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IMPROVE CAPITAL STRUCTURE OF FOOD ENTERPRISES IN VIETNAM

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LIST OF PUBLISHED WORKS OF THE AUTHORRELATING TO THE THESIS

1. Tran Thi Hoa (2020), “Factors affecting the capital structure of listed food businesses in Viet Nam”, *Asia – Pacific Economic Review,* Vol. 10 (575)/2020, pp. 66 - 68.

2. Tran Thi Hoa (2020), “Capital structure of food businessses in some countries around the wold and lessons learned for food businessses in Viet Nam ”, *Asia – Pacific Economic Review,* Vol. 08 (571)/2020, pp. 31 - 33.

3. Bui Thi Thu Loan, Than Thanh Son, Đo Hai Hung, Tran Thi Hoa (2020), “Study on the Effect of Entrepreneurship on the Business Performance of small and Medium: A Case study in Vietnam*”, Advances in Economics and Business Vol.8 No 4*, pp205-213

4. Mai Thi Dieu Hang, Tran Thi Hoa (2019), “Sustainable development of listed food businesses”, *Proceedings of national workshops – The fourth industrial revolution: Vietnamese start-up and business development*, Social Labor Publishing House, pp. 343 – 349.

5. Mai Thi Dieu Hang, Tran Thi Hoa (2019), “Capital structure of seafood enterprises in Viet Nam and the problem posed” , Financial magazine, Vol.6 (707)/2019, pp. 58 – 60.

6. Tran Thi Hoa, Nguyen Minh Phuong (2018), “Food and baverage indutry toward sustainable development”, *Asia – Pacific Economic Review,* Vol. 06 (518)/2018, pp. 49 - 51.

Introduction

1. Rationale of the Study

Capital structure is not a new research topic, but has been and will continue to attract the attention of many domestic and foreign researchers. Both domestic and foreign researches revolve around two big questions:i) whether or not an optimal capital structure exists; (ii) how capital structure affects to the enterprise value. In the world, there are many studies on capital structure with many conflicting views. On the basis of fundamental theories, researchers continue to search and develop new theories to clarify the impact of capital structure on enterprise value as well as the appropriateness of the theories in each research context.

The purpose of the research is to verify the suitability of each theory to the conditions of Vietnam, at the same time, the studie also clarify the characteristics of capital structure as well as the impact of capital structure on the operation of enterprises in a certain industry. There have been studies on capital structure of cement, steel, seafood or pharmaceutical enterprises.

Food is an important factor for the whole society in general and for each person in particularly. The fact shows that spending on food is positive ratio relationship with the growth of Vietnam economy. Economic growth has helped increase per capita income, leading to higher and higher Vietnamese household spending on food. Besides the background that economic growth is steadily increasing, the size of Vietnam's young population with more than 90 million people also increases the attractiveness of participating in the food industry. The scale of the food industry currently accounts for about 15% of the gross domestic product (GDP).

Currently, food products not only meet domestic demand but also export to many countries around the world. In particular, Vietnam is gradually becoming an important source of rich agricultural products and foodstuffs for countries around the world. Currently, food industry plays an important role in export promoting, creating jobs and raising income for workers; Food industry trade promotion is being actively implemented by associations, trade promotion organizations and enterprises in many different markets around the world.

It can be seen that the food sector plays an important role in Vietnam's economy. This role is shown through: (i) the actual scale of the business accounts for a large and wide distribution, which is closely related to agriculture and aquatic products; (ii) abundantly, low-priced local raw materials, large consumer market, no high infrastructure technology required; (iii) fast turnaround time, high growth rate.

In fact, the capital structure of listed food company in Vietnam achieved the following positive results: (i) the debt was maintained in a state of integrity and adjusted to suit the macro-economic fluctuations in the past period; (ii) Industrial structure has low impact on financial risks of businesses, improved financial balance and acts as a safety pad, high-end payment for loans; (iii) listed food company has a relatively high internal proportion of capital.

However, the capital structure of listed food company also has some outstanding limitations: (i) the capital structure of enterprises has shifted towards increasing dependence on external sources; ii) captial structure has not brought into play the effects of large financial companies; (iii) lack of diversification in corporate debt structure; (iv) increased financial risk for some businesses; (v) Enterprises have not built the title of capital structure.

Stemming from the above reasons, the author chose to study the topic "Improving the structure capital of listed companies in Vietnam" in order to learn deeply about the actual capital structure of these enterprises, like the personnel of the above limits to be the premise for the job of producing some solutions to improve the capital structure of listed food company in the coming time.

2. Research objectives

The overall objective of the topic is to propose solutions to improve the capital structure towards the target capital structure of listed food enterprises in Vietnam.

To achieve that objective, the thesis implements the following specific tasks:

(1) Systematizing domestic and abroad research projects to find research gaps.

(2) Interpreting the theoretical issues about the organizational structure and improving the enterprise's capital structure.

(3) Analyzing and assessing the current status of capital structure, the factors affecting the capital structure as well as the impact of the capital structure on the operations of the listed food enterprises in Vietnam.

(4) Analyzing and testing the factors affecting capital structure and the impact of capital structure on profitability of listed food enterprises in Vietnam.

(5) Proposing some solutions to improve the capital structure of listed food enterprises in Vietnam in the coming time.

3. Object and scope of the study

Research subjects

The research subjects of the thesis is the capital structure of the business.

Research scope

- About research space: listed food enterprises on the Ho Chi Minh City Stock Exchange and the Hanoi Stock Exchange.

- Regarding the research period: Secondary data on listed food enterprises in Vietnam were collected in the period 2013 - 2019.

4. New contribution of the thesis

Through the research content, the thesis has made certain contributions as follows:

(1) Interpreting the theoretical issues about the capital structure and improving the structure structure.

(2) Presenting experiences of improving capital structure of food enterprises in some countries in the world and lessons for Vietnamese food enterprises.

(3) The thesis has shown how the characteristics of food enterprises affect the capital structure of food enterprises.

(4) The thesis uses the GMM estimation method to quantitatively study the factors affecting the capital structure and the impact of capital structure on the ROE of the food enterprises of Vietnam listed food enterprises to overcome endogenous phenomena.

(5) The thesis has analyzed and evaluated the current status of capital structure of Vietnam listed food enterprises

(6)The proposed solutions to improve the capital structure are derived from the research results and the point of view of completing the capital structure of the NY enterprises in Vietnam.

5. The structure of the thesis

In addition to the introduction and conclusion, the thesis is structured with 4 chapters as follows:

Chapter 1: Overview of research on capital structure of enterprises and research methods

Chapter 2: Theoretical basis for the capital structure of the enterprises

Chapter 3: Current status of capital structure of listed food companies in Vietnam.

Chapter 4: Solutions for improving capital structure of listed food enterprises in Vietnam.

Chapter 1
OVERVIEW OF RESEARCH SITUATION ON ENTERPRISE'S CAPITAL STRUCTURE AND RESEARCH METHODS

1.1. Studies on capital structure of businesses

1.1.1. Studies on optimal capital structure

1.1.2. Researches on factors affecting the capital structure of enterprises

1.1.3. Studies on the impact of capital structure on business performance and corporate value

Firstly, the capital structure theories are not homogeneous, but not mutually exclusive. Inconsistency about the content related to capital structure is due to the partial research method. However, the theories have complemented each other to create a panorama of capital structure of enterprises.

Secondly,empirical evidence on the impacts of capital structure on business performance and enterprise values is not consistent.

Thirdly, studies show that there are 7 main factors including: enterprise size, profitability, asset structure, growth rate, liquidity, business risks, the impacts of foreign ownership to enterprises's capital structure , however, the impact of the above factors is inconsistent in the scope of different countries, different industries and enterprises in the same industry.

1.2. Research gaps and research questions

1.2.1. Research gaps

Firstly, although there have been many studies related to the capital structure of enterprises in Vietnam, the studies mainly focus on enterprises of all industries, listed on the stock market, or State-owned enterprises, or a few studies on the capital structure of enterprises in a particular industry, especially there has not been any research on the capital structure of food enterprises.

Secondly, the researches on capital structure of enterprises in Vietnam are often associated with the goal of building optimal capital structure for enterprises. However, in reality, it is very difficult to determine the optimal structure for enterprises because the capital structure will change depending on the objectives of the enterprise in each period. Therefore, the solutions to improve capital structure should be directed to the target capital structure of enterprises

Thirdly, the quantitative researches so far on the factor effects on the enterprise's capital structure and the impact of capital structure on the ROE, almost all use data tables and Fixed Effects Model (FEM) and random effect model (REM) to investigate, then use Hausman test to conclude. This research is very difficult to overcome the endogenous phenomenon in the model, while the influence of capital structure to profitability is two side. Therefore, the title of the method to the rule of GMM can be the solution to make up for the orientation of the occupational operation to ROE of listed enterprises throught researches sample includeing 18 listed food enterprises in Vietnam period 2013 - 2019.

1.2.2. Header question

The thesis research into depth about the basic structure of the food industry in Vietnam to clarify research questions such as:

(1) What is the theoretical basis of capital structure and improving capital structure of the enterprise?

(2) What is the experience of the improving capital structure of the enterprise in the world?

(3) How do characteristics of food enterprises affect the SME sector's capital structure?

(4) How was the status of the capital structure of listed food enterprises in Vietnam in the period of 2013 - 2019?

(5) What factors affect the capital structure of listed food enterprises? Impact direction of those factors?

(6) How does capital structure affect the operation of listed food enterprises?

(7) What solutions do Vietnam listed food enterprises need to implement in order to improve capital structure in the next period?

1.3. Research Methods

1.3.1. Research hypothesis

1.3.1.1. Research hypotheses on factors affecting the capital structure of listed food enterprises

Table 1.1. The hypotheses of the research model the impact of factors on the capital structure of listed food enterprises

No	Content of hypothesis	Expectati for ons sign thed	Citation
H1.1	The multidimensional relationship between the size of enterprises and the use of debt in the capital structure of listed food enterprises.	+	Kester (1986), Titman and Wessels (1988)
		-	Mash (1982), Rajan và Zingales (1995), Chittenden and partner (1996)
H1.2	The growth rate has a positive influence on the capital structure of listed food enterprises	+	Ross (1977), Titman andWessels (1988), Lang and partner(1996)
H1.3	The inverse relationship of the proportion of fixed assets in total assets with the debt ratio of the listed food enterprises	-	Frank và Goyal (2009) Phan Thanh Hiệp (2016)
H1.4	Inverse relationship between liquidity with capital structure of listed food enterprises	-	Chittenden et al (1996)
H1.5	Inverse relationship between profitability and capital structure of listed food enterprises	-	Fozia Memon, Niaz Ahmed Bhutto and Ghulam Abbas (2012), Aboor (2005), Bontis and partner (2000)

No	Content of hypothesis	Expectati for ons sign thed	Citation
H1.6	State-owned listed food enterprises tends to increase the use of debt.	+	Brailsford vand partner(2002), Bhabra and partner(2008), Li and partners(2009) ,Margaritis & Psillaki (2010),

Source: Author's synthesis

1.3.1.2. Research hypotheses about the impact of capital structure on the equity returns of listed food enterprises

Table 1.2. The hypotheses of the research model the impact of capital structure on ROE of listed food enterprises

No	Content of hypothesis	Expecta for nstio the signd	Citation
H2.1	Capital structure and deb ratio have a positive effect on ROE	+	Modigliani and Miller (1963); Petersen and Rajan (1994), Roden and Lewellen (1995); Ooi (1999) Ghosh (2000); Abor (2005); Nour (2012); Mitani (2014)
H2.2	The size of the listed food enterprises has a negative impact on the ROE	-	Mash (1982), Rajan and Zingales (1995), Chittenden andpartner (1996); Fozia Memon, Niaz Ahmed Bhutto and Ghulam Abbas (2012)

No	Content of hypothesis	Expecta for nstio the signd	Citation
H2.3	The asset structure of listed food enterprises has a negative effect on ROE	-	Rami Zeitun and Gary Gang Tian (2007); Fozia Memon, Niaz Ahmed Bhutto and Ghulam Abbas (2012)
H2.4	State ownership is negatively related to ROE of listed food businesses	-	Thomsen and Perdersen's (2000), Le Duc Hoang (2015)

Source: Author's synthesis

1.3.2. Proposed research model, variables and scales

* Model testing the factors affecting the capital structure of the listed food enterprises

* LEVit= β0 + β1SIZEit+ β2GROWTHit+ β3TANGit +β4LIQ it + β5ROAit+ β6OWNit + $\varepsilon_{i,t}$

Inside:

- Dependent variable - LEVi, t: capital structure is measured by the debt ratio of 18 listed food enterprises in the period 2013-2019.

The independent variable: is the factor affecting the capital structure of listed food enterprises in the period 2013-2019. Specifically, the independent variables include: (i) SIZE: Enterprise size; (ii) GROWTH: Growth rate; (iii) TANG: Asset structure; (iv) LIQ: Liquidity; (v) ROA: Profitability; (vi) OWN: Ownership structure defined as a dummy variable

β0 is a constant; βj is the regression coefficients corresponding to 6 independent variables; εi, t is the random error.

* Model of examining the impact of industrial structure on ROE of listed food enterprises

ROEit = β0 + β1LEVit + β2TANGit + β3SIZEit + β4OWNit + εi, t

Inside:

- Dependent variable - ROEi, t: Return on equity of 18 listed food enterprises in the period 2013-2019

- Independent variable: The independent variable is the debt ratio (LEV) taking into account maturity, which means both short-term debt (SLEV) and long-term debt (LLEV).

The study also introduces the model of control variables including: (i) TANG: Asset structure; (ii) SIZE: Business size; (iii) OWN: Ownership structure defined as a dummy variable.

- $\beta 0$ is a constant; βj is the regression coefficients corresponding to 6 independent variables; εi, t is the random error.

1.3.3. Research Methods

1.3.3.1. Qualitative research methods

1.3.3.2. Quantitative research method

The thesis uses Generized Method of Moments (GMM) to regress research data on STATA 14. GMM is a regression model published by Lars Peter Hansen in 1982 in article "Large Sample Properties of Generalized Methods of Moments Estimators".

Chapter 2
THEORETICAL BACKGROUND ON CAPITAL STRUCTURE OF ENTERPRISES

2.1. Overview of the capital of the enterprise

2.1.1. Capital concept of enterprise

2.1.2. Capital classification

2.1.2.1. Classification by ownership relationship

2.1.2.2. Classification by time of capital mobilization and use of capital

2.1.2.3. Classified by scope of capital mobilization

2.2. Capital structure and improving capital structure of the business

2.2.1. Capital structure of the business

2.2.1.1. Capital structure concept

In the scope of the thesis, the author thinks that "the enterprise's capital structure is the component and the proportion of each separate source of capital in the total capital that the enterprise mobilizes and uses for business activities".

2.2.1.2. The indicators reflect the capital structure of the enterprise

2.2.1.3. Theories about the capital structure of the enterprise

2.2.1.4. Factors affecting the capital structure of the enterprise

2.2.1.5. The impact of capital structure on business operations

2.2.2. Improving capital structure of the enterprises

2.2.2.1. Principles of improving the capital structure of the enterprises

2.2.2.2. Content of improving capital structure of the enterprises

2.2.2.3. The order of improving the capital structure of the enterprise

2.3. Experience in improving capital structure of food enterprises in some countries around the world and lessons for Vietnamese food enterprises.

2.3.1. Experience in improving capital structure of enterprises in some countries around the world

2.3.1.1. Experience of the listed food enterprises in Japan

2.3.1.2. Experience of the listed food enterprises in Thailand

2.3.1.3. Experience of the listed food enterprises in the United States

2.3.2. Lessons learned for improving capital structure of Vietnamese enterprises.

Chapter 3: SITUATION OF CAPITAL STRUCTURE OF LISTED FOOD ENTERPRISES IN VIETNAM

3.1. Overview of listed food enterprises in Vietnam

3.1.1. Food enterprise and food industry in Vietnam

3.1.2. Characteristics in the business operations of food enterprise

3.1.2.1. Food product characteristics

Firstly, food products are directly related to human health, so food safety standards in the production, processing, packaging and storage should be strictly followed.***Secondly***, the purchasing power in the market varies greatly, from time to time, according to locality ...consumers can consider carefully when they need to shop, especially at a time when there are a lot of consumer goods that can be replaced by other products.***Thirdly,*** the number of people buying is high because of food products associated with people's daily lives, members of society all have consumer demand, but each purchase is not much, small and scattered because of the needs of life. life is very diverse. But there is also a huge difference in consumers: between the population class, status, and groups of different occupations, ethnicity, gender, educational attainment, age, and living habits.***Fourthly,*** the input materials of food companies are mainly agricultural products, so food products are also affected by the seasonality and instability of agricultural products.

3.1.2.2. Product consumption market characteristics of food enterprises

The characteristics of business activities have dominated the capital structure of the enterprises. As follows:***Firstly,*** the capital structure of food enterprises will be inclined to use debt.***Second,*** the capital structure of the enterprises is inclined to short-term capital.***Thirdly***, external capital accounts for a large proportion in the total capital sources of businesses and enterprises increasingly diversify forms of capital mobilization.

3.1.3. Listed food enterprises on Vietnam stock market

Currently, many standards are applied to sub-sectors for listed companies in the stock market. According to the industry Classification Benchmark of ICB (Industry Classification Benchmark), listed food enterprises in Vietnam are classified in industry level 4, the number of listed food enterprises as of December 31, 2019 is shown in Table 3.1.

Table 3.1: listed food enterprises on Vietnam's stock market as of December 31, 2019

Years	**Numbers of listed food enterprises**			**Speed increased (%)**
	HSX	**HNX**	**Sum**	
2013	10	8	18	-
2014	10	9	19	5,56
2015	10	12	22	15,79
2016	10	12	22	-
2017	10	11	21	
2018	11	11	22	4,54
2019	11	10	21	-

Source: Author's synthesis

3.1.4. Business results of listed food enterprises

In the period 2013-2019, despite many difficulties, but food enterprises in general and listed food enterprises in particular have achieved encouraging results. A general analysis of business results of listed food enterprises shows that net sales and cost items of listed food enterprises increased in the period 2013-2019, but still ensures that these businesses are profitable. Net profit after tax of food enterprises increased highest in 2015, then decreased slightly in 2016 and 2017, and then increased again in 2018 and 2019.

The target of profit margin of listed food enterprises enterprises is quite high, the highest ROS is 17.62% in 2015, the lowest is 2017 (12.46%), so there is not much variation between years. The rate of return of equity is the highest and also the most variable in the group of indicators on profitability.

3.2. The current situation of capital structure of listed enterprises in Vietnam

3.2.1. The current situation of capital and capital sources of listed food enterprises in Vietnam

*** Capital size of listed companies:**

In the period of 2013 - 2019, listed food enterprises constantly grow in size: the size of listed food enterprises in 2013 is 86,866 billion dong, by 2019, the size of these businesses will reach 184,664 billion dong. Especially, the capital scale oflisted food enterprises increased rapidly in 2015 and 2019 such as Kinh Do JSC.

*** Property structure:**

In the period 2013-2019, the asset structure of listed food enterprises tended to lean toward the assets with the average proportion of assets in the study period was 59.12%.

*** Capital sources of listed food enterprises:**

To meet the increased demand of total assets, the capital sources of listed businesses also increased in the period 2013 - 2019.

3.2.2. Situation of capital structure of Vietnamese listed enterprises

3.2.2.1. Capital structure by ownership relationship

First, the scale of liabilities increased during the study period; The debt ratio increased in the period 2013-2017, then decreased and stabilized in 2018 and 2019. The volatility of the debt ratio is similar to the fluctuation of the average lending interest rate, showing that firms has adjusted debt ratio to suit fluctuations of interest rates. The scale of equity capital constantly increasing in the period 2013-2019 also shows the increasing independence and financial autonomy of listed food enterprises.

Second, the average proportion of short-term debts in the total liabilities of listed food enterprises in the study period is 58.26%, of which the listed food enterprises have capital size of less than VND 1,000 billion and the listed food enterprises have foreign equity capital, short-term debt ratio is very high, averaging over 90% in the period 2013-2019. This shows that these companies depend heavily on short-term debt, high pressure to repay short-term debts, leading to high payment risks. However, the use of many short-term debts helps these companies save a part of the cost of capital.

Third, in the equity structure, the proportion of LNGL and equity often increased, showing that the business results of enterprises are highly effective, helping businesses increase financial autonomy business decisions. However, the increase in the proportion of retained earnings or the increase in the owner's equity by issuing shares also increases the average cost of capital used by enterprises.

3.2.2.2. Capital structure according to time of capital mobilization and use of capital

Long-term capital accounts for a relatively high proportion of the total capital resources (on average, 72.80%). Compared with the average long-term assets of 40.88%, it shows that long-term capital not only sponsors the entire assets but also a part of the short term asset. This will create a high level of safety in terms of solvency for Third, in the equity structure, the proportion of LNGL and equity often increased, showing that the business results of enterprises are highly effective, helping businesses increase financial autonomy business decisions., and stable financial balance. However, the relatively high proportion of long-term capital sources also puts pressure on the higher cost of capital compared to short-term capital sources.

3.2.2.3. Capital structure to based on capital mobilization scope

Internal capital and external capital resources both have a strong increase in the period 2013-2019. Capital structure shows that the independence in production and business decisions of listed food enterprises has increased, but listed food enterprises still depend heavily on external capital, especially listed food enterprises with capital scale of less than 1,000 billion VND.

3.2.3. Evaluating the affecting factors the capital structure of listed food enterprises in Vietnam

3.2.3.1. Research sample

To evaluate the affecting factors the capital structure of listed food enterprises in Vietnam by quantitative model, the author uses table data according to time series in the period of 2013 - 2019. Therefore the author only keeps in the research sample of 18 listed food enterprises in Vietnam before 2013.

3.2.3.2. Results of the model

The variables correlated positively with LEV and statistically significant include: OWN, GROWTH, The variables are inversely correlated with LEV and statistically significant include: TANG, ROA, LIQ, SIZE variable positively correlated with LEV but not statistically significant.

3.2.3.3 General conclusion about factors affecting capital structure of listed food enterprises

Based on the hypotheses and the results of the research model regression, the author gives a summary of the impact of factors on LEV of Vietnam listed food enterprises in the period 2013-2019 as follows:

Table 3.20. Summary of the factor impact model results on LEV

Out	Expectations on sign	Actual sign	Level of significance	Hypothesis testing
SIZE	+/-	+	Meaningless	Rejected H1.1
ROA	-	-	1%	Accept H1.5
GROWTH	+	+	1%	Accept H1.2
TANG	-	-	1%	Accept H1.3
LIQ	-	-	1%	Accept H1.4
OWN	+	+	1%	Accept H1.6

Source: Authors synthesized from research results

The experimental results show that the profitability factor has a negative impact on the enterprise's capital structure. This can be explained that the more profitable a business is, the more likely it is to reduce its debt-to-total capital ratio, rather than to borrow more to take advantage of the tax shield. , because these enterprises will tend to use endogenous capital from retained profits.

Regarding the liquidity of assets, experimental results show that this factor has a negative impact on the enterprise's capital structure. Combined with the fact that in the debt structure of listedfood companies in Vietnam, the short-term debt ratio accounts for half of the total liabilities, this experimental result is completely understandable. It can be seen immediately that with the unchanged short term asset, the reduction in debt by enterprises will increase the liquidity of the business.

In terms of growth rate, the results of GMM model give high reliability results, with p-value <0.05 and positive beta coefficient, which means, the higher the growth rate of enterprises, the more likely they are to use use a lot of debt.

In terms of state ownership, the GMM model gives reliable results that this factor has a positive impact on the same direction and has a high statistical significance on the enterprise structure. This shows that, in the period 2013-2019, listed food enterprises with an foreign equity capital factor, although having a lower debt ratio than listed food enterprises without an foreign equity capital element, but listed food enterprises with foreign equity capital factor are tending to direction to increase the use of debt.

Regarding the tangible nature of the property, the experimental results give quite unexpected results, when this factor has a negative impact on the enterprise's capital structure. Normally, enterprises with growth in fixed assets will increase their debt due to increasing collateral for loans, but in reality, the results show that enterprises invest in fixed assets mainly with LNGL or increase in equity, but does not prioritize use of loans.

Experimental results on the effect of the scale factor on the structure of enterprises show that the beta coefficient of the variable SIZE is positive but not statistically significant. That means that the size of the enterprise has a positive impact on the LEV, but in some cases it is not, or in other words, it does not follow the rules. And in fact, Vietnamese food enterprises shows that larger businesses use less debt. This is different from the general situation of capital structure of Vietnamese enterprises because most of the empirical studies in Vietnam have shown that the capital size has a positive relationship with the debt ratio.

3.2.4. The impact of capital structure on the operation of listed enterprises

3.2.4.1. The impact of capital structure on the average cost of capital used by listed food enterprises

Firstly, although in theory, the cost of debt is always lower than WACC, but not always increasing debt also helps businesses reduce the average cost of capital, it also depends on the capital structure of enterprises based on debt or equity.***Second,*** enterprises can still increase their equity capital while reducing the average cost of capital by choosing to pay stock dividends instead of cash dividends to reduce the cost of using equity. .

3.2.4.2. The impact of capital structure on financial risks of listed food enterprises

Firstly, the level of use of financial equipment of listed food enterprises is low, but taxpayers with a scale of less than 1,000 billion dong have a higher level of using financial security than listed food enterprises with capital of over 1,000 billion dong. This means that these enterprises will have greater financial risks when using more debt.***Secondly,*** the financial balance of businesses is guaranteed, regular capital not only fully sponsors long term asset, but also sponsors short term asset, creating "a safety cushion" for the payment capabilities of businesses.***Thirdly,*** the impact of capital structure makes enterprises' ability to pay interest always high. On the one hand, this will help businesses have advantages in meeting their debt obligations. On the other hand, the high interest payment capacity of enterprises is also the basis for improving the credit rating of enterprises in the stock market, helping businesses to have favorable access to mobilized capital from the stock market such as issuing shares or issuing bonds.

3.2.4.3. The impact of capital structure on the equity return of listed food enterprises

* Research sample

Similar to the quantitative research on the factors affecting the industrial structure of listed food enterprises in Vietnam, the sample still includes 18 listed food enterprises in Vietnam before 2013 and the procedure and steps are similar.

* General conclusions about the effects of capital structure on ROE

Table 3.31. Summary of the model results of the effects of capital structure on ROE

Out	Expectations on sign	Actual sign	Level of significance	Hypothesis testing
LEV	+	+	10%	Accept H2.1
SLEV)	+	+	1%	Accept H2.1
(LLEV	+	+	1%	Accept H2.1
SIZE	-	-	1%	Accept H2.2
TANG	-	-	Meaningless	Rejected H2.3
OWN	-	-	1%	Accept H2.4

Source: Authors synthesized from research results

The empirical results of the research on the impact of capital structure on the equity profitability rate show:

Enterprise size variable (SIZE): has a negative impact on ROE, ie when the size of NYTP increases 1%, it has a corresponding ROE reduction effect (0.04277). This is explained as follows: when the listed food enterprises continuously increase their capital to expand their scale, they have to find funding sources. In fact, the capital of the enterprises is financed mainly from the equity capital, the use of debt without increasing will not amplify the increase of ROE but on the contrary, increasing the equity capital also reduces the benefits of the owners enterprises.

Ownership variable: listed food enterprises that have an foreign own factor will reduce ROE. That means that the listed food enterprises with the state-owned assets factor use less debt (presented in the results of the quantitative study of the factors affecting the industrial structure), therefore, it does not amplify the ROE.

The variable proportion of fixed assets in total assets (TANG): inversely related to ROE, but not statistically significant. This means that in fact, there exist listed food enterprises with a high proportion of fixed assets and increasing ROE. This is explained as follows: when listed food enterprises increase investment in fixed assets, they are pursuing an investment strategy in depth by investing in modern equipment and production technology lines. That helps to increase productivity and improve operational efficiency, so the profitability of the owners also increases.

3.2.5. Discussing the results of qualitative and quantitative research on capital structure of listed food enterprises in Vietnam

Firstly, equity accounts for a higher proportion than liabilities in capital structure. The average debt ratio of NYTPs for the period 2013-2019 is 0.434, in which short-term debt accounts for a high proportion in NPT. Capital structure has a positive impact on equity returns, but qualitative research shows that long-term debt has a stronger positive impact on ROE, while long-term debt only accounts for an average proportion. about 10% of total liabilitie.***Second,*** the factor of enterprise size both affects the capital structure and the ROE of the enterprises in listed food enterprises. For capital structure, enterprise size is considered to have a multi-dimensional relationship. However, most of the studies so far have concluded about the positive relationship between the size of enterprises and the capital structure. Meanwhile, the quantitative research on the impact of the enterprise size on the capital structure of the listed food enterprises shows the opposite results when concluding that the sizes of the listed food enterprises are inversely related to the debt ratio.***Thirdly,*** the asset structure is also the factor affecting the capital structure and ROE of listed food enterprises. The empirical research results show that listed food enterprises finance fixed assets to ensure the compatibility of time, which means that the financing is due to increasing equity capital, not increasing debt, the debt ratio is not high, as a result, the ROE cannot be amplified.***Fourth,***listedfood enterprises with high profitability tend to use less debt. In fact, endogenous capital sources of listed food enterprises are quite high, accounting for 12.06% to 21.16% of business capital. However, self-financing capacity decreased gradually in the period 2013-2017 and increased again in the two years 2018-2019. However, the new use of high debt has a positive impact on profitability, especially the profitability of the owner, but there exist quite a large difference between groups of enterprises. Thus, there exists an interplaying relationship between profitability and capital structure of listed food enterprises.***Fifth,*** liquidity is a factor that has inversely related to industrial structure. Meanwhile, short-term debt accounts for a high proportion of the total liabilities. Therefore, with an unchanged amount of assets, for good liquidity, listed food enterprises need to cut short-term debts.***Sixth,*** the factor of state ownership is also a factor that both impacts capital structure and affects to ROE. Quantitative research results with a sample of 18 listed food enterprises in the period 2013-2019 show that enterprises have foreign owned capital tend to increase their use of debt.

3.3. Evaluating the status of capital structure of listed food enterprises

3.3.1. Achievements

Research on capital structure of listed food enterprises in the period of 2013-2019 shows that capital structure of listed food enterprises achieve the following results: ***First,*** the capital structure of listed food enterprises has a debt ratio at a safe threshold and is adjusted in a suitable direction with macroeconomic fluctuations as well as strategic goals of the enterprises. ***Second,***the impact of capital structure makes the financial risks of listed food enterprises low. ***Third***, the impact of capital structure makes the return to equity of enterprises sharply increased in the period. ***Fourthly***, listed food enterprises have special duty accounts for a quite high proportion

3.3.2. Limitations and the cause of the restriction

3.3.2.1. Limitations

First, the capital structure of listed food enterprises has shifted towards increasing dependence on external capital sources. ***Second,*** the structure has not brought into play the positive effects of financial leverage. ***Third,*** the debt structure lacks diversity. ***Fourth***, increase financial risks for businesses with capital size below 1,000 billion *VND.*

Fifth, the average cost of capital tends to increase. Sixth, businesses have not built up the target capital structure

3.3.2.2. The cause of the limitations

*** Subjective reasons**

Firstly, enterprises with larger scale and transparent information so have more advantages when issuing shares to mobilize capital in the financial market. ***Secondly,*** enterprises have not really understood the impact mechanism of financial leverage. ***Thirdly,*** the difference in investment strategy and financing strategy of business group by capital size.***Fourthly,*** managers' fear of risk and need a high safety in business makes loans, especially long-term loans, account for a low proportion. ***Fifth***, listed food enterprises with capital size of less than VND 1,000 billion have not high revenue results, so their self-financing capacity is low, these enterprises maintain a relatively high debt ratio, over 60% of liabilities. ***Sixthly,*** listed food businesses have a safe financing model, the majority of equity use to finance makes the cost of using capital of these businesses increase. ***Seventhly***, at present, listed food enterprises have not implemented the construction of targeted industrial structures, the scale of equity capital and mobilized loans are mainly based on the capital needs of enterprises.

*** Objective reasons**

Firstly, due to the technical and economic characteristics of the food industry.***Secondly***, due to the change of Vietnamese people's taste and consumption habits of food products. ***Thirdly***, because the financial market is not yet fully completed to become a capital mobilization channel for businesses, especially the corporate bond market.

Chapter 4: SOLUTIONS TO IMPROVE CAPITAL STRUCTURE OF LISTED FOOD ENTERPRISES IN VIETNAM

4.1. Socio-economic context and development orientation of the food industry in Vietnam in the coming years

4.1.1. World economic context

The year 2020 has passed with many difficulties: natural disasters, epidemics, disasters, conflicts and violence have covered many places. In particular, the COVID-19 epidemic has turned lives upside down and made the global economy sway. However, the positive signals are raising hope that the world economy will recover more positively in 2021.

4.1.2. Vietnam's economic situation

In 2020, although the economy is quite heavily affected by the Covid-19 epidemic, Vietnam is one of the few economies in Asia with positive growth. Besides the results achieved, Vietnam is still facing many difficulties and challenges. Specifically:

First, the global long-lasting Covid-19 pandemic will be the greatest threat; global trade tensions, leading to increased trade protectionism and financial risks, could be exacerbated by a prolonged pandemic. Domestic consumption continued to be at a low level because the household and business incomes decresed, unemployment increased and more businesses stopped operating. Investment prospects are uneven, private investment remains weak and trade-related foreign investment continues to decline**.**

Second, in 2021, the world economy will continue to face many risks and challenges. Vietnam is also not out of this general impact because the economy is now deeply integrated and has a large openness.

Third, the problem of the current economy lies in the lack of demand for loans in the context of economic instability, not interest rates, so the solution to cut interest rates is also difficult to support the economy. .

Fourth, the over-reliance on imports and exports makes the economy vulnerable to external shocks. To face this fact, Vietnam has to further diversify its trading partners, thereby reducing the shocks from a particular trading partner.

4.1.3. Development orientation of the food industry in Vietnam in the next period

4.1.3.1. Food industry development perspective

Firstly, ensuring food safety is to ensure the interests of consumers and the health of the citizens, is a regular task that needs to focus on the direction of the Party committees and authorities, is the responsibility and interests of the groups. organizations and individuals that produce and trade in food and of each citizen.

Secondly, the organization synchronously implements legal provisions on food safety, focusing on inspection and examination, and promotes the application of advanced measures in food safety management.

Thirdly, Strengthen information and communication to create a profound change in the perception of producers, consumers and the whole society about hygiene and food safety.

4.1.3.2. Development orientation of the food industry

4.1.3.3. Development trend of the food industry in the coming time

4.2. The perfect view of capital structure of listed food enterprises in Vietnam

4.2.1. Improving the capital structure must ensure financial safety

4.2.2. Improving the capital structure of listed food enterprises must diversify forms of capital mobilzation in the financial market

4.2.3. Improving the capital structuremust increase the enterprises value in the future

4.2.4. Improving the capital structuremust be placed in specific conditions of each business

4.2.5. Improving the capital structure should move toward the target capital structure

4.2.6. Improving the capital structure of listed food enterprises should be based on funding decisions

4.3. Solution for improving capital structure of Vietnamese listed enterprises

4.3.1. Adjusted the debt ratio at a reasonable level, at the same time diversify tools and forms of loan financing

- Release Stock; Using hybrid securities in capital mobilization; Finance lease.
- Diversify short-term debt by increasing appropriated capital

4.3.2. Diversify funding sources from equity

- For retained earnings: Enterprises can adjust to reduce the rate of dividend payment to prioritize retaining reinvestment profits or choose the form of stock dividend payment at an appropriate rate.

-For the equity stakes of owners: listed food enterprises can increase the capital contribution of equities through issuing ordinary shares through private placement, targeting certain groups of investors. In the event that the stock market is in a downturn, issuing shares is often not easy and enterprises can increase their equity capital through the issuance of preference shares.

4.3.3. Increasing the scale and proportion of long-term debt

- Actively exploit long-term loans with cheaper cost of capital.
- For the group of large-scale reputable enterprises in the market, issuing bonds to replace long-term loans with banks is a very popular trend and completely usable in the Vietnam stock market.

4.3.4. Developing a target capital structure for listed food enterprises

4.3.4.1. The cost of capital approach method

Advantages of the method: This method will give the most accurate and objective results on the target capital structure level

Limitations of the method: need to collect a lot of data, it is complicated, requires analysts to have skills to filter data appropriately and effectively.

4.3.4.2. Adjusted Present Value

Advantages of the method: it allows to assess separately the effect of debt on the enterprise value.

Limitations of the method: Firstly, the method has difficulty in estimating bankruptcy costs and the probability of bankruptcy. Secondly, this method only assumes that the principal benefit of debt is the tax benefit and the cost of debt is the cost of bankruptcy, regardless of the other benefit of debt, which increases the discipline of the management. And another cost of debt reduces financial flexibility and incurs agency costs.

4.3.4.3. Comparative analysis method

Advantages of the method: This isan intuitive and easy-to-understand method.

Limitations of the method: When there are large fluctuations in growth potentials and risks between enterprises in the industry. Then we will expect the debt ratios to be different between firms because firms in the industry are at different stages in the business cycle.

4.3.4.4. Regression analysis method

Advantages of the method: When running the regression model and the underlying relationships are established, the forecast debt ratio for any firm can be quickly calculated by using independent variable measurements of that enterprise.

Limitations of the method: The coefficients of the regression model tend to change over time. In addition, these models tend to only partially explain the differences in debt ratios among firms.

4.3.5. Constructing a warning system for using debt

Applying Z-index to determine the safety limit in the use of debt

Table 4.3: proposed debt ratio for high-risk enterprises

No	Enterprises	Z index(2019)	Proposed debt ratio
1	HNM	1,05	43,16%
2	HKB	1,74	20,24%

Source: Author's calculations from financial statements of listed food enterprises

Thus, through the application of the Z index, it has shown the bankruptcy risk of enterprises in the use of debt and then proposes the level of using debt to minimize this risk.

4.3.6. Re-evaluate capital structure annually

4.3.7. Completing the policy of dividend payment for food enterprises

Table 4.4: Dividend payment rate for listed food enterprises

Unit: Milion VND

Năm	2013	2014	2015	2016	2017	2018	2019
DPS	4.776.252	2.474.665	14.495.901	10.668.733	8.194.915	7.945.535	8.753.716
NI	9.016.048	9.172.814	16.437.653	15.434.723	15.439.296	16.615.889	18.134.620
Divident payout ratio	52,98%	26,98%	88,19%	69,12%	53,08%	47,82%	48,27%

Source: Author's calculations from financial statements of listed food enterprises

In the coming time, listed food enterprises need to complete their dividend policy in the following direction:

- Continuing to maintain the policy of paying dividends under the model of stable dividend at a low level in order to increase capital from retained earnings for production and business activities to increase capital scale for businesses as well as autonomy in business activities.

- Enterprises need to periodically re-evaluate the business life cycle to have a correct and effective dividend payment strategy for each stage of enterprise development.

- Enterprises should combine the form of cash dividend payment and the form of stock dividend payment.

4.3.8. Some solutions to improve business efficiency in order to increase efficiency in using financial leverage

4.3.9. Improving efficiency of capital use for businesses

4.4. Solutions and conditional support

4.4.1. Supporting for agricultural development

4.4.2. Encouraging cyclic economic development to ensure sustainable development of food enterprises

4.4.3. Completing policies on food safety, against counterfeit and pirated goods

CONCLUSION

Capital structure, the main content of the sponsorship decision, is a strategic issue of the company. Choosing a suitable structure not only helps businesses ensure financial security but also increases the value of businesses as well as benefits for the equity.

The research chooses to study the capital structure of Vietnam listed food enterprises with the aim of clarifying the theoretical issues about the capital structure within a research industry as well as enriching the empirical studies on capital structure. The content of the thesis consists of four chapters. The main conclusions about the thesis include:

Firstly, the thesis has systematized and synthesized the research works on domestic and foreign capital structure. Since then, the author pointed out research gaps to explain the research necessity of the thesis.

Secondly, the thesis has synthesized and systematized the theories about enterprise structure. The author of the thesis suppose that the decision-making on capital structure needs to have a connection with other financial management decisions to help businesses achieve their strategic goals.

Thirdly, the thesis has selected and clarified the lessons learned from completing industrial structures in some businesses in Japan, Thailand and the United States. Through the analysis of capital structure, the thesis shows that (i) the selection of capital structure must be suitable with the remaining financial policies as well as the development orientation of enterprises in each period; (ii) the assessment of capital structure must consider it in a whole, especially factors such as the characteristics of the capital market, business philosophy, and competitive position.

Fourthly, the thesis has analyzed and clarified the current status of capital structure of Vietnam listed food enterprises in the period 2013-2019. On the basis of analysis of capital structure according to ownership relations, over time of use, and scope of mobilization, the thesis clarifies the current status of capital structure of listed food enterprises in Vietnam with the following outstanding features: (i) capital structure in favor of equity, the average debt ratio in this period is 0.434; (ii) listed food enterprises have a high ratio of short-term debts in total liabilities, accounting for more than 80% (iii) The proportion of long-term capital in the total capital is relatively high, the model of funding is safe, but the forms of funding for long-term capital sources are not diversified, mainly funding fromequity, so it has not been promoted impact to the ĐBTC

Fifthly, the thesis has clarified the factors affecting the industrial structure of listed food enterprises in Vietnam through quantitative model. The explanatory variables include firm size, asset structure, growth rate, profitability, liquidity, and state ownership. Enterprises with large scale and high profitability tend to use less debt; enterprises with a high proportion of assets tend to be financed by equity.

Sixthly, the thesis clarifies the impact of capital structure's operations, including the impact of capital structure on the average cost of capital, financial risks and profitability of equity. The thesis has analyzed and evaluated the use of ĐBTC in these enterprises and showed the difference between groups of enterprises in using ĐBTC.

Seventhly, the thesis quantifies the impact of the debt ratio on the profitability rates of listed food enterprises through testing the relationship between the debt ratio and the indicators reflecting the return of equity (ROE). . The results show that debt ratio has a positive relationship with ROE, especially long-term debt.

Eighthly, on the basis of analyzing and clarifying the current status of capital structure of listed food enterprises in Vietnam in the period 2013-2019, at the same time, based on the perspective of improving capital structure of listed food enterprises, the thesis has proposed a number of solutions. to improve capital structure for Vietnam listed food enterprises in the coming time.

Despite its great efforts in research, the thesis is not immune from its flaws and limitations. The thesis has not yet clarified a number of contents related to capital structure such as: the impact of capital structure on the cost of capital is not deep and has not mentioned the impact of capital structure on the cash flow of enterprises, not yet built is targeted capital structure for a specific enterprise ... The thesis author hopes to receive the comments of researchers to complete the thesis and have orientation for the next research.