (2015 - 2019). However, due to the trend

of economic growth and development, leading to an exciting real estate market and an increase in land prices, in 2017, the city continued to issue land price lists to adjust land prices in 07 districts. Currently, the regulation on land price list for the period 2020 - 2024 has been issued, which is the basis for calculating land use levy, land rent and compensation when the state recovers (according to Clause 2, Article 114 of the Land Law. two thousand and thirteen). Accordingly, businesses that use commercial and service land will have to fulfill increasing financial obligations on land.

Unit: Mill.dongs, Source: [16], [17], [18]

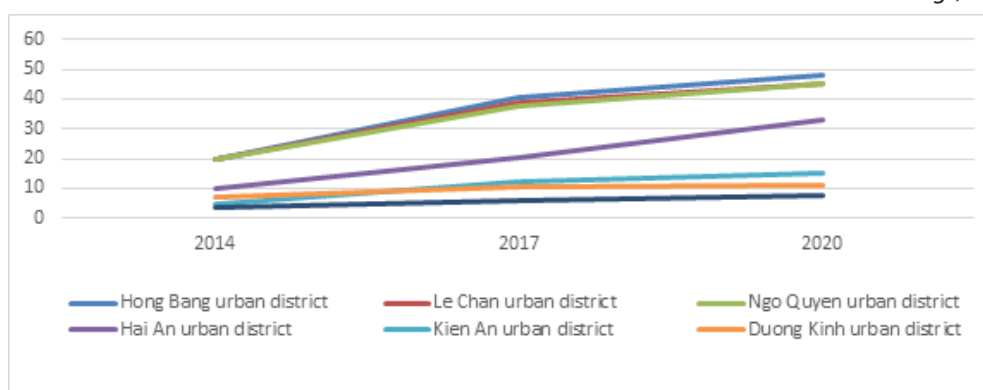


Chart 3: The highest land price volatility in 7 districts of Hai Phong city

Land prices according to State regulations are often lower than actual land prices in the market. Accordingly, enterprises that lease land for production and business in Hai Phong city often have to pay high land rental prices. There are areas where the land price has increased 2.4 times from 2014 to now, such as Hong Bang district, the highest land price in 2014 was 20 million VND/m² increasing to 48 million VND/m² in 2020.

1.2.4. Land access index

As a centrally run city, it is an investment attraction center in the North, but the city's land access index ranks in the bottom group of the country.

Year	2015	2016	2017	2018	2019	2020
Scores	4,87	4,99	5,58	6,50	6,9	6,18
Ranking in land access	61	56	49	35	33	51

Source: [19]

Table: Hai Phong's land access index

In the period of 2015 - 2018, Hai Phong's land access index has improved significantly, increasing 28 places, from 61/63rd in 2015 to 33/63rd in 2019. However, in 2020, Hai Phong's land access score decreased from 6.9 to 6.18 and decreased 18 places, ranking 51st. Compared to neighboring localities such as Quang Ninh, Hai Duong, the land access index of Hai Phong has always been lower since 2015 until now. In 2020, Hai Duong's land access index ranked 13/63; Quang Ninh ranked 17th out of 63. In 2018, Quang Ninh was the locality with the second-highest land access index in the country. Enterprises' assessment of adequate compensation if land is acquired is relatively low. This component index ranks 60/63 provinces and cities in 2015, 54/63 in 2017 and 50/63 in 2020. The implementation of administrative procedures related to land, site clearance is slow,... According to enterprises, Hai Phong has improved significantly since 2015 but is still in the second half of 63 provinces and cities.

In addition, indicators such as transparency and informal costs Hai Phong has several land-related components such as access to planning documents and informal fees for carrying out procedures. The administration often ranks not high. Accessing planning documents in 2019, Hai Phong ranked 59th, enterprises with informal payments in implementing land administrative procedures ranked 58th in 2020... Provincial PCI survey data also showed that preferential policies and land access of state-owned and foreign-invested enterprises are higher than that of non-state sectors.

2. SOME BARRIERS IN LAND ACCESS AND SOLUTIONS TO OVERCOME DIFFICULTIES FOR BUSINESSES IN HAI PHONG

2.1. Some barriers in accessing land of enterprises in Hai Phong

2.1.1. Barriers from the land institution

Firstly, to develop a clean land fund, businesses with investment needs often spend a long time waiting for the authorities to clear the ground, allocate and lease land. The 2013 Land Law still lacks a number of state mechanisms to recover land according to land use master plans and plans, and there is no regulation on land recovery for bidding for land use rights. These are the difficulties for the city government when they want to develop the land fund to call for investment and the difficulties for businesses when they want to access the cleared land, saving project implementation time investment. When there is no clean land fund available for investment, businesses often have to incur additional opportunity costs and time costs from the time the project is registered to the time the land is allocated or leased.

Secondly, there are barriers to the provisions of the land acquisition of enterprises. For investment projects under Article 73 of the 2013 Land Law, enterprises needing to implement investment projects need to reach an agreement and consensus of all households there. If a few households do not agree, the enterprise cannot rent land and conduct production. The 2013 Land Law wants to protect the maximum interests of land users, harmonize the interests of people and investors, but at the same time create a loophole in land speculation, making it difficult for enterprise. Therefore, businesses often sublease land from individuals and organizations that have been allocated or leased by the city.

Thirdly, compensation activities after land recovery of enterprises are still inadequate. The recovery of allocated or leased land for implementation of BT investment projects has not yet provided a compensation mechanism for enterprises that have allocated or leased land whose land has been recovered. Enterprises that are allocated or leased land when their land is recovered for the city to implement BT projects have petitioned the city to be returned the land and resume production and business. However, due to problems with land law, state agencies are confused in handling it. This is a common problem for businesses across the country.

2.1.2. Barriers from the quality of state management of land by the Hai Phong city government

Firstly, the planning work has many shortcomings that make it difficult for businesses to access land. One is the planning work has not paid attention to housing planning for workers, which is one of the difficulties for businesses. Because housing for workers is an essential condition in developing industrial parks and economic zones, workers can save money and time and feel secure to stick with their work. Implementing the planning of housing areas for workers is also a cost-saving solution for businesses, limiting the situation that companies have to arrange a daily shuttle bus for workers. The

untimely change of planning makes it difficult for businesses to access land in the land area where investment projects have been stopped from continuing to deploy. Areas of land with registered investment projects are usually areas with favorable conditions for production and business. Therefore, when these projects stop being implemented, many other businesses will want to invest in production. The slow change in planning also wastes land resources and reduces the city's land use efficiency.

Secondly, the time to carry out procedures for land allocation, land lease, and issuance of land use right certificates for enterprises is still slow. In industrial parks, the delay in handing over decisions on land allocation and land lease increases the cost of time in carrying out administrative procedures and increases financial costs, causing capital accumulation for enterprises and investment projects. From here appears the violation of an enterprise when operating before receiving a decision on land allocation, due to the waiting time causing investment costs to increase. On the other hand, the number of eligible organizations to rent land but have not yet decided to rent land in districts is still relatively large. By 2020, in 15 districts, 273 organizations are eligible to rent land but have not yet decided to lease land, such as: Thuy Nguyen district with 42 organizations operating on an area of 3,003,478.4m²; Tien Lang district with 18 organizations, an area of 1,228,179m².... The delay in land handover and land lease decisions has a significant impact on businesses. From here appears the violation of an enterprise when operating before receiving a decision on land allocation, due to the waiting time causing investment costs to increase.

Thirdly, administrative procedures and informal costs increase. Low land access index with low transparency, increased informal costs increase the time and material costs of operating enterprises and reduce the attractiveness of the investment environment. These are big difficulties for businesses in the city, especially non-state enterprises. This barrier comes from the state management of land with administrative processes and procedures and the contingent of officials managing the land in Hai Phong. Assessment of private businesses in the city, friendly officials, and civil servants ranked 61/63 provinces and cities. This is also one of the limitations in building a modern business investment environment in Hai Phong today.

Fourth, barriers from the development trend of the real estate market. The development trend of the real estate market makes the market price of land in Hai Phong increase. The city decided to adjust land prices in accordance with the socio-economic situation, protecting the rights of people whose land was confiscated but causing businesses to increase costs for production and business activities. This is a common difficulty for businesses in big cities, where the market price of land often fluctuates and increases.

2.2. Some solutions to improve the efficiency of enterprises in accessing land in Hai Phong

2.2.1. Forecasting investment trends of enterprises in Hai Phong

Before the recovery trend after the covid -19 pandemic of developed countries, the global supply chain shifted due to the increasingly fierce US-China trade war. The implementation of commitments in new-generation trade agreements such as EVFTA, CPTPP... is an opportunity and a challenge for Hai Phong to continue becoming a leading locality, even topping the country in terms of attracting investment. With the advantage of geographical location, strength in the development of industry and services, especially seaports - logistics, Hai Phong is the gateway to the seaport of the North. It

can become an attractive destination, the largest investment in the North. Convergence of all types of traffic, allowing Hai Phong to become a transshipment point for domestic and international goods. However, without preparing good conditions to receive investment opportunities and not removing barriers to access to land of enterprises, it is difficult for Hai Phong to achieve its short-term and long-term goals have set. Therefore, the preparation of a clean land fund, promoting administrative reform on land, creating an environment and favorable conditions for domestic and foreign enterprises to access land are urgent tasks of the Hai Phong city government

2.2.2. Solutions to improve the efficiency of enterprises in accessing land in Hai Phong city

Firstly, improve the efficiency of land planning in the city

In the coming time, Hai Phong needs to improve planning, supplement the planning of housing areas for workers in economic zones and industrial parks, and save time and material costs for both employees and enterprise owners. The functional agencies in the state management of land need to step up the work of amending and supplementing the planning, especially for the land areas that are not allowed to continue implementing the project. Timely planning is a prerequisite for the acquisition and conversion of land use purposes, replenishing the clean land fund, and promoting investment attraction.

Secondly, improve the efficiency of clean land development in the city

For the land acquisition activities of enterprises that have been allocated, leased and acquired land to implement compensation projects, the city needs to have a support mechanism to help businesses return to business and production soon. On the other hand, the city needs to consider and recommend to the central agency in adjusting and supplementing regulations and mechanisms to ensure the legitimate interests of businesses in the above case.

For activities of site clearance and development of clean land fund, the city needs to actively improve the quality of state management of the economy, improve the qualifications and skills of the contingent of officials managing the state land. For approved projects, it is necessary to ensure the site clearance budget to comply with the agreed time with the investor, minimizing the delay in site clearance. The city also needs to have more mechanisms to encourage and support (according to the authority of the provincial Government) investment enterprises to advance funding and support site clearance.

Hai Phong has an important position in the economic growth and development of the region and the whole country. Therefore, developing a project of specific mechanisms and policies to develop the city according to Resolution No. 45 of the Politburo is an activity of important and urgent significance today. Hai Phong can develop specific mechanisms and policies on land.

Thirdly, improve the efficiency of land allocation and land lease activities for businesses

For enterprises operating in industrial parks, economic zones and cities, continue to implement preferential policies in accordance with current laws. In addition, the implementation of land administrative procedures, especially the early handing of land use decisions to enterprises when the site clearance has been completed. For enterprises with investment projects in areas that are not subject to land acquisition by the State, the city government and socio-political organizations (the Fatherland Front, the Women's Union, etc.), need to actively participate, encourage and mobilize people, ensuring the legal rights of the people's land and supporting businesses.

Fourth, improve the land access index, the city's transparency index

In order to improve the provincial competitiveness index in 2021 - 2022, the People's Committee of Hai Phong city has issued plan No. 182/KH – People's Committee, dated 2/8/2021. Accordingly, the land access index's target set is 7 points or more, ranked from position 40 or higher. The Hai Phong's Department of Natural Resources and Environment and functional agencies strengthen measures to support people and businesses. Shortening the time for granting land use right certificates, accelerating administrative reform procedures on land. Advising and proposing plans for land recovery that are not for the right subjects, not within the right authority, slow to be put into use, or used for improper purposes to create a clean land fund to attract investment, available premises to be assigned to businesses wishing to invest. In addition, the departments, agencies, branches, district people's committees need to public documents related to planning and other information; provide adequate information for citizens and businesses to ensure the city's transparency index is improved from 6.5 or higher, ranked from 26th position or higher.

Fifth, to overcome the situation that businesses have to increase costs due to the development trend of the real estate market, the city needs to have many mechanisms and policies to support businesses to improve labor productivity. The city needs to continue to improve the proportion of trained workers (striving to return to the first position in 63 provinces and cities in terms of the proportion of trained workers); invest in transport infrastructure, implement chain links with neighboring localities and the whole country... For small and medium enterprises, the city needs a mechanism to support business investment, adjust land prices suitable

CONCLUSION

In order to build an investment and business environment that attracts domestic and foreign enterprises, Hai Phong needs to remove barriers in land access for enterprises. The above research results show that enterprises in Hai Phong city face a number of major barriers when accessing land, such as Land law is still inadequate, effective state management of land by the city government is not high. The land law still lacks mechanisms to create a clean land fund available to attract investment, compensation and support for enterprises whose land has been recovered to implement unreasonable BT projects. On the part of the city government, the planning and planning changes have not met the investment needs of enterprises. The land allocation and land lease procedures are cumbersome and delayed, increasing costs and reducing the investment efficiency of enterprises. Besides, the development trend of the real estate market causes land prices to increase, which also makes businesses have to fulfill financial obligations on land increasingly. Removing barriers in Hai Phong should focus on improving the quality of state management of land. Specifically, the city government needs to focus on the quality of strategic planning to develop a clean land fund, improve land allocation and lease land efficiency, and have a mechanism to support small and medium enterprises in fulfilling their financial obligations on land. Effective implementation of these solutions helps businesses in Hai Phong access land more easily and conveniently and is one of the key tasks Hai Phong needs to perform to create a modern business environment.

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VIETNAM ACTIVELY DEVELOPS DIGITAL ECONOMY FOR SUSTAINABLE DEVELOPMENT

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Abstract: *In the context of a volatile world with many ongoing global problems, such as climate change, epidemics, economic integration, and especially the strong development of the Industrial Revolution 4.0, Digital economic development is an inevitable trend for all countries if they do not want to be left behind. So, what has Vietnam done to develop the digital economy? What is the current situation of Vietnam's digital economy? And what do we need to do to develop the digital economy to adapt to the trend and develop sustainably? Statistical synthesis and meta-analysis methods, together with actual observation, have been applied to conduct the research to answer the questions raised in the study.*

Keywords: *Digital economy; Digital economic development; Sustainable development.*

1. INTRODUCTION

The 13th National Party Congress document has set a target that by 2025 the digital economy will account for 20% of GDP [1]; by 2030 the digital economy will account for about 30% of GDP [2]. The transformation to a digital economy in Vietnam needs the necessary institutions, apparatus, and resources for effective implementation. To realize the goals set out by the 13th Party Congress, Vietnam needs to implement solutions synchronously. With the right direction, positive contributions from ministries, branches, localities, and the whole society, digital economy development will achieve the set goals, contributing to Vietnam's rise to robust development.

2. CASE STUDY

2.1. Transforming from a traditional economy to a digital economy

There are many different interpretations of the concept of *the digital economy*. In this article, the digital economy is understood as an economy in which all economic activities are based on digitalization; developing the digital economy is using digital technology and digital data to create new business models. In essence, these are business models that operate based on the application of digital technology. Especially electronic transactions made using the Internet such as e-commerce, online sales, online learning, online medical examination, electronic payments, etc., to create convenience to meet people's needs.

The term *digital economy* started earlier than the concept of Industrial Revolution 4.0. However, when the Industrial Revolution 4.0 appears, the trend of digitizing the economy has the opportunity to develop vigorously.

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When the trend of the digital economy started, the Government of Vietnam has oriented and tried to prepare all conditions to develop the digital economy actively.

In 2000, the Party Central Committee issued Directive No. 58-CT/TW on *Promoting the application and development of information technology in the cause of industrialization and modernization*. Institutionalizing the above policy, the Prime Minister issued Decision No. 81/2001/QD-TTg dated May 24, 2001, to approve the *Action Program to implement Directive No. 58-CT/TW on promoting the application and development of information technology in the cause of industrialization and modernization in the period 2001-2005*". These goals are "In 2010, Vietnam's information technology industry will reach a good level in the region and be widely applied in all fields; Information technology has become a key economic sector with high growth rate and an increasing proportion of contribution to GDP growth".

In 2014, Politburo issued Resolution 36-NQ/TW on *Promoting the application and development of information technology to meet sustainable development and international integration requirements*. Then, on September 27, 2019, the Politburo issued Resolution 52/NQ-TW on *Proactive guidelines and policies to participate in the Industrial Revolution 4.0*, setting out goals for the digital economy to contribute 20% of GDP in 2025 and 30% of GDP in 2030.

Institutionalizing the above policy of the Party, the Government has issued Directive and Decisions on this issue such as Directive No. 16/CT-TTg dated May 4, 2017, on *Strengthening capacity to respond to the 4th industrial revolution*. The directive has set out tasks and solutions to proactively approach the Industrial Revolution 4.0, such as: creating a change in digital connection infrastructure, developing information technology human resources, and controlling network security, develop appropriate mechanisms and policies to support innovative start-ups, etc; Directive No. 01/CT-TTg dated January 14, 2020, on *Promoting the development of Vietnam's digital technology enterprises* affirms: "Digital transformation creates opportunities for Vietnam to develop, quickly catching up with developed countries". Vietnamese digital technology firms should take the lead and create breakthroughs in implementing the "Make in Vietnam" strategy. This guideline is "Vietnamese enterprises strive to master technology gradually, actively design and manufacture, create products, and be proactive in creating new services, solutions, and business models." Local digital businesses will contribute to the mission of making Vietnam an industrialized country, growing its economy quickly and sustainably and embracing the goal of making it a high-income nation by 2045. Decision No. 749/QD-TTg dated June 3, 2020, approved *The National Digital Transformation Programme by 2025, with orientations toward 2030*. Accordingly, Vietnam will strive to become a leading digital country and economy in the ASEAN region by 2030 and allow comprehensive testing of new technologies in the digital economy. The main targets include improving the economy's competitiveness, with an average digital economy growth rate reaching 20% a year and labor productivity growth of at least 7% by 2025. The program also aims to build transparent and effective governance in the world's top 50 in terms of e-government. In addition, the program plans to have all Vietnamese citizens using mobile payment services by 2030 and be equipped with the skills to be safe in cyberspace. The ICT human resource sector will be expected to meet its digital transformation development requirements. In addition, the legal system has been increasingly improved, creating favorable conditions for economic development, such as Law on e-transactions (2005), Law on Information Technology (2006), Law on Cybersecurity (2018).

The above directives and decisions help us orient, prepare the conditions, and motivate Vietnam to transition from a traditional to a digital economy proactively. Currently, Vietnam is one of the countries with the fastest digital economy development among ASEAN countries. Appeared many new business models such as e-commerce, digital banking; call a car, book a car with technology; online education, online medical examination and treatment; smart agriculture... and is participating in the global technology system. According to the research results of Tufts University (USA), Vietnam is one of the countries with the fastest digital transformation speed, ranked 48th among the 60 countries, 22nd in terms of digital development speed [3]. According to reports by Google and Temasek, the scale of Vietnam's digital economy will reach 33 billion USD with a growth rate of 25% per year by 2025. Vietnam's digital economy growth rate will rank second in the ASEAN region (after Indonesia), and market size ranked third (after Indonesia and Thailand). By 2025, if the size of the region's digital economy market is 240 billion USD, Vietnam will account for about 18% of the ASEAN [4].

2.2. The current situation of digital economy development in Vietnam and some issues raised

When moving from the traditional economy to the digital economy, there have been many leading enterprises in research, development, and innovation in Vietnam, contributing to the national digital transformation process. In particular, state-owned enterprises have a pioneering role in the application of digital technology to the process of management, production, and business. Some typical enterprises are Army Telecommunication Industry Corporation (Viettel), Vietnam Mobile Telecom Services One Member Limited Liability Company (Mobiphone), Vietnam Posts and Telecommunications Group (VNPT), Electricity of Vietnam (EVN), Vietnam Oil and Gas Group (Petrovietnam or PVN), Bank for Foreign Trade of Vietnam (Vietcombank), etc. The above enterprises have applied digital technology into the process of management, production, and business quite early. Currently, Viettel, Mobiphone, VNPT master digital and digital technologies and create superior products and digital ecosystems to supply the market. Serving the national digital transformation process; implementing many software projects for e-Government; population database; with connected infrastructure serving industries and fields throughout the country, from online education to healthcare, technology car booking, smart agriculture, smart city. The national online public service that has appeared since the end of 2019 has grown rapidly, increasing the number of public services from 8 to over 2,800 services, saving more than VND 8,000 billion per year for society [5]. In addition, non-state enterprises are also increasingly attaching importance to digital technology in management and production, and business. By the end of 2020, our country has over 58,000 digital technology enterprises. In 2020, there will be 13,000 digital enterprises established [6]. Internet infrastructure has developed, the number of Internet users has increased rapidly over the years. From 17.7 million in 2007 to 68.17 million in 2020 (70% of the population) [7], thereby promoting the development of the digital economy in Vietnam, both infrastructure and business market. Although Vietnam does not have a digital economy, the development of new types of businesses based on digital technology in various fields and industries has increased our GDP. In 2019, Vietnam's digital economy reached a value of 12 billion USD, contributing 5% to the GDP of the country, 4 times higher than in 2015 [8], and is expected to reach 43 billion USD by 2025 and contribute 20% of GDP; by 2030 contribute 30% of GDP.

Some types of businesses in sectors of the digital economy include:

E-commerce (EC): Using information technology in buying and selling transactions has given rise to new business methods: e-commerce. Although newly appeared, e-commerce is the fastest-growing field in the digital economy in our country. According to the Vietnam E-commerce and Digital Economy Agency (iDEA), by the end of 2019, our country had 29,370 e-commerce websites/apps for sales (increased 26,917 Websites compared to 2014 and increased 5,123 Websites compared to 2018). There are 999 e-commerce trading floors (increased to 716 exchanges compared to 2014 and 89 floors compared to 2018), 145 e-commerce websites/apps for online promotion, 47 e-commerce websites/apps for online auctions [9]. The increase in digital technology infrastructure has made the scale of Vietnam's B2C (Business to customer - a type of business in e-commerce for individual consumers) e-commerce market increase rapidly. The proportion of revenue compared to the total retail sales of goods and services for the whole country is increasing (*Table 1*).

	2015	2016	2017	2018	2019	2020*
Revenue (billion USD)	4.07	5.0	6.2	8.06	10.08	11.8
Revenue growth rate (%)	37	23	24	30	25	18
The proportion of revenue/total retail sales of consumer goods and services (%)	2.8	3	3.6	4.2	4.9	5.5

Table 1: The size of Vietnam's B2C e-commerce market and the proportion of e-commerce revenue compared to the total retail sales of consumer goods and services from 2015 to 2020

Source: Vietnam E-commerce and Digital Economy Agency 2020, p.30;

(*) Vietnam E-commerce and Digital Economy Agency 2020.

Thus, our country's e-commerce revenue in 2020 increased by 290% compared to 2015. The proportion of revenue/total retail sales of consumer goods and services increased by 196%. The revenue growth rate in 2020 is lower than in previous years, but Vietnam is the only country among ASEAN countries with double-digit e-commerce growth [10].

Financial technology (abbreviated fintech or FinTech): Along with the emergence of digital technology and the application of digital technology to business activities, the financial – banking sector has also shifted from the traditional business model to digital banking. In Vietnam, the trend of applying digital technology in the financial – banking sector is happening fast and is one of the countries with the highest growth in e-payments globally, with about 35% per year [11]. In the past 5 years (2016-2020), the total payment via the Internet increased by 262.5%, the payment value increased by 353%; mobile payments increased by 1,000% in volume and 3,000% in value [12]. In 2020, payment by phone reached over 1 million transactions, with a value of more than 10 million billion VND, up 118.5% in quantity and 121% in value compared to 2019; payment via the Internet has 421.8 million transactions with a value of over 24.6 million billion, up 10.8% in quantity and 24.4% million in value compared to 2019 [13]. Currently, Vietnam has 78 organizations providing payment services via the Internet, 49 organizations providing payment services via mobile, and 42 organizations providing intermediary payment services [12]. Banks have researched and applied many new and modern technologies to payment activities, such as fingerprint authentication, face recognition, biometrics, QR codes, etc.

Transportation: The application of digital technology has made car-hailing and car-ordering services meet the increasing demands of consumers. The market for car-hailing and booking technology cars in our country is increasingly popular, attracting many drivers to participate,

quickly dominating the transportation market. Currently, in addition to ride-hailing and ride-hailing applications such as Grab, Gojek, Be, MyGo, and FUTA (Vato), more traditional carriers are applying 4.0 technology to their operations Vinasun, Mai Linh. According to a report by Google, Temasek Holdings, Bain&Co, the ride-hailing market in Vietnam in 2019 reached 1.1 billion USD, more than 5 times higher than in 2016, and it is forecasted that by 2025, the call market will be Vietnamese technology cars reached about 4 billion USD, ranked fourth in the region, equal to the Philippines [14].

Education, medical: Application of information technology and internet infrastructure has formed a model of online education, online medical examination, and treatment; manage teaching and learning; book medical treatment, manage patient records online.

Travel: The application of digital technology in tourism development in Vietnam is increasingly focused. Online booking service developed with the participation of many Vietnamese start-ups, such as My tour, Luxstay, Tripi Partner, Vn Trip, iVivu, Chudu24, etc. is competing with famous foreign companies in Vietnam such as Booking, Agoda, Expedia, etc. According to the report of Google and Temasek, the scale of online tourism in Vietnam in 2018 reached 3.9 billion USD (up 15%) and is expected to increase to 9 billion USD in 2025 [15].

Agriculture: The application of digital technology (Internet Of Things (IoT), LED technology, unmanned aerial vehicle (UAV), robots and financial management, etc) is shaping smart agriculture. In particular, the most commonly applied technologies are digitized equipment and machinery systems, attached sensors, connected to the Internet, and combined with a system of net houses and greenhouses to create an Indoor smart farming system, based on self-contained or semi-automatic control technology. Currently, the smart agricultural model is applied in enterprises and large-scale concentrated production farms. In addition, the application of technology software in managing and monitoring the production and distribution of agricultural products has connected globally in the agricultural production process, such as product packaging, product origin, production process, preservation time. Cloud computing technology, unmanned aircraft technology used in pesticide spraying [16]. In animal husbandry, with the application of SmartChick software technology, smart chicken raising models have appeared, farmers can take care of chickens at any time and anywhere; such as the smart dairy farming model of Vinamilk, TH Trumilk, etc. The smart agricultural model makes our country's agricultural production more and more active, reducing dependence on the environment and weather, controlling diseases, so productivity is high and growth is increasingly sustainable.

Based on the current status of digital economic development in Vietnam, several problems need to be overcome, which, if not solved, will affect the development of the digital economy in Vietnam in the future. Includes the following issues:

Firstly, the perception of the subject of economy, especially businesses, of the digital economy is still insufficient. The participation of businesses is an important factor in promoting the development of the digital economy. In Vietnam, the perception of businesses is still insufficient. According to data from the Ministry of Industry and Trade, in 2018 there were still 61% of businesses outside of the digital economy, and only 21% of businesses started participating [17]. Awareness is insufficient, so the demand and action on the digital economy are still slow, uneven, and inconsistent from the Government, businesses, and people, so the development of the digital economy in Vietnam is still slow.

Second, system institutions, policies, as well as enforcement, dispute settlement, and enforcement institutions, are still incomplete. Although the institution for the digital economy has been promulgated, it has not been synchronized and completed slowly. Besides, the rapid development of science-technology, digital economy, and new business methods has confused the management agencies in managing digital economic activities, therefore, not yet exploit the potential to develop the digital economy.

Third, digital connection infrastructure and connection services in Vietnam are still limited and not synchronized. Telecommunications infrastructure and platforms of IoT, AI, Big Data, network security, digital identity, and electronic payment are not evenly distributed between rural and urban areas, between plains and mountainous areas. Technical equipment for data collection, storage, transmission, and processing is limited, lacks connectivity, and slow and unstable transmission speeds. Network safety and security are not guaranteed. Besides, the construction and completion of the national database system are still slow; The connection and sharing of public and private databases are still inadequate. These limitations are hindering the development of the digital economy in our country.

Fourth, human resources have not yet met the requirements for digital transformation in general and the digital economy in particular. According to the Ministry of Information and Communications, the demand for human resources in the field of information technology increased by 13% every year, but in reality, it only increased by 8%, much lower than the requirement for human resources [18]. In 2021 alone, the number of information technology human resources needs 500,000 people, but there is a shortage of 190,000 people [19]. Besides, the quality of human resources in research, development, and application of digital technology is still low. The lack of human resources in both quantity and quality has made it difficult to implement digitalization in all fields in general and the development of the digital economy in particular.

2.3. Solutions to develop Vietnam's digital economy

To achieve the goal that the digital economy will contribute about 20% of GDP by 2025 and about 30% of GDP by 2030, making an important contribution to the sustainable development of the economy, Vietnam should focus on the following solutions:

Firstly, raising perceptions about the digital economy of economic subjects, especially businesses, thereby creating a unified perception of the digital economy's position, role, and connotation in policymaking and formulation. On that basis, there are reasonable and effective policies to implement in practice. After synchronizing and raising perceptions, businesses should to proactively prepare the conditions (capital, human resources, technology) to seize opportunities and international competitiveness in the global digital economy; The Government should step up support for businesses in developing digital infrastructure, information, and communication technology, training digital human resources, etc.

Secondly, it is necessary to focus on building and perfecting institutions and policies suitable to the digital economy business environment to create a legal basis for the development of the digital economy. The Government shall coordinate with relevant ministries and branches to establish a specialized, competent, and responsible institutional agency in digital economy development. In particular, the State should issue decrees on data sharing, electronic authentication, and personal data protection; impose sanctions on intellectual property on the network, protect the network

information security, and set up a coordination mechanism when technology incidents occur. Encourage enterprises to apply new and digital technologies to develop new business models, digital economy, and digital society.

Third, rapidly develop digital connection infrastructure and digital connectivity capacity. Attention should be paid to investment in upgrading digital infrastructure to speed up convenient, fast, and smart connections in all localities in the country. Promote e-Government, the digital Government in all areas. Accelerate the completion of the national database, create linkages between the public and private sectors. Encourage cashless payments. Focus on enhancing security and safety for payment services based on high technology. Enhance the capacity of the Security Operation Center (SOC) to prevent and handle situations that occur early, in reality, creating favorable conditions for people and businesses to easily and equally access digital technology. In addition, accelerate the use of 5G network services to keep up with the development trend of the world. Implement technical and non-technical measures to improve management efficiency in transnational digital technology activities, creating a fair and equal competitive environment for domestic enterprises.

Fourth, rapidly develop human resources to serve the needs of digital transformation and the digital economy. First of all, the State should have the policy to encourage qualified training institutions to participate in the human resource training process to serve the needs of the digital economy. In addition, it is necessary to popularize informatics and digital technology to the people. The State needs to have policies to attract and effectively use scientists and intellectuals trained from abroad and have in-depth knowledge in the field of information technology (software and hardware) to return to work in our country. In addition, training institutions need to actively improve their human resource training capacity for the digital economy.

CONCLUSION

The global supply chain was interrupted under the impact of the Industrial Revolution 4.0 and especially the Covid-19 pandemic. Developing the digital economy is a necessity for all countries if they do not want to be outdated. Actively shifting from a traditional economy to a digital economy, Vietnam's economy is changing rapidly in many fields, from trade, payment, education and training, healthcare, transportation, tourism, agriculture, etc. Developing the digital economy will create opportunities for Vietnam to grow quickly and sustainably. Doan Duy Khuong - Vice President of the Vietnam Chamber of Commerce and Industry (VCCI) affirmed: *If Vietnam well applies the results of the Industrial Revolution 4.0 and digital transformation, GDP in the next 10 years will increase 100 billion USD and have many opportunities towards the development of national prosperity* [20].

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THE IMPACTS AND FACTORS AFFECTING THE CORPORATE GOVERNANCE OF STATE-OWNED ENTERPRISES IN VIETNAM IN THE CONTEXT OF GLOBALIZATION

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Abstract: *This paper aims to study the corporate governance of state-owned enterprises in Vietnam in the context of globalization. This paper will be beginning by providing the overall comprehension of corporate governance and corporate governance in state-owned enterprises (hereby SOEs) in particular. Next, the article will show the impacts of SOE governance on enterprises' production and business activities, related stakeholders, and socio-economics. Finally, the paper presents a model of the factors affecting SOEs' governance, thus pointing out the differences in governance between the SOEs and other types of enterprises in the Vietnamese economy.*

Keywords: *Corporate governance, SOEs, state-owned enterprises, Vietnam, globalization*

1. INTRODUCTION

Despite a 20-year trend toward privatization, state-owned enterprises (SOEs) continue to be significant economic participants. SOEs contribute 20% of investment globally, 5% of employment, and up to 40% of output in some countries (World Bank, 2014). They have maintained essential services in critical economic areas such as utilities, finance, and natural resources. Even in competitive industries, several countries retain governmental ownership of large-scale manufacturing and service firms. However, unlike in the past, SOEs are under intense pressure to improve their performance now. These pressures come from the need to boost their own and the economy's overall competitiveness, particularly in countries where SOEs are major players. SOEs provide critical financial, infrastructure, and other services to businesses and consumers more efficiently and cost-effectively, reduce their fiscal burden and fiscal risk, and improve the transparency and accountability of their operations. Globalization, market deregulation, and budgetary discipline all contribute to performance improvement attempts. A lengthy history of reform efforts demonstrates that the key to improved SOE performance is improved governance (World Bank, 2014).

2. CORPORATE GOVERNANCE:

Corporate governance has received much attention from scholars because of its growing importance and events in the late 1990s and early 21st century. The financial crises in Asia and the Russian Federation and corporate scandals in the United States and Europe make policymakers and investors more aware of the role of corporate governance. Therefore, there is a wealth of studies concerning corporate governance in the last two decades.

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There is no standard accepted definition of corporate governance because scholars study it from their theoretical perspective and context; however, scholars are likely to share similar ideas. Some scholars focus on systems of controls within the company. Cadbury (1992) defined corporate governance as: *“the whole system of controls, both financial and otherwise, by which a company is directed and controlled”*. Similarly, Gillan and Starks (1998) considered corporate governance as the system of laws, rules, and factors that control operations at a company. On the other hand, others view corporate governance as relationships between the board of directors, shareholders, and stakeholders. Monks et al. (1995) stated: *“It is the relationship among various participants in determining the direction and performance of corporations”*. Likewise, in Ching, Tan, and Ching’s (2006) study, corporate governance constitutes a set of rules that govern the relationships between management, shareholders, and stakeholders. In addition to these perspectives, many scholars consider corporate governance as a measure to manage the company and ensure the interest of the shareholders or stakeholders. Andrei Shleifer et al. (1997) viewed corporate governance as *“the way in which suppliers of finance to corporations assure themselves of getting a return on their investment”*, while La Porta et al. (2000) referred to corporate governance *“as a set of mechanisms through which outside investors protect themselves against expropriation by the insiders (both managers and controlling shareholders)”*. At the international level, it is reliable to consider the definition of corporate governance that OECD offers. OECD (2004b) claimed that corporate governance involves a set of relationships between a company’s management, its board, its shareholders, and other stakeholders. It also provides the structure through which the company’s objectives are set, and the means of attaining those objectives and monitoring performance are determined.

It can be seen that these mentioned-above definitions of corporate governance share similar fundamental elements. Corporate governance constitutes a system of rules, mechanisms, and regulations within a corporation to regulate the relationship between its managers and related stakeholders to set company objectives, organize, manage, and control the company operations.

3. CORPORATE GOVERNANCE OF STATE-OWNED ENTERPRISES:

The SOE’s definition relies on the regulations of the State. In OECD reports, SOEs are regarded as firms in which the State exercises ownership. In Vietnam, according to Clause 1, Article 88 of the Enterprise Law 2020, State-owned enterprises are defined as limited liability companies or joint-stock companies that wholly (100% of charter capital) or partially (over 50% of charter capital or voting shares) are owned by the State.

Despite the privatization trend in recent decades, state-owned enterprises play an essential role in economic development worldwide. As reported by International Finance Corporation (IFC), SOEs make up 5% of employment, 20% of the investment, and up to 40% of domestic output across the globe (International Finance Corporation, 2018). SOEs are essential for providing critical services such as telecommunications, transportation, banking, education, health, water, and energy in many countries. Many large SOEs have taken the role of global players as they are becoming the world’s biggest companies and investors worldwide. Among the world’s 2000 largest firms, the share of SOE assets reached 20% in 2018 (International Monetary Fund (IMF), 2020).

Given the critical role of SOEs in the economy, there always exists a concern about SOEs’ efficiency. Some studies have indicated that the financial performance of SOEs, in terms of profits and labor productivity, is lower than in private companies (International Monetary Fund

(IMF), 2020; Richmond et al., 2019). The inefficiency of SOEs is partly because state-owned enterprises face several governance challenges (Korin Kane and Hans Christiansen, 2015). On the one hand, SOEs may encounter difficulties when the State over-exercises its ownership rights and interferes deeply in corporate governance with political motives, leading to the unclear scope of responsibility, lack of accountability, and inefficiencies in business operations. On the other hand, the limited oversight due to passive and remote ownership probably weakens the incentives of corporate insiders to act in the best interests of enterprises and the general public. Another governance issue that often arises in connection with SOEs is that SOEs' management might be protected from the possibility of takeover and bankruptcy, which are two disciplining factors regarded essential to management in private companies. Further, apart from economic activities, SOEs possibly perform socio-political tasks. These mentioned governance challenges hinder the quality of SOEs governance as well as the SOEs performance.

In addressing these governance challenges and enhancing the performance of SOEs, governments have attempted to establish SOE corporate governance framework in agreement with good disciplines suggested by international organizations. In 1999, OECD first published its principles of corporate governance to help policymakers improve the quality of corporate governance. The principles comprise five main parts: regulations concerning shareholders, other investors, stakeholders, disclosure and transparency, and the responsibilities of the boards. In 2005, OECD first provided their guidelines on corporate governance of SOEs to advise how to manage SOEs more effectively, and then, in 2015, they updated the guidelines (OECD, 2015). In addition to the main parts of the Principles, OECD's guidelines on SOEs governance provide three other sections focusing on state ownership and SOEs' role in the marketplace. In 2014, the World Bank also provided a framework for SOEs' corporate governance (World Bank Group, 2014). The toolkit of the World Bank may be divided into two parts. The first part includes policy measures that may be used within the machinery of government to improve better SOEs governance, while the second part shows how to optimize internal governance agreements in SOEs to enhance SOEs' performance and protect minority shareholders. Based on these international recommendations, governments have built their corporate governance codes of SOEs, which fit the national regulations. In 2020, the OECD released a report on implementing the SOE Guidelines in the last five years. The information reviewed that the governments of OECD countries tend to improve SOEs' regulatory framework to ensure transparency and accountability of the State's exercise of ownership rights (OECD, 2020).

To sum up, the SOEs governance addresses the typical elements in line with joint corporate governance. It also establishes SOEs' regulatory system that governs the relationships between shareholders, institutional investors, managers, and other stakeholders to manage the corporate effectively. However, the SOEs governance involves distinct elements. The SOEs governance requires the State to exercise its ownership in the general public's interest, carry out the SOEs governance in a transparent and accountable manner, and ensure fair competition between SOEs and private firms. The following sections will analyse the role of SOE governance and the factors influencing it.

4. THE IMPACTS OF CORPORATE GOVERNANCE IN SOES

Corporate governance has long been a core element in the operation of an enterprise in general and a state-owned enterprise in particular. This has been shown very clearly from the content

and functions of corporate governance mentioned above. Furthermore, SOE governance also has several essential roles which approached at three levels: the role of SOE governance on firm performance, impact on stakeholders, and SOEs' role for socio-economics.

a. The impact of state enterprise governance on firm performance

Like enterprises in general, corporate governance plays a considerable on the firm performance of SOEs.

Heo (2018) studied over 320 state-owned enterprises in Korea to examine the influence of SOE governance on firm performance. The results show that the more management quality is improved, the better the performance quality will be. This study accesses the impact of corporate governance on some measures of SOE performance, including performance access results, buyer satisfaction, operational efficiency, and financial process.

Agreeing with that opinion, a study of SOEs in Morocco shows that 03 stages of corporate governance and management reform from 1980-2000 had a positive impact on the performance of state-owned enterprises, played a growing factor in the country's socio-economic development in recent years (Semmar, 2012). Besides, corporate governance also has a positive effect on firm valuation. Better corporate governance practices also perform financially better. On the other hand, companies that do well in measured profitability are also good in their corporate governance disclosures (Kandukuri et al., 2015).

Jonathan M. Karpof et al. (1994) also assert that a firm's overall governance structure has many financial influences, despite the link between corporate governance terms and firm performance. There are also conflicting signs, businesses with less stringent management regulations show higher ROAs and M/Bs than other companies in the same industry, meaning that a less restrictive governance structure will help businesses develop more efficiently and increase competitiveness.

However, the impact of SOE governance has its characteristics compared with corporate governance in general.

A study of large Chinese enterprises in 2008-2016 showed that the quality of corporate governance directly convinced the agency-performance relationship. However, the degree of state ownership harms the quality of operations, where the proportion of state capital in enterprises increases, agency costs will increase, which means lower operational quality. Besides, managerial appropriation is higher for SOEs compared to private enterprises (Khan et al., 2020).

Besides, some other factors such as board size, degree of collectivization, disclosure, and clarity are positively related to the performance of SOEs, showing that they affect the performance of state-owned enterprises. However, board independence and separation between the chairman and chief executive officer positions have adverse or negligible effects on specific performance measures. These results suggest that a giant board of directors, collectivization of SOEs, and more transparent disclosure practices may benefit SOE performance (Heo, K., 2018)

Molnar et al. (2017) argues that one of the decisive factors for China's development is corporate governance, leading to improved productivity through good management than resources at the corporate level. A study of businesses from 1999-2015 found that a more significant pay break between managers and employees hurt productivity but increased ROA and ROE, which are executives' goals, and short-term exchange profits for the account of productivity. While growth in revenue and

profits can lead to greater performance on the surface, it does not always ensure higher productivity. If this sacrifice leads to financial debt, it could reduce productivity. Immoderate ownership structure in a certain degree of concentration can also promote production. Although they may own only a tiny portion of the pieces, stakeholders and investors are supposed to drive its performance.

b. Impact of SOEs on related stakeholders

The role of corporate governance becomes more apparent as we enter the 21st century when a series of economic crises caused by manager fraud, misconduct, and negligence has resulted in criminal cases, major bankruptcy, debts, and significant loss of assets of shareholders and investors. Corporate scandals have shaken investors' trust in the market and businesses, demanding the effectiveness of current corporate governance practices in encouraging transparency and accountability (Baker et al., 2009). This includes disclosure, and all publicly listed companies must notify stakeholders of their financial policy and objectives. Besides, releasing timely information about insiders (directors, board members, and main part-owner) who have invested in the business. In addition, news that has a more significant impact on company performance and shareholders' assets needs to be updated regularly.

The benefit of centralized control is that it results in more effective administration oversight and helps fix agency dilemmas. Nevertheless, the expenses linked with centralized ownership are under liquidity and decreased hazard diversification. Distributed ownership offers greater liquidity, which can be necessary for the extension of innovation. For instance, cross-owned and cross-controlled businesses can decrease transaction costs and reduce motivations to interlock opportunistic action. As a result, stakeholders have a higher purpose of investing in particular investment relationships. Otherwise, this can also lower the level of competition in the product market (Maher et al., 2000).

Research on Morocco's SOEs has shown that governance reform in the SOE sector can promote more sustainable linkages of Moroccan businesses and their global partners, aligning SOE supervision standards with standards management of non-state opponents, and adopting more conventional corporate practices to advance the clearness and financial execution of SOEs. In driving Moroccan SOEs towards universally recognized measures, the participation of internal and foreign partners and stakeholders has significantly impacted promoting best practices of transparency and accountability (Semmar, 2012).

c. Impact of SOE governance on socio-economic

Corporate governance impacts the evolution and functioning of capital exchanges and has a powerful impact on resource allocation. The increasing capital mobility and globalization era have also enhanced an essential structure that affects countries' manufacturing competitiveness and economies. By executive that, several of the fundamental parts that drive effective corporate governance and evaluate many of the strengths, flaws, and economic connections of different corporate governance practices. (Maher, M., & Andersson, T., 1999)

Ngu (2002) argues that corporate governance reform measures seem to affect the economic performance of SOEs positively. This relationship is shown in the average annual growth rate of TFP of 3.05% during the time studied and 4.22% and 5.37% respectively during the period studied partial and total reform, which led to drastic changes in macroeconomic policies.

McMillan et al. (1999) and Malesky et al. (1998) repeatedly concentrate on SOE governance improvement and the connection between enterprises to support trade in Vietnam. They find that

solid two-sided relationships exist between many companies. They have relaxed more draconian regulations than before on financial management. However, they must preserve and develop the government's capital and pay taxes and other levies prescribed by law. All profits after tax associate with SOEs, and they possess almost complete autonomy to use their property. Although SOEs enjoy more freedom than before, providing macroeconomic benefits, their performance is still not adequately established.

SOEs play an essential role in economic growth and provide vital public services like infrastructure, medic, and education. The underperformance of SOEs can point to considerable difficulties to overall public development and competitiveness. (Heo, K., 2018). In addition, improving the corporate governance of SOEs is also significant to improving financial administration and their role in producing primary services and developing rural areas of the country (Semmar, 2012).

SOE governance helps to increase social responsibility, focusing more on protecting the interests of consumers. Vietnamese SOEs should also defend nature by creating environmental-friendly goods and services. Besides, businesses must actively engage in civil exercises such as welfare contributions and implement global standards such as ISO 14000, and other standards should be considered the primary commitment to social responsibility. Besides the company's efforts, governance factors play a significant role. Government services can be enforced with less authority, a transparent legal operation, and an improved foundation. The State remains an essential member in facilitating a convenient market environment (Hang, 2004).

5. FACTORS INFLUENCING ON CORPORATE GOVERNANCE OF SOES IN VIETNAM

Numerous factors have contributed to the effectiveness of corporate governance procedures in both private and public businesses. According to specific research (A Shleifer et al., 1997), they can be classified as external and internal factors. Internal factors consist of internal structure, board of directors' activities (BOD), and corporate governance policies (OECD, 2005). In addition, SOEs in general and Vietnamese SOEs, in particular, have unique characteristics compared to other types of enterprises in the economy. These characteristics impact how corporate governance implement. In the following section, the paper will analyze two specific points about Corporate Governance that make Vietnamese SOEs different from other types of enterprises in the Vietnam economy, including Shareholder structure and Business areas. After that, it will illustrate the factors affecting the corporate governance of SOEs in Vietnam, including external and internal factors.

a) Vietnamese State-owned enterprises have unique features in capital structure and shareholder structure

Like SOEs in other countries globally, SOEs in Vietnam have different characteristics compared to other enterprises in the economy. First, Vietnamese SOEs are entities formed by the government through legal means to take part in activities of a commercial nature. The government may assume full or partial ownership of a State-owned enterprise, which is usually allowed to participate in specific activities. The State is the owner of the entire or above 50% charter capital of the enterprise (Article 88, Vietnam Business Law). As the sole or biggest investor in an enterprise, the State has full authority to decide on issues related to the existence and operation of each SOE (Nguyen et al.), including:

- Making decisions on the formation, reorganization, and disposition of enterprises such as establishment, division, separation, consolidation, or merger; transfer all or part of the capital to other organizations or individuals; enterprise dissolution;

- Deciding on objectives, development strategies, production and business plans, financial investments of the enterprise;

- Deciding on the model of enterprise management organization; decide to dissolve or re-organize the enterprise; approve the operating charter, amend and supplement the charter; decide on the appointment, dismissal, commendation, and discipline of enterprise managers (the chairman and members of the Members' Council, or the company's president, controller, general director or director)

- Deciding the essential criteria evaluate the operation of the enterprise.

- Checking and supervising the implementation of the assigned goals and tasks of the enterprise.

Second, to ensure the management of the State and improve the operational efficiency of the SOE sector, as an owner, the State must perform the following responsibilities towards the entire SOE sector, including:

- Organizing the building and approval of planning for the development of the SOE sector, including the new establishment, arrangement, and restructuring of SOE in each industry, field, and area within the entire economy;

- Regulating the corporate finance, salary, allowance, bonus, and other benefits of the state owner's representative and other titles in SOEs.

Thus, as the largest shareholder (in some cases the sole shareholder), the State has decided most corporate governance activities. Therefore, the political influence from the State on decisions related to corporate governance is evident. It is entirely different from private economic groups when there is participation in management. from other shareholders.

b) SOEs in Vietnam operate particular business fields

Regarding the field of operation: To ensure the correct implementation of state enterprises' key roles, objectives, and functions in the national economy, the scope of state capital investment to establish state enterprises has been approved limited to the following *four industries and fields* (Law on management and use of state capital for investment in production and business in enterprises in 2020 and Decree No. 91/2015/ND-CP dated October 13, 2015, of Government on investment of state capital in enterprises and management and use of capital and assets at enterprises (amended and supplemented by Decree No. 32/2018/ND-CP):

- Providing essential public products and services, ensuring social security;

- Operating in the field directly serving national defense and security according to the government's regulations on organization, management, and operation of defense and security enterprises.

- Working in the field of natural monopoly.

- High-tech application activities, significant investment, creating a driving force for rapid development for other industries, fields, and the economy.

Thus, the law has affirmed that SOEs can only be established and operated at critical stages in some industries and fields to ensure the community's interests (public safety, national security, high-tech applications, significant investments that other economic sectors do not want or cannot provide...)

These distinctive features of state-owned enterprises have influenced the impact factors of corporate governance. The factors affecting the governance of state-owned enterprises will also be different from those of other types. Basically, the impact on the business includes factors from outside and inside the business. However, state-owned enterprises are more strongly affected by

several factors. The next section will review the external factors and internal factors affecting the SOE governance.

c. External Factors affecting the SOEs Corporate Governance

A strong legal and regulatory framework reflects the inherent value of the business culture (McCarthy et al., 2003; Saidi, 2004) while also simplifying enterprises' legal admission, formal operations, and legal exit. Doidge et al. (2007) operationalized the legal system regarding minority investor rights and the economic and financial development level. Additionally, the authors suggested that these variables can alter costs and benefits. Numerous studies have established a correlation between political influence and low economic growth, corruption, and a lack of transparency and disclosure, particularly in state-owned companies (SOEs) (McCarthy & Puffer, 2003; Saidi, 2004). Social and cultural influences are two of the most significant external variables affecting company governance. Hofstede (2001) contended that corporate governance is intrinsically tied to financial objectives that are not culturally neutral. Available research reveals that a country's historic context is defined by its culture, values, and traditions (Archambault et al., 2003).

Economic structure has been related to corporate governance as a necessary component of establishing a stable and sustainable investment climate. Adeyemo et al. (2008) found in a study done in developing that the absence of solid economic policies and reforms was cited as the primary factor for enterprises' poor performance.

Globalization is a leading concept that has become the main factor in business life during the last few decades. This phenomenon affects the economy, business life, society, and environment differently. Almost all corporations have been involved by increasing competition and rapid changes in technology and information. This issue makes corporations more profit-oriented than long-term and sustainable companies. Globalization also should be a process that integrates world economies, culture, technology, and governance. Because globalization also involves the transfer of information, skilled employee mobility, the exchange of technology, financial funds flow, and geographic arbitrage between developed and developing countries.

Globalization has some opportunities and threats. A company might have learned how to protect itself from some adverse effects and get opportunities from this situation. Globalization affects the corporate governance of SOEs sharply in different ways:

- Increasing competition,
- Technological development,
- Knowledge/Information transfer,
- Portfolio investment (fund transfer between developed countries and emerging markets),
- Regulation/deregulation, International standards,
- Market integration,
- Intellectual capital mobility,
- Financial crisis-contagion effect-global crisis.

Büge et al. (2013) argued that the state sector has traditionally been characterized by orientation towards domestic markets and often lagging business performance. However, globalization changes corporate governance in SOEs. They tend to compete increasingly with private firms for resources, ideas, and consumers in domestic and international markets.

Thorne et al. (2010) argued for the importance of technology and defined three key characteristics: (1) dynamics, which they define as “constant change that challenges the structure of social institutions”; (2) reach, which they define as “the broad nature of technology as it moves through society”; and (3) self-sustaining nature, which they define as “the fact that technology acts as a self-sustaining entity” (pp. 376-377).

In summary, the external factors affecting SOE governance include:

1. Legal system;
2. State Political influence;
3. Social/cultural environment;
4. Economic influence;
5. Globalization and;
6. Technology

d. Internal Factors

Internal Structure

The ownership structure determines its framework and the percentage of stock owned by individual and institutional investors (Shliefer & Vishny, 1997). Institutional investors in publicly traded companies are large stockholders in developed and emerging economies (Solomon et al., 2004). Numerous researches have revealed a correlation between ownership structure and growth and performance (Barth et al., 2001).

Bouaziz et al. (2012) observed a high correlation between the board of directors' membership and the firm's financial performance. The effectiveness of board members in every organization is proportional to its size. The OECD (2004a) reports that enterprises with smaller boards of directors are more effective than those with larger boards. Kula (2005), on the other hand, asserted that the CEO could more easily influence a smaller board of directors. Boards of directors in some Vietnamese corporations might surpass 50 members, although in the United States, they rarely exceed 25 (Ungureanu, 2012). Numerous research on board diversity has established a favorable correlation between it and shareholder value (Carter et al., 2003) and return on investment and return on assets (Erhardt, Werbel & Shrader, 2003). In most Arab and African countries, businesses have made little progress toward improving dominant attitudes toward gender and race (Kang et al., 2007). Professionally and ethically managed enterprises are more likely to attract investors than badly managed firms. In many countries, some businesses have been found to be in flagrant violation of corporate governance regulations. Virakul et al. (2012) established a strong correlation between well-trained and experienced CEOs and the growth and success of businesses. Finally, according to Virakul and McLean (2012), the demographic characteristics of the BOD can affect a firm's corporate performance and strategy (2015).

In summary, the internal (intrinsic) structure of the enterprise affecting corporate governance include:

1. Ownership structure;
2. Board Composition;
3. Board Leadership;

4. Board size;
5. Demography.

Board of Directors' Activities

The board's activities, including oversight, control, accountability, addressing conflicts of interest among decision-makers, decreasing transaction costs, and ensuring continuity, are critical to the firm's success (Baysinger et al., 1985). The board of directors of any business is invariably seen as the most vital component of its success. Members are responsible for everything from hiring and firing the CEO to evaluating the firm's performance and defining strategic direction (Kang et al., 2007). A frail board translates into lax oversight of performance evaluation and accountability. Existing research reveals considerable correlations between the content and quality of BOD and the financial performance of businesses (Ezzamel et al., 1993). Internal control mechanisms efficiently prevent CEO and senior management opportunism and the personal use of corporate assets. Adequate controls also ensure that board members have timely access to essential information that can be used in decision-making. The BOD is responsible for enforcing the framework for controlling the CEO and management, even if execution differs significantly among corporate entities (Thorne et al., 2010).

In summary, the factors related to the activities of the Board of Directors that affect corporate governance include:

1. Deciding CEO's job
2. Assessing CEO&Management's performance
3. Helping to set strategic directions
4. Evaluating firm's performance
5. Developing CEOs succession plan
6. Communicating with stakeholders
7. Maintaining legal and ethical practices
8. Ensuring that control and accountability mechanisms are in place
9. Evaluating the board's performance

Policies on Corporate Governance.

These are critical because they communicate its beliefs, objectives, and terms of involvement and operations. Policies are guiding concepts that keep businesses on track (Thorne et al., 2010). Several of these policies are concerned with transparency and disclosure, which they promote.

- Consistent and aggregate reporting;
- Annual publications or results and internal audit of firms;
- Compensation policy governing the disclosure of CEO remuneration;
- Top management and board members;
- Disclosure policy governing financial reporting and auditing of a firm;
- Hiring and selection processes, particularly those involving the recruitment of the CEO and top management I (OECD, 2004a). Ferrell et al. claimed that three distinct categories of risk could be classified as hazards; risk management should prioritize lowering the chance of fraud, injury, and financial losses.

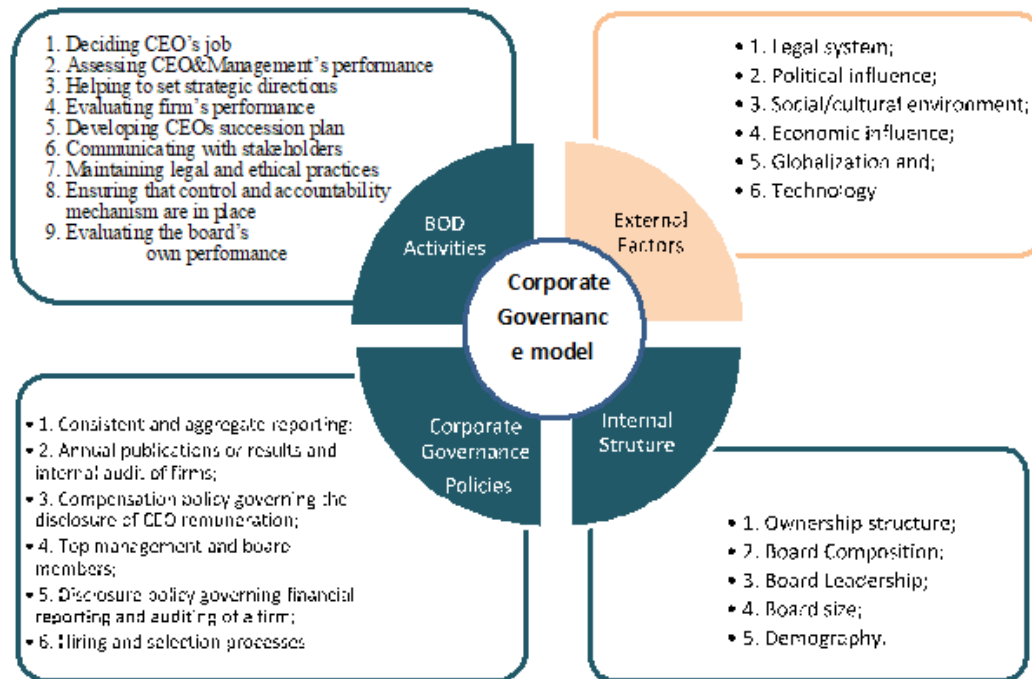


Figure 1: SOE Corporate Governance Model

6. CONCLUSION

In a world of globalization, Vietnamese state-owned enterprises must change to adapt. Among these changes, corporate governance has a significant role in improving the quality of business operations, benefiting stakeholders, and ensuring the national socio-economic situation. Understanding the unique characteristics of SOEs governance and SOEs operation in Vietnam are the foundation for determining the influencing factors for state-owned enterprise governance. Internal structure; Corporate governance policies; BOD activities; and External factors are identified as four groups of factors that will have major impacts on SOE governance in Vietnam in the context of globalization. Accurately aware of these factors, the Government of Vietnam and state-owned enterprises can find policies solutions to restructure and improve the governance of SOEs shortly.

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OPPORTUNITIES AND BARRIERS OF INNOVATION IN SMALL AND MEDIUM ENTERPRISES IN VIETNAM

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Abstract: *Innovation is the process in which a business develops new products, services, processes, or management systems to meet requirements due to changing business environments, technologies, or competitive models. The result of innovation is improving the capacity of Small and Medium Enterprises (SME), increasing competitiveness with competitors in the market. In the context of technology, knowledge, and innovation are becoming the key factors determining competitiveness and economic growth of each country, innovative SME plays the role center during development. Vietnamese SMEs have many opportunities but are also full of challenges in the innovation process. The solutions focus on creating a favorable legal and institutional environment, promoting industries and fields related to innovation of businesses such as university research, supporting industries, start-ups. business, developing corporate culture ...*

Keywords: *Innovation; business innovation; opportunities and barriers of innovation; SME; Vietnam*

1. INTRODUCTION

Over the years, Vietnam has achieved remarkable economic results, creating a place for itself in global value chains where business types play a huge role. As of July 1, 2017, the whole country had more than 5.86 million economic, administrative and non-business units, up 13.7%, equivalent to 0.7 million units, and attracted 26.9 million workers, an increase of 18.6% equivalent to 4.2 million workers compared with these items in 2012. On average, each year increased 2.6% in units, 3.5% in terms of labor which is lower than the number in the period of 2007 - 2012, respectively 5% and 6.7% (Khanh Linh, 2018). Currently, the business sector contributes the most to the development of the economy, accounting for over 60% of the GDP. From 2010 to 2017, the number of SMEs in operation increased by 10.5% per year; the number of employees attracting to work in the enterprise sector increased by 5.9% per year; capital for production and business increased by 15.4% per year; turnover increased by 15.6% per year; profit increased 13.7% per year and contribute to the State budget increased 12.4% per year (Phan Thao, 2018). However, small and medium enterprises focus more on policies to encourage innovation. Small and medium enterprises only contribute 14.2% of sales from innovative products. Meanwhile, the number of small and medium enterprises is 07 times higher than the number of large enterprises. (AKP Mochtan, Ha Minh Hiep, 2021). Therefore, it is necessary to promote further the implementation of preferential policies for small and medium-sized enterprises, further encourage innovation activities to increase the value of revenue from the innovation gradually. To maintain a high growth rate towards a high middle-income country status, it is necessary to improve the capacity

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of innovation in the entire economy, which the first to mention is the business sector. Currently, innovation in the enterprise sector has certain potentials and limitations, it is necessary to have an assessment to have suitable solutions.

2. METHOD

A systematic approach was applied in this study to search for articles about the concepts of innovation, opportunities, barriers and the fact happened in Viet Nam. We used Google Scholar, Scopus databases to find relevant articles. For both databases, the following keywords were used for article searching: Innovation, opportunities, barriers, SME in Viet Nam. For Google Scholar, our search was limited to searching keywords, titles, abstracts, resulting in 2.370.000 documents. After limiting the search by selecting only the titles, we arrived at 72 articles. Besides, the article uses qualitative methods, focuses on analyzing and evaluating the results achieved by the Vietnamese business community in recent years, the results of innovation in SME; Analyze the potentials and limitations in innovation in SME to give suggestions on policies and solutions to improve innovation in SME in Vietnam. The data used are secondary data, extracted from the websites of ministries and branches.

3. LITERATURE REVIEW

There is a lot of research on innovation in SMEs both in theory and practice, covering innovation issues such as the concept, form, and role of innovation.

3.1. The concept and role of innovation in SME

Innovation is the process in which a business develops new products, services, processes, or management systems to meet requirements due to changing business environments, technologies, or competitive models (D'Aveni, 1994). Innovation involves many stages, from researching and planning to finding technical solutions and commercializing. Unlike invention, innovation is only recognized when SMEs turn inventions into products, sell them on the market and earn profits. The number of patented inventions measures the patent invention.

Law on Science and Technology (2018) of Vietnam shows the concept of innovation that innovation is the creation and application of achievements, technical solutions, technology, and management solutions to improve socio-economic development efficiency, productivity and quantity, and added value products and goods.

Therefore, the role of the State in innovation is necessary. In developed countries, governments support innovation in many ways. Securing intellectual property rights and supporting research at universities is common (OECD, 1999).

Companies commercialize new ideas and technologies through their business models. While companies may have extensive investments and processes to explore new ideas and technologies, they often have little ability to transform the business models through which start-ups to this will pass. This is important - the same idea or technology brought to market through two different business models will yield two different economic outcomes. So it makes a lot of sense for companies to develop the ability to change their business models. (Chesbrough, H. W, 2010)

Chesbrough, H. W., & Rosenbloom, R. S. (2002) assessed the technical potential of these business models through their business model, while those successful business models became successful through evolving business models significantly different from Business Model. In

contrast, finding and learning an effective business model in failed projects is quite limited.

The new change evolving to create value, from collaboratively closed to open, and now co-changeable. It examines some of the major trends that have dramatically changed the capacity of the global market and also some of the newly changed quantifiers that should equip the organization of value creation. The core of co-innovation includes engagement, co-creation, and engaging experiences to create value. Therefore, the activity of creative co-organizers is difficult to capture by competition. (Lee, S., Olson, D., & Trimi, S.,2012)

If government organizations and/or government agencies want to encourage SMEs to become and remain innovative, they should encourage these companies to adopt an innovation policy. Without such a policy, SMEs are unlikely to implement stimulus measures and subsidy programs successfully. (Keizer, J., Dijkstra, L., & Halman, J. I. M. 2002).

3.2. *The contents of innovation in SME*

According to the Global Innovation Report 2019 of the World Intellectual Property Organization (WIPO), the Global Innovation Index (GII) is a concept with many contents, including 7 groups of elements. These are institutions, research, and human capital, infrastructure, market complexity, business complexity, technology knowledge and output, creative output.

The Organization for Economic Co-operation and Development (OECD, 2005) also introduces four types of innovation related to a range of changes in business operations, including product innovation, process innovation, operational organization, and marketing innovation.

There are many forms of innovation, Schumpeter (1930) studied the five main groups of innovation: Launching new products or improving the quality of existing products; Offer new production methods; Develop new markets; New supply development; Organizational innovation (Shumpeter, 1934).

According to Johnson (2011), there are two main ways to innovate: product innovation and process innovation. **The first** direction is when there are changes and adjustments in the functionality of the commercialized product. At that time, the product is added with new functions compared to products currently on the market. The innovative direction in the process is when there is a change in the way services are provided, especially quality and cost. This innovation relates to the technological process from design, distribution to commercialization (Loilier, 1999). SMEs innovate through technology and customers, focusing on building knowledge and competencies that competitors do not have, thereby helping businesses maintain a pioneer position in the market (Foster,1986). Radical innovation is innovation in technology, customers, and the market (Danneels, 2002).

The second direction in which businesses innovate is to create market entry barriers for potential competitors through technological innovation and maximization of profits. This helps businesses maintain a relative monopoly in the market. Innovation is the key to flexibility and new product pioneering (Brown, 1998).

The source of corporate innovation comes from within or outside the business, but all aim to compete better in the market (Lundvall et al., 2002).

SME innovate on three competitive factors of products: quality, price, and service. Starting from ideas and successfully implemented in commercial business operations (Richard, 2006). Therefore, when there is a need to innovate, businesses explore the business environment,

competitors, and available research resources such as human resources, technology, and finance. Innovation is potentially risky (Langdon, 2011).

The OECD believes that innovation includes product innovation and technological innovation. Technological innovation allows new products to be introduced and changes in quality, price, and customer satisfaction helping businesses increase market share and the profitability of related products.

An important condition for businesses that want to innovate is to have an investment in human resources and R&D. This determines whether the firm is the market leader for that product or not (Ferrari, 2005). Investing in R&D is a risky investment and difficult to control more effectively than conventional investments because it is difficult for businesses to calculate the cost and effectiveness. Therefore, the effectiveness of innovation needs to be assessed by the revenue from the innovative products in the marketplace. To have new products in the market, firms need regular capital investment instead of working capital, to avoid financial imbalances in the face of innovation risks. (Coyne, 1996) The efficiency of innovation can also be measured by the number of invention inventions acquired through R&D investments.

SMEs that want to innovate need to build a flexible and organic organizational structure closely linked with each other. Because innovation depends so much on robot organization, strategic thinking, and leadership talent. The administration of an organization greatly impedes innovation. In an organizational structure, innovation requires teamwork and innovative thinking. Therefore, training and developing human resources are essential requirements for innovation (Julien, 1999).

Another condition for promoting innovation in SMEs is that the state policy and mechanism should focus on innovation for businesses.

Governments should step up the work of the national innovation system (NIS). This system operates on the integration of three factors: SME, universities, research institutes, and state support agencies. Promoting the development of the knowledge economy is also an innovative solution. The effect of innovation can be measured through the knowledge transfer between these three subjects. The result is the quality of the products and services provided in the market. The purpose of innovation is to improve quality and reduce service costs. (Niosi, 2011).

Fuentes Fuentes, M. M., Ruiz Arroyo, M., Bojica, A. M., & Fernández Pérez, V. (2010) taking into account the variety of forms, from corporate presentations to business plans. They show that a business model is a computational and narrative device that allows entrepreneurs to discover the market and play a fulfilling role by contributing to the technological-network-economic construction of an innovation.

3.3. The opportunities and barriers of innovation in SME

Through an institutional-based perspective, this paper argues that the institutional environment in the Asia Pacific region plays a multifaceted role behind firms' innovation strategies and knowledge management. Namely, institutions that impose rules of legitimacy act as a source of knowledge and allocate incentives and resources for innovation. Institutions have significant potential to advance understanding of knowledge management and innovation strategies in Asia Pacific businesses. (Lu, Y., Tsang, E. W. K., & Peng, M. W. 2008). The Government's more proactive approach to encouraging small high-tech firms to innovate is an advantage. (Oahey, R. P. 1991)

Niosi (2011) explores barriers to business model innovation, which previous academic research has identified as including conflicts with existing assets and business models, as well as perceptions of understanding these barriers.

Gambardella, A., & McGahan, A. M. (2010) proposed developing general-purpose technologies for licensing downstream professionals. In prototype format, these general-purpose technologies are built-in ways to be used by different potential downstream licensors and can fit their different strategies. This strengthens the hand of innovative companies in emerging markets towards knowledge-based assets and can be expected to improve their ability to capture a larger share of the industry's value to offer their technology created.

An informal survey about high technology companies (semiconductor, audio-video equipment, and computer hardware) was carried out. Pseudo-representation was tested using hierarchical parsing regression. The results show that the system is significantly positive between the new conversion speed and both the radical product and the new level process change. New products and changing processes for high affinity. The findings that companies should not shy away from new changes for fear of ranking. In addition, based on these results, new products and processes are closely linked to each other and the new rate of change. (Goktan, A. B., & Miles, G., 2011)

Five main institutional-based barriers to a new change in China are (1) fair competition, (2) access to finance, (3) laws and regulations, (4) tax burden, and (5) support system. This release raises the bar on institutional-based entrepreneurship by making innovation based on how regime-based constraints affect innovation in SMEs. (Zhu, Y., Wittmann, X. & Peng, M.W., 2011).

Innovative practices in small underdeveloped countries similar to barriers in industrialized countries (e.g., financing and skilled labor) have been found. Still, there are also many points of difference, as expected from the peculiar environment of a technologically less developed country. The role of government policies is of particular importance. Barriers to business model innovation include conflicts with existing assets and business models and perceived barriers to understanding these barriers. (Hadjimanolis, A. 1999.)

4. RESULTS

4.1. Opportunities of innovation in SME in Vietnam

- From 2016 up to now, the State has continuously promoted and carried out many activities to lead the economy to move to innovation-oriented development, especially to promote businesses to carry out creative innovation activities. In 2018, Vietnam was recognized with many international and domestic activities, giving strong messages on the aspirations and orientation of science, technology, and innovation development. In addition to the increasingly clear incentives and policies, e-government (e-government) is an important factor. (AKP Mochtan, TS. Hà Minh Hiệp, 2021)

Nearly 5 years since Resolution 19 and more than 2 years since Resolution 35 was issued, the Government has focused on improving the business environment and has made certain changes. If Vietnam establishes transparent, connected systems such as e-government, the goal of cutting off 50% of business conditions will be able to be implemented on schedule and in reality. At the same time, it will help fight corruption, strengthen the governance capacity of the State, increase the capacity of civil servants at work and improve the relationship between the State and businesses (Pham Chi Lan, 2019).

Vietnam is having good improvements in the business environment in recent years. Regarding business conditions, up to now, ministries have submitted 22 documents (1 Law and 21 Decrees), which have reduced and simplified 3,004 / 6,191 conditions (reaching 97% of the assigned target, an increase of 60.4% over the previous month). Regarding specialized inspection, the Ministries submitted and issued 21 documents, reduced and simplified 6,776 / 9,926 lines of goods to be checked, and 30 procedures. (N.T. Hoa, N.Thanh Hien, 2021)

- The input into Vietnam's innovation capacity is quite good. According to the United Nations Development Program (UNDP) calculations, the average number of years Vietnamese students go to school is higher than the world average. A report by the United Nations Educational, Scientific and Cultural Organization (UNESCO) in 2017 showed that the proportion of overseas students in Vietnam ranked 9 out of 100 countries in the world, mainly in developed countries such as the United States, Australia, France. Vietnam is also in the group of countries with high rates of budget spending on education (OECD, 2003).

- The SMEs in the processing and manufacturing industries have good growth. In a recent report of the World Bank (W.B.) over the past 3 years, Vietnam has created 1.6 million new jobs in the manufacturing and processing industries - a high rate in the manufacturing and processing industry. The rate of increase in employment is equivalent to the rate of increase in output. In manufacturing and processing industries, jobs are predominantly created in export-oriented industries, including textiles and electronics. According to the World Bank, the aforementioned industries have attracted agricultural workers, contributing to net labor movement out of agriculture and structural transformation and labor reorganization into activities with higher productivity. (P.X. Nha, L. Quan, 2013),

4.2. Barriers of innovation in SME in Vietnam

In addition to the above modest potentialities, innovation in SME in Vietnam still faces many difficulties and limitations:

- Vietnam's capacity for innovation as well as its readiness for the 4th Industrial Revolution remains low. According to the 2018 Global Competitiveness Report published by the World Economic Forum (WEF), Vietnam ranked 82 out of 140 countries for innovation capacity, reaching a score of 33.4 / 100. . The ratings of component criteria such as the application of patents and research and development (R&D) spending are also low, at 89 and 76 respectively. The World Economic Forum (WEF) 's future production readiness report also showed that Vietnam ranked only 70 out of 100 countries in terms of human resources, in which the index of labor has 81-grade expertise, 75-grade university quality, and 90-degree expertise in technology and innovation. Besides, although there are about 60% of the population of working age, the number of trained workers only accounts for nearly 40% (Vu Thuy, 2019).

- Vietnam's global innovation index (GII) in 2017 increased 12 places compared to 2016, to 47/127 the economy, the highest position ever. However, in the global ranking of innovation activities, Vietnam is still far below the leading group, including Japan, Singapore, South Korea, and Malaysia, and significantly lower than China, Indonesia, India, Philippines, Thailand. Therefore, there is still much work to be done to improve this index, such as: to improve the groups of indicators on the business environment, capital market, and investment, technology application. (N.T. Hoa, N.Thanh Hien, 2021)

- The number of innovative start-ups is still small. The capacity of Vietnamese firms to come up with new ideas, whether new products to meet market needs or new production processes to increase competitiveness, is deficient. Although the level of support from the Vietnamese Government in promoting innovation activities is higher than that of Thailand and Malaysia, the spending of SMEs on R&D in Vietnam remains the lowest among the 10 countries. SMEs are not the center of the innovation system, and there are not many commercialized technology products. Vietnamese goods for domestic consumption or export are still difficult to compete by different characteristics, but mainly on prices. The number of newly established businesses is relatively large, but only 23.9% are established in science and technology, and very few of them are considered innovative start-ups. SMEs are not interested in R&D activities because most of them are operating in the low-tech industry (accounting for 44.2% in 2014). Only 17.3% of SMEs are considered to be operating in high-tech industries. (P.X.Nha, L.Quan, 2013)

- Vietnamese SMEs have a very small labor scale. The number of SMEs with less than 10 people accounts for 68%, from 10 to 49 people accounts for 25%, and 50-199 people account for 5%. Thus, up to 93% of SMEs have employees less than 50 people, and 98% of SMEs have several employees below 200 people. The number of SMEs with 200 or more employees accounts for only 2%. This makes it difficult for businesses to improve their investment capacity and upgrade technology to catch up with the country's development requirements. However, the positive factor here is that industrial revolution 4.0 can bring many rapid growth opportunities for small and medium-sized SMEs. Even micro SMEs and start-ups have good ideas because the conditions for the realization of ideas are now much more favorable. (P.X.Nha, L.Quan, 2013)

Personnel of SME also showed that the proportion of research and technical staff in SME, including large-scale SME, was only below 40%. Technical manpower accounts for only 36.4% in a medium-sized enterprise, followed by support human resources with 29.5%. The rest is human resources for other normal positions.

Many Vietnamese SMEs are now conscious and innovative efforts, but they do not have the necessary cooperation and support from universities and research institutions. The key to promoting innovation is increasing circulation, linking ideas, and coordinating implementation among all parts of society. However, this is a fundamental weakness of Vietnam, as there is still no effective coordination among the three main actors that need to participate in innovation efforts, namely businesses, schools, and research organizations save, and State. Especially, the coordination between SMEs and universities, and research organizations are still very weak. (N.T. Hoa, N.Thanh Hien, 2021)

- Corporate culture has not encouraged innovation. 50% of leaders out of 589 companies surveyed accept mistakes when employees do it wrong. Most businesses have not facilitated sharing information and learning culture for their employees. Research on 589 Vietnamese SMEs also shows that 72% of SMEs do not have policies to invest in human resources, and 78% have not invested financially in research and development (R&D) activities, 80% of which do not have partners for R&D activities. According to a survey of 143 SMEs by the Asian Development Bank (ADB), businesses in Vietnam are implementing innovation activities to achieve short-term rather than long-term goals. Some businesses choose to cooperate or sell a part of the company's shares to foreign partners. Through that, they have access to the source of the latest technology and equipment with cheaper quality and price instead of doing research themselves. (Le Anh Hung, 2021)

Every year, an average of 10,000 new brands are registered out of a total of 121,000 businesses. On average, every 12 businesses get one registered brand. Some businesses have to pay two to three times more to buy imported machinery and equipment because they have to buy individually and through intermediaries, because there are no international partners (Nguyen Ngoc Minh, 2020)

5. DISCUSSIONS

After discovering the advantages and barriers in the innovation of small and medium enterprises in Vietnam, we also propose some ideas to promote small and medium enterprises in innovation.

- There are many programs in Vietnam to support innovation in science and technology such as the Vietnam Innovation Support Program, a program to support research into food value chains in the Red River Delta. Chapter Program to promote innovation through research in science and technology (FIRST). Innovation Project towards low-income people (VIIP) and Vietnam Climate Innovation Center (VCIC)), has funded about 190 million USD for technology innovation companies in Vietnam. So this is the right time to develop a system that helps companies improve technology, especially start-ups, to benefit from technology and capital improvements, and connect stakeholders in the same region, creating synergy to support SMEs.

- Promoting supporting industries: Foreign investment is still expected to be one of the major drivers of technology transfer. The weak capacity of supporting industries makes Vietnamese SMEs have difficulty participating in the supply chain (vertical linkage) with foreign investors. Limited participation of domestic firms in global value chains, low marketing efficiency, and low level of authorization within the business. The investment rate in research and development (R & R&D) of agricultural SMEs is too small (only spending 1.6% of total revenue on R&D, too low compared to ASEAN countries). The sectors that spend the most on technological innovation and R&D are in the low growth category (pharmaceutical chemistry, electrical equipment, specialized machinery, or coffee processing). While the industries with high growth (40% or more) are those with the lowest or zero R&D costs and technological innovation (food processing, electronics, textiles).

Even for high-tech products and processing industries, the added value of processing and exporting these products bring to the Vietnamese economy is limited. For example, assembling and exporting new technology products to Samsung only brings Vietnam more than 1% of added value from total export turnover since most spare parts and components are foreign. So it doesn't drive growth. Recent studies show that supporting industries are performing poorly. Vietnam is an attractive country for FDI inflows, especially in the electronics industry. In recent years, tens of billions of dollars were invested from multinational corporations such as Samsung, Intel, L.G., and Microsoft, but very few domestic SMEs can adopt new technology through the link with FDI SMEs.

- Promote the start-up movement, focus on creativity with new ideas, so policy measures should focus on encouraging R&D activities, investing in improving the level and ability to apply science and technology in businesses. This is an effective way to underpin innovation and drive rapid growth based on new ideas and initiatives. Due to the nature of the start-up business is towards rapid growth. Currently, under revolutionary 4.0 conditions, a good idea associated with favorable conditions, start-ups can quickly step in and get ahead thanks to the rapid growth associated with high creativity. can become a large SME, reaching global reach. With such a reality, policy solutions at the macro level are necessary but not sufficient. The policy should be associated with specific solutions at the micro-level, targeting specific population groups so that individuals can freely come up with creative

ideas. At the same time, society must have a more open perspective to encourage those creative ideas, regardless of whether they become a reality or not.

- Promote linkages between universities, research institutions, and businesses. To enhance the nation's innovation capacity, it is necessary to strengthen the link between SMEs and universities and research institutes towards enterprise-centered orientation; Universities are research subjects, considering research as a mandatory task. The Government should pay attention to invest in building key laboratories and forming strong research universities.

The innovation must mainly come from free-market resources. The State's investment should only be spent on innovative solutions in the public sector or acting as an initial foundation to orient the private sector to participate. Technological innovation is only one part of innovation. Many businesses can significantly increase their production and business efficiency thanks to small, nothing innovations confidentiality, and not always can be considered a secret or a technological invention to be able to apply for protection of intellectual property. Countries cannot focus on technological innovation resources for high technology only. Low-level technologies are also extremely important because they help promote large-scale production and business activities, and create the necessary foundation before higher technologies can be developed and applied.

- Promote a culture of innovation at businesses. Creativity occurs in every member of the business. The role of the leader is to activate and create the environment that nurtures that creativity. Innovation can come from small actions, from changing the way of meeting, a way of selling ... SME should connect to the start-up ecosystem, connect resources from investors, mentors, investment funds, and change the path of thinking to open thinking. SME themselves want to develop, if they want to survive, they cannot be creative. Therefore, SMEs must create a good working environment that encourages all employees to have innovative thinking. Accordingly, business leaders must always pay attention to their junior staff to encourage their employees to contribute.

6. CONCLUSIONS

The article employs a systematic approach to elucidate the theoretical and practical underpinnings of innovation in small and medium-sized firms in Vietnam, concluding that both businesses and the Government must apply the solutions mentioned above to foster innovation. By examining innovation case studies from various countries, the research team examines the role, possibilities, and challenges to innovation in small and medium-sized companies in Vietnam.

Today's companies innovate in a variety of areas, including business model innovation, technology cycle innovation, product innovation, and market innovation. As a result, it is clear that hurdles to innovation exist in areas such as money, legislation, awareness, and business model.

However, this study did not address topics concerning innovation in SMEs, such as comparing innovation across industries, identifying variables impacting SME innovation, or examining the link between leadership style and the capacity to innovate in business. This may serve as a recommendation for future studies on corporate innovation. As a result, it is important to continue promoting the implementation of preferential policies for small and medium-sized companies and support innovative activities to enhance the income generated by enterprises via innovation steadily.

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SOLUTIONS TO PROMOTE RESEARCH, TRANSFER, APPLICATION, AND DEVELOPMENT OF SCIENCE-TECHNOLOGY, INNOVATION; DEVELOP NATIONAL INNOVATION SYSTEM AND INNOVATIVE START-UP ECOSYSTEM

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Abstract: *The article identifies difficulties and limitations in research, transfer, application, and development of science - technology; the development of the national innovation system, the innovative start-up ecosystem in our country in recent years, as the basis for proposing solutions to promote this activity in the coming time in our country, so that science and technology are the driving force for growth in the spirit of catching up, advancing and spearheading in a number of areas compared to the region and the world as oriented by the party in the 13th National Party Congress.*

Keywords: *Science-technology; Research, transfer; innovation; innovative start-up ecosystem*

1. INTRODUCTION

Today, in the context of the Fourth Industrial Revolution, globalization and deeper and more extensive international integration, many countries have shifted their attention to promoting the formation of an “Economy of Innovation”. Accordingly, high-quality human resources and science-technology have become the most critical inputs of the modern production force, which is a key factor in promoting growth and enhancing the nation’s prosperity. Accordingly, to effectively promote the contribution of science-technology, there is the need to actively promote research, transfer, application and development of science-technology; develop the national innovation system, the innovative start-up ecosystem. These activities are the driving forces for the country’s science-technology to be effectively brought into play in terms of the role and position for socio-economic development, which is the key to opening up opportunities for rapid and sustainable development.

Identifying that science-technology plays a particularly important role in developing socio-economic and protecting the nation, our Party and State have advocated the development and application of science-technology from very early. That has been considered as the leading policy to focus on and bring Vietnam to the advanced level of science-technology development, with a scientific-technological potential that can meet the basic requirements of an industrial country in a modern way. And at the 13th National Party Congress, our Part has also identified that one of the driving forces and resources for the country’s development is “... to promote innovation, strongly apply science and technology, especially the achievements of the fourth industrial revolution”³; and identified that we need to continue “Promoting research, transfer and strong application of the

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³ Communist Party of Vietnam (2021), Văn kiện Đại hội đại biểu toàn quốc lần thứ XIII [Documents of the 13th National Party Congress], National Political Publishing House, Hanoi, volume 1, p. 34.

achievements of the Fourth Industrial Revolution in all areas of social life, focusing on a number of key sectors and fields with the potential and advantages, to act as the driving force for growth in the spirit of catching up, advancing together and spearheading in some areas compared to the region and the world.”¹

2. SOME DIFFICULTIES AND LIMITATIONS IN RESEARCH, TRANSFER, APPLICATION AND DEVELOPMENT OF SCIENCE-TECHNOLOGY; THE DEVELOPMENT OF NATIONAL INNOVATION SYSTEM, INNOVATIVE START-UP ECOSYSTEM IN OUR COUNTRY IN RECENT YEARS

Although activities in research, transfer, application, and development of science and technology; the development of the national innovation system, the start-up ecosystem in our country has achieved remarkable results, as shown by a number of parameters that have achieved positive changes such as: Total Factor Productivity (TFP) contributes to the average growth in the period of 2016-2020 of about 30-35%”. In fact, the TFP index increased from 33.6% on average in the 2011-2015 period to 45.2% in the 2016-2020 period, in the total 10 years of 2011-2020, to 39.0% (exceeding the target of 35%); The proportion of high-tech product export value in the total value of goods exports increased from 19% in 2010 to about 50% in 2020; The average labor productivity growth rate in the period 2016-2020 was 5.8% per year (much higher than the 4.3% per year in the period 2011-2015); Vietnam’s Global Innovation Index (GII) has continuously increased tremendously, leading the group of countries with the same income level and ranked 3rd in ASEAN, in 2020, ranking 42nd out of 131 countries; Vietnam’s start-up ecosystem begins to be formed and developed strongly. Funding Investment for innovative start-ups is growing rapidly. There are more than 3,000 innovative start-up businesses in Vietnam (the statistics estimated by Topica Founder Institute 2012-2019); The number of ISI articles (statistics by ISIKNOWLEDGE) of Vietnam has steadily increased annually. Some fields of natural sciences such as Mathematics, Physics, and Chemistry continue to enjoy high rankings in the ASEAN region. Vietnam’s average internationally published growth rate in 2016-2020 was 25.68% per year. In Southeast Asia, during this period, Vietnam’s international publications ranked fifth with a total of 48,366 publications, behind Thailand with 87,971 publications. In 2020, Vietnam’s international publications tended to increase sharply as the number of publications in the first 10 months exceeded 16% compared to 2019.²

However, the process is currently facing many difficulties and limitations, which need to be identified and indicated, which is to be served as the basis for building up synchronous solutions to promote these contents in the coming time to be more effective manner.

For activities in research, transfer, application, and development of science- technology, it can be seen that difficulties and limitations are barriers to promoting the role and position of science- technology in economic development as follows:

Firstly, the scientific-technological human resources for researching, transferring, and directly participating in the practice of receiving and applying are still modest, not up to high-quality, not

¹ Communist Party of Vietnam (2021), Văn kiện Đại hội đại biểu toàn quốc lần thứ XIII [Documents of the 13th National Party Congress], National Political Publishing House, Hanoi, volume 1, p. 115.

² Communist Party of Vietnam Online Newspaper (2020), “*Khoa học và công nghệ - động lực phát triển kinh tế - xã hội*”, Bài 1: Thực hiện nhất quán khoa học và công nghệ là quốc sách hàng đầu, [Science and technology – driving force for socio-economic development, Lesson 1: Synchronously implement science and technology is the first national policy], <https://dangcongsan.vn>, Accessed on 12/8/2021

continual, and are not ensuring reserved human resources in the long term. The number of (FTE) researchers of Vietnam in 2017 reached nearly 67,000, ranking second in ASEAN, much lower than Thailand (83,320), and too low for developed countries. Vietnam's university-level human resource training has not yet facilitated innovation, which is also reflected in the GII ranking index of higher education of Vietnam ranked 81/129; Human resources at businesses are few in quantity and low in quality. According to the 2018 R&D Survey of the National Department of Information on Science and Technology, the distribution of research staff converted into full-time equivalents (FTE) shows that R&D organizations have the largest research force (accounting for 39.40%), this was followed by the university sector at 25.77% and business at 24.06%.¹ The low quality of human resources for scientific research and technological innovation in Vietnam is one of the major challenges for Vietnam's demand for continuous innovation and upgrading of technological capacity.

Secondly, activities in research, transfer, application and development of science and technology have not been effectively socialized, yet mainly based on the state budget and are not high in absolute and relative value. In the ASEAN region, Vietnam's ratio for R&D spending to GDP (0.52%) is behind Singapore (2.22%), Malaysia (1.44%), and Thailand (0.78%). Although the gap in the ratio for R&D spending to GDP of Vietnam compared to Thailand is not large, the gap to Singapore (more than 4 times) and Malaysia (nearly 3 times) is very large. Compared to countries such as Japan, South Korea and China, this ratio of Vietnam is too low (Table 1).²

Table 1: Indicators of human resources and investment in research and development in Vietnam compared to some countries/regions

Country/region	Data Year	The ratio for R&D spending to GDP	Total investment for R&D (USD million, PPP)	Number of reserachers	Average number of FTEs per 10,000 people	R&D average Funding / FTE (USD, PPP)	R&D Ratio conducted by businesses (%)	Investment rate for R&D paid by businesses (%)
America	2016	2.80	543,249.0	1,371,290	42.37	396,159	73	63
China	2017	2.19	495,980.9	1,740,442	12.52	284,974	77	76
Japan	2017	3.20	175,836.3	676,292	53.37	260,000	78	78
South Korea	2017	4.55	89,834.1	383,100	74.47	234,492	79	76
Germany	2017	3.04	127,105.3	419,616	51.17	302,908	69	66
France	2017	2.19	62,947.6	288,579	43.21	218,192	64	58
The UK	2017	1.67	47,809.9	289,674	43.86	165,074	67	51
Russia	2017	1.11	42,268.9	410,617	27.96	102,939	60	30

¹ National Department of Information on Science and Technology (2020), Tổng luận Khoa học – Công nghệ - Kinh tế năm 2020, “Tổng luận số 2: Hệ thống đổi mới sáng tạo quốc gia ở một số nước Đông Á và hàm ý chính sách cho Việt Nam”, [General Review of Science - Technology - Economy for the year 2020, “General Review No. 2: National Innovation System in some East Asian countries and policy implications for Vietnam”] <https://vista.gov.vn>, Accessed on 11/8/2021

² National Department of Information on Science and Technology (2020), Tổng luận Khoa học – Công nghệ - Kinh tế năm 2020, “Tổng luận số 2: Hệ thống đổi mới sáng tạo quốc gia ở một số nước Đông Á và hàm ý chính sách cho Việt Nam”, [General Review of Science - Technology - Economy for the year 2020, “General Review No. 2: National Innovation System in some East Asian countries and policy implications for Vietnam”] <https://vista.gov.vn>, Accessed on 11/8/2021

Singapore	2016	2.22	11,114.1	38,829	69.19	286,231	60	54
Malaysia	2016	1.44	12,412.3	73,546	23.58	168,769	56	57
Thailand	2016	0.78	9,113.5	83,320	12.10	109,379	79	75
Vietnam	2017	0.52	3,359.7	66,953	7.08	50,180 (1)	73	64
Indonesia	2017	0.24	7,720.1	57,024	2.15	135,383	-	-

Note: (1) based on the actual price USD equal to \$17,372.

Source: National Department of Information on Science and Technology (2020), General Review of Science - Technology - Economy for the year 2020, “General Review No. 2: National Innovation System in some East Asian countries and policy implications for Vietnam”, <https://vista.gov.vn>, Accessed August 11, 2021.

Thirdly, the method of investment in research, transfer, application, and the development of science and technology has not been diversified and has not encouraged the business sector to increase their spending on R&D investment.

The number of enterprises with investment in research in science-technology now accounts for the ratio of only 73%, and 64% of investments in R&D are paid by enterprises (compared to the rate of 76-78% in the three East Asian countries mentioned above). The R&D rate implemented by enterprises as well as paid is lower than only just the three East Asian countries, but in terms of the absolute value of spending on R&D, Vietnamese enterprises spend very little; and the number of enterprises directly related to scientific research and development is only about 400 enterprises (too little compared to the scale of over 750,000 enterprises operating in the fields currently); the “demand side” of the science-technology market is still underdeveloped (both in size, level, and quality), which has not formed a strong attraction to promote the “supply side” to develop and innovate associated with application in practice.

Fourthly, activities in providing market information, supporting the development of the science-technology market are not regular, continuous, and have not really become an environment and means to enhance the capacity of science and technology in general, and improve the quality of products and boost exports in particular.

For the development of the national innovation system, the creative start-up ecosystem, there remain a lot of difficulties and limitations as follows:

First of all, elements throughout the innovation system have not been developed synchronously and closely linked together. Elements in the system (research and development, commercialization of new products, creation of a cultural environment, educational activities, training scientific and technological human resources), elements of infrastructure (information, standardization, protection of intellectual property rights), organizations (governments, businesses, universities, research institutes), have not been synchronously developed and closely linked together. In particular, Vietnam’s information and communication technology (ICT) index (ICT) and the use of ICT in Vietnam have recently been rated low, ranking 90th and 92nd according to the assessment of 2019; in terms of innovation link index, Vietnam is rated as without the tendency of improvement, currently ranked 84th.¹

¹ National Department of Information on Science and Technology (2019), Tổng luận Khoa học – Công nghệ - Kinh tế, “Chỉ số đổi mới sáng tạo toàn cầu và kinh nghiệm cho Việt Nam”, [General Review of Science – Technology – Economy, “Global Innovation Index and Experiences for Vietnam], <https://vista.gov.vn>, accessed 11/8/2021

Secondly, the models of providing services, supporting start-up projects, the creative start-up ecosystem have not focused on improving the capacity of the entities. Some surveys on the situation of innovation in Vietnamese enterprises conducted by Project on promoting innovation through scientific-technological studies (Project FIRST) 2 show that, by investigating each investment activity for innovation, most Vietnamese enterprises have only achieved at trying to occupy the “top part” instead of “root part” when it comes to the investment. A substantial proportion of enterprises invest in process innovation through “Investment in new technology, firmly attached to goods, machinery, equipment” (39.4%) or through “Upgrading/modifying existing technology and equipment” (39.3%), while the technological transfer from science-technology public organizations and other non-public organizations is all below 0.3% and 0.6% respectively. This means that businesses mainly buy technology to apply, with little improvement or research.¹

Thirdly, the government has not really played a pioneering role in confronting risks. In fact, when buying technological solutions, the private sector always focuses on economic efficiency and the ability to make direct profits. Meanwhile, the government often prioritizes socio-economic and political goals, ensure security and safety and taking on the fields in which the private sector that do not want to invest or is afraid of investing. This discouraged and did not attract the private sector to invest in technological solutions, so there was no increase in both quantity and quality as desired.

3. SOLUTIONS ON PROMOTING RESEARCH, TRANSFER, APPLICATION AND DEVELOPMENT OF SCIENCE-TECHNOLOGY; DEVELOPMENT OF NATIONAL INNOVATION SYSTEM, INNOVATIVE START-UP ECOSYSTEM

3.1. Promoting research, application transfer and the development of science-technology

First, develop the scientific and technological workforce.

In the research, there needs to be improving the capacity to develop strategies and long-term visions on the creation of sources of scientific-technological staff, development, and implementation of scientific planning. There is also a need for plans to develop scientific-technological human resources to overcome the shortage; orienting to consider sources from the high-school level training to undergraduate and postgraduate training levels by sectors and fields identified in connection with the strategies of scientific-technological and socio-economic development. The development of training strategies and the creation of resources of scientific-technological staff must be associated with the requirements of promoting innovation activities, requirements of the Fourth Industrial Revolution and international integration, with a focus on interdisciplinary sectors and fields, enhanced use of mobile communications and connectivity of things, big data, artificial intelligence, robotic technology, self-driving vehicles, 3D printing technology, nanotechnology, and biotechnology, etc. Solving specific problems in areas such as agriculture, industry, and services; at the same time, focusing on training skills that meet global standards, and business must be considered one of the pillars that contribute to the development of scientific-technological human resources.

Expand and improve the quality of the undergraduate, postgraduate, and vocational training programs, especially in the fields that serve socio-economic development requirements in the context

¹ National Department of Information on Science and Technology (2020), Tổng luận Khoa học – Công nghệ - Kinh tế năm 2020, “Tổng luận số 2: Hệ thống đổi mới sáng tạo quốc gia ở một số nước Đông Á và hàm ý chính sách cho Việt Nam”, [General Review of Science - Technology - Economy for the year 2020, “General Review No. 2: National Innovation System in some East Asian countries and policy implications for Vietnam”] <https://vista.gov.vn>, Accessed on 11/8/2021

of the Fourth Industrial Revolution. Renovate, enhance the quality of general education towards an increase in practical activities, particularly education in science, technology, engineering, mathematics (STEM). Build internship programs in centers for innovation, innovative start-ups.

Strengthen the training and retraining associated with the use and appointment of talents in the field of science and technology. Enhance the development of scientific and technological human resources, including training, retraining associated with the use and appointments of talents in the field of science and technology. Devise effective policies to discover, train and nurture talents of young scientific staff, create sources aimed to form strong technological R&D groups, leading scientists in the field, internationally qualified general engineers. They are dedicated and long-term committed to the cause of science and technology, capable of directing, organizing, and solving important scientific and technological problems of the country. In addition, it is necessary to facilitate and take full use of the scientific-technological resources of leading enterprises at home and abroad to participate effectively in this process.

Secondly, promote the socialization of research activities, transfer applications, and develop science and technology. Effectively mobilize investment resources outside the state budget, especially from enterprises, for training, retraining, and development of scientific-technological human resources. Strengthen the mobilization of beyond-the-budget investment to develop potentials, especially, the facilities and techniques of scientific-technological organizations, contributing to improving working conditions for scientific and technological human resources. In order to improve the quantity and quality of the transfer of research results, there should be synchronous and close coordination between the State, enterprises and science-technology organizations (universities, research institutes and other organizations) in managing, coordinating, and identifying objectives to shorten the roadmap for the transfer of applications.

Thirdly, diversify the methods of investment in research, application transfer, science, and technology development, focusing on the role of the enterprise sector.

It is necessary to effectively and synchronously coordinate forms of investment in the research and development of technology to avoid overlapping, scattered investment, or insufficient investment, but to take advantage and resources of the participants. It is necessary to increase the number and effective use of research results, intellectual property patents, exclusive patents of the research team to shorten the transfer cycle and put the results into practical application to other businesses and users. There should be transparent and effective policies and mechanisms for businesses with long-term investment orientation and consider science and technology as a resource for business development.

Directly support enterprises in science-technology research. In general, there are various forms for the State to support enterprises in research and technology directly. It was creating conditions and mechanisms for businesses, sharing and benefiting from research results, providing research conditions, providing research funding, coordinating research, supporting single or a group of enterprises in science and technology. For the solutions of direct support to be effective, it is necessary to focus on immediately prioritized areas suitable to Vietnam's needs, conditions, and resources. Some areas include agriculture, forestry, and fisheries (in which high technology is applied), information and telecommunications technology, electronics, mechanics, transport mechanics, electrical equipment, high-class garments and footwear, logistics...

In order to implement this solution, it is necessary to build mechanisms in the direction of specific fields and close coordination between the State, enterprises and research institutes right from the informational stage, budget planning, identification of tasks to the operational stage in reality and division of benefits from research results.

Publicize and disseminate information widely to enterprises about the source of supported capital and procedures to enjoy support to improve access to state-supported capital for science and technology activities. At the same time, the State needs to improve the efficiency of using support capital by changing the model of supporting enterprises from direct support to assigning associations of industries as a focal place to receive the needs of research, development, innovation, and to manage state investment capital. On the basis of the capital, the associations and enterprises will actively coordinate or cooperate research activities with research institutes and agencies. Investment capital for the associations may vary, but priority is given to businesses, industries with outdated technology, enterprises operating in important fields such as information technology and biotechnology. In order to examine and supervise the use of capital, the State should promulgate regulations on the regime of supporting research implemented on the basis of contracts between technology research enterprises and enterprises applying such research.

The State needs to carefully select the supported entities to overcome the inefficiencies and unfairness in the use of the State's science-technology funding. For supporting R&D activities necessary for production and business, it is necessary to choose enterprises that are important for local economic and social life. The planned R&D activities must be urgent for the entities themselves. In addition, to receive and effectively use the State's support sources, enterprises must meet the necessary conditions on facilities, human resources and the ability to link and cooperate in research.

Strengthen support for enterprises that apply modern, high-quality governance systems; strengthen control over the observation of quality standards. Build financial mechanisms to support enterprises in environmental protection activities at production and business establishments. Development of new products, technical management and product quality management is the decisive issues for the competitiveness of enterprises, but businesses less focus them. Vietnamese enterprises also have little need for training in technical management. The State needs to support enterprises because of inadequate awareness about the role of product quality in competition.

It improves the operational efficiency of the National Fund for Science-Technology Development to support enterprises in technological innovation and incubatory activities. At the same time, promote the establishment and rapidly put into operation the National Technology Innovation Fund to carry out large-scale, interdisciplinary technology innovation research tasks and products that impact the development of industries or sectors.

Increase budget investment for practical programs and topics that positively impact exploiting domestic resources and improving production capacity and competitiveness of goods and enterprises. Develop mechanisms to bind the responsibilities of organizations and individuals to implement programs and projects to ensure the effectiveness of research work.

Fourth, strengthen market information activities, support the development of science-technology markets.

The State should increase spending on the organization of introduction forms, technologically informational market and technological consultancy for enterprises. For example, it is nec-

essary to regularly and continuously organize markets on technology and equipment at national, international, regional and local scales; operate and develop online Techmarts; conduct information-technology services; develop technological transaction platforms. The State also needs to introduce a policy of initial support for applied research establishments to participate in the science and technology market, forming a broad and transparent technology market.

In addition to the technical information system, it is necessary to establish a network of science and technology consultants who use specialized experts to support technological consultancy and trading consultancy. People who want to buy technology can go through this department to better understand the organization's reputation with the technology, order the technology evaluation, consult on technology, etc.

The State should increase investment in agencies operating in the field of accreditation, quality certification, and standards. Experience shows that developing countries can use this form not only to improve their scientific and technological capacity but also to improve product quality and promote exports. The State should invest in establishing or upgrading and adjusting the apparatus of agencies and mechanisms related to technical information, standardization, quality assurance, technical processes, inspection, testing, certification and recognition, taking necessary steps to participate in international activities on standardization and certification actively. The State should quickly supplement the system of product standards and move towards harmonization with international standards to facilitate the entry of exported goods into the markets of countries in the region.

3.2. Build and develop a national innovation system

In order to build and develop a national innovation system, Vietnam needs to focus on some of the following solutions.

First, create mechanisms for developing and linking elements throughout the innovation system. The State supports the implementation of policies to encourage and strengthen coordination among ministries, sectors and enterprises in the process of strategic and policymaking. Have a strategically clear vision on dividing labor between universities, state research agencies and enterprises. Ensure the functional balance between state research agencies and enterprises. Through planning, courses of action, finance and investment to promote innovative activities of enterprises and society, direct investment of the State, tax exemption and reduction policies are the main measures to encourage activities as well as adjust the innovation system towards a more focus on enterprises.

Second, the State needs to build institutions on encouraging innovation and entrepreneurship, increase investment in R&D, support higher education, promote businesses in venture capital and adjust the regulatory system to facilitate the opening of high-tech enterprises. The State's role does not stop at policies directly related to science and technology through research funding, the promulgation of standards, and the introduction of scientific tasks for innovation; but also aims to broadly expand in all national policies related to the components of the components innovative national system.

Build and perfect institutions for industries with new business models (e-commerce, shared economy, financial technology, digital banking technology,...) to ensure smooth, encourage innovation and creativity, and suit the level of risk of each sector, industry, and business activity. Apply the regulatory sandbox to new industries and business lines to create a legal corridor for innovative products and services.

Review and perfect the institution in a way that encourages digital technology enterprises in the country to develop applications and research to master the prioritized technologies in order to actively participate in the Fourth Industrial Revolution (tax preference policies; flexible use of financial tools as leverage for research, development and application of technology; ...).

Support is not directed at individuals and single companies but towards connected projects, technological programs combined among schools, institutes, companies, institutes and companies, and foreign organizations and experts.

Build special, with breakthrough mechanisms and policies for the construction and operation of centers for innovation. Encourage higher education departments, businesses and organizations at home and abroad to establish centers for innovation in Vietnam. Invest, research and develop some of the prioritized technologies to actively participate in the Fourth Industrial Revolution, including robotics technology, advanced materials, renewable power, artificial intelligence, technology in medicine, the internet of things, big data, blockchains ...

Third, form an overall systematic coordination agency. It is possible to establish a Council or Committee for Science and Technology Policy to determine policies, strategies and coordinate funding and investment for all scientific and technological activities. Participants in this agency include the Prime Minister, the heads of ministries, CEOs from large enterprises in industries, experts, leading scientists, representatives of state management agencies.

Fourth, the State must take the lead in confronting risks. With new technologies unprecedented in the market, the State needs to accept as a test customer to promote and motivate the private sector to invest in risky sectors. The areas of risk tolerance must be projects and programs of entities that really need innovation such as medical and military. The State must take risks, adventures to a certain extent when investing in these sectors.

3.3. Build and develop an innovative start-up ecosystem

To build and develop an innovative start-up ecosystem, it is necessary to focus on some of the following solutions:

First of all, it is necessary to perfect, create breakthroughs on some institutions.

Strictly implement the directives of the Government and the Prime Minister on improving the business environment, cutting costs for enterprises mentioned in Resolutions No. 19/NQ-CP (years 2014-2018) and Resolution No. 02/NQ-CP (years 2019-2020) on improving the business environment; Resolution No. 35/NQ-CP (year 2016) on business support; Directive No. 20/CT-TTg (year 2017) on adjustment of inspection and examination activities over enterprises; Resolution No. 139/NQ-CP (year 2018) on cost reduction for enterprises.

Review and revise the institutions of innovative start-ups in a way that facilitates activities in capital contribution, stock purchase, and buying, selling, and merging technological enterprises. It is necessary to continue modifying, supplement, and remove barriers, complicated and time-consuming procedures, which causes investors to be afraid and many start-ups to open companies abroad and register to set up abroad to raise capital.

Build specific mechanisms for applying new business models, new products, new technologies in areas, including potential but challenging areas such as financial technology, e-commerce, digital transformation in socio-economic areas to ensure the availability, feasibility, specificity. Especially, boldly encourage the testing and development of new models unprecedented under the sandbox mechanism. It is necessary to develop many legal documents, restrictions and policies specific to start-up businesses.

Secondly, it is necessary to have policies to support finance, information, capacity building. Support to further encourage individual investors and social investment, community investment for start-ups, so that start-up projects have more resources; diversify forms of support, and continue to support production premises, public service provision, momentum... Create favorable conditions in terms of the policy to support start-up projects to further step onto the global playing field, developing markets, and raising capital. Connect the national with the global start-up network, especially the young generation studying and working abroad to share knowledge, experiences, and business opportunities. Supporting educational institutions to train, create young, new-thinking and skilled intellectual resources to provide the ecosystem with Vietnam's advantages in terms of innovative start-ups. Focus on capacity building, organize education and training for entities in the ecosystem, and develop cooperation, linkage, and communication.

Thirdly, diversify service delivery models, support innovative start-up projects. Form service delivery models for innovative start-up projects that provide specific public services to start-ups. In addition to the State's agencies, encourage private units, incubatory units, universities; encourage the model of combining universities and research institutes with the state and enterprise sectors in order to effectively mobilize and exploit human resources, knowledge, scientific research results and technology development in the field of vocational training and educational institutions; encourage the model of building an innovative start-up ecosystem of large enterprises to effectively exploit the resources of experts, supply chains, partners of enterprises supporting start-ups; technological incubators./.

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APPROPRIATE EXCHANGE RATE MANAGEMENT POLICY OF VIETNAM

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Abstract: *Exchange rate policy is one of the most important macroeconomic policies, and it is always a “hot” issue for researchers as well as policymakers. The size of trade and investment between Vietnam and its partners has increased and is expected to grow, causing the currencies exchange rate to change. The risk of spreading instability from the partner countries’ economies into Vietnam may also step up, making macroeconomic policies in general and Vietnam’s exchange rate policy in particular hard to implement. Via studying Vietnam’s exchange rate policy from 2014 to 2021, this paper will prove the appropriateness of applying the central exchange rate mechanism in Vietnam. In addition, putting forward some recommendations to run the exchange rate policy in the context of increasingly deeper and wider international economic integration.*

Keywords: *exchange rate policy; central exchange rate mechanism*

1. THEORETICAL AND PRACTICAL BASIS ON EXCHANGE POLICY IN VIETNAM

After the 1997-1998 Asia financial crisis, a managed floating exchange rate mechanism was the best choice for Vietnam.

In simple terms, a managed floating exchange rate is a regime in which the exchange rate fluctuates according to the supply and demand relationship in the market. The central bank intervenes in the foreign exchange market to influence the exchange rate. Still, the central bank is not committed to maintaining a fixed exchange rate fixed-rate or any fluctuation around the central rate (Nguyễn, 2021, Buitrago, 2021, Mitchell, 2020, Chen, 2021, Bofinger & Wollmershäuser, 2001).

That decision marked an important turning point for Vietnam’s foreign exchange market when the SBV completely changed the exchange rate regime, from the subjective determination at the will of the SBV to a more objective one, based on foreign currencies supply and demand in the State-regulated market. To adjust the exchange rate, the SBV can adjust supply and demand by buying or selling foreign currencies in the foreign exchange interbank market, raising more confidence for the market as opposed to each previous adjustment. This management mechanism is more flexible, in line with international practice, and also promoting international economic integration. Reasons for Vietnam to apply the state-owned bank ratio under the managed floating regime:

- Operating the exchange rate under the managed floating mechanism will be more flexible, suitable for the international trade and investment scene, which helps to circulate faster after a series of self-made trade associations. has been signed.
- By managing the exchange rate in a new way, the State Bank will implement synchronous monetary policy solutions to ensure the stability of the foreign exchange market target and the macroeconomic stability.

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- A Flexible rate helps limit the increase in money supply, authoring certain discounts in time.

By 2014, the SBV set an exchange rate target of no more than $\pm 2\%$. This is also the year when VND credit increased slowly, then, the SBV loosened the subjects of foreign currency loans under the Government's policy, focusing on the priority areas and the ability of the SBV to balance foreign currency. With interest rates of 4-5% lower than VND loans, businesses could access cheap credit sources (Xuân Thanh, 2014).

On December 31, 2015, the SBV issued Decision 2730/QĐ-NHNN announcing the adjustment of the USD anchorage rate to the central exchange rate regime. The SBV defines it based on a basket of currencies of countries that establish cooperation of commerce, loaning, debt repayment, and investment with Vietnam, which conforms to macroeconomic objectives in each period. This adjustment is made according to Vietnam's committed roadmap in WTO integration as Vietnam had committed to liberalizing current and capital accounts in 2018 and simultaneously setting a goal of reforming exchange rate policies to join the WTO. This change was also in line with the international financial market at the time. The SBV's announcement came after the People's Bank of China repeatedly devalued CNY in August 2015, causing turmoil in the global financial market and causing the SBV's operations to fall into a state of disarray. In addition, on December 1, 2015, the IMF announced that the CNY will join the fund's basket of reserve currencies - marking CNY growing role in the international financial market, as well as forecasting that the USD is gradually losing its dominance. Thus, the SBV's shift in the management of exchange rate policy was inevitable at the time.

According to the IMF, the exchange rate arrangement is classified as *de facto* stabilized. The *de jure* arrangement is managed to float. The SBV is gradually increasing exchange rate flexibility. In August 2015, it widened the VND/USD trading band to ± 3 percent from ± 1 percent while devaluing the central parity by one percent. In January 2016, it announced the VND/USD rate would be adjusted daily rate based on (i) the previous day's weighted average dong/USD exchange rate; (ii) a weighted average of movements in dong exchange rates vis-à-vis seven other important trading partners' currencies (including EUR, CNY, JPY, SGD, KRW, THB, TWD); and (iii) domestic macroeconomic conditions. Credit institutions in Vietnam may set their exchange rates between the VND and other foreign currencies and authorized dealers can set their VND/USD exchange rate in transactions with their clients, provided that the chosen rate is set within the established band around the VND/USD central rate set by the SBV.

The room for operating monetary policy in 2021 will be narrower than in 2020, but with a stable macroeconomic background, there is hardly a shock that can happen to the exchange rate. The SBV will continue to operate the exchange rate on the principle of flexibility and stabilize the exchange rate based on balancing foreign currency supply and demand, monitoring the foreign currency status of credit institutions and enterprises, in combination with consistently fighting against dollarization.

2. EXCHANGE RATE MANAGEMENT POLICY PROVES EFFECTIVE

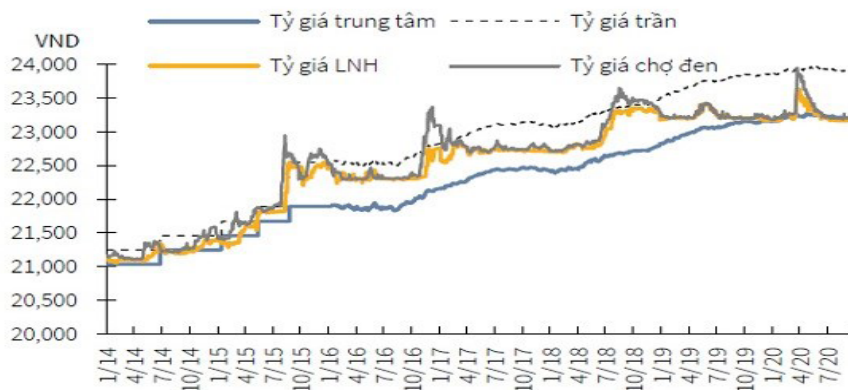
Looking back on the whole period of 2016-2020, the management of monetary policy and banking activities has achieved positive results, thereby contributing to the macroeconomic stability, supporting economic growth, stabilizing the monetary and foreign exchange markets.

2.1. Reflecting the market demand and limiting the psychology of hoarding foreign currencies

The quoted rates and daily transactions will fluctuate rapidly and get closer to market supply and demand. When one of the three factors that affect the central rate (*specified in Section 1*) is

volatile or at the same time, all three factors are volatile, and it will be counted into the central rate and operated daily. The central rate will be integrated and published daily to understand that the central rate can fluctuate up and down depending on the fluctuations of the above three factors, and it must also ensure the executive objectives of SBV. In other words, the level of references to determine the published exchange rate will be carefully taken into account by the SBV, ensure the flexibility and the management factors under the managed floating exchange rate regime defined in the current documents on foreign exchange management.

The daily exchange rate changes do not create large spreads will reduce currency speculation to make a profit and lower the expectations of price dumping. The more important issue is that people rely on the stable foundation of the Vietnamese currency, and at the same time, increasing our confidence in the use and storage of VND instead of foreign currencies as before. In addition, the SBV drags the foreign currency deposit interest rate in USD down to 0%. It can be said that all those measures are in the same direction to reduce the dollarization as well as the psychology and reality of hoarding and storing the foreign currency. Vietnam aims at a foreign currency market that spontaneously operates on the market's principle more and retains two key principles in the management of exchange rate policy: the proactiveness and the flexibility associated with the market. In the context of the Covid-19 pandemic, the regional currencies have devalued sharply against the USD, VND is still considered one of the most stable among them. VND is also more stable than the currencies of many of its trading partners.



Nguồn: Bloomberg, KBSV

Figure 1: The exchange rate of VND versus USD from January 2014 to July 2020

Source: Bloomberg, KB Securities Vietnam

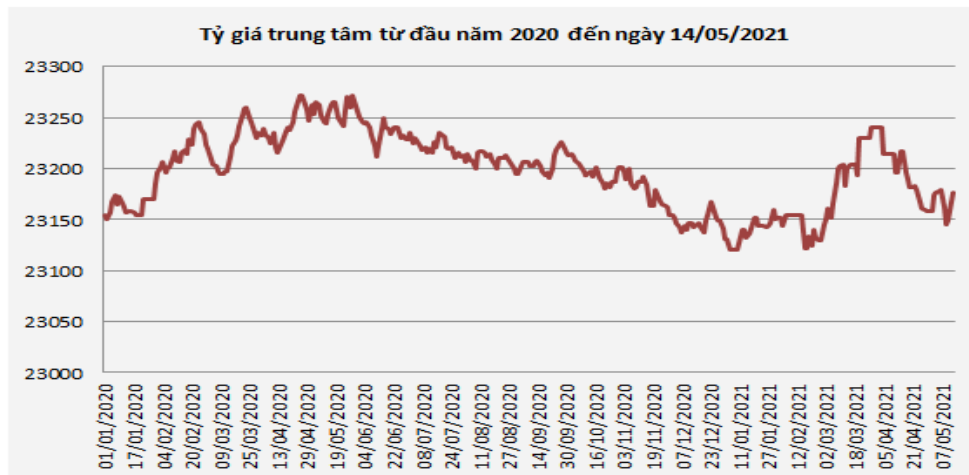


Figure 2: The central exchange rate of VND versus USD January 1, 2020 to May 14, 2021

Source: SBV

2.2. Mitigating the economic damage

The foreign exchange market and international finance are always volatile, and Vietnam is not out of that due to the deep integration into the world economy. “The “delays” in the response will be minimized, minimizing the negative effects on import and export activities and other macroeconomic problems of the domestic economy”, Bao Viet Securities assessed the new exchange rate management mechanism.

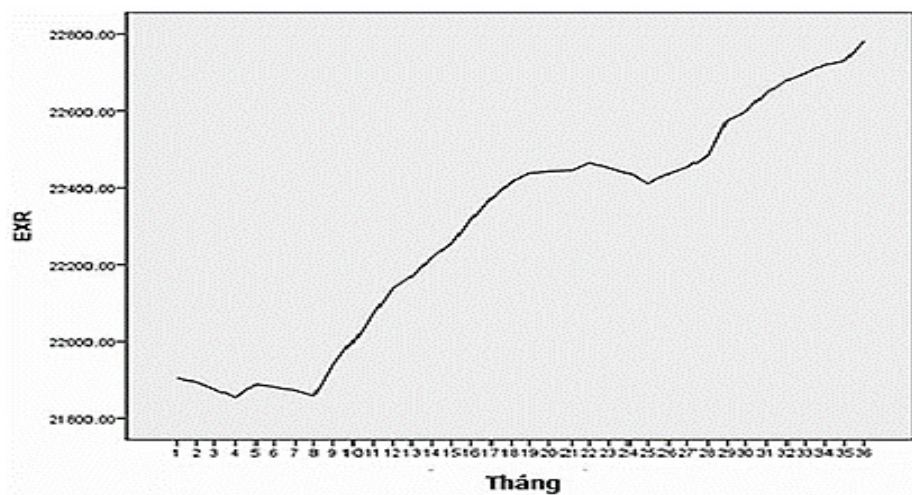


Figure 3: The central exchange rate of VND versus USD from 2016 to 2018
EXR = Exchange rate (VND/USD)

Source: SBV

After a year since the application of this mechanism, according to the research group of the Institute for Economic and Policy Research - University of Economics of The National University of Hanoi, the flexible central exchange rate has helped Vietnam’s exchange rate to have a relatively stable year by limiting the effects of large external shocks. In 2016, the reference rate at the end of the year only increased by 1,18% as opposed to the beginning of 2016, at the threshold of 22.154 VND/USD. In the meantime, the fluctuation range is also just under $\pm 1,5\%$ throughout the year. The National Financial Supervisory Commission said that the foreign exchange market was

fairly stable throughout 2016, with only slight fluctuations at the end of the year due to seasonal factors and the psychological impact of USD appreciation following the United States Presidential election results. (*Figure 3* below shows fluctuations mainly taking place in the Fourth Quarter of 2016). After three years of application, from 2016 through 2018, the central exchange rate was announced by the SBV on December 28, 2018, at 22.825 VND / USD, which is the highest level in 2018. Compared to the beginning of 2018, the increase of VND/USD central exchange rate is 400 VND, equivalent to 1,78%, which also completed the target of controlling the exchange rate - increased by no more than 2% set by the SBV since the beginning of the year. It marked a year of continuing to manage the foreign exchange market successfully. However, there had been times when the market was under a lot of pressure and had doubts that the executive would be difficult to “squeeze” the exchange rate.

In comparison with a 1,2% increase in both 2016 and 2017, the 1,78% increase in 2018 is higher. However, this is necessary for the context that the domestic currencies of other countries have been strongly devalued against the USD, causing the Vietnamese dong to appreciate against other foreign currencies, putting pressure on the competitiveness of Vietnamese exports.

In 2019, VND/USD exchange rate had many “unexpected” developments. The US-China trade war escalated, causing the CNY to devalue by an average of nearly 5% against the USD. In this context, the SBV has raised the central rate by about 1,5% (from VND 22.825/USD at the end of 2018 to VND 23.164/USD on December 6, 2019). Accordingly, the USD buy-sell rate at commercial banks at the end of 2019 is almost unchanged compared to the same period in 2018, ranging around 23.100 VND /USD (buy) and 23.250 VND/USD (sold) (Nguyễn, 2020).

Throughout 2020, the COVID-19 pandemic had a devastating impact on the economies around the world. However, thanks to the management of the SBV, the domestic market still had ensured stable and sustainable development. To stabilize the exchange rate when the foreign exchange market is under pressure during the period of social distancing, on March 24, 2020, the SBV adjusted the buy-sell rate at 23.175-23.650 VND/USD. The SBV kept the buy-in price and reduced the selling price by 257 VND (equivalent to more than 1%) compared to the rate announced on March 23. After this intervention, the upwards trend of the exchange rate was reduced. At the same time, the SBV kept the USD selling rate at 23.650 VND/USD in the next three months. By July 16, 2020, the SBV increased the selling price of USD to 23.873 VND/USD, and accordingly, the USD selling rate was operated following the fluctuations of the central exchange rate. During the regular Government meeting in early September, Prime Minister Nguyen Xuan Phuc said foreign exchange reserves had reached about 92 billion USD. This is Vietnam’s record level of foreign exchange reserves. Therefore, after almost one year maintain the buying price at 23.175 VND/USD since 29/11/2019, SBV has lowered the USD purchase price by 50 VND to 23.125 VND/USD in the afternoon of November 24, 2020. The USD discount purchased by the SBV is stronger than in 2019 when the SBV was buying a large amount of foreign currency from commercial banks, equivalent to more than VND 30.000 billion. The SBV’s lowering the buying for USD will reduce the attraction of foreign currency, help the foreign currency supply to stay in the market more, and contribute to stabilizing the domestic exchange rate amid the increase in foreign currency demand at the end of the year. In general, in 2020, the exchange rate is not the same as in previous years because VND even increased slightly by about 0,2% against the USD while the forex market has almost no end-of-year pressure.

2.3. Appropriate to the context of international trade and investment

In the context of global economic integration, expanding trade liberalization, the wave of the signing of FTA is becoming stronger around the world and becoming a new trend in the world's economy. In the international economic system that countries cannot stand outside. Well aware of this situation, in recent years, Vietnam has actively participated in the negotiation and signing of bilateral and multilateral FTAs. Up to now, Vietnam has negotiated, signed, and implemented 17 FTAs. 14 FTAs have been implemented, 2 FTA has been concluded and ratified, and one is currently in the negotiation process. Vietnam is integrating more deeply into the international economy than ever before. The current exchange rate mechanism helps to circulate faster after a series of free trade agreements that have been signed and adapt to changes in exchange rates of partners, thus ensuring the competitiveness of Vietnamese goods on the international market. The stability and appreciation of VND may reinforce the trend of foreign capital inflows into Vietnam in the upcoming years.

Even as a country is frequently in a trade deficit, Vietnam has become a super exporting country in the past 05 years. The trade balance has continuously recorded a gradual increase in surplus since 2014 and reached a record 20 billion USD in 2020. In addition, FDI inflows have continuously increased year by year, from 11 billion USD in 2010 to nearly double in 2020.

Besides, one of the factors improving the competitiveness of goods and services is effective cost management. Along with the daily announcement of the central exchange rate, the SBV has also added the way of trading with the Commercial banks under derivative contracts. Derivative tools will support businesses to be proactive in calculating costs, developing appropriate products and business plans. Major commercial banks in Vietnam have been providing contracts to effectively manage commodity price fluctuations such as Futures, Commodity Price Swaps, Options; and exchange-rate fluctuation efficiency management contracts such as FX Forward, Cross Currency Swap, Currency Options (also known as Forex Options). The supply of capital and currency trading products to manage fluctuations in goods prices and exchange rate fluctuations is an effective tool to support and accompany businesses in the current context.

2.4. Synchronized monetary policies

By managing the exchange rate in a new way, the SBV will implement synchronous monetary policy solutions to stabilize the foreign exchange market and stabilize the macroeconomics.

According to Mrs. Nguyen Thi Hong - SBV Governor, the SBV's view of the exchange-rate policy management remains consistent with stabilizing the foreign exchange market and enhancing the position of the Vietnamese dong, thereby contributing to macroeconomic stability and supporting economic growth at a reasonable rate. This new way of operating rates will allow the exchange rate to react more flexibly and promptly to domestic and international developments. In addition, the SBV will implement synchronous monetary policy solutions to ensure the goal of stabilizing the foreign exchange market, contributing to macroeconomic stability (An Binh, 2018).

Mr. Bui Quoc Dung, Former Director-General of The Monetary Policy Department (SBV), also affirmed that changing the way of managing the exchange rate is the next step in the anti-dollarization roadmap of the economy. This is a solution of the SBV in synchronous implementation of other solutions such as: narrowing the borrowers in foreign currencies, gradually shifting the mobilization of foreign currency loans to foreign currency buying and selling relationships, etc.

This will help to stabilize the exchange rate, ensure stability in the foreign currency market, and avoid speculation and hoarding of foreign currencies.

Encountering the Covid-19 pandemic, which has negatively impacted the domestic economy, the SBV has promptly issued documents directing credit institutions and proactively implemented solutions to alleviate difficulties for borrowers. Specifically:

– For *SBV*: Having operated in asynchronous and flexible monetary policy tools, regulated open market with reasonable terms, volumes, and interest rates. Preparing support plans when necessary to ensure market liquidity, interest rate instruments are adjusted in downwards trend, so that commercial banks reduce lending interest rates and some types of fees for the economy. It can help to reduce the financial burden on customers and promote the business activities of customers. The SBV also closely monitors the exchange rate development and actively intervenes to stabilize the foreign currency market. Therefore, the exchange rate fluctuations in the previous months have not greatly affected the business results in general.

– For *commercial banks and other credit institutions*: Implementing Circular No. 01/2020/TT-NHNN of March 13, 2020 of the SBV on restructuring the repayment term, exempting and reducing interest on old loans, maintaining new debt groups, and lending with preferential interest rates for loans affected by the pandemic. Commercial banks have a credit package of about 300.000 billion VND with low interest rates for customers, along with a reduction in some service fees.

Therefore, monetary solutions are timely implemented to support businesses to overcome difficulties during and after the pandemic.

2.5. Reducing inflation

Flexible exchange rates help to limit the increase in money supply, which causes inflation for a certain time. According to Goldberg and Knetter (1997), the two economists who laid the foundations for research on the effect of exchange rates on inflation said that there are two important exchange rate transmission channels: direct and indirect exchange rate transmission.

Direct transmission channels depend on the factors of the exporting country's market. Calling e is the exchange rate of the local currency per unit of foreign currency, and p^* is the price of goods imported from foreign markets in foreign currencies, then $e.p^*$ is the price of imported goods in the local currency. If e increases but p^* does not change, the price of imported goods in the local currency will increase accordingly. This result is called the transmission of the exchange rate to the import price. The increase in import prices will lead to production prices and consumer prices if importing enterprises increase the selling price for the final producer of goods, increasing inflation (also known as inflation imports).

An indirect transmission channel refers to the competitiveness of goods in the international market. A decrease in the exchange rate makes domestic products cheaper for foreign consumers, and as a result exports and total demand will increase, leading to an increase in domestic prices. Thus, in the long run, the decline in the exchange rate will have the impact of reducing inflation.

Regarding the effect of inflation on the exchange rate, when the inflation rate is high, the domestic currency depreciates against foreign currencies, which leads to an increase in the exchange rate. When the inflation rate falls, the local currency rises against the foreign currency, which lowers the exchange rate. Thus, the exchange rate is an instrument of the State in the management of macroeconomic indicators such as inflation, trade balance, payment balance ...

When the exchange rate rises, the local currency is low, it is beneficial for exports, which has the effect of increasing inflation. When the exchange rate falls, and the domestic currency rises, it is beneficial for imports and inflation reduction. Therefore, the exchange rate has fluctuations in the same direction as inflation.

The exchange rate is a factor having a direct influence on the inflation situation. Vietnam is an exporter of high import-intensive components. The transfer rate of Vietnam's foreign exchange rate is the highest in the ASEAN. HSBC estimates that a 100 basis point currency devaluation is associated with a roughly 0,25 percentage point increase in Vietnam's total inflation. Previous sharp falls in VND have been linked to the rise in inflation. In fact, in recent years, inflation has tended to stabilize firmly at less than 2%. This is the premise to inflation, the overall CPI is restrained at less than 4% because fluctuations in petrol prices, oil prices, and food prices usually take place only in the short term. The low inflation gap between Vietnam and other countries will also limit adjusting the exchange rate.

2020 is the year when money pumping occurs around the world, and Vietnam has no exception. Monetary policy loosened, and cheap money continued to be evident for the economic development, but whether it continues to loosen further, cheaper or not, is another case, depending on the likelihood of an increase in inflation. International organizations forecast that Vietnam's economy in 2021 will be among the countries with high growth rates compared to the region and the world, from 4,5% to 8,1%, with many relatively optimistic signals.

However, with unpredictable developments from both domestic and international Covid-19 pandemic, the re-application of controls and blockade on a large scale can negatively and unpredictably affect the economic outlook in 2021. Vietnam's average inflation forecast for 2021 is likely to be controlled by about 4%, but still under increased pressure and risk (exceeding 4%).

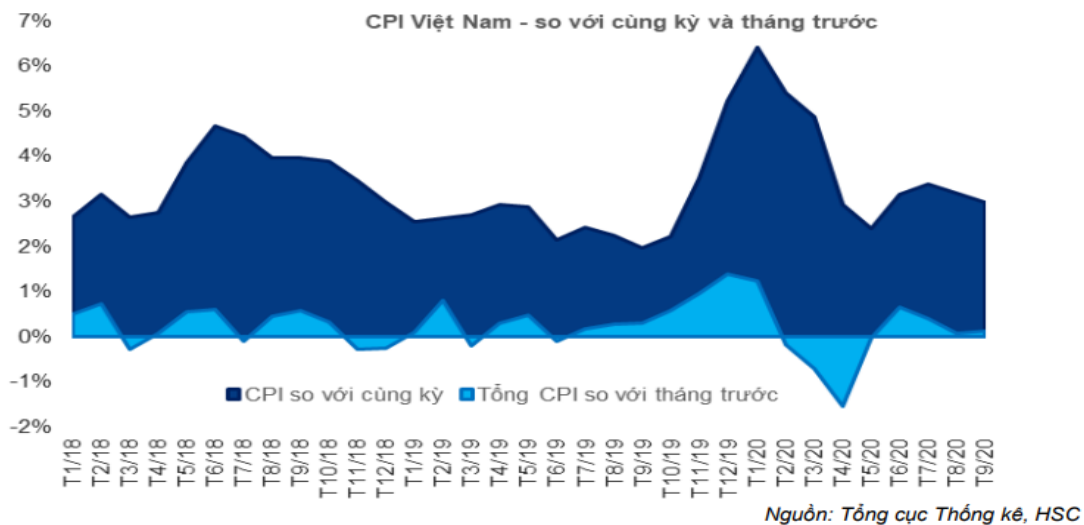


Figure 4: Consumer Price Index of Vietnam compared to the same period last year and previous month from January 18, 2018 to September 20, 2020

Source: GSO

Specifically, the risk that world prices may bounce back sharply when the pandemic is controlled, the consequences of many countries' central bank and governments implementing unlimited quantitative easing programs. And the world demand quickly recovers will put a lot of

pressure on both the world and the domestic inflation. Food prices may rise due to the increase in world prices. Weather, natural disasters, epidemics, saltwater intrusion,... has complicatedly developed and negatively affected the supply. Remarkably, if the Covid-19 epidemic is well controlled and develops vaccines successfully, domestic demand can recover strongly again, causing inflationary pressures on the demand to increase faster ... This requires tight and synchronized coordination of monetary policy and other macroeconomics policies, especially fiscal policy and price control of the Government.

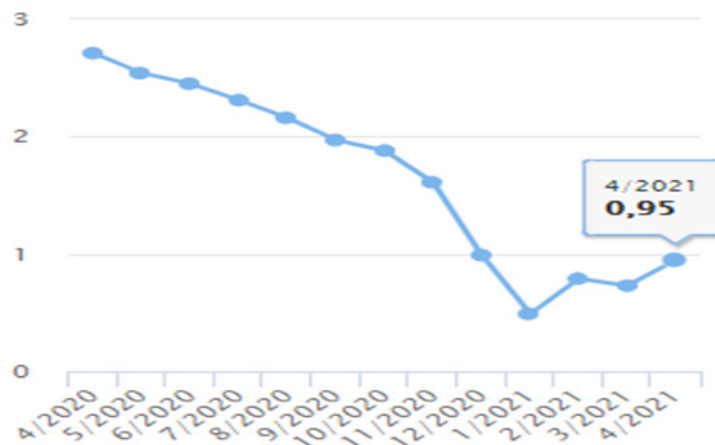


Figure 5: Vietnam Core Inflation rate from April 2021 to April 2021 (Unit: %)

Source: GSO

In the context of the amazing economic recovery and growth, the SBV has also expressed a stable management view over the past 10 years with many achievements, drastic spirit, effort, high political determination. The SBV will continue to observe the inflation rate to have appropriate policy responses.

3. ORIENTATION AND RECOMMENDATIONS TO IMPROVE THE EXCHANGE RATE POLICY

3.1. Orientation

The Government should continue to achieve the dual goal, effectively preventing the Covid-19 pandemic and achieving socio-economic recovery. In particular, the SBV will maintain a close watch on domestic and foreign macro-economic and monetary changes, foreign exchange rate developments, as well as foreign currency demand and supply to set appropriate exchange rates. In addition, it will uniformly carry out measures and policy tools to stabilize exchange rates and the foreign exchange market to help ensure macroeconomic stability. Due to US currency manipulation accusations, the SBV will operate the exchange rate more cautiously and the central rate will be closer to the free market rate.

3.2. Recommendations

There will be many upcoming challenges that Vietnam's economy, in general, and Vietnam's currency, in particular, need to conquer. However, it cannot deny that Vietnam has had many favorable conditions in the past decade to consolidate its strength. Here are some recommendations to improve Vietnam's exchange rate policy.

(i) It is necessary to have a large enough amount of foreign exchange reserves to intervene when there are major fluctuations in the foreign currency market

The larger the foreign currency reserves are, the more space will be created for proactive regulating. The large enough foreign exchange reserves also help reduce shocks to the market, even deal with intentional currency attacks. However, foreign exchange reserves should have sustainable growth rather than rapid growth. Considering the main contributors to the increase of Vietnam's foreign exchange reserves, including FDI, ODA, remittances, and export earnings, show that foreign exchange reserves necessarily rely on exports to achieve sustainable growth because of the growth potential of the other three sources is not so much. Besides enhancing the competitiveness of goods, ensuring the stability of imported goods' price is crucial to increase export earnings.

(ii) Promote the liberalization of currency markets and capital markets

Develop the currency market in a more market-oriented way: Raising the operational standards of commercial banks to increase the competitiveness of the domestic banking system. When domestic commercial banks operate well and are competitive enough with foreign commercial banks, the SBV will become bolder in making more transparent and relevant regulations in line with international practice. It is necessary to strengthen further the inspection and supervision activities oriented towards world standards. This is considered a key solution because when subjective management measures, orders, and administrations are no longer applied, it is necessary to have effective mechanisms and agencies for inspection and supervision to operate the market smoothly.

Regarding the capital markets, to ensure the safety of the credit market, as well as for credit unions operating under principles and healthy competition, it is necessary to develop and apply macro-careful supervision and increase remote monitoring. Meanwhile, accelerating the roadmap for applying International Accounting Standards, including Basel II standards and towards Basel III standards. It is required to complete the relevant legal framework, focus on the development of corporate bonds and promote equitization and divestment associated with the listing. Additionally, improving the capacity of a risk monitoring system and upgrading information technology infrastructure and market databases are also needed.

(iii) Harmonizing the exchange rate policies with other macroeconomic policies

The stability of the foreign exchange market plays an important part in macroeconomic stability. Managing exchange rate policy is very complicated because it is necessary to aim for both the economy's internal and external balance goals. Therefore, it requires consideration of using the policy related to other macroeconomic policies such as monetary policy and fiscal policy. The monetary policy should be oriented towards inflation targeting, while the fiscal one needs to be adjusted to increase revenues and reduce spending, so as not to put pressure on the management of exchange rate policy.

(iv) Develop a mechanism for synchronous coordination among Government management agencies

The Government should create a synchronous and comprehensive coordination mechanism among the Government management agencies, including the macroeconomic policies' plan, the unified objectives, and the methods of action. This is a prerequisite for particularly achieving the goal of exchange rate stabilization and general macroeconomic stability. To avoid situations where one agency's implementation puts pressure on other agencies or provokes dispute in the action objectives.

4. CONCLUSION

The exchange rate has a significant impact on the economy's growth and stability. As a result, any country's exchange rate policy is regarded as one of the most important components of its national monetary policy. Maintaining macroeconomic stability is an urgent requirement for economic growth, and it is the primary objective of the Government's economic policies, including the exchange rate policy. Depending on the context, a country will figure out the best exchange rate policy for itself. A wrong choice in operating exchange rate policy can greatly affect the macroeconomic indicators, cause economic instability, and even lead to a country's crisis. For Vietnam, the application of a managed floating exchange rate is reasonable in the current situation. That has been proven during the past years when the State Bank of Vietnam has handled the exchange rate flexibly and effectively. This success can be noted in a proactive and flexible position, ensuring positive stability for the market. The introduction of the central exchange rate mechanism since the beginning of 2016 marked an important turning point for the regulator in the management of the foreign exchange market. It has been in a more flexible direction according to the market's balance of supply and demand. The exchange rate has been stabilized through foreign currency trading activities with commercial banks as well as adjusting trading prices. To promote the role of the exchange rate as a macro-regulating tool in the economy, it must be aligned with economic development objectives and other micro-economic policies.

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A STUDY OF FACTORS AFFECTING THE APPLICATION OF COST MANAGEMENT ACCOUNTING IN CIGARETTES MANUFACTURING ENTERPRISES OF THE VIETNAM NATIONAL TOBACCO CORPORATION

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Assoc. Prof. Dr. Nguyen Manh Thieu³

Abstract: *This study aims to identify and measure the factors affecting the process of the application of cost management accounting in cigarettes manufacturing enterprises of Vietnam National Tobacco Corporation. Through the process of consulting experts, designing surveys, collecting surveys from 12 cigarettes manufacturers of Vietnam National Tobacco Corporation, the results indicated that managers' point of view, quality of accounting staff, the efficiency of information provision, legal regulations have positive effects on the application of cost management accounting. Moreover, the research also proposed several suggestions to promote the process of applying cost management accounting in these enterprises.*

Keywords: *Management Accounting, Cost Management Accounting Cigarettes manufacturers, Vietnam National Tobacco Corporation*

1. INTRODUCTION

Cost Management Accounting (CMA) is a management tool that helps businesses adapt to competitive and changing environments. Cost management accounting provides useful information to managers and offers technical measures and methods to help managers exploit, use, and distribute resources effectively and economically. CMA finds causes of limitations and proposes timely solutions to limit risks, minimize wasted costs, and improve the business's profits.

In Vietnam, tobacco is a production industry that contributes to the state budget of more than 11 trillion VND per year, creates many jobs, and creates a value chain throughout from agricultural production to industrial production.

In the early 20th century, the cigarette manufacturing enterprises belonging to Vietnam National Tobacco Corporation (Vinataba) had transferred from the state-owned company to the one-member limited liability company. With traditional management methods, accounting functions mainly focused on financial accounting. Therefore, the application of cost management accounting and cost management accounting has many obstacles. The research aims to determine the factors affecting applying management accounting in cigarettes manufacturing enterprises of the Vietnam National Tobacco Corporation, thereby giving recommendations to managers to apply the cost management accounting in the most effective ways.

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2. THEORETICAL BASIS AND SUGGESTED MODEL

2.1. Theoretical basis:

Coercive pressure is an important factor in institutional theory to explain innovation in a unit (DiMaggio and Powell, 1983; Hoffman, 2001; Delmas, 2002; Delmas and Toffel, 2004b; Delmas and Tooffel). ,2008). This pressure may come from the pressure of the regulatory agencies, the government or customers, suppliers... to adjust the business. According to DiMaggio and Powell (1983), companies often change their systems to fit with the regulations to comply with the laws and receive more support from the government.

Business environments: According to Scott (1995), institutions established in each social context constrain the actions of organizations so that these activities conform to a set of legitimate rules and practices defined by society. According to Zuker (1987), the extent to which an organization operates according to the rules and practices of a business group depends on the characteristics of its members, the density of the organization's interactions, and the information flows. According to Abrahamson (1996), regarding membership characteristics, if an organization does not accept innovation as others, it will lose membership and support from other organizations and stakeholders. For the density of interactions among members of the organization, according to DiMaggio and Powell, Covaleski and Dirsmith (1988) the organizations that are most likely to mimic the behavior of their closely related organizations such as the organizations in the same industry or in the same geographical location. For the information flows between members in the same industry or business sector, according to Oliver (1991), if a member has adopted a rule to act, the other member will apply it without considering the benefits of the activity.

Effectiveness of information provision: This is a factor in the theory of the relationship between benefits and costs (Otto Eckstein, 1958). Managers in each enterprise apply cost management accounting to obtain specific information of costs in each stage, department, and management level. However, besides benefits, managers often consider expenses to save and control costs and reach target profits. According to Vaivio (2004), Innes and Mitchell (2004), Laitinen (2006), the cost management accounting in the enterprise should focus on the effectiveness of information provision and the quality of the information provided, which must be appropriate, timely, and predictable.

Quality of accounting staff: This is a factor in sociological theory (Harrington, 2005), which explains the change, development, and behavior of individuals in society. According to Radhakrishna & Satya Raju (2015), the qualifications of accounting staff include knowledge, skills, abilities, experience, and personality. Chenhall's studies (2004) indicated that the capacity of accountants has an impact on the implementation of cost management accounting.

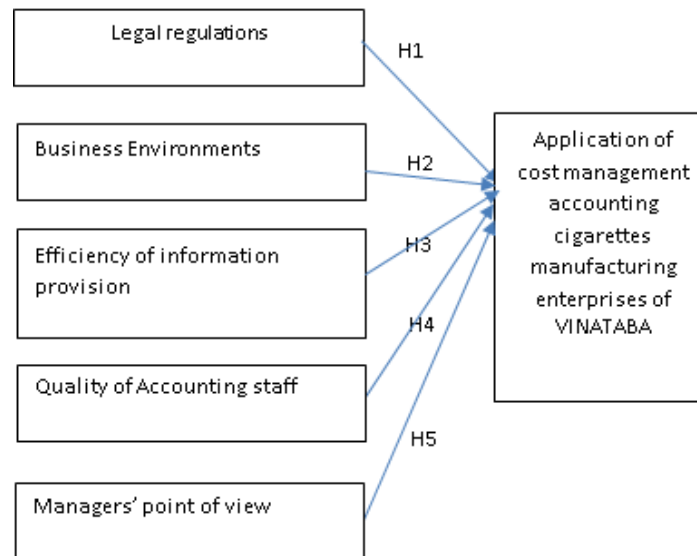
Managers' point of view: This is the factor that belongs to the theory of the relationship between benefits and costs (Otto Eckstein, 1958). According to Shields (1995) cost management is an important task of the management apparatus. To build a cost control system in the enterprise, managers need the information of the cost management system. According to Cooper and Kaplan (1998) the quality of the information provided by the cost management accounting system affects the quality of the decisions made by managers.

Based on the underlying theories and previous studies, the research proposes a model consisting of 5 factors affecting the application of cost management accounting in cigarette manufacturing

enterprises: legal regulations, business environment, quality of accounting staff; effectiveness of information provision; managers' point of view.

2.2. Suggested model

Based on factors affecting the application of cost management accounting cigarettes manufacturing enterprises, the following research model is proposed:



Source: Suggested by the authors

H1: Legal regulations positively affect the application of cost management accounting in cigarettes manufacturing enterprises of the Vietnam National Tobacco Corporation

H2: Business environment positively affects the application of cost management accounting in cigarettes manufacturing of the Vietnam National Tobacco Corporation

H3: Efficiency of information provision positively affects the application of cost management accounting in cigarettes manufacturing enterprises of the Vietnam National Tobacco Corporation

H4: Quality of accounting staff positively affects the application of cost management accounting in cigarettes manufacturing enterprises of the Vietnam National Tobacco Corporation

H5: Managers' point of view positively affects the application of cost management accounting in cigarettes manufacturing enterprises of the Vietnam National Tobacco Corporation

3. RESEARCH METHODS

To verify the factors affecting the application of cost management accounting, the authors surveyed 12 cigarette manufacturing enterprises of the Vietnam National Tobacco Corporation. There are 192 questionnaires distributed to 12 cigarette manufacturing enterprises of the Vietnam National Tobacco Corporation, of which 176 valid are returned. For each cigarette manufacturing enterprise, the surveys are sent to the board of directors, accountants, the management staff at all levels and the workers. A Likert 5 scale measures the questionnaire (1: Totally agree; 5: Totally disagree). The purpose of the survey is to measure the impact of factors on applying cost management accounting in the cigarette manufacturing enterprise of the Vietnam National Tobacco Corporation.

4. RESEARCH RESULTS

The study uses an exploratory factor analysis (EFA) with a model of 5 independent factors (including 18 observation variables) and a dependent factor (including 4 observation variables).

4.1. Results of reliability test of scale with Cronbach's Alpha coefficient

By measuring the preliminary reliability of scales through **Cronbach's Alpha coefficient**, all scales of observed variables are reliable.

Table 1: The results of Cronbach's Alpha reliability testing of variables

Factor	Variables	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Cronbach's Alpha of the Legal Regulations is 0.806 >0.6 and the corrected item-total correlation of variables > 0.3.			
Legal Regulations (ROL)	ROL1 enterprises are affected by government regulations (on business activities)	.561	.784
	ROL2 enterprises are affected by the directives of local authorities (to production and business activities)	.749	.689
	ROL3 enterprises are affected by pressure from the parent company	.601	.766
	ROL4 enterprises are affected by pressure from public health protection organizations	.582	.775
The Cronbach's Alpha of Business Environment (EOB) is 0.863 >0.6 and the corrected item-total correlation of variables >0.3.			
Business Environment (EOB)	EOB1 enterprises are affected by input resource of the production process	.653	.850
	EOB2 enterprises are affected by demand of customers	.735	.815
	EOB3 Enterprises are influenced by competitors	.748	.812
	EOB4 Enterprises are affected by smuggling	.714	.824
The Cronbach's Alpha of the Quality of Accounting Staff (QOA) is 0.851 >0.6 and the corrected item-total correlation of variables >0.3.			
Quality of Accounting Staff	QOA1 Well-trained accountants	.718	.796
	QOA2 Accounting staff has professional training in accounting.	.739	.776
	QOA3 Accountants with in-depth expertise in cost management accounting	.709	.801
The Cronbach's Alpha of efficiency of information provision (EOI) variable is 0.814 >0.6 and the corrected item-total correlation of variables >0.3.			
Efficiency of information provision	EOI1 enterprises are affected by the timely and synchronized information of cost management accounting	.674	.734
	EOI2 enterprises are affected by the predictability of cost management accounting information	.684	.723
	EOI3 enterprises are influenced by the decision-making consultancy of cost management accounting information	.635	.774
The Cronbach's Alpha of managers' point of view (VOA) is 0.795 >0.6 and the corrected item-total correlation of variables >0.3.			
Managers' point of view	VOA1 Managers understand technical tools of cost management accounting	.710	.687
	VOA2 Managers appreciate the usefulness of cost management accounting	.725	.679
	VOA3 Managers are aware of the application of cost management accounting	.597	.748
	VOA4 Managers accepts high costs in investing in the application of cost management accounting	.409	.827
The Cronbach's Alpha of Application of cost management accounting is 0.799 >0.6 and the corrected item-total correlation of variables >0.3.			

Application of cost management accounting cigarettes manufacturing enterprises	ACMA1 Ability to apply cost management accounting techniques in making estimates	.790	.677
	ACMA2 Ability to apply performance evaluation techniques	.618	.748
	ACMA3 Ability to apply cost management accounting techniques to support decision-making process	.742	.680
	ACMA4 Ability to apply cost management accounting techniques in the process of making effective use of resources, increasing the value of enterprises	.361	.851

Sources: Processing data by the authors

4.3. Exploratory Factor Analysis:

To evaluate whether an exploratory factor analysis is suitable for analysis in this case, the authors use the KMO and Bartlett's test. In the exploratory factor analysis, the KMO index (Kaiser-Meyer- Olkin) is used to examine the suitability of factor analysis. The KMO value must be between 0.5 and 1 (Hair, et.al (2006), Dinh (2012)), and if the value is less than 0.5, factor analysis may not be appropriate for the data.

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.699
Bartlett's Test of Sphericity	Approx. Chi-Square	1391.316
	Df	153
	Sig.	.000

The KMO and Bartlett's test showed KMO = 0.699 ($0.5 < \text{KMO} \leq 1$) with a Sig=0.00 < 0.05 (Table 2), it means that the application of exploratory factor analysis in the study is appropriate (Dinh, 2012)

4.4. Correlation's analysis

The correlation analysis showed in Table 3, at the significance level of 5%, the independent variables are all correlated with the dependent variable.

		ROL	QOA	VOA	EOI	ACMA
ROL	Pearson Correlation	1	.291**	.459**	.447**	.526**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	176	176	176	176	176
QOA	Pearson Correlation	.291**	1	.115	.266**	.500**
	Sig. (2-tailed)	.000		.128	.000	.000
	N	176	176	176	176	176
VOA	Pearson Correlation	.459**	.115	1	.494**	.588**
	Sig. (2-tailed)	.000	.128		.000	.000
	N	176	176	176	176	176
EOI	Pearson Correlation	.447**	.266**	.494**	1	.551**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	176	176	176	176	176

ACMA	Pearson Correlation	.526**	.500**	.588**	.551**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	176	176	176	176	176
**. Correlation is significant at the 0.01 level (2-tailed).						

Therefore, all the independent and dependent factors meet the requirements to be included in the linear regression model to determine the relationship between each independent factor and the dependent factor.

4.5. Multiple regression analysis

ANOVA ^a					
Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	26.195	4	6.549	62.264	.000b
Residual	17.985	171	.105		
Total	44.180	175			

a. Dependent Variable: The applications of cost management accounting

b. Predictors: (Constant), Efficiency of Information Provision, Quality of Accounting staff, Legal Regulations, Managers' point of views

Coefficients ^a							
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	.543	.225		2.417	.017		
ROL	.117	.043	.160	2.729	.007	.691	1.447
QOA	.315	.046	.357	6.884	.000	.886	1.129
VOA	.332	.053	.374	6.326	.000	.680	1.471
EOI	.127	.038	.200	3.360	.001	.672	1.488

a. Dependent Variable: The applications of cost management accounting

The standardized coefficients of Beta > 0 mean that independent factors positively affect the dependent factor. Managers' point of view has the greatest effect, followed by the quality of accounting staff, the efficiency of information provision, and legal regulations. VIF values of all factors are less than 2 proving that there is no multi-collinearity between independent variables.

Thus, multiple regression model are as follows:

$$ACMA = 0.43 + 0.16ROL + 0.46QOA + 0.53VOA + 0.38EOI$$

5. CONCLUSION AND RECOMMENDATION:

Conclusion

The study results showed that all 5 factors positively affect the application of cost management accounting in cigarettes manufacturing enterprises of the Vietnam National Tobacco Corporation. The managers' point of view has a most significant influence, followed by quality of accounting staff, the efficiency of information provision, and finally legal regulations

Some recommendations

From the manager's point of view: the author proposes recommendations to improve the quality, capacity, qualifications, and attitudes of managers by regularly training, evaluating, and reviewing; making managers understand business objectives and long-term benefits of cost management accounting.

Regarding the quality of accounting staff: the company should concentrate on improving the quality, capacity, qualifications, and attitudes of accounting staff by training; improving recruitment, evaluating; conveying business objectives to all staff

Regarding the effectiveness of accounting information: The companies should try to improve the quality of the information system such as: building appropriate, economical, and effective CMA information system design; Implement ERP system supporting cost management accounting

Regarding legal regulations: Ministry of Finance needs to have a circular guiding more specifically how to apply, scope, the content of application, modeling of cost management accounting work in companies.

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THE BASEL II STANDARDIZED APPROACH TO BANK RESTRUCTURING: EXPERIENCE OF SOME COUNTRIES

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Abstract: *This paper aims to make some recommendations for Vietnamese commercial banks in implementing the standards of the Basel II Agreement towards the goal of sustainable development. By using qualitative research methods, the authors have clarified three pillars of the Basel II Agreement on sustainable banking development, which including: (1) Minimum capital; (2) Supervision, and (3) Market principles. The authors have also analyzed the commercial banks' restructuring experiences of some countries following the Basel II standards; thereby making recommendations suitable to the practical conditions of the Vietnamese commercial banking system.*

Keywords: *Basel II, restructuring banking, sustainable development*

1. INTRODUCTION

Basel II is an international treaty on capital adequacy for banks that has been studied and applied by many countries in order to minimize the risks in banking activities through required reserve ratio as well as implementing checked and controlled regulations of market principles compliance. In many countries in the world, the application of Basel II depends on the socio-economic environment as well the characteristics of the different banking system, leading to differences in the complexity and costs of the application process. In the case of Vietnam, the country has developed so fast for the last few years. Vietnamese local commercial banks have gradually approached this Treaty. However, there are many obstacles in implementation due to the complexity of the Treaty and the banks' limited resources. Therefore, it is necessary to refer to the implementation experiences of countries around the world.

2. MATERIALS AND METHODS

To clarify the views and content of commercial bank restructuring activities under the Basel II Treaty as well as the experience of some countries implementing this activity, the authors use qualitative research which includes analytical, synthesis and document systematization. Research results mainly use secondary data collected through published reports, journals, scientific thesis and previous studies.

3. RESEARCH RESULTS

3.1. A Basel II standardized approach to restructuring banking

a) Restructuring of commercial banks

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The view of bank restructuring is often mentioned by researchers in the context of the economy having internal difficulties and/or the commercial banks themselves operate inefficiently.

It is the view of the World Bank that banking restructuring includes measures taken synchronously to maintain the national payment system, service accessibility, and at the same time deal with existing problems in the financial system that have the potential to be, or have been, causing a crisis.

Waxman views bank restructuring on two levels: (i) in a broad sense, restructuring the banking system is the process of restructuring all the components of the system, including the central bank, commercial banks, the social policy banking system, development banks to microcredit institutions, and (ii) in a narrow sense, it simply includes solving the problems of one of the above components, such as restructuring a bank at risk of failure in a banking system that is still operating effectively.

From the perspective of evaluating bank performance, Claudia Dziobek and Ceyla Pazarbasioglu define commercial bank restructuring as a measure towards the goal of improving bank performance, including restoring solvency, profitability, and improve the operational capacity of the entire commercial banking system to perform well the function of financial intermediation; thereby suggesting that bank restructuring includes financial restructuring, operational restructuring, and safety monitoring. Sharing the same view, Claessens stated that banking restructuring is the aim of arranging and improving the management and governance capabilities of commercial banks to ensure system safety and to form a class of commercial banks having true financial strength, ability to manage and control risks and corporate governance.

In Vietnam, Ngo Thi Bich Ngoc (2007) mentioned that banking restructuring in a broad sense includes measures related to restructuring banks and the entire banking system; and other related measures such as financial restructuring, organizational restructuring, operational restructuring as well as diversification of banking activities, merger, dissolution or equitization to improve banking competition. Vu Van Thuc (2013) defines the restructuring of commercial banks as the change of one, several or all aspects of capital, assets, finance, organizational structure, management methods or management style, etc.. thereby helping commercial banks to operate more safely, healthily, and effectively.

From his perspective, Nguyen Khuong (2015) determined the concept of bank restructuring can be understood from two angles: (i) from the systematic perspective, bank restructuring is a series of well-implemented measures to maintain the national payment system, and maintain access to credit services, as well as dealing with outstanding problems in the financial system that caused the crisis; and (ii) from the organizational perspective, bank restructuring is a series of measures of financial restructuring, organizational restructuring, operational restructuring, diversification of banking activities, mergers, dissolutions, and privatization... to improve operational efficiency and competitiveness.

From both local and international research results, it can be concluded that *the restructuring of commercial banks can be summarized into one core point, which is the change and adjustment of relevant factors that make up the banking system.*

b) Restructuring of commercial banks according to Basel II Treaty

The Basel Committee is a committee of banking supervisors appointed by the Central Bank Governors of a group of 13 countries including Belgium, Canada, France, Germany, Italy, Japan, Luxembourg, the Netherlands, Spain, Sweden, Switzerland, Great Britain, and the United States that were established in 1975. Experiencing the bankruptcy of a series of banks in the 1980s, the Basel Committee studied and issued a capital adequacy treaty called the Basel Accords.

The Basel Accord has undergone 5 stages of completion, supplementation, and development, including 1998 - the issue of the Basel I Treaty; 1999 - 25 basic principles were set forth on effective banking supervision and inspection; 2004 - the issue of the Basel II Treaty; 2010 - the issue of the Basel III Treaty and in 2017 it was Basel IV Treaty. By the end of December 2020, only 18 Vietnamese commercial banks have met the Basel II standards. The target set by the State Bank of Vietnam in the coming time is still for banks to achieve this standard. The framework model of the Basel II Accord is depicted in Figure 1:

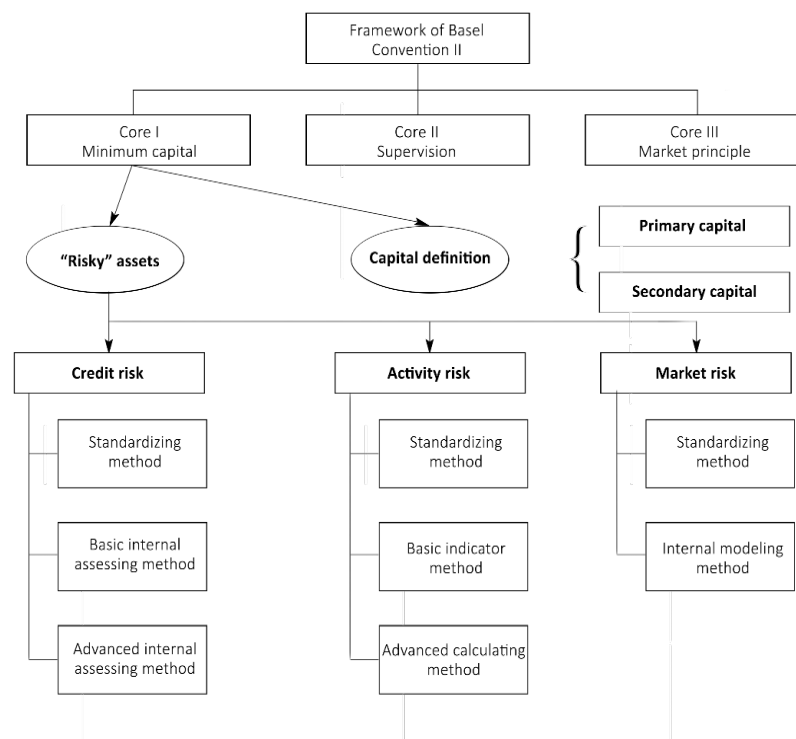


Figure 1: Framework model of Basel Convention II

(Source: Basel Committee on Banking Supervision 2006)

Commercial bank restructuring according to Basel II standards is the change and adjustment of relevant factors such as strategic structure, ownership structure, governance, finance, operations, and other components to create an overall structure of a commercial bank that meets 3 pillars: Minimum capital, good monitoring, and compliance with market principles.

Pillar 1: Minimum capital

The core content of Basel II's minimum capital adequacy criteria is that commercial banks must have a minimum required capital ratio based on total assets adjusted for credit risk, market risk, and operating risk at a safe level of 8% under normal conditions:

$$CAR = \frac{\text{Total capital}}{\text{Credit risk} + \text{Market risk} + \text{Operational risk}}$$

Which, equity capital is divided into 3 levels:

- Tier 1 capital: Owner's contributed capital (charter capital or common share capital) and retained earnings.

- Tier 2 capital: Share premium, differences due to revaluation of assets, provisions for loss, additional capital from mixed debt instruments (convertible bonds, preferred shares, ...), long-term debts that satisfy certain conditions.

- Tier 3 capital: Depending on the regulations of the banking supervisory authority, commercial banks can use short-term secondary loans for the sole purpose of meeting part of the capital requirements for market risk.

Because of the stability and ability to be proactive in using the above-mentioned capital sources, the standard has set forth the following regulations:

$$\text{Tier 1 capital} \geq \text{Tier 2 capital} + \text{Tier 3 capital}.$$

According to Basel II standards, credit risk is determined by the total amount of assets at risk. Operational risk is the risk of loss, directly or indirectly, due to inadequate internal processing, human or system activity, or objective external events. The Basel Committee expects banks to keep capital to hedge against operational risks. Banks can choose one of three methods of calculating the necessary capital for operating risk with increasing complexity and risk sensitivity: The Basic indicator approach (BIA); The Standardized Approach (TSA); and Advanced Measurement Approaches (AMA). When the operation of commercial banks is more complicated, it is necessary to apply a more complex method, and at the same time, do not allow banks to switch back to simple methods. Market risk, according to the Basel Committee, is the risk of a loss in trading position when prices fluctuate wildly. Generally, market risk will be associated with four basic types of risk on book transactions: Interest rate risk, capital position risk, exchange rate risk and commodity risk.

Pillar 2: Monitoring

The four main principles of inspection and control are as follows: (i) Banks should have an overview process of capital adequacy in relation to the bank's risk characteristics and have a strategy to maintain capital. The five attributes of a solid process are: Board and management oversight, reasonable capital estimation, comprehensive risk assessment, internal inspection and control, and monitoring, reporting and evaluation of control performance; (ii) The central bank should examine and evaluate the strategies as well as the assessment of the commercial bank's internal capital adequacy and the commercial banks' ability to supervise and ensure compliance with regulations on capital ratio; (iii) The central bank should require commercial banks to maintain capital adequacy ratios above the minimum ratios; and (iv) the central bank should intervene at an early stage to address the risk attributes of a given commercial bank.

Pillar 3: Market principles

The Market Principles include a set of disclosure requirements that allow market participants to assess key information about the size of the application, the capital, the level of risk, and the

risk assessment process of commercial banks. Disclosure requirements include: (i) the commercial bank should have a disclosure policy approved by its board of directors that outlines the bank's approach to the disclosure content and the control of disclosure process; (ii) Complying with the provisions of the Treaty on 13 standard tables of announcements to ensure market principles, including: Table 1 on the scope of application, Table 2 on capital structure, Table 3 on full capital, Table 4 on overall disclosed credit risk, table 5-6 credit risk depending on the approach, table 7 on equity, table 8-9 on credit risk reduction, table 10-11 on risk market, table 12 for operational risk and table 13 for interest rate risk on the books.

3.2. The Basel II standardized approach to restructuring banking: Experience of some countries

a) Experience of Asia-Pacific countries

Some countries in the Asia-Pacific region such as Australia, Japan, Singapore, etc., are implementing Basel II. They have differences in applying depending on their market characteristics, national regulations and bank risk management capabilities. However, in these countries and some territories such as Hong Kong, there is a common perception in identifying the main challenges when implementing Basel II, which are:

- It is necessary to develop a roadmap with strict regulations on the progress of Basel II implementation, striving to ensure the roadmap.
- The limitation of resources in the implementation of Basel II
- The limitation of risk perception according to Basel II
- Basel II Pillar 1 implementation challenges such as limitations, data constraints, risk management systems, data warehouses, underdeveloped processes and practices, high costs for technology.
- Difficulty in interaction between risk management and control as well as some other barriers such as inefficient lending, access capital, poor capacity, unproven program implementation.

By identifying the main obstacles and challenges, Asia-Pacific countries have formed experiences in the process of restructuring banks according to Basel II standards, which is: business strategies development, risk management, Basel II implementation and setting specific plans and programs; good at change management; investing in upgrading information technology systems, source data, processes and systems; develop the structure and process of checking and supervision to strengthen risk management and solve the system's shortcomings. Additionally, these countries also improve efficiency through cost optimization, strict compliance with Basel II regulations, propaganda and awareness raising about the benefits of implementing the treaty, to create a competitiveness in a global playing field. For the example of Japan, this country uses qualified foreign experts to review a number of policies related to Basel II, from processes, models and implementation methods. The experience of China is that commercial banks are interested in solving data problems, building information infrastructure plans. The case of Korea is to deepen operational risk management through reviewing and strengthening the legal framework for operational risk management through regular review as well as training plan development for employees and using management software.

Up to present, basically countries and territories such as Australia, Hong Kong, China... have all completed Basel II and reserve capital according to Basel III regulations. Other countries such

as Japan and Indonesia have also completed Basel II and gradually applied Basel III. Especially in the case of Japan, many targets have been achieved in Basel IV because this country pays special attention to the structure of risk identification and internal control.

b) The experience of Chile

Chile is one of the countries that was heavily affected by the global commercial banking system crisis in the 1980s. Because of that reason, Chile is one of the countries that have made a lot of efforts to ensure the sustainability of the banking system according to Basel II standards.

As early as 2005, the Central Bank of Chile restructured the risk management system under Basel II by requiring commercial banks to implement risk management by a standardized approach. At the same time, legal regulations on minimum capital requirements have been developed and capital expenditure allocation for market risk has been established. Simultaneously, the Central Bank of Chile and the Chilean Banks Supervisory Authority SBIF released a plan with guiding principles including:

- Firstly, the bank restructuring under Basel II was carried out under the supervision of both the Central Bank and the SBIF.
- Secondly, the restructuring is gradually step by step, there is only a standard approach for credit risk and operational risk in the first stage. Advanced models are applied for the next stages.
- Thirdly, supporting for the development of economic sectors and fields, especially industry, will be maintained throughout the process of commercial banking restructuring.
- Fourth, providing their support to international banking groups, subsidiaries or bank branches in Chile.

Besides, the actual implementation in this country has provided some extremely valuable practical experiences:

- Firstly, it is necessary to clearly define Basel II banking restructuring as necessary for banks operating internationally as it allows for more sensitive, riskier capital allocation and make trade fairer for global.
- Secondly, before implementing bank restructuring under Basel II, it is necessary to establish an accurate assessment of the current regulation, current supervision and management in banking sector. The assessment can be carried out in accordance with the provisions of Basel II BCP or FSAP – Guidelines and reports for compliance assessment issued by the IMF.
- Thirdly, small banks and micro-organizations need to consider the roadmap for bank restructuring under Basel II because the complexity and implementation costs may outweigh the potential benefits. Therefore, it is possible to approach in the direction of ensuring each standard, each pillar and should proceed step by step; especially in developing countries where the Basel I standard is not fully implemented.

4. DISCUSSION

Implementing Basel II standards is considered as a strategic solution, changing in quality, creating a foundation for the Vietnamese banking system to be fully capable to meet development and integration requirements. As early as 2014, the SBV approved the Basel II implementation roadmap, selected 10 domestic banks to pilot Basel II, proceeding to apply Basel II to all domestic

banks. By the end of 2020, there are 18 commercial banks meeting Basel II standards including: VIB, Vietcombank, MB Bank, Techcombank, ACB, MSB, HDBank, OCB, VPBank, VietBank, Vietcombank, VietCapitalBank, SeABank, ShinhanBank, LienVietPostBank, NamABank, Standard Chartered Vietnam and BIDV.

Notably, VIB was the first bank to be recognized as meeting Basel II standards, then big names such as Vietcombank, MBBank, VPBank or BIDV which were only recognized to meet Basel II standards at the end of 2019, after officially receiving capital flow from strategic shareholder KEB Hana Bank. In the context of globalization, each country's banking system is increasingly affected by economic fluctuations both in the domestic and the international market, which leads to commercial banks revealing their weaknesses, even the risk of bankruptcy. Therefore, based on the above international experiences as well as the practice of restructuring in Vietnam, some lessons can be drawn to help Vietnamese commercial banks soon achieve the provisions of the Basel II Treaty:

Firstly, it is necessary to define the achievement of Basel II as an important goal in supporting commercial banks to respond and handle all kinds of risks well, ensuring the safety of commercial banks and their own safety for entire banking system. This goal should be concretized by choosing implementation strategies and allocating resources efficiently.

Secondly, state management agencies, directly the State Bank of Vietnam, should establish general regulations and guidelines for commercial banks to implement Basel II in a manner appropriate to the economic and social characteristics and take into account the capabilities of each commercial bank. The participants in the process of restructuring banks according to Basel II standards must be clearly identified, including: (i) The commercial banks themselves; (ii) The Central Bank as a specialized agency directing and supporting the implementation of Basel II; (iii) National financial supervision committee; (iv) Domestic and foreign credit rating agencies and (v) Independent consulting organizations.

Thirdly, emphasizing the role of state management agencies in finance and banking in building the environment for Basel II implementation by completing and narrowing the gap between policies, strengthening the legal framework to establish basic principles for carrying out the required restructuring by Basel II.

Fourth, commercial banks should focus on technological infrastructure and the quality of human resources. Accordingly, it is necessary to concentrate on training to improve qualifications, learning from Basel II implementation experiences from domestic and foreign banks that have successfully implemented this standard.

Fifth, it is necessary to define the implementation of Basel II as a continuous and prolonged process. Therefore, in order to carry out the efficient bank restructuring under Basel, international experience shows that it is indispensable to set up a banking supervisory division to implement Basel II with an independent position from the Central Bank. At that time, both the banking supervisory authority and the central bank will jointly supervise the implementation process, ensuring objectivity and timely support.

CONCLUSION

At the present, Vietnam has 18 commercial banks meeting Basel II standards, in fact, there is only a few banks have applied all 3 pillars of Basel II including: Vietcombank, VPBank, VIB,

MSB. This is encouraging, but it is too small compared to the number of commercial banks in our country. Furthermore, the Covid-19 pandemic is pulling back the bank's business plans, most banks have the same scenario of reducing profits, increasing provisioning, and increasing bad debts. The epidemic affects the economy of both the world and Vietnam. As a result, the problem of raising capital for banks is even more difficult when they have to tighten their belts soon and reduce operating costs. Therefore, the study of international experience in the implementation of the Basel II Treaty in the current conditions becomes very valuable.

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THEORETICAL ANALYSIS ON FRAMEWORK FOR FISCAL SUSTAINABILITY

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Abstract: *Fiscal sustainability plays an important role for a country to develop its economy and avoid abrupt macroeconomic crisis. Therefore, there have been a large number of studies conducted by scholars, governmental institutes and non-governmental organizations focusing on the theoretical and empirical frameworks for fiscal sustainability. During the covid-19 pandemic, a new economic crisis has happened all over the world, which leads to awareness of governments of countries on maintaining fiscal sustainability. The main purpose of this paper is providing a variety of approaches to fiscal sustainability to understand the issue from an academic with providing several applicable approaches to measure the fiscal sustainability.*

Keywords: *Fiscal imbalance, fiscal sustainability, public debt, budgetary deficit.*

1. INTRODUCTION

In the context that state budget expenditure is increasingly outstripping the economy's ability to mobilize resources, it is necessary to borrow money to offset the state budget deficit, leading to an increase in the size of the state budget deficit compared to GDP, which is both motivating and inhibiting the growth of the economy. Especially under the press of Covid-19 pandemic, the public expenditures spent by Vietnamese government are forecasted to rise dramatically. Along with that is the situation from a number of projects invested with a large scale of capital from the state budget as well as large loans, but not as effective as when proposing the investment policy. Therefore, the efficiency of allocating and using the financial resources of Vietnam is becoming a crucial issue, which attracts the concerns of not only government but also citizens. Meanwhile, a number of fields, although not directly creating motivation for economic development, contribute to maintaining and ensuring social order, building fair and civilized institutions such as spending on other sectors. In the fields of social security, health care and education, investments have not been made on a satisfactory scale. Hence, to help Vietnamese government carry out all duties under the difficulty situation, it will be important to create the fiscal sustainability. Therefore, in this paper, the author would like to summarize several theoretical frameworks on fiscal sustainability which will provide a method to help policy-makers to design a potential fiscal plan.

The rest of the paper is prepared as following. Section 2 describes the literature review on fiscal sustainability. Section 3 will concentrate on theoretical analysis framework on fiscal sustainability. Section 4 concludes the meaning of paper.

2. LITERATURE REVIEW

The concept of fiscal sustainability has a long history, although its nomenclature has often changed. In the late 1970s, immediately after the beginning of the tax and expenditure limitation

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movement, fiscal stress was the term used to explain the pressures that confronted state and local governments (Levine, 1980). The term fiscal sustainability did not appear in these earlier studies, although Gold (1995) did raise the possibility that states might face continuing long-term crises. After the Brundtland report (also known as *Our Common Future*) (World Commission on Environment and Development, 1987) on environmental sustainability, the term fiscal stress gradually changed into fiscal sustainability. Horne (1991), writing for the International Monetary Fund, identified indicators of fiscal sustainability, and by the mid-1990s, this change was nearly complete. State and local governments are still being forced to confront the issues of fiscal sustainability. The importance of sustainable public finances has received increasing attention particularly in the context and following the 2008-2009 economic and financial crisis. Fiscal sustainability concerns the growing imbalance between revenues and expenditures over time, which gives rise to the problem of structural deficits and excessive debt accumulation. Fiscal sustainability is a useful criterion to evaluate whether or not fiscal policy is on a right long-term track. Theoretically, sustainable fiscal policies would need to prevail without any modification in the existing policy stance, or, in other words, if the intertemporal government budget constraint holds in present value terms. Sustainable fiscal policies can be continued indefinitely without any change in the policy stance, and when the intertemporal government budget constraint holds in present value terms. Conversely, if budgetary imbalances prevail, economic policies at both macro and microeconomic levels will quickly become unsupportable and changes would be required. If such a phenomenon occurs, then fiscal imbalances would imply a need for larger and more painful adjustments for the economy (Afonso and Jalles, 2012).

In particular, Trehan and Walsh (1991) and Afonso (2008) are of interest in what follows since they emphasize the relationship between primary balances and government debt. In a recent working paper from the Federal Reserve Bank of Boston (Zhao and Coyne, 2013), the definition of fiscal sustainability has been enriched by the introduction of a trend gap and an explicit inclusion of social insurance and income maintenance programmes (as well as the continued inclusion of other post-employment benefits and pension contributions). Since social welfare programmes often have an inter-governmental component, this is the beginning of a discussion of intergovernmental effects.

Hamilton and Flavin (1986) examined solvency conditions at the national level. Afonso and Jalles (2011) recently examined solvency conditions for 19 countries. Both of these papers use stationarity properties to determine if sustainability exists. They find that it generally does, although there are some qualifications attached. Using stationarity and cointegration measures Mahdavi and Westerlund (2011) and Raju (2011) were the first to apply these concepts to the sub-national levels. Mahdavi and Westerlund (2011) first examined the aggregates of state and local governments and find that conditions for sustainability exist for broad measures, although it is temporizing for some narrower measures. Raju (2011), in examining states in India, found that there should be some concern about future sustainability. Of note, in both of these papers, there was an explicit recognition of intergovernmental transfers, with the fiscal sustainability results being much more fragile for measures that exclude intergovernmental aid.

Hence, fiscal sustainability is a controversial issue viewed from academic as well as financial market perspectives and perceptions. While studying fiscal sustainability some closely related concepts like debt sustainability, government solvency, stability of budgetary deficit-to-GDP ratio,

and debt-to-GDP ratio are regularly discussed and analyzed by academics and to a lesser extent policymakers to understand the problem of fiscal sustainability (Pradhan, 2015a). On the other hand, market perception of fiscal sustainability is all about financeability¹ of deficit, rollover of debt and how easily a government can mitigate its financial obligations to its creditors. The latter aspect is realized through the behavior of financial markets. The financeability aspect depends upon the creditworthiness of the government and the perception of investors about its fiscal health and the overall macroeconomic scenario. That is why market perception about fiscal sustainability may or may not match the academic view of fiscal sustainability. Considering the difficulty of defining fiscal sustainability both academically and in terms of financial markets perspectives, a definition one can settle on is as follows: Fiscal sustainability refers to whether some of the government's deficit or debt parameters can grow or create any disruption in the financial market and economy in the near or remote future and hence trigger an abrupt change in fiscal policy (Pradhan, 2019).

3. THEORETICAL ANALYSIS FRAMEWORK ON FISCAL SUSTAINABILITY

Fiscal sustainability asks a deceptively simple question, namely, when does a country's fiscal imbalance become too large to tackle or finance easily? However, addressing this question is never simple and clear cut. As a consequence, despite the importance of fiscal sustainability analysis, it is quite difficult and near-impossible to provide an unambiguous and accurate conclusion about debt or fiscal sustainability. To overcome this problem, various approaches to fiscal sustainability assessment have been developed for recent years. In this paper, the author would like to present three main approaches, namely fiscal projection and fiscal gap approach, balance sheet approach and a recent early warning system, which can value the Vietnamese scholars studying on fiscal sustainability.

Fiscal Projection and Fiscal Gap Approach

Instead of using given time series data like Domar's Approach to Fiscal Sustainability (Domar, 1944) or Solvency Approach (Hamilton and Flavin, 1986; Wilcox, 1989), Fiscal Projection and Fiscal Gap Approach was developed to research about the future of evolution of relevant fiscal variables for studying the sustainability aspect. This methodology consisting of several fiscal parameters is used to judge the long-term sustainability of fiscal policy based on theoretical frameworks published earlier. To highlight the importance of fiscal projection it is important to note that such projections provide invaluable signposts to help current government to respond to known fiscal pressure and risk in gradual manner help future government to avoid abrupt policy change' (Organisation for Economic Cooperation and Development [OECD], 2014). Fiscal projection to know future dynamics of fiscal policy is called a forward-looking approach. To know the long-term (LT) sustainability based on comprehensive fiscal projections, it is important to know the concept of fiscal gap (FG) analysis (Auerbach, 1994). FG is defined as the immediate and permanent increase in primary surplus (PS) to attain a pre-determined or current level of debt-to-GDP ratio in future. FG conveys through a single number the magnitude of PS necessary to avoid unsustainable increase in debt-to-GDP ratio or to maintain the IBC requirement. FG is also calculated both in finite and infinite time horizons to assess sustainability

¹ Financeability implies how easily a government or a nation finances deficit, rolls over debt or external sector payment needs. It depends on the creditworthiness of the entities concerned and perception of financial market investors (Pradhan, 2019).

Let us assume that the projected primary surplus is \overline{PS} . If the current debt level is unlikely to equal present discounted value (PDV) of all future \overline{PS} , FG is then the difference between current debt level and projected primary balances, that is, \overline{PS} . If FG is denoted as Δ , a constant proportion of projected GDP (denoted as Y), to attain equality between debt level and PDV of primary surpluses, then:

$$\Delta = \frac{B_{t-1} - \prod_{j=1}^N (Z_{t+j}) B_{t+j} - \sum_{i=1}^N \left\{ \prod_{j=1}^i (Z_{t+j}) \overline{PS}_{t+j} \right\}}{\sum_{i=1}^N \prod_{j=1}^i (Z_{t+j}) \overline{Y}_{t+j}}$$

FG calculation for absolute level of debt for finite and infinite horizon.

$$\Delta = \frac{B_{t-1} - \sum_{i=1}^{\infty} \left\{ \prod_{j=1}^i (Z_{t+j}) \overline{PS}_{t+j} \right\}}{\sum_{i=1}^{\infty} \prod_{j=1}^i (Z_{t+j}) \overline{Y}_{t+j}}$$

The FG calculation in terms of debt-to-GDP ratio for a finite period assumes that at the end of the projection, the hypothetical debt-to-GDP ratio is d^* , then we have:

$$\Delta = \frac{b_{t-1} - \prod_{j=1}^N (Z_{t+j}) d^*_{t+j} - \sum_{i=1}^N \left\{ \prod_{j=1}^i (Z^*_{t+j}) \overline{ps}_{t+j} \right\}}{\sum_{i=1}^N \prod_{j=1}^i (Z_{t+j}) \overline{Y}_{t+j}}$$

FG calculation for debt to GDP ratio for finite and infinite horizon

$$\Delta = \frac{b_{t-1} - \sum_{i=1}^{\infty} \left\{ \prod_{j=1}^i (Z_{t+j}) \overline{ps}_{t+j} \right\}}{\sum_{i=1}^{\infty} \prod_{j=1}^i (Z^*_{t+j}) \overline{Y}_{t+j}}$$

In the formulars, the meaning of components as follow: B_t and B_{t+1} be the stock of debt at t and $t+1$; b_t and b_{t+1} be B_t/GDP and B_{t+1}/GDP ; Z and Z^* respectively represent $(1+r)$ and $\{(1+g)/(1+r)\}$ with r and g being defined as cost of borrowing (i.e., bond yield), nominal GDP growth rate. The denominator in each equation is the PDV of income of the country (i.e., GDP)

To assess fiscal sustainability through the fiscal projection framework, one needs to compute the FG or sustainability gap (SG), that is, Δ . However, Δ depends on discounted value of public debt, projected value of primary surplus, GDP, interest rate on borrowing and GDP growth rates. Due to difficulty in getting accurate forecasted values of the above variables, FG has little empirical application. Moreover, due to the cumbersome formula for computing FG, its application is very limited in empirical research. To overcome this problem, the forward-looking approach assesses fiscal sustainability in terms of comparing projected debt-to-GDP ratio to any benchmark or threshold debt-to-GDP ratio.

Balance Sheet Approach (BSA)

The BSA addresses the shortcomings of traditional debt sustainability analysis (DSA) to fiscal sustainability by considering the disaggregated analysis of existing fiscal and external structures of the economy to account for risk and vulnerability of financing deficit or rollover of debt. Traditional DSA focuses on the aggregate measures of debt and neglects the disaggregated measures of fiscal or external sectors. The origin of BSA can be traced to the re-genesis and resolution of episodes of

various types of macroeconomic crises. For instance, the financial and currency crises of East Asian countries in 1997–1998, and the fiscal and external debt crises of Latin American countries during the mid-1990s to early 2000s. According to an International Monetary Fund (IMF) study (2004), BSA is an analytical framework to identify the sources of vulnerabilities and imbalances in different macroeconomic sectors of a country. Every macro sector may be represented by balance of stock (like assets and liabilities) and flow side (income/ revenue and expenditure) match or mismatch with other sectors. By doing so, BSA assesses the risk of financeability or repayment obligations and financing needs of interlinked macro sectors like fiscal and external sectors and their possible transmission risk to cause a crisis. Financeability risk implies how easily a country or a government can finance its funding needs to avoid any ST payment or repayment obligation crisis.

Generally, in a developing country context, persistent fiscal imbalance causes rapid deterioration of external sector indicators and vice versa due to their close link through macroeconomic identity. BSA is actually the perception of financial markets about the risk involved in financing a country's external financing needs or financing the budgetary deficit of the government. This is because borrowing from the financial market exposes the balance sheet weakness or vulnerability of the entity concerned. In brief, we can discuss the link between balance sheet vulnerability and fiscal sustainability. Creditors' assessment about soundness of government finance, irrational behavior of investors or speculation about government's ability or the capacity to absorb exogenous negative shocks like banking crisis or other contingent liabilities are important factors to determine fiscal vulnerability. Other factors influencing fiscal vulnerability are how the government's borrowing programme affects savings—investment or current account balance, the international financial market environment, government default history or assessment of government finance by several credit rating agencies. A negative sign of fiscal stability initially reflects investors' unwillingness to subscribe to government bonds leading to collapse of bond price or spike in bond yield to unsustainable levels triggering a sovereign debt crisis. Sometimes even if government finance is in bad shape with high level of debt and deficits persisting for a long time, it might not invoke a debt crisis if other macro variables like high level of savings, investments, growth and comfortable forex reserves are maintained (Hausman & Purfield, 2004).

BSA, which considers numerous fiscal, external and other important macroeconomic indicators, may not convey a uniform or unanimous conclusion in identifying balance sheet vulnerability of the fiscal or external sectors. Moreover, the unit of measurement of all indicators may not be the same which would create a problem for aggregation. To overcome these limitations, the IMF study (2011) developed a composite vulnerability index (CVI) covering all indicators in providing a uniform call on the issue of financeability risk.

The framework for constructing CVI is not difficult to understand. In general, transformation of the variables or indicators concerned to the respective standard normal variable would make them a unit-free number. This has an advantage in aggregation, which is not possible if indicators are in differential units. That is why, to construct the CVI, each indicator, let us say X_{it} , can be transformed into a standardized Z_{it} score, where Z_{it} is a standard normal variate and defined as $(X_{it} - \mu)/\sigma$. The μ and σ are the usual notations used for mean and standard deviation (SD) of the concerned with indicator over time or space as the case may be. The value of Z score of each indicator separately or combined has important meanings. For example, if Z score is equal to zero, it implies that the concerned value is close to the average of the group or concerned sector. On the other hand, higher negative value implies better performance while higher positive value indicates worse performance because we are measuring the vulnerability of an indicator. In order to generate the index for each category, one can transform the Z scores into a cumulative normal probability

distribution with specified value of mean without changing the value of SDs. The specified value of mean depends upon the scale of measurement of vulnerability. For example, if one measures a vulnerability index on a scale of zero (0) to ten (10), then mean will be 5. That means the simple Z score, which is nothing but the value of a standard normal variate, is now transformed into an index with a specified scale of measuring vulnerability. In this example, the value of index exceeding 5 towards 10 implies a higher degree of financeability risk. On the other hand, an index value below 5 implies a lesser or absence of financeability risk.

A recent early warning system (EWS)

One of the disadvantages of the above-mentioned approaches to fiscal sustainability is that they do not incorporate uncertainty while assessing it. The EWS takes into account the economic uncertainty underlying the dynamics of fiscal policy, public debt and other macroeconomic factors. It incorporates a comprehensive measure of the responsiveness of fiscal policies to economic shocks (Van Ewijk et al., 2013). The European Commission, the IMF and the OECD often use EWS results for signaling the possibility of a fiscal crisis and subsequent surveillance measures (Koester & Nickel, 2014). The objective of EWS is to avoid build-up of huge macroeconomic, fiscal and financial imbalances in preventing the onset of any crisis (European Central Bank [ECB], 2014). The effectiveness of EWS depends on reliable and timely identification and assessment of risk indicators and conveying the same to policymakers in advance. The assessment of EWS depends on a large number of fiscal and non-fiscal variables. These indicators together form the basis of signaling. The signaling mechanism of EWS works through four distinct steps (ECB, 2014). The first step is to identify episodes of fiscal stress based on past incidents. The second is to identify ‘potential or leading indicators’ for fiscal stress and defining a ‘signaling window’. The signaling window determines how far in advance EWS can signal fiscal stress. It may be six months or one year or more than one year. If it is one year, signaling sent by an indicator(s) can be expected to cause a fiscal crisis in the next one year. The third step involves determining a ‘critical threshold’ for each of the leading indicators on the basis of historical data of leading indicators and past episodes of fiscal stress. The fourth and final step is to aggregate all indicators into a CVI for signaling fiscal stress and policy surveillance.

4. CONCLUSION

This paper has provided a comprehensive review of the available literature on fiscal sustainability adopted in different contexts and supplemented it with adequate technical notes and explanations which are not provided or explicit in literature. Each approach has theoretical and empirical applicability and implications as well as limitations. Theoretical superiority of one approach over the other does not imply that it is empirically appealing and vice versa. In this respect, it is quite difficult to establish the superiority of one approach over the others. Considering various aspects of different approaches to FS, one could focus on the EWS and the BSA for short-term vulnerability, since they are theoretically less demanding, empirically simple and more appealing for practical implications.

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INNOVATION OF MECHANISM AND POLICY FOR BANKVIETNAM TRADE FOR ECONOMIC DEVELOPMENTAND SUSTAINABLE BUSINESS

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Abstract: Commercial banks are characterized by a diverse and complex range of financial services. As the result, commercial banks are exposed to a variety of risksand sensitive to fluctuations of the economy. Therefore, all transactions and activities of commercial banks are strictly regulated by regulatory agencies to maintain control over the standardized practices of commercial banks. Renovating and perfecting financial-monetary mechanisms and policies is an important contribution to the development of the system of Vietnamese commercial banks with the role of commercial banks as key financial intermediaries. Therefore, this is a factor - a premise to promote sustainable economic and business development in the context of globalization. Monetary policy is a broad definition with many aspects. Within the scope of this article, we only presents some key policies that have a strong impact on the sustainable development and sound business of the Vietnamese commercial banking system.

Keywords: bank, commercial, policy.

1. POLICY ON FINANCIAL RESTRUCTURINGAND IMPROVING FINANCIAL CAPACITY OF COMMERCIAL BANKS.

The policy of financial restructuringand improving financial capacity is the most important policy of countries in consolidating and enhancing competitiveness and sustainable development of the commercial banking system. In addition to being enforced throughout the development process, this policy is often emphasized by states in the following cases; financial - monetary crisis, economic recession affecting the commercial banking systemby causing bad debts, leading to the risk of bankruptcy; Opening and liberalizing the financial services market, which leads to a pressure to improve the competitiveness of commercial banks. The policy of financial restructuring, sounding and improving the financial capacity of Vietnamese commercial banks needs to be renewed and completed with the following main contents:

- It is necessary to markedly shift the business model of commercial banks towards reducing dependence on credit activities and traditional activities and increasing income from non-credit services(with an emphasis on modern services). Besides, the scale of income/profit of commercial banks needs to increase rapidly while increasing ROE and ROA of Vietnamese commercial banks to keep pace with the average profit rate of commercial banks in the region and in the world.

- Increasing the scale of charter capital and assets in parallel with improving the quality and profitability of assets; reduce the proportion of risky assets in total assets.

- Increase equity capital of commercial banks from retained earnings, issuance of stocks and bonds; mergers and acquisition; repurchase. As for weak credit institutions, tough measures should

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be imposed including dissolution, bankruptcy and mergers. In addition, they should be closely and comprehensively supervised by the SBV in terms of management, governance, financial conditions and operation. Ensure to maintain the level of equity capital of commercial banks in accordance with the scale of assets on the basis of implementing the minimum capital adequacy ratio of 10%.

- Stabilize and bring down nonperforming loans and clean up the balance sheet. Provide a mechanism to avoid rises in bad debts.

- Enhance operational and business management capacity. Standardize management processes and procedures to strengthen the operational capacity of credit institutions; improve their safety and operational efficiency; improve market discipline in banking operation and consistent with international standards and to better meet the demand for financial and banking services of the national economy.

2. THE POLICY PROMOTES RESTRUCTURING OF THE OPERATING MODEL OF COMMERCIAL BANKS.

According to the Enterprise Law and the Law on Credit Institutions, Board of Management and the Supervisory Board of commercial banks include the Board of Directors, Executive Board, Supervisory Board, and the establishment of a number of management organizations. In fact, the operation of commercial banks still has many problems. The relationship between the Board of Directors and the Executive Board as well as the separation of ownership and management is unclear. Therefore, the following measures should be taken in the coming time:

- Commercial banks must strengthen institutions and restructure banking professional activities, in order to diversify activities, to offer both traditional banking activities and financial services and other related services.

- Restructuring the organization to form the model of Parent company - Subsidiary company. Headquarters of existing banks will act as parent companies, branches and affiliated units will become subsidiaries. The management method between the parent company and its subsidiaries will be the same as for some current economic groups in our country.

- Apply modern management tools through Assets and Liabilities Management Committee, Bank management strategy and organization, management and operating information system, credit management, internal control departments. Standardize these tools to uniform process and operational management.

3. RENOVATING THE POLICY OF BUSINESS MANAGEMENT OF THE COMMERCIAL BANKING SYSTEM.

Appropriate business management policy is a factor promoting the operation and business development of commercial banks. This policy needs to be developed with the following aspects:

- Enhance operational and business management capacity: Standardize management processes and procedures towards synchronization, modernity, automation and conformity with international practices.

- Legal framework on retail banking services:

The incomplete legal framework is a major barrier to modern banking in Vietnam. Vietnam has not yet completed the legal framework for modern banking services. This is a big challenge for Vietnamese banks to accelerate modern banking services. A clear legal framework

will create orientations for technology development and ensure favorable conditions for the development of modern banking services

- Fight against unfair competition; with the expansion of credit autonomy and self-responsibility of commercial banks. The SBV stimulates the creativity and initiative of banks in business activities. Apply the Core Principles for Effective Banking Supervision of the Basel II in performing the functions of a state management agency and supervising the market, standardize, improve and healthyize the internal control through the application of global standards.

4. CONCLUSION

Renovating and perfecting the financial-monetary policies is an important driving force for sustainable development and business of Vietnam's commercial banking system in particular and the national economy in general in the context of globalization.

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IMPACT OF INDUSTRIAL REVOLUTION 4.0 FOR SUSTAINABLE ECONOMIC DEVELOPMENT IN VIETNAM

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Abstract: *Today, humanity is witnessing extraordinary achievements of the modern industrial revolution, with the emergence of the knowledge economy, the globalization process taking place more and more deeply, these factors are affecting strongly and directly in many areas of social life. Through the article, from a philosophical perspective, the author analyzes the impact of the industrial revolution 4.0 on sustainable economic development in Vietnam with a number of main contents such as: (i) concept on the industrial revolution 4.0 and sustainable economic development; (ii) achievements, limitations and causes limiting the sustainable economic development in Vietnam under the impact of the industrial revolution 4.0; (iii) thereby proposing solutions for sustainable economic development in Vietnam under the impact of the industrial revolution 4.0.*

Keywords: *Industrial Revolution 4.0; Sustainable economy; Digital infrastructure; Vietnam*

1. INTRODUCTION

Currently, Vietnam is promoting a strategy of sustainable economic development in the context of unpredictable international changes along with the onset of the industrial revolution 4.0. The 4.0 revolution with breakthroughs in artificial intelligence (AI), internet of things (IoT), big data (Big Data) and physical and biological technologies are creating productive and important forces. The new production system... has been having a strong impact on sustainable economic development in Vietnam on many different levels, both in terms of achievements and limitations.

2. LITERATURE REVIEW AND PREVIOUS RESEARCH STUDIES

World Economic Forum (WEF), Vietnam policy summary (2018), Industrial Revolution 4.0 in Vietnam: implications for the labor market. In this Summary, a number of opportunities and challenges for Vietnam's labor and employment sectors are mentioned in the context of the industrial revolution 4.0.

Tran Mai Giang (2017), Industrial Revolution 4.0 opportunities and challenges, Quang Binh Science and Technology Information Journal, No. 5. The article has outlined the basic issues of the 4.0 revolution, pointed out the inevitability and opportunities created by the 4.0 revolution. At the same time, the author also points out new challenges, especially the negative impacts of the 4.0 revolution on developing countries today.

Ho Que Hau (2019), Industrial Revolution 4.0 in Vietnam: potentials, barriers and the role of the state, Journal of Economics and Development, No. 260. This article evaluates: potential;

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barriers; The role of the State in the industrial revolution 4.0. Research results show that Vietnam has significant potential in the industrial revolution 4.0: The determination of the Party and the State; have the advantage of a latecomer; relatively large population and in the golden population structure period; abundant, low-cost, dynamic and creative workforce; The telecommunications infrastructure is relatively good. However, there are also many barriers for industrial revolution 4.0: Limited awareness of industrial revolution 4.0; majority of small and medium enterprises, lack of capital and low technology level; limited quality of human resources; The state has not fully fulfilled its role in realizing its potential and overcoming the negative impacts of barriers to implementing the 4.0 industrial revolution.

Klaus Schwab (Translator: Dong Bich Ngoc and Tran Thi My Anh) (2018), *The Fourth Industrial Revolution*. The book consists of three chapters, providing the basics of the fourth industrial revolution - what the fourth industrial revolution is, what it brings, how it will affect us, and what people can do to utilize it for the common good. The *Fourth Industrial Revolution* book outlines the future development trend of mankind and is determined to take advantage of the opportunities from this revolutionary change to build a better world.

UNDP Viet Nam Discussion Paper (2019), *Inclusive Industrial Revolution 4.0 to Achieving Sustainable Development Goals in Vietnam*. This document lays out the concept of the inclusive industrial revolution 4.0, the pillars for creating new growth drivers and job flows to ensure that no one is left behind. After a brief introduction to Vietnam's development landscape, the document highlights the importance of the inclusivity of the industrial revolution 4.0 to ensure that Vietnam is not left behind and no one is left behind. later in Vietnam.

Le Van Thong, Vu Trinh The Quan (2019), *Vietnam's economy in the context of industrial revolution 4.0*, *Journal of Science and Technology Development - Economics of Law - Management*, 3(4). The article studies a number of assessments of Vietnam's economy in the context of the industrial revolution 4.0 with the main content including an overview of the industrial revolution 4.0, considering how the industrial revolution 4.0 affects the economy. Vietnam today and the opportunities and problems for the Vietnamese economy. The article also proposes some recommendations to develop Vietnam's economy in the coming time in the context of the industrial revolution 4.0.

Central Institute for Economic Management, Center for Information and Documentation (2018), *Vietnam's readiness to participate in Industrial Revolution 4.0: Comparison with the case of China*, Thread 3, - VNEP. The article focuses on analyzing the preparation and policy moves to participate in the industrial revolution 4.0 from China, and analyzes the current status of Vietnam's readiness to participate in the 4.0 industrial revolution and put provide some policy-oriented suggestions to promote more effective participation of Vietnam in the industrial revolution 4.0.

Central Institute for Economic Management, Center for Information and Documentation (2018), *Impact of the Industrial Revolution 4.0 on Vietnam's human resource development*, Topic No. 10, *Vietnam Economic Information Publication - VNEP*. The article points out that Industry 4.0 is the inevitable development trend of the times; The researchers point out the current situation of human resource development in Vietnam. On the basis of analyzing the current situation, researchers have proposed a number of solutions to promote the development of high-quality human resources in Vietnam today.

In addition, there are many scientific works by other authors, such as: Ho Tu Bao (2020), On key issues in building digital infrastructure in Vietnam, Institute for Advanced Study in Mathematics, John Institute von Neumann, Ho Chi Minh National University; Kieu Linh (2018), In order that the labor productivity of Vietnamese people is no longer inferior to other countries, VnEconomy electronic magazine; PwC Vietnam (2021), Vietnam Digital Skills Readiness Report; PwC Vietnam (2018), Vietnam Industry 4.0 Survey;...

In general, the above works have elaborated on the impact of the industrial revolution 4.0 from different angles, such as the potential, opportunities, challenges and barriers of the Industrial Revolution 4.0; Vietnam's readiness to participate in the industrial revolution 4.0; impact of industrial revolution 4.0 on human resource development; Vietnam's economy in the context of the industrial revolution 4.0;... but there has been no research on the impact of the industrial revolution 4.0 on sustainable economic development in Vietnam. However, the above works are useful sources for the author to refer to and cite in the article.

3. METHODOLOGY AND PROPOSED MODEL

The article uses a synthesis of Marxist methodologies, interdisciplinary research, in which the focus is on the use of documentary research methods and specific research methods such as analysis - synthesis, induction - deduction., compare, contrast, generalize, etc.

4. RESEARCH RESULTS

The results of the study are presented in the following sections:

Firstly, clarify the concept of the 4.0 revolution and sustainable economic development.

Second, analyze the achievements, limitations and causes limiting the sustainable economic development in Vietnam under the impact of the industrial revolution 4.0.

Third, propose solutions for sustainable economic development in Vietnam under the impact of the industrial revolution 4.0.

5. DISCUSSION AND CONCLUSION

Thus, the strong impact of the industrial revolution 4.0 is profoundly affecting the sustainable economic development in Vietnam. Besides the achievements, this revolution is posing many problems that need to be implemented quickly such as, restructuring the economy; building and developing digital infrastructure; developing skilled and high-quality human resources, especially developing ICT human resources; invest in research and development (R&D); attracting foreign investment in the field of science and technology, etc. Of course, in order to do the above, it is necessary to mobilize the strength of the whole society, from the central to the grassroots levels, from taking advantage of resources. internal resources to make the most of external resources, from private economic sectors to state economic sectors. All must see that this is both an opportunity and a challenge to bring Vietnam's economy to sustainable development.

6. CONCEPT OF THE 4.0 REVOLUTION AND SUSTAINABLE ECONOMIC DEVELOPMENT

6.1. Concept of industrial revolution 4.0

Research on the development of human society, C. Marx oriented, checking to the end, the development of human society is to realize the level of development. Yes, the development of the

productive forces not only leads to a change in the mode of production, but also fundamentally changes the entire socio-economic form. Thus, Marx argues, “The economic epochs differed not in what they produced, but in how they produced, with what means of labour”. Accordingly, the tool of labor can determine the most developed level of the productive force. By because, labor tools can show how to conquer human limits, which is the criterion for analyzing great economies. Therefore, C. Marx once oriented: “The hand crank brings the society with lords, the steam engine brings the society with industrial capitalists” [2]. And deciding the factor that directly affects the work of improving and developing labor tools to bring about the highest efficiency is science and technology. Therefore, in the consultation, C. Marx once commented deeply on the unified system between science and production, “The development breakdown of the fixed consultant is an indicator for the transforming universal knowledge of society. ization to any level to the volume of output direct Next”[3].

Human society has so far gone through four major industrial revolutions with interconnected historical lines. The first industrial revolution pointer lasted from the beginning of the eighteenth century to the 40s of the nineteenth century, with the mechanization of content. The most outstanding feature is the railways and steam mechanics that marked the second great division of social labor. With this revolution, people began to break with divine thinking to enter the background. new civilization of science and technology. The second industrial revolution, which took place from the end of the 19th century and the beginning of the 20th century, with the content of electrification and assembly wire being strongly applied to life and mass production. Now the world appears many industrial powers that dominate the entire world economy. The third industrial theater conversion started in the 1960s, with content automation. Characterized by computers and global information systems (internet), the world officially entered the knowledge economy.

Revolution 4.0 was formed and developed on the basis of the legacy of previous industrial revolutions. But it is clear that the content of its binding is completely different in substance from that of the receiver. Because, the industrial revolution 4.0 includes sets of technologies in three areas: First, digital with content: artificial intelligence (AI), internet of things (IoT) and big data (Big Data). Hai is, the field of the robots are new system, host in 3D, new material and nano art. Third, the field of biological art is applied in agriculture, fisheries, medicine, food processing, environmental protection, and renewable energy.

Vietnam is in the period of strongly supporting industrialization and modernization of the country, with the quality of both implementing the processes of the industrial revolution that the world has experienced and making a leap in the application of new technologies to the country. develop the country to deploy. Therefore, the Prime Minister’s Directive No. 16/CT-TTg on strengthening access to industrial revolution 4.0, issued on October 24, 2017, the world is undergoing unprecedented changes. Increasingly fast pace and increasingly extensive scale are changing the basis of production, commerce, healthcare, and education. In that predecessor, Resolution No. 52-NQ/TW dated September 27, 2019 of the 12th Politburo on a number of master programs and policy systems to participate in the fourth industrial revolution stated that: must Timely grasp and effectively take advantage of opportunities to improve labor productivity, efficiency and competitiveness of the economy, effectiveness and efficiency in social management, information convergence, transfer and strong application. Advanced components of the fourth revolution for all fields of socio-economic life, especially a number of important, functional, and advantageous

industries and fields to grow up according to the spirit of catching up, progressing and surpassing in some areas compared to other regions and the world.

6.2. The concept of sustainable economic development

In the face of the great transformation of the 4.0 industrial revolution, the Party and State have issued many guidelines, policies and action programs to orient the country's development so that it is both consistent with the general trend of the world. world that is consistent with the reality of the Vietnamese revolution. In particular, the leading policy of inclusiveness is the sustainable development of the country in many fields, first of all, sustainable economic development.

Economic development is the process of progressive change of a country in the context of a growing economy. However, economic growth is the increase in the number of outputs in the economic activity at a given period. Economic development is an increase in the quality of indicators of the economy. In which, not only includes long-term economic growth that is always high, but also shows the development of the quality of manufactured goods and services; development in technology, human resources, health, education and implementation of social justice.

Therefore, sustainable economic development can only be achieved when economic growth is high, but it must have quality, efficiency, low debt and create an increasingly large surplus value for the society. Therefore, at the 11th National Congress, our Party advocated to renew the economic growth model in the direction, "from mainly development in width to reasonable development between width and depth, while expanding scale, while focusing on quality, efficiency and sustainability"[4]. A current situation in developing countries is that high economic growth but excessive consumption of natural resources or low income of workers is not considered sustainable economic development.

Sustainable economic development is also synonymous with sustainable economic development. A sustainable economy must meet the following requirements: First, an economy with high GDP growth and GDP per capita. Developing countries in the current context need GDP growth of about 5% per year to be considered sustainable economic development. Second, the structure of GDP must follow the trend, the proportion of industry and services in GDP is higher than that of agriculture. Third, economic growth must be of quality and effective, not accepting growth at all costs, because that would poison and sustainably destroy the economy.

Thus, sustainable economic development must ensure high growth, quality and efficiency in all aspects of the economy. This development process creates equality among actors operating in the economic system that have the opportunity to access the country's economic resources such as capital, human resources and natural resources. Sustainable economic development must not guarantee the interests of a few, but create prosperity for everyone, create conditions for improving the quality of life, and not infringe on basic human rights. people.

7. IMPACTS OF THE 4.0 REVOLUTION ON SUSTAINABLE ECONOMIC DEVELOPMENT IN VIETNAM

7.1. Vietnam's achievements in sustainable economic development under the influence of the industrial revolution 4.0

- Vietnam's economic growth is high

Although Vietnam implemented the process of industrialization and modernization much later than other countries in the region and the world; The application of 4.0 technology in production

and business has just started, there are still many limitations, but one of the outstanding economic achievements is that the economic growth rate is maintained at a high level. GDP scale is 2.4 times higher, from 116 billion USD in 2010 to 268.4 billion USD in 2020. The average period 2011 - 2015 reached 5.9%/year; in the 2016-2020 period, reaching 6%; For the whole period of the 2011-2020 Strategy, GDP growth will reach about 5.9% per year, this rate puts Vietnam in the group of 40 countries with the largest economy in the world and the fourth in the ASEAN region.. In 2020, the events of the Covid-19 pandemic, pushed our planet into a deep recession, GDP growth of countries around the world decreased seriously, there were countries with negative GDP growth, Vietnam's GDP growth still reached 2.91%, ranked in the Top countries with positive growth. Therefore, the XIII Congress commented: "Our country has never had the opportunity, potential, position and international prestige as it is today"[5]. The above analysis shows that the reason for Vietnam's high economic growth is the increase in capital factors and total factor productivity (TFP), which is fighting reducing the role of labor and natural resources.

- On economic restructuring towards modernity

In the period from 2011 to 2020, "The share of agriculture, forestry and fishery in GDP will decrease from 18.9% in 2010 to 14.8% in 2020; the industrial, construction and service sectors (including product tax minus subsidies) increased respectively from 81.1% to 85.2%, exceeding the set target"[6]. In which, the proportion of service and industry sectors is increasing and agriculture is decreasing. This shift of Vietnam's economic structure is going in the right direction and effectively, because only industry and services can bring great added value to Vietnam's economy for development. The reason leading to the above economic restructuring is that the State has the right economic guidelines and policies. On the other hand, the State also applies the line of innovation in science and technology, especially the impact from the fourth industrial revolution, which contributes to rapid economic restructuring.

- On the issue of creating jobs and increasing workers' incomes

According to logical thinking, the fourth industrial will create unemployment, job loss, because all human jobs have been replaced by machines, "Robots with artificial intelligence fighting replace humans. people in production. 47% of jobs today will be 75% automated within 20 years."[7] But some researchers believe that a reduction in total employment is unlikely. Because hyper-automation and hyper-connectivity can enhance the productivity of existing jobs and create many other new professions. In general, in 2020, Vietnamese workers aged 15 and over are working at 53.4 million. Labor shift continues to follow the trend from agriculture, forestry and legal to industry and construction and service sectors with the respective proportion of labor in regions in 2020 being: 32.8%; 30.9%; 36.3% compared to 2019 respectively: 34.5%; 30.1% and 35.4%. The process of shifting the labor structure above towards industry and services is due to the strong development of many new professions in the fields of information technology, analysis and R&D.

Regarding income of workers: Along with GDP growth, GDP per capita growth rate also increases workers to increase. If in the period 2010-2014, GDP per capita increased only 4.93%/year on average, in 3 years (2016-2019), GDP per capita increased by an average of 5.6%, higher an increase of 4-4.5% is set for the whole period 2016-2030. As a result, per capita income in 2019 will reach 2715 USD. The poverty rate dropped sharply from more than 70% to less than 6% (\$3.2/day at purchasing power parity). The majority of the remaining poor in Vietnam are ethnic

minorities, accounting for 86%. The reason for this achievement reflects the rise in skills, services, digital businesses and the freelance economy.

7.2. The limitations of Vietnam's sustainable economic development under the impact of the 4.0 revolution

Besides the achievements, Vietnam's economic development still has many limitations before the impact of the industrial revolution 4.0. This presents several problems:

- Labor productivity growth is still low

Vietnam's labor productivity in 2020, as estimated by the International Labor Organization (ILO), is 7 times lower than that of Malaysia; 4 times that of China; 3 times that of Thailand, 2 times of the Philippines and 26 times of Singapore. The most important reason for the above situation is that "Most of the private enterprises use technology 2-3 generations behind the world average, up to 76% of machinery and technological lines are imported into the country. from abroad of the 1960 generation, 75% of equipment has been depreciated, 50% of equipment is refurbished"[8]. The backward technology level makes it difficult for Vietnam to improve labor productivity compared to other countries in the region and risks falling further and further behind when the industrial revolution 4.0 has really impacted. strongly to all sectors of the economy.

- Science, technology and innovation in many fields have not been promoted, the national level of science and technology in general is still far from that of the leading group in the region.

Due to historical circumstances, Vietnam did not have the opportunity to industrialize and modernize the country soon. Therefore, the industrial revolution 4.0 is a very valuable opportunity for Vietnam to make a leap into new technology fields, realize faster industrialization and modernization and narrow the development gap. However, the reality shows that the government's investment and application of the industrial revolution 4.0 in production and service provision is still slow compared to other countries in the region and the world. According to the 2018 report on the level of readiness for future manufacturing published by the World Economic Forum (WEF), out of a total of 100 assessed countries, Vietnam belongs to the group of countries with the highest production level. readiness for the industrial revolution 4.0 is low. "Vietnam ranks only 90/100 in terms of technology and innovation, in which, 92/100 in technology platform, 77/100 in creative capacity"[9]. The state budget's investment in science and technology activities is still modest, the ratio of investment in science and technology to total state budget expenditure and to GDP tends to decrease.

- Science and technology human resources

In general, science and technology human resources are underdeveloped, especially in R&D human resources. The total number of R&D personnel in Vietnam is only 61,663 people, an average of 6.8 staff per 10,000 people, much lower than that of developing and developed countries in Asia (Malaysia 17.9; China: 11); Singapore: 66.9). The limitation of science and technology human resources is also reflected in the shortage of skilled workers, "Although Vietnam has emphasized on Industry 4.0 policy reform, in terms of technical skills, As a result of the digitalisation of the workforce, Vietnam has dropped 4 places to 96th place in the 2020 Global Talent Competitiveness Index (GTCI)"[10]. Medium-skilled workers are near the bottom of the ranking at 128/130, and highly skilled workers are at 99/130 countries. According to the trend of industrial development 4.0, in the next 10 years, Vietnam will have about 7.5 million people lose their jobs because

they cannot meet the demand for skilled labor resources. Therefore, Vietnam needs to change its education and training goals and strategies to match the 4.0 industrial revolution.

7.3. The limited causes of Vietnam's sustainable economic development under the impact of the 4.0 revolution

Awareness of the nature and impact of the industrial revolution 4.0 on sustainable economic development is not at the level

Most economic actors are not ready for the industrial revolution 4.0, they do not fully understand the nature and impact of it on socio-economic development, and are not ready to approach new technologies. According to PwC Vietnam's 2018 Industry 4.0 Vietnam survey, "27% of respondents fully understand the concepts and impacts of Industry 4.0, 73% have no or little knowledge about Industry 4.0, or do not clearly understand the impacts of Industry 4.0)[11]. As a result, leading to the current state of enterprises are afraid to invest and apply high technology in production and business; recruitment of unskilled labor resources and fear of large investment costs but not bringing benefits to enterprises. This slows down economic restructuring, increases labor productivity, and lowers middle income.

State budget investment in science and technology is still low and implementation is slow

According to the Report of the World Economic Forum (WEF), in 2018, Vietnam achieved positive indicators for advantages to further boost readiness for Industry 4.0, such as government investment in public new technology (31/100); new technology investment company (50/100); patented (49/100); Number of mobile phone subscribers per 100 people (39/100); government determination and action (43/100)[12]. However, in the 2016-2020 period, the total state budget expenditure for science and technology is VND 59,529 billion, 8.4% lower than in the 2011-2015 period. Thus, Vietnam's total investment in science and technology is still less than 1% of GDP annually, lower than the Strategy for Science and Technology Development set forth and very low compared to other countries in the region and the world..

Over the years, although the Party and State have had many guidelines, policies and strategies to orient and direct the active participation in the fourth industrial revolution, in general, the implementation has been slow. Some ministries, sectors, fields and levels of government are not fully aware of the nature and impact of the 4.0 revolution, so the implementation under the direction of the Government is still inadequate. For example, the construction of e-government, smart city development, automatic road toll collection, electronic customs procedures for network security, etc., are still conducted in a synchronous manner, lacking connectivity and interconnection. lack of determination, fear of change.

Human resources have not met the requirements of the industrial revolution 4.0

Among the three basic factors for the sustainable economic development of each country is the application of science and technology, the development of infrastructure and the development of human resources, in which, human resources play an important role. important. Therefore, in the renovation period, the Party and State have always paid special attention to human resource development with programs such as, "Strategy for development of human resources in Vietnam for the period 2011 - 2020"; "Planning on human resource development in Vietnam for the period 2011-2020". Therefore, Vietnam currently has nearly 12 million trained workers with vocational training qualifications or higher, of which more than 5 million have university and postgraduate

degrees, accounting for 44% of the total number of employees. trained human resources. Although this is a potential human resource, it has not yet met the requirements of the industrial revolution 4.0. Because, this trained human resource is “mainly low-skilled labor, in which, the number of workers doing simple occupations accounts for the highest proportion (37-40%), the rate of labor high-level technical expertise only fluctuates in the range of 6-7%”[13]. On the other hand, untrained human resources are still quite high, accounting for about 78.3% of the more than 50 million Vietnamese workforce today. This limitation is a major barrier to the implementation of the 4.0 revolution and building a sustainable economy.

Digital infrastructure has not met the objective requirements of the industrial revolution 4.0

“Digital infrastructure is the foundation of e-Government and Digital Economy” [14]. Components of digital infrastructure include: equipment, connectivity, data, application infrastructure, legal and human resources. The current state of Vietnam’s digital infrastructure elements still has many limitations that do not meet the objective requirements of the industrial revolution 4.0, such as slow implementation of national databases; the connection and sharing of data is very limited, mainly “information monopoly”. Data security and network security are low, “it is estimated that up to 35% of Internet users in Vietnam are likely to face cyber attacks, the sixth highest in the world”[15]. Vietnam has not yet built an infrastructure for identification, electronic authentication, connection and interconnection on a national scale, and there is no complete legal framework for electronic identification and authentication. Lack of a legal corridor for digital economic development; sharing and opening data of government agencies, public and private enterprises; protect personal data, private information; issues of rights and ethics when applying artificial intelligence,... and currently, Vietnam is not only short of ICT human resources, but also has limited skills and expertise in the field.

8. SOME SOLUTIONS FOR SUSTAINABLE ECONOMIC DEVELOPMENT IN VIETNAM UNDER THE IMPACT OF THE 4.0 REVOLUTION

Firstly, the State needs to have guidelines and policies for rapid restructuring of the economy in line with the 4.0 revolution. The 4.0 revolution is both an opportunity and a challenge for sustainable economic development. Therefore, it is necessary to shift in the direction of increasing the proportion of service industries such as banking, real estate, insurance, tourism, new scientific and technological products, information technology, e-commerce and reduce the rate manufacturing, agriculture and mining sectors.

Second, build and develop digital infrastructure to serve as the foundation for the development of e-Government and Digital Economy. Invest in and upgrade the network system, especially develop a high-speed server system, upgrade the internet connection to keep up with the development of the times. Deploying national database centers; expanding the connection and sharing of data in the public and private systems; personal data security and network security. Completing the system of identification, electronic authentication, connection and interoperability infrastructure on a national scale. Building a legal system for the development of the digital economy to facilitate and handle conflicts and inadequacies arising in the operation of new business methods and the need to rapidly develop skilled ICT human resources. capacity and high level to meet the requirements of the industrial revolution 4.0.

Third, develop human resources sufficient in quantity and quality to carry out research and development activities of new technologies, products and services. Changing the model of human

resource training towards developing learners' creativity and entrepreneurial skills. Strengthen teaching in ICT as well as in the fields of new materials, new energy, digital, automation and AI, biotechnology,... Build a team of qualified, qualified scientists ethical qualities to meet the requirements of industries, contributing to improving competitiveness, shortening the gap in qualifications compared to the region and the world.

Fourth, businesses need to soon renew their thinking and be ready to receive the industrial revolution 4.0. By applying technology and innovation to optimize resource allocation, bringing high efficiency in production and business. Encourage businesses to build a model of "smart factory", e-commerce to improve the quality of supply chain management; develop new software products and services. Together with the state, businesses support professional training institutions to improve their capacity and qualifications of high-quality human resources to meet the needs of the new economic era.

Fifth, it is necessary to focus on mobilizing financial resources to invest effectively in research and development (R&D) activities, which is considered a prerequisite for scientific and creative innovation. Accordingly, it is necessary to invest in research and development of new science and technology such as: new materials, new energy, digital, information technology, automation and AI, biotechnology,... towards mastering some typical technologies of the industrial revolution 4.0.

Sixth, the state needs to have appropriate policies to strongly attract foreign investment in the field of science and technology; cooperation in research and development of artificial intelligence products; invest and develop projects capable of going ahead and taking the lead in producing new scientific and technological products and services of the 4.0 industrial revolution.

Seventh, promoting the industrial revolution 4.0 in order to develop a sustainable economy associated with preserving and protecting the environment. Although, the nature of the industrial revolution 4.0 is aimed at saving energy, resources, wasting labor, etc., mainly promoting the creative capacity of people. Therefore, many scientists believe that the industrial revolution 4.0 is moving from a "brown economy" to a "green economy". However, Vietnam is a developing country, the industrial revolution 4.0 has just begun, so environmental problems such as pollution of soil, water and air sources; electronic and industrial waste from developed countries; Exploiting resources and natural resources, etc., is having a great impact on the country's sustainable development. Therefore, we do not develop the economy at all costs, but sustainable economic development must always be associated with preserving and protecting the living environment of people.

9. CONCLUDE

Thus, the strong impact of the industrial revolution 4.0 is profoundly affecting the sustainable economic development in Vietnam. Besides the achievements, this revolution is posing many problems that need to be implemented quickly such as, restructuring the economy; building and developing digital infrastructure; developing skilled and high-quality human resources, especially developing ICT human resources; invest in research and development (R&D); attracting foreign investment in the field of science and technology, etc. Of course, in order to do the above, it is necessary to mobilize the strength of the whole society, from the central to the grassroots levels, from taking advantage of resources. internal resources to make the most of external resources, from private economic sectors to state economic sectors. All must see that this is both an opportunity and a challenge to bring Vietnam's economy to sustainable development.

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