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**FACTORS AFFECTING CAPITAL STRUCTURE OF FISHERY ENTERPRISES LISTED ON THE HO CHI MINH STOCK EXCHANGE**

**Tran Thi KieuTrang<sup>1</sup>, DinhThi Thu Huong<sup>2</sup>, Tran Kieu Nga<sup>3</sup> and Pham Thi PhiOanh<sup>4</sup>**

<sup>1</sup>Manager of the training center for out standards and human resource development at Tay Do University

<sup>2</sup>Can Tho City- Vietnam

<sup>3</sup>Dean of the faculty of Accounting – Finance and Banking at Tay Do University

<sup>4</sup>Tay Do University

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**ABSTRACT**

The results of this study attempt to identify factors affecting the capital structure of fishery enterprises listed on the Ho Chi Minh Stock Exchange (HOSE) has been established and the parameters are estimated based on table data of 11 seafood enterprises listed on HOSE in the period 2009 - 2018, give the following conclusion:

The results of FEM regression analysis show that the factors affecting the capital structure of fishery enterprises listed on HOSE in the period of 2009 - 2018 include profitability (beta = -0,456; beta = -0,506), firm size (beta = 0,033; beta = 0,043), billion The value of tangible fixed assets (beta = -0,307), taxes (beta = 0,097) and liquidity of enterprises (beta = -0,006) with high statistical significance. In particular, firm size is positively correlated with debt ratio and short-term debt ratio; profitability is negatively correlated with the ratio of debt and the ratio of short-term debt; The ratio of tangible fixed assets is negatively correlated with the ratio of short-term debt; Liquidity has a negative correlation with the debt ratio and corporate tax rates are positively correlated with the ratio of long-term debt.

**Keyword:** Capital structure, fishery enterprises, Ho Chi Minh Stock Exchange.

**1. INTRODUCTION**

Capital structure is a financial concept that reflects the ratio of debt to equity used by the business. Determining an optimal capital structure is important in the operation of the business. Because the optimal capital structure will help businesses minimize the weighted average cost of capital and thereby maximize the value of the assets of corporate shareholders. Besides, the capital structure also affects the profitability and business risks that enterprises themselves may encounter. Therefore, choosing a capital structure between loans and equity is an art in financial management.

The capital structure will change depending on the characteristics of the situation of each enterprise, the area in which it operates, as well as the effects of macroeconomic fluctuations of the economy, cultural factors, religion. Rather than finding the optimal ratio of debt to equity, finance researchers are often interested in finding out the factors that influence loan decisions. -

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In other words, use the financial leverage of the business. Due to the correlation between these influencing factors and the capital structure, we can assess whether the decision to use the loan or equity of the business is reasonable or unreasonable, with inadequacies. and what risks arise to propose solutions to improve the efficiency of using financial leverage, maximizing asset value for businesses.

Each industry has its own characteristics, specific capital structure. Therefore, it is necessary to study the factors affecting the capital structure of a particular industry. In particular, the fisheries sector is considered to be the industry that can create the largest source of foreign currency in the Vietnamese economy in general, the Mekong Delta in particular, has a strong impact on the economy as well as life. social life. However, the development of this market is still inadequate and difficult, especially the demand for capital. As an industry that requires a large amount of capital and is highly dependent on loans, while credit is increasingly tightened and lending interest rates are high, seafood joint-stock companies need to find devise a capital structure that maximizes profits and adds value to the business.

Moreover, there are not many studies concerned about the optimal capital structure of seafood enterprises. In the world, there have been many studies examining the effect of the ownership structure on the capital structure and the performance of enterprises, most of these empirical studies often focus mainly on managerial ownership. , centralized ownership, large shareholder ownership (Berger et al., 1997; Chaganti and Damanpour, 1991; La Porta et al., 1999; Morck et al., 2000; Chen et al., 2005; Lin et al. (2011). In the Vietnamese market, studies examining the influence of foreign ownership show inconsistent results (Le Thi Phuong Vy and PhungDuc Nam, 2013; PhanHuu Viet, 2013; Vo XuanVinh, 2014) ...

Originating from the above practice, the topic "Factors affecting capital structure of fishery enterprises on Ho Chi Minh Stock Exchange" is implemented with the purpose of finding out the factors. factors affecting the capital structure of fishery enterprises, assessing the level of influence, pointing out the inadequacies, and proposing suitable solutions.

## **2. LITERATURE REVIEW**

### **The scale of the enterprise**

Firm size (SIZE) is measured in logs of the total value of the firm's assets. The size of the enterprise is important because it is the first sign for outside investors to know the business, it has a relationship with the characteristics of business ownership and access to capital. Firm size is positively associated with debt because large firms are often at risk of bankruptcy and have low costs of bankruptcy. Besides, large firms have lower representation costs of loans, fewer information gaps than smaller firms, less volatile cash flow, easy access to credit markets, and high utilization of more debt to get more benefits from the tax shield. According to studies of Tran DinhKhoi Nguyen and Ramachandran (2006); Truong Dong Loc and Vo KieuTrang (2008); Dang ThiQuynhAnh and QuachThiHai Yen (2014) firm size has a positive relationship with capital structure. Meanwhile, a study by Le Thi Kim Thu (2012) shows that firm size negatively impacts a firm's capital structure. In this study, the authors expect that firm size is positively correlated with debt ratio, short-term debt ratio, and long-term debt ratio.

### **Tangible fixed assets**

The proportion of tangible fixed assets (TANG) is measured by the total value of tangible fixed

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assets over total assets. According to the theories of capital structure, tangible fixed assets are positively related to financial leverage, because creditors often require secured collateral for loans. Moreover, the liquidation value of an enterprise also increases when there are many tangible fixed assets and reduces the damage in case of bankruptcy (Jean.J.Chen, 2003). Meanwhile, studies of WanrapeeBanchuenvijit (2009), Doan Ngoc Phi Anh (2010) suggest that the capital structure and tangible fixed assets are positively correlated. In the study, the authors expect the proportion of tangible fixed assets to be positively correlated with the debt ratio, short-term debt ratio, and long-term debt ratio.

### **Profitability**

Profitability (ROA) is measured by profit after tax on average assets. According to the classification order theory, managers prefer to finance projects with internal capital and then external capital. In addition, profitable businesses do not like raising additional equity to avoid diluting ownership. This means that profitable businesses will have low borrowing rates. However, with the benefit of the tax shield, it is argued that more profitable businesses should borrow more, when the other factors are constant, so they will take advantage of the tax shield more. According to research by Huang and Song (2006); Tran DinhKhoi Nguyen and Ramachandran (2006); WanrapeeBanchuenvijit (2009), profitability has a negative relationship with capital structure. In the study, the authors expect profitability to be negatively correlated with debt ratio, short-term debt ratio, and long-term debt ratio.

### **Growth**

Businesses with prospects for future growth largely rely on equity financing. This can be explained by the theory of agent cost. Research by Truong Dong Loc and Vo KieuTrang (2008); Le Thi Kim Thu (2012) shows that the growth rate of enterprises has a positive relationship with capital structure. In the study, the authors expect the growth rate to be positively correlated with the debt ratio, short-term debt ratio, and long-term debt ratio.

The growth rate (GROW) is measured as follows:

$$\text{TTS Growth rate} = (\text{This year's revenue} - \text{Previous year's revenue}) / (\text{Previous year's revenue})$$

### **Liquidity**

Corporate liquidity (LIQ) is measured by the ratio of current assets to current liabilities. Enterprises with high liquidity and good cash flow, can use the funds generated from their operations to refinance, or use this source to settle old debts and reduce debts. On the other hand, firms with lots of liquid assets can use these assets for their investments without borrowing (PhanThanhHiep, 2016). In the study, the authors expect liquidity to be negatively correlated with debt ratio, short-term debt ratio, and long-term debt ratio.

### **Tax**

Corporate tax (TAX) is measured by the ratio of the cost of corporate taxes to pre-tax income and interest. Businesses with really high taxes will use more debt to take advantage of the tax shield. A number of empirical studies in Vietnam have shown that tax factors have a positive influence on capital structure such as Le Dat Chi (2013); Meanwhile, studies Dang ThiQuynhAnh and QuachThiHai Yen (2014) suggest that tax has a negative relationship with

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capital structure. In the study, the authors expect taxes to be negatively correlated with debt ratios, short-term debt ratios, and long-term debt ratios.

### **Capital Structure**

The dependent variable is the capital structure of the business, also known as financial leverage. Based on the research of Nguyen ThiBichThuy and Nguyen ThiHanhDuyen (2016), the authors used three criteria to measure the capital structure of the business, namely debt ratio (TLEV), short-term debt ratio (STLEV). ) and long-term debt ratio (LTLEV).

Debt ratio (TLEV) = Total liabilities / Total assets.

Short-term debt ratio (STLEV) = Short-term debt / Total assets.

Long-term debt ratio (LTLEV) = Long-term debt / Total assets.

Through theoretical foundations and previous studies, the authors synthesize factors affecting the capital structure of fishery enterprises, including factors such as firm size, fixed assets, tangibility, profitability, business growth, liquidity and tax.

Based on the theoretical foundations of capital structure of economists in the world and relevant domestic and foreign empirical studies published, the authors propose 03 models to study the factors. affecting capital structure of fishery enterprises listed on HOSE with 03 dependent variables representing capital structure including debt ratio, short-term debt ratio, long-term debt ratio and 06 independent variables , As follows:

Model 1: Factors affecting the debt ratio of businesses

$$TLEV = \beta_0 + \beta_1.SIZE + \beta_2.ROA + \beta_3.TANG + \beta_4.GROW + \beta_5.TAX + \beta_6.LIQ + u$$

Model 2: Factors affecting the ratio of short-term debt of the enterprise

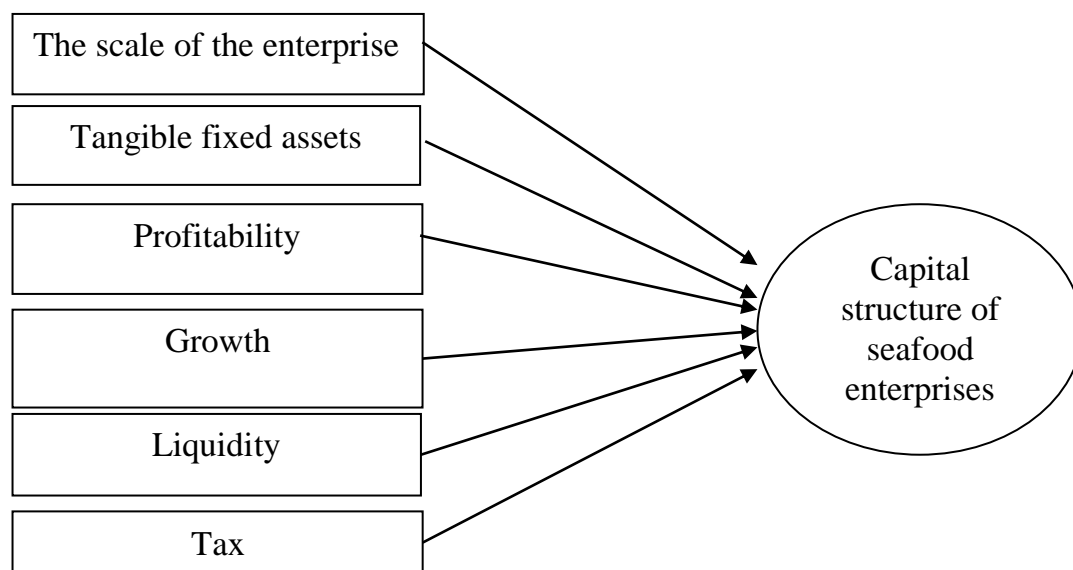
$$STLEV = \beta_0 + \beta_1.SIZE + \beta_2.ROA + \beta_3.TANG + \beta_4.GROW + \beta_5.TAX + \beta_6.LIQ + u$$

Model 3: Factors affecting long-term debt ratio of enterprises

$$LTLEV = \beta_0 + \beta_1.SIZE + \beta_2.ROA + \beta_3.TANG + \beta_4.GROW + \beta_5.TAX + \beta_6.LIQ + u$$

TLEV, STLEV, LTLEV are debt ratio, short-term debt ratio, and long-term debt ratio. These are 03 dependent variables that measure the capital structure of the business.

SIZE, ROA, TANG, GROW, TAX, LIQ are independent variables affecting the capital structure of seafood enterprises listed on HOSE.



**Figure 1.**Proposed research model

### **3. METHODS OF RESEARCH**

#### **General objective**

The main objective of the thesis is to analyze the factors affecting the capital structure of fishery enterprises listed on the Ho Chi Minh Stock Exchange, based on which recommendations are proposed to stabilize the capital structure of enterprises in the fishery group listed on the Ho Chi Minh Stock Exchange.

#### **Detail objectives**

- (1) Identify factors affecting the capital structure of fishery enterprises listed on the Ho Chi Minh Stock Exchange.
- (2) Assessing and measuring the influence of factors on the capital structure of fishery enterprises listed on the Ho Chi Minh Stock Exchange.
- (3) Propose recommendations to stabilize the capital structure of enterprises in the fishery group listed on the Ho Chi Minh Stock Exchange.

Survey subjects: Fisheries enterprises listed on HOSE were collected from 2009 to 2018.

#### **Research scope**

The study was conducted based on data of seafood enterprises listed on HOSE. Relevant information and data of seafood enterprises listed on HOSE were collected from 2009 to 2018.

#### **The method of data collection**

The data used in the project is mainly collected from audited annual financial statements in the period of 2009 - 2018 of 11 seafood enterprises listed on HOSE. These businesses are in the fields of aquaculture, processing and importing and exporting aquatic products. Relevant information and data are collected from the online portal of FPT Securities Joint Stock Company and on the website <http://vietstock.vn>.

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**Sample size**

The sample size was determined based on the research of Tabachnick and Fidell (2007) with  $n$  and  $m$  respectively the sample size and the number of independent variables, then we have the formula defined as follows:

$$n \geq 50 + 8m$$

Thus, with 6 independent variables, the sample size should be collected at least 98 observations. The author group collected 11 seafood enterprises listed on HOSE from 2009 to 2018 (110 observations) to ensure reliability.

**Methods of data analysis**

**For objective 1:** To identify factors affecting the capital structure and issues related to the capital structure of fishery enterprises, the authors used (1) qualitative research methods. through a review of previous theoretical and experimental foundations and (2) descriptive statistical methods including frequency distribution, mean, highest value, lowest value, standard deviation.

**For objective 2:** To measure the influence of factors on the capital structure of fishery enterprises listed on HOSE, the authors used the regression estimation method of table data.

The regression model has the following form:

(1) Factors affecting the debt ratio of the enterprise

$$TLEV = \beta_0 + \beta_1.SIZE + \beta_2.ROA + \beta_3.TANG + \beta_4.GROW + \beta_5.TAX + \beta_6.LIQ + u$$

(2) Factors affecting the ratio of short-term debt of the enterprise

$$STLEV = \beta_0 + \beta_1.SIZE + \beta_2.ROA + \beta_3.TANG + \beta_4.GROW + \beta_5.TAX + \beta_6.LIQ + u$$

(3) Factors affecting the long-term debt ratio of the enterprise

$$LTLEV = \beta_0 + \beta_1.SIZE + \beta_2.ROA + \beta_3.TANG + \beta_4.GROW + \beta_5.TAX + \beta_6.LIQ + u$$

Inside:

TLEV, STLEV, LTLEV are debt ratio, short-term debt ratio, and long-term debt ratio. These are 03 dependent variables that measure the capital structure of the business.

SIZE, ROA, TANG, GROW, TAX, LIQ are independent variables affecting the capital structure of seafood enterprises listed on HOSE.

Because the data used in this study is tabular data, to measure the factors affecting the capital structure of fishery enterprises listed on HOSE, the authors first used the estimated model. Pooled OLS as a baseline estimate (Greene, 2008). However, when estimating by Pooled OLS, many disadvantages are not suitable with the characteristics of panel data, because the OLS regression model considers businesses to be homogeneous, this is usually not counterintuitive. It reflects the fact that each business is a separate entity, has its own characteristics and differences between periods, and therefore the OLS regression model can lead to estimates that are deviating when these specific impacts cannot be controlled. Therefore, in addition to the Pooled OLS model, testing the influence of factors on capital structure is also verified by the fixed impact model (FEM) and random impact model (REM).

The fixed impact model (FEM) was developed from the Pooled OLS model when more control of different characteristics between businesses, and the correlation between model residuals and independent variables. . The random impact model (REM) was also developed from the Pooled OLS model when it was possible to control different characteristics of businesses, but there was no correlation between model residues and variables. independence. The basic difference between the FEM model and the REM model is reflected in the variation across firms. For the FEM model, the distinctive characteristics between businesses are assumed to be correlated with



the independent variables; Meanwhile, in REM model, these individual characteristics are assumed to be random and not correlated with independent variables.

After that, the authors continued to perform F tests, Breusch - Pagan Lagrangian tests and Hausman tests to choose the most suitable model. To choose between OLS and FEM, an F test is used. To choose between OLS and REM, the Breusch - Pagan Lagrangian test was used, and to choose between FEM and REM, the Hausman test was used.

+ Using F test to compare OLS and FEM models. This test allows verifying the existence of specific effects among businesses in the sample. Hypothesis H0 is expressed as follows:

H0: There is no specific effect on firms.

+ Using the Breusch - Pagan Lagrangian test to choose the OLS or REM model is appropriate, based on the assumption that H0 is no random difference between businesses. Hypothesis H0 is expressed as follows:

H0: There is no random difference between businesses

If the H0 hypothesis is rejected, we can conclude that there exists a random difference between enterprises and the REM model is more appropriate than OLS.

+ When both FEM and REM are better than the OLS model, the Hausman test is used to select the FEM or REM method that is suitable for sample data regression, based on the assumption that H0 is no correlation between variables. independence and composition of error UI (unique characteristics of each enterprise) because correlation is the cause that makes the difference between FEM and REM. Hypothesis H0 is expressed as follows:

H0: There is no correlation between the independent variable and the error component UI

If the H0 hypothesis is rejected, then the conclusion is that the FEM method is more suitable to use. In contrast, REM method is more suitable if the hypothesis H0 is accepted.

Also, the authors also use some more tests related to the problem of multicollinearity, variance of variance, and autocorrelation in regression of table data.

+ Testing the phenomenon of multi-collinearity

**For objective 3:** Based on the analysis achieved from goals 1 and 2, the authors propose recommendations to maintain the capital structure of seafood enterprises listed on HOSE.

#### 4. RESEARCH RESULTSE

##### **Valuation of the impact of factors affecting capital structure of fishery enterprises at listed on Hose**

##### **Statistics describe the variables**

Table 1 shows a detailed description of the criteria used in the study, which were collected from audited financial statements published by 11 seafood enterprises listed on HOSE in the period of 2009 - 2018. In general, most All indicators have relatively high standard deviation, showing the degree of unevenness among enterprises in the period 2009 - 2018.

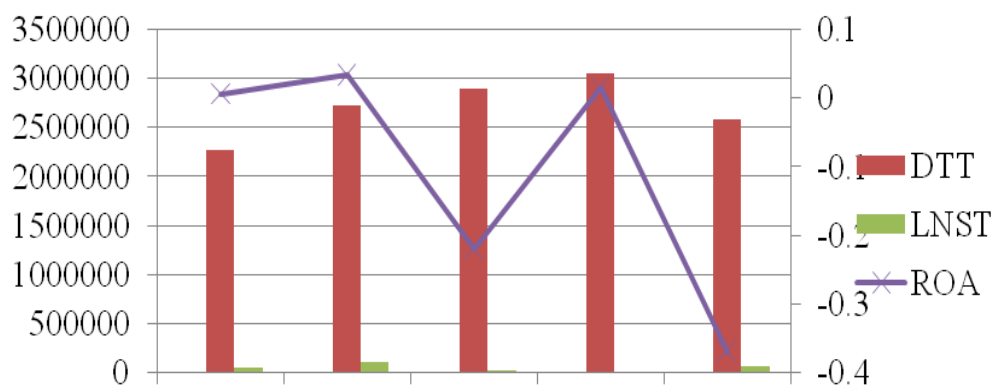
**Table 1 Descriptive statistics used indicators in the study**

Indicator	Num ber of obser vatio ns	Average value	Minimu m value	Maximu m value	Standar d deviatio n
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Indicator	Number of observations	Average value	Minimum value	Maximum value	Standard deviation
Return on total assets	110	0,047	-0,192	0,197	0,059
Revenue growth rate	110	0,119	-0,440	1,503	0,284
Current solvency	110	2,204	0,670	26,040	3,442
Tax expense on profit before tax and loan interest	110	0,109	-0,368	0,770	0,135
Proportion of tangible fixed assets in total assets	110	0,173	0,039	0,417	0,083
Firm size (total assets log)	110	12,767	11,456	15,562	1,074
Capital Structure					
Total debt to total assets	110	0,566	0,042	0,967	0,147
Short-term debt on total assets	110	0,531	0,030	0,949	0,218
Long-term liabilities over total assets	110	0,035	0,000	0,389	0,052

Source: Compiled from collected data

Although fishery enterprises retain their position as most businesses have increased net sales in recent years (Figure 1), the return on assets of listed seafood enterprises Listing on HOSE is quite low. Looking at Table 1, we see that the return on total assets (ROA) of the seafood enterprises in the sample has an average value of 4.7%, including some enterprises with negative profitability such as An Giang Seafood Import Export Joint Stock Company, Hung Vuong Seafood Joint Stock Company with a negative negative profit margin in 2017 and 2018, Seafood and Public Investment Joint Stock Company. seafood joint stock company no.4, Camimex Group joint stock company, ... The profitability is dropping sharply in recent years, partly creating negative sentiment for investors, maybe that is part of the reason number of fishery companies had to cancel listing due to losses in 3 consecutive years.





**Figure 2:** Net revenue (DTT), profit after tax (LNST) and average ROA of enterprises in the sample

Source: Compiled from collected data

Although the enterprises in the sample are in the fishery sector, the revenue growth of enterprises is not the same. There are businesses with negative revenue growth of 44%, but there are also businesses with revenue growth of up to 150.3%, average revenue growth of 11, 9%, which gives There is a big difference in the growth of businesses in the sample. Besides, the proportion of tangible fixed assets of fishery enterprises has an average value of 17.3%, while the smallest and largest values are 3.9% and 41.7, respectively. %. Liquidity expressed by current solvency index of seafood enterprises listed on HOSE has an average value of 2,204, the smallest value is 0.670 and the largest value is 26,040. The size of enterprises shown by the log of total assets is not much different. The average size of enterprises is 12,767, of which the largest value is 15,562 and the smallest is 11,456. In terms of capital structure, the seafood businesses listed on the HOSE generally have an average loan / equity ratio of 56:44. In the loan structure, short-term debt often accounts for a higher proportion than long-term debt. This proves the preference of enterprises when using short-term loans. However, the variability between individual values and mean values is quite large. There are businesses that almost do not use financial leverage, but some businesses have over 90%. This is understandable because each business has its own characteristics in business activities, so there will be a big difference in the capital structure of businesses.

Specifically, the ratio of short-term debt to total assets is an average of 53.1%, Mekong Fisheries Joint Stock Company is the company with the lowest ratio of short-term debt to total assets with the lowest average value. is 10.92%; while Camimex Group Joint Stock Company is the company with the highest average short-term debt ratio. The long-term debt ratio of seafood enterprises listed on HOSE has very low average value (3s, 5%).

**Table 2 Statistics of capital structure of enterprises in the sample**

Code	Enterprises				Number of observations	Total debt to total assets	Short-term debt on total assets	Long-term liabilities on total assets
AAM	Mekong Seafood Joint Stock Company				10	0,124	0,109	0,014
ABT	Ben Tre Seafood Import Export Joint Stock Company				10	0,307	0,303	0,003
ACL	Cuu Long Fisheries Joint Stock Company				10	0,673	0,637	0,035
AGF	An Giang Seafood Import Export Joint Stock Company				10	0,616	0,607	0,009
ANV	Nam Viet Joint Stock Company				10	0,457	0,420	0,035
CMX	Camimex Group Joint Stock				10	0,876	0,858	0,018

Code	Enterprises	Number of observations	Total debt to total assets	Short-term debt on total assets	Long-term liabilities on total assets
	Company				
FMC	Sao Ta Food Joint Stock Company	10	0,684	0,682	0,003
HVG	Hung Vuong Joint Stock Company	10	0,675	0,643	0,031
IDI	Multinational Investment and Development Joint Stock Company	10	0,645	0,562	0,080
TS4	Seafood Joint Stock Company No. 4	10	0,699	0,600	0,093
VHC	VinhHoan Joint Stock Company	10	0,477	0,416	0,062

Source: Compiled from collected data

**Testing multi-collinear phenomenon**

The correlation coefficient between variables is used to show the relationship between variables in the model. Besides, the correlation matrix analysis also allows us to detect possible multi-collinear phenomena in the model. If the correlation coefficient between the two explanatory variables is high, it indicates that the information of one explanatory variable is included in the information of another explanatory variable. Therefore, the estimated value will be affected and unreliable when multi-collinear phenomenon occurs in the model.

**Table 3 Correlation coefficient matrix between variables in the model**

	TLEV	STLEV	LTLEV	SIZE	ROA	TANG	GROW	TAX	LIQ
TLEV	1								
STLEV	0.9681	1							
LTLEV	0.0798	-0.1701	1						
SIZE	0.1477	0.1437	0.0118	1					
ROA	-0.4590	-0.4699	0.0635	-0.2793	1				
TANG	0.2811	0.1938	0.3081	0.1750	-0.0814	1			
GROW	0.1481	0.0628	0.3280	-0.1319	0.2286	0.1127	1		
TAX	-0.2271	-0.2434	0.0790	0.3521	0.0112	-0.0922	-0.1351	1	
LIQ	-0.6184	-0.5884	-0.0905	-0.1538	0.1036	-0.3579	-0.1954	0.1285	1

Source: Results of data analysis

To consider the correlation between the independent variables in the model, a correlation coefficient matrix is used before estimating the model. Examining the correlation between the independent variables in the model to look at the relationship between the independent variables and detect multi-collinear cases.

**Table 4 Coefficients of magnification and variance**

Variables	VIF
SIZE	1.34
ROA	1.23
TANG	1.22
GROW	1.19
TAX	1.16
LIQ	1.14
The average value of VIF	1.21

**Source: Results of data analysis**

The results show the correlation coefficients between the independent variables in the model ranged from -0.2793 to 0.3521, no pair greater than 0.8. Therefore, when using the regression model, it is less likely to encounter the phenomenon of multicollinearity between variables (multicollinearity). This was also retested by using the VIF (variance magnification factor) when running regression and the results did not show multicollinearity. Thus, independent variables can be included in the research model.

**Measuring the influence of factors on capital structure of fishery enterprises listed on HOSE**

Based on the data collected and calculated from audited financial statements of 11 seafood enterprises listed on HOSE, the authors conducted estimation of regression model with table data to verify the impact of the factors coming to the capital structure of fishery enterprises listed on HOSE in the period of 2009 - 2018.

For table data, (panel data), the OLS model has the disadvantage of not being able to control the characteristics of each enterprise. Therefore, from the data collected and processed, in addition to this model, the influence of factors on the capital structure of fishery enterprises is also estimated through a fixed impact model (FEM) and model of random effects (REM).

**a. Model 1: Factors affecting the debt ratio of fishery enterprises listed on HOSE**

To test the influence of factors on the debt ratio of fishery enterprises listed on HOSE in the period of 2009 - 2018, the authors use the dependent variable as the debt ratio calculated by the total debt to total properties (TLEV). The independent variables in model 1 include firm size (SIZE), rate of return on total assets (ROA), proportion of tangible fixed assets (TANG), revenue growth (GROW), tax (TAX) and liquidity (LIQ). Table 5 below in turn presents the regression estimation results using three methods of OLS, FEM and REM.

**Table 5 Estimated results by OLS, FEM, REM methods of Model 1**

Dependent variable TLEV	OLS	FEM	REM
SIZE	0,0015849 (0,11)	0,0330431 *** (4,18)	0,0307596 *** (3,26)
ROA	-1,552542 (- *** 6,18)	-0,4561872 *** (-2,83)	-0,6561014 *** (-3,48)

Dependent variable TLEV	OLS	FEM	REM
TANG	0,0835285 (0,46)	-0,2132248 * (-1,89)	-0,1345355 (-1,02)
GROW	0,0930376 * (1,80)	0,0258612 (0,95)	0,0437129 (1,34)
TAX	-0,2212315 * (-1,96)	0,0618334 (1,12)	0,0214528 (0,32)
LIQ	-0,0324402 *** (-7,31)	-0,0061394 ** (-2,08)	-0,0112751 *** (-3,29)
CONSTANT	0,6895195 *** (3,64)	0,2067366 * (1,97)	0,2452916 * (1,92)
Number of observations	110	110	110
StatisticsF	23,43 ***	8,57***	
StatisticsChi2			46,41 ***
R <sup>2</sup> (%)	57,72	35,61	51,57
Rho(%)		89,97	55,63

Note: Statistical values of t and z are shown in parentheses

\*\*\*, \*\*, \* correspond to the statistical significance levels of 1%, 5% and 10%

**Source: Results of data analysis**

**Verify model selection**

The results of the model selection tests are presented in Table 6. To compare OLS and FEM models which are the more appropriate models, the F test is used. The testing results show that the F-test value is statistically significant at 1%. Therefore, this level of significance allows us to reject the hypothesis H0: There is no existence of specific effects among firms. So FEM is better than the OLS model. Breusch - Pagan Lagrangian test is used to choose between OLS and REM model, Breusch - Pagan Lagrangian test value is statistically significant at 1%, so with this significance level, there is a basis to reject Hypothesis H0: there is no random difference between businesses. Therefore, there are differences between OLS and REM methods. In this case, REM was chosen as the more appropriate estimation model. Next, a Hausman test was performed to determine which model was more suitable between REM and FEM. The results show that the Hausman test value is statistically significant at 1%. Therefore, with this significant level, we have the basis to reject the hypothesis H0: There is no correlation between the independent variable and the error component ui. In this case, FEM was selected as the most suitable model.

**Table 6 Model test result of Model 1**

Inspection results	F value and Chi-square
F Testing value	F(10,93) = 40,68***
Breusch – Pagan Lagrangian Testing value	Chibar2(01) = 76,47***
Hausman Testing value	Chi2(6) = 37,45***

Note: \*\*\* corresponds to the statistical significance level of 1%

Source: Results of data analysis

Testing the autocorrelation phenomenon and the variance of errors

From the test results in Table 6, we see that with the hypothesis H0: The model has no autocorrelation phenomenon, the Serial correlation test results in the rejection of H0, so the model has self-correlation.

**Table 7 Test results of autocorrelation and variance of variation of Model 1**

Inspection results	F value and Chi-square
Serial correlation	F(1,10) = 10,029***
Variance of errors varies (Heteroscedasticity)	chi2 (11) = 25,87***

Note: \*\*\* corresponds to the statistical significance level of 1%

Source: Results of data analysis

Also with the hypothesis H0: The model does not have variance of variance, Heteroscedasticity test gives results rejecting H0, the model has variance change phenomenon. Therefore, the authors conducted a correction by adjusting the standard errors (Robust s.e). Table 8 below shows the regression estimation results by the adjusted OLS, FEM, REM methods.

The results of the FEM regression analysis adjusted in Table 8 show that, out of 06 factors included in model 1, there are 03 factors affecting the debt ratio of fishery enterprises listed on HOSE. statistically significant, that is the size of the business (SIZE) statistically significant at 5%; Profitability (ROA) is statistically significant at the 5% level and liquidity (LIQ) is statistically significant at the 10% level. In particular, the SIZE variable is positively correlated with the debt ratio; while ROA and LIQ variables have a negative correlation with debt ratio.

**Table 8 Estimated results using the revised Model 1 OLS, FEM, REM method**

Dependent variable TLEV	OLS	FEM	REM
SIZE	0,0015849 (0,11)	0,0330431 ** (3,05)	0,0307596 *** (2,84)
ROA	-1,552542 (- *** 7,41)	-0,4561872 (- ** 2,34)	-0,6561014 (- *** 3,43)
TANG	0,0835285 (0,63)	-0,2132248 (- 1,58)	-0,1345355 (- 0,90)
GROW	0,0930376 ** (2,12)	0,0258612 (0,80)	0,0437129 (1,59)
TAX	-0,2212315 (- * 1,83)	0,0618334 (1,20)	0,0214528 (0,34)
LIQ	-0,0324402 (- *** 3,96)	-0,0061394 (- * 1,84)	-0,0112751 (- *** 2,68)
CONSTANT	0,6895195 *** (3,57)	0,2067366 (1,43)	0,2452916 (1,23)

Dependent variable TLEV	OLS	FEM	REM
Number of observations	110	110	110
StatisticsF	32,56 ***	6,66***	
StatisticsChi2			74,45 ***
R <sup>2</sup> (%)	57,72	35,61	51,57
Rho(%)		89,98	55,63

Note: Statistical values of t and z are shown in parentheses  
 \*\*\*, \*\*, \* correspond to the statistical significance levels of 1%, 5% and 10%

Source: Results of data analysis

**b. Model 2: Factors affecting short-term debt ratio of fishery enterprises listed on HOSE**

To test the influence of factors on the short-term debt ratio of fishery enterprises listed on HOSE in the period of 2009-2018, the authors used the dependent variable as the ratio of short-term debt calculated by Short-term debt to total assets (STLEV). The independent variables in model 2 include firm size (SIZE), rate of return on total assets (ROA), proportion of tangible fixed assets (TANG), revenue growth (GROW), tax (TAX) and liquidity (LIQ). Table 9 below shows the regression estimation results based on three methods: OLS, FEM and REM.

**Table 9 Estimated results by the method of OLS, FEM, REM of Model 2**

Dependent variable STLEV	OLS	FEM	REM
SIZE	0,0045351 (0,29)	0,043273 *** (4,34)	0,038793 *** (3,44)
ROA	-1,5484150 (- *** 5.88)	-0,505666 ** (-2,48)	-0,747835 *** (-3,34)
TANG	-0,1440493 (-0,77)	-0,307096 ** (-2,15)	-0,240167 (-1,53)
GROW	0,0309666 (0,57)	-0,004973 (-0,14)	0,011923 (0,31)
TAX	-0,2874107 (- ** 2,43)	-0,041471 (-0,60)	-0,088380 (-1,11)
LIQ	-0,0335386 (- *** 7,21)	-0,008140 ** (-2,18)	-0,014266 *** (-3,52)
CONSTANT	0,6722578 *** (3,39)	0,078244 (0,59)	0,518798 (1,00)
Number of observations	110	110	110
StatisticsF	28,82 ***	8,00***	
Statistics Chi2			48,73 ***
R <sup>2</sup> (%)	54,81	34,03	54,53

Dependent variable STLEV	OLS	FEM	REM
Rho(%)		83,53	47,37

Note: Statistical values of t and z are shown in parentheses  
 \*\*\*, \*\*, \* correspond to the statistical significance levels of 1%, 5% and 10%

**Source: Results of data analysis**

**Verify model selection**

The results of model selection test are presented in Table 10. To compare OLS and FEM models which are the more appropriate models, F test is used. The testing results show that the F-test value is statistically significant at 1%. Therefore, this level of significance allows us to reject the hypothesis H0: There is no existence of specific effects among firms. So FEM is better than the OLS model. Breusch - Pagan Lagrangian test is used to choose between OLS and REM model, Breusch - Pagan Lagrangian test value is statistically significant at 1%, so with this significance level, there is a basis to reject Hypothesis H0: There is no random difference between businesses. Therefore, there are differences between OLS and REM methods. In this case, REM was chosen as the more appropriate estimation model. Next, a Hausman test was performed to determine which model was more suitable between REM and FEM. The results show that the Hausman test value is statistically significant at 1%. Therefore, with this significant level, we have the basis to reject the hypothesis H0: There is no correlation between the independent variable and the error component ui. In this case, FEM was selected as the most suitable model.

**Table 10 Results of model selection test of Model 2**

Inspection results	F value and Chi-square
F Testing value	F(10,93) = 24,99***
Breusch - Pagan Lagrangian test value	Chibar2(01) = 68,32***
Hausman test value	Chi2(6) = 30,41***

Note: \*\*\* corresponds to the statistical significance level of 1%

**Source: Results of data analysis**

**Testing the autocorrelation phenomenon and the variance of errors**

From the test results in Table 11, we see that with the hypothesis H0: The model does not have the autocorrelation phenomenon, the Serial correlation test results in the rejection of H0, so the model has self-correlation.

**Table 11. The results of the autocorrelation test and the variance of variation of Model 2**

Inspection results	F value and Chi-square
Serial correlation	F(1,10) = 6,344**
Variance of errors varies (Heteroscedasticity)	chi2 (11) = 104,30***



Note: \*\*\*, \*\* correspond to the statistical significance level of 1%, 5%

**Source: Results of data analysis**

Also with the hypothesis H0: The model does not have variance of variance, Heteroscedasticity test gives results rejecting H0, the model has variance change phenomenon. Therefore, the authors conducted a correction by adjusting the standard errors (Robust s.e). Table 12 below shows the regression estimation results by the adjusted OLS, FEM, REM methods.

The results of the FEM regression analysis adjusted in Table 12 show that, out of 06 factors included in model 2, there are 3 factors affecting the short-term debt ratio of listed seafood enterprises. on HOSE is statistically significant, that is the size of business (SIZE) statistically significant at 1%; Profitability (ROA) is statistically significant at 5% and the proportion of tangible fixed assets (TANG) is statistically significant at 10%. In particular, the SIZE variable is positively correlated with the ratio of short-term debt; while ROA and TANG variables are negatively correlated with the ratio of short-term debt.

**Table 12 Estimated results using the adjusted OLS, FEM, REM method of Model 2**

Dependent variable STLEV	OLS	FEM	REM
SIZE	0,004535 (0,31)	0,043273 *** (3,48)	0,038793 *** (2,86)
ROA	-1,548415 *** (-7,32)	-0,505666 ** (-2,55)	-0,747835 *** (-4,09)
TANG	-0,144049 (-0,88)	-0,307096 * (-1,94)	-0,240167 (-1,41)
GROW	0,030967 (0,61)	-0,004973 (-0,11)	0,011923 (0,28)
TAX	-0,287411 ** (-2,54)	-0,041471 (-0,92)	-0,088380 (-1,58)
LIQ	-0,033539 *** (-4,03)	-0,008140 (-1,71)	-0,014266 *** (-2,58)
CONSTANT	0,672258 (- *** 4,03)	0,078244 (0,48)	0,151880 (0,69)
Number of observations	110	110	110
Statistics F	31,72 ***	6,16***	
Statistics Chi2			83,67 ***
R <sup>2</sup> (%)	54,81	34,03	54,53
Rho(%)		83,53	47,37

Note: Statistical values of t and z are shown in parentheses

\*\*\*, \*\*, \* correspond to the statistical significance levels of 1%, 5% and 10%

**Source: Results of data analysis**

**c. Model 3: Factors affecting the long-term debt ratio of fishery enterprises listed on HOSE**

To test the influence of factors on the long-term debt ratio of fishery enterprises listed on HOSE in the period of 2009-2018, the authors used the dependent variable as the ratio of long-term debt calculated by Long-term debt to total assets (STLEV). The independent variables in model 3 include firm size (SIZE), rate of return on total assets (ROA), proportion of tangible fixed assets (TANG), revenue growth (GROW), tax (TAX) and liquidity (LIQ). Table 13 below shows the regression estimation results by OLS, FEM and REM, respectively.

**Table 13 Estimated results by the method of OLS, FEM, REM of Model 3**

Dependent variable LTLEV	OLS	FEM	REM
SIZE	-0,002481 (-0,50)	-0,009554 * (-1,83)	-0,003900 (- 0,79)
ROA	-0,005286 (-0,06)	0,041039 (0,39)	-0,002696 (-0,03)
TANG	0,196703 *** (3,31)	0,046318 (0,62)	0,176113 *** (2,85)
GROW	0,058555 *** (3,42)	0,027934 (1,55)	0,052688 *** (3,07)
TAX	0,062482 * (1,67)	0,096922 *** (2,67)	0,070556 * (1,92)
LIQ	0,000860 (0,59)	0,001706 (0,87)	0,000730 (0,47)
CONSTANT	0,017034 (0,27)	0,129193 (1,87)	0,038683 (0,61)
Number of observations	110	110	110
Statistics F	4,53 ***	2,36***	
Statistics Chi2			21,81 ***
R <sup>2</sup> (%)	20,89	13,21	61,52
Rho(%)		36,29	4,23

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Note: Statistical values of t and z are shown in parentheses  
\*\*\*, \*\*, \* correspond to the statistical significance levels of 1%, 5% and 10%

**Source: Results of data analysis**

**Verify model selection**

The results of model selection test are presented in Table 14. To compare OLS and FEM models which are the more appropriate models, F test is used. The testing results show that the F-test value is statistically significant at 1%. Therefore, this level of significance allows us to reject the hypothesis H0: There is no existence of specific effects among firms. So FEM is better than the OLS model. Breusch - Pagan Lagrangian test is used to choose between OLS and REM model, Breusch - Pagan Lagrangian test value is statistically significant at 1%, so with this significance level, there is a basis to reject Hypothesis H0: There is no random difference between businesses. Therefore, there are differences between OLS and REM methods. In this case, REM was chosen as the more appropriate estimation model. Next, a Hausman test was performed to determine which model was more suitable between REM and FEM. The results show that the Hausman test value is statistically significant at 1%. Therefore, with this significant level, we have the basis to reject the hypothesis H0: There is no correlation between the independent variable and the error component ui. In this case, FEM was selected as the most suitable model.

**Table 14 Results of model selection test of Model 3**

<b>Inspection results</b>	<b>F value and Chi-square</b>
F Testing value	F(10,93) = 3,23***
Breusch - Pagan Lagrangian test value	Chibar2(01) = 4,41**
Hausman test value	Chi2(6) = 18,16***

Note: \*\*\*, \*\* correspond to the statistical significance level of 1%, 5%

**Source: Results of data analysis**

Testing the autocorrelation phenomenon and the variance of errors

From the test results in Table 15, we see that with the hypothesis H0: The model does not have the autocorrelation phenomenon, the Serial correlation test gives the result of rejecting H0, so the model has self-correlation.

Also with the hypothesis H0: The model does not have variance of variance, Heteroscedasticity test gives results rejecting H0, the model has variance change phenomenon. Therefore, the authors conducted a correction by adjusting the standard errors (Robust s.e). Table 16 below, in turn, presents the results of the regression estimates using the three adjusted OLS, FEM, REM methods.

The results of the FEM regression analysis adjusted in Table 15 show that, out of 06 factors included in model 3, only 1 factor affects the long-term debt ratio of the listed seafood enterprises. Listed on HOSE is statistically significant, it is the tax of the enterprise (TAX) with a statistical significance of 5% and is positively correlated with the ratio of long-term debt.

**Table 15 Test results of autocorrelation and variance of variation of Model 3**

<b>Inspection results</b>	<b>F value and Chi-square</b>
Serial correlation	F(1,10) = 14,710***
Variance of errors varies (Heteroscedasticity)	chi2 (11) = 7887,58***

Note: \*\*\* corresponds to the statistical significance level of 1%

**Source: Results of data analysis**

**Table 16 Estimated results using the revised Model 3 OLS, FEM, REM method**

<b>Dependent variable LTLEV</b>	<b>OLS</b>	<b>FEM</b>	<b>REM</b>
SIZE	-0,002481 (- 0,65)	-0,009554 (- 0,98)	-0,003800 (- 0,75)
ROA	-0,005286 (- 0,11)	0,041039 (0,47)	-0,002700 (- 0,05)
TANG	0,196703 ** (2,32)	0,046318 (0,56)	0,176113 *** (4,17)
GROW	0,058555 ** (2,49)	0,027934 (1,34)	0,052688 * (1,87)
TAX	0,062482 ** (2,20)	0,096922 ** (2,51)	0,070556 * (1,80)
LIQ	0,000860 (1,43)	0,001706 (1,00)	0,000730 (1,16)
CONSTANT	0,01703 (0,33)	0,129193 (1,00)	0,038683 (0,54)
Number of	110	110	110

Dependent variable LTLEV	OLS	FEM	REM
observations			
Statistics F	5,39 ***	2,49*	
Statistics Chi2			29,15 ***
R <sup>2</sup> (%)	20,89	13,21	61,52
Rho(%)		36,29	4,23

Note: T and z statistical values are shown in parentheses

\*\*\*, \*\*, \* correspond to the statistical significance levels of 1%, 5% and 10%

**Source: Results of data analysis**

**Discuss the estimated results of the model**

The following section discusses in more detail the influence of factors on capital structure. In other words, will help us answer the six hypotheses set out in the previous section, and finally find answers to two questions of the research topic: (1) What are the factors affecting the research? capital structure of fishery enterprises listed on Ho Chi Minh Stock Exchange ?, and (2) What are the trends of these factors?

**Table 17 Research results of 3 models**

Dependent variable	TLEV	STLEV	LTLEV
SIZE	0,0330431 ** (3,05)	0,043273 *** (3,48)	-0,009554 (-0,98)
ROA	-0,4561872 ** (-2,34)	-0,505666 ** (-2,55)	0,041039 (0,47)
TANG	-0,2132248 (-1,58)	-0,307096 * (-1,94)	0,046318 (0,56)
GROW	0,0258612 (0,80)	-0,004973 (-0,11)	0,027934 (1,34)
TAX	0,0618334 (1,20)	-0,041471 (-0,92)	0,096922 ** (2,51)
LIQ	-0,0061394 * (-1,84)	-0,008140 (-1,71)	0,001706 (1,00)
CONSTANT	0,2067366 (1,43)	0,078244 (0,48)	0,129193 (1,00)
Number of observations	110	110	110
Statistics F	6,66***	6,16***	2,49*
Statistics Chi2			
R <sup>2</sup> (%)	35,61	34,03	13,21
Rho(%)	89,98	83,53	36,29

Note: T and z statistical values are shown in parentheses

\*\*\*, \*\*, \* correspond to the statistical significance levels of 1%, 5% and 10%

**Source: Results of data analysis**

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### **Profitability**

From the results of the regression analysis, we see that the rate of return is an important factor affecting the capital structure of the business and has statistical significance in models 1 and 2. This effect is inversely opposite. , that is, when businesses have a higher rate of return, they will tend to reduce debt usage, instead they will use the retained earnings to supplement the capital of the business. This is entirely consistent with the viewpoint of classification theory and coincides with the hypothesis set out in the previous sections. Therefore, the results of research on capital structure and profitability ratio are inversely related to the original hypothesis of the authors and also the results of the authors Tran DinhKhoi Nguyen and Ramachandran (2006); Wanrapee Banchuenvijit (2009).

### **The scale of the enterprise**

Firm size is a factor that affects the capital structure and is statistically significant in models 1 and 2. In the short term, firm size has a positive effect on the use of financial leverage. This supports the viewpoint of the theory of intermediary costs: Large-scale enterprises are economically advantageous, and the amount of information is also more transparent so that they can easily access loans than businesses. small. On the other hand, in the short term, businesses can not guarantee success because the results of the project must come in the long term. Therefore, in the short term, large-scale businesses will take advantage of their loans. When their long-term project is successful, they will shift to using retained earnings to invest in other projects. Thus the research results of the topic are completely non-contradictory. The research results are consistent with the original hypothesis of the authors and consistent with the research of Tran DinhKhoi Nguyen and Ramachandran (2006); Truong Dong Loc and Vo KieuTrang (2008); Dang ThiQuynhAnh and QuachThiHai Yen (2014) in the short term. In the structure of long-term capital, firm size has a negative coefficient of impact, meaning that firm size negatively affects the ratio of long-term debt. Larger businesses will prefer to use equity rather than long-term loans. This supports the theory of classification when large-scale businesses are synonymous with retained earnings and higher amounts of idle money. Therefore, they will make full use of this available capital. However, this relationship is not statistically significant.

### **The proportion of tangible fixed assets**

According to the equilibrium theory and initial cost theory and the initial hypothesis of the authors, the proportion of tangible fixed assets has an inversely related relationship with capital structure. Businesses with many fixed assets mean they are more likely to mortgage their loans, so the opportunity to access loans will be higher. And the analysis shows that the proportion of tangible fixed assets negatively affects the capital structure in the short term with a significance of 10%, while in the capital structure in general and long-term capital structure this impact is positive but not statistically significant. Enterprises with high tangible fixed asset structures tend to increase long-term debt while reducing short-term loans. This result is consistent with the study of WanrapeeBanchuenvijit (2009); Doan Ngoc Phi Anh (2010). However, this result is contrary to the study of Jean.J.Chen (2003).

### **Growth**

Based on the analysis of the three models, the revenue growth has no effect on capital structure,

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capital structure in the short term, and also in the long term statistically. However, the sign of the estimated coefficient is positive in model 1.3 and negative in model 2. This shows that revenue growth has a positive effect on the capital structure, long-term capital structure. . When businesses are forecasted to have high growth rates in the future, shareholders tend to want to take full advantage of the benefits of these opportunities and do not want to share benefits to others. This result is consistent with the study of Truong Dong Loc and Vo KieuTrang (2008); Le Thi Kim Thu (2012).

### **Corporate income tax**

The analysis results in model 3 show that corporate income tax is positively related to the structure of long-term capital at a statistical significance level of 5%, but no correlation between tax and tax structure is found. The general capital structure, statistically short-term capital structure. Several empirical studies around the world and in Vietnam have also shown a positive relationship between the non-debt tax shield and capital structure as researched by Bradley, Jarrell, and Kim (1984); Wald (1999), Le Dat Chi (2013).

### **Liquidity of the business**

Based on the results of the study in model 1, the liquidity and debt ratio are negatively correlated. This result is consistent with the initial expectations of the author and research group of PhanThanhHiep (2016). Enterprises with high liquidity and good cash flow can use the funds generated from their operations to refinance or use this source to settle old debts and reduce debts. On the other hand, businesses with lots of liquid assets can use these assets for their investments without borrowing.

## **5. CONCLUSIONS AND RECOMMENDATIONS**

### **CONCLUSIONS**

The study was conducted with the aim of finding out factors affecting the choice of using loans or equity of Vietnamese enterprises in the short and long term, assessing the direction of the impact through Each factor will then propose measures to improve the efficiency of using financial leverage for businesses. The theoretical basis of the thesis is based on equilibrium theories, classification order theory, intermediate cost theory, and Modigliani and Miller theory. The thesis uses descriptive statistical methods combined with the use of suitable econometric models.

The analysis of the data in the survey sample shows that the average loan/equity ratio of fishery enterprises listed on HOSE is 56%: 44%, in which the ratio of short-term debt Much higher than the long-term debt ratio. It also shows that the demand for loans of businesses is quite high, especially short-term capital. It can be explained in the fact that seafood enterprises need short-term loans mainly to buy input materials for production and business process.

The result of the regression analysis of table data by FEM method shows:

- (i) Profitability is negatively correlated (-) with the ratio of debt and the ratio of short-term debt statistically significant.
- (ii) Firm size is positively correlated (+) with the ratio of debt and short-term debt ratio statistically.
- (iii) The proportion of tangible fixed assets has a negative (-) correlation with the capital



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structure in the short term in terms of statistical significance.

(iv) Taxes of enterprises have a positive (+) positive correlation with the capital structure in the long term in terms of statistical significance.

(v) The liquidity of the enterprise is negatively correlated (-) with the debt ratio statistically significant.

### **RECOMMENDATIONS**

Based on the findings and conclusions, the following recommendations are suggested:

#### **1. Regarding the growth rate of enterprises**

It requires businesses to keep a stable growth rate. On the one hand, stable growth rates help businesses move towards the optimal structure to ensure business development and efficient growth, on the other hand, it also helps the process of reaching the optimal capital structure easier. In the current period, in addition to the strong enterprises, with a stable growth rate, some construction enterprises are still affected by the economic downturn in general and the enterprises themselves say Particularly, the growth is still low and contains many risks, this is a barrier in the capital restructuring process. Therefore, keeping a stable growth rate is one of the prerequisites for construction industry enterprises to achieve optimal capital structure successfully.

#### **2. Regarding profitability ratio on total assets**

Empirical research results also show the effect of profitability factor on the target capital structure of fishery enterprises in the period of 2009-2018. This factor has an opposite impact on the target capital structure of the business. Increased profitability will reduce the debt ratio of businesses down. Profitability creates financial flexibility for businesses, reduces endogenous financial obstacles, and helps businesses reduce their dependence on loans. When businesses have abundant endogenous capital and increase profits, they will have the necessary financial autonomy. To achieve these goals, businesses need to improve their business efficiency. The study suggests solutions groups for businesses on this issue as follows:

+ Development strategies are needed in different stages, in which specific financial plans need to be developed, closely following the development direction and characteristics of the enterprise during that period. Financial plans need to have the financial statements expected, along with the expected financial ratios calculated from these reports.

+ Second, business executives should step up management measures, strictly control lost costs, review production costs regularly.

+ Thirdly, enterprises need to formulate capital mobilization plans suitable to their investment needs and production and business activities to avoid wasting capital or failing to ensure capital.

+ Fourth, businesses should take measures to unfreeze the output market for their products to increase capital absorption.

#### **3. Regarding the enterprise's size of business**

Due to the negative correlation between a firm's size and structure, the authors believe that the expansion of the scale can help businesses find markets easily, have more investment opportunities as well as attract investment. more sponsor. Therefore, helping businesses can improve the efficiency of their business operations. Some measures to increase the size and reputation of businesses such as transparency of financial information help increase the confidence of investors; There are policies to attract investors such as increasing the rate of dividend payment to increase capital, expand production. From there, the size of the business

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will grow.

#### **4. Regarding the proportion of fixed assets**

We need to invest in the renovation of fixed assets. Invest in researching and innovating production technologies to minimize production time and at the same time improve the level of workers and employees to master new science and technology. Avoid buying old, outdated, and outdated equipment.

#### **5. Regarding the liquidity of enterprises**

Firms with high profitability and high liquidity will often have easier access to loans. Therefore, requiring businesses to increase solvency will help businesses build trust from partners and suppliers, especially focusing on the most effective monitoring of corporate revenues to ensure payments on time.

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