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Factors Affecting Capital Structure in Plastics Manufacturing Enterprises in Northern Vietnam

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Abstract

There are various perspectives on capital in economics. Some economists argue that capital encompasses all economic factors arranged to produce goods and services, including financial assets, as well as knowledge about the economic and technical aspects of the business. Through practical research conducted in the plastics manufacturing industry in Northern Vietnam, the author identifies the factors influencing the capital structure, including subjective and objective factors. Based on these findings, appropriate solutions are proposed to improve the capital structure within enterprises.

Keywords: The capital structure within the plastics manufacturing enterprise in Northern Vietnam

1. Introduction

Throughout the course of history, perspectives on capital have emerged, developed, and progressively improved. Representative among these perspectives are various understandings of capital held by economists from different schools of economic thought:

Some classical economists approach capital from a tangible standpoint, considering it as one of the inputs in the production process. This understanding is suitable for early stages of economic development when the economic management is rudimentary.

According to some financial experts, capital represents the total amount of money contributed by shareholders in a business, entitling them to a share of the company's profits. As a result, financial perspectives emphasize the financial aspect of capital, clarifying the fundamental sources of a company's capital and highlighting the benefits of investment, encouraging increased investment in expansion and production development.

In the book "Economics" by David Begg, Standley Fischer, and Rudige Darnbusch, capital is defined as a commodity used continuously in subsequent business production processes. There are two types of capital: physical capital and financial capital. Physical capital refers to reserves of other goods and services that have been produced. Financial capital includes cash, bank deposits, etc. Land is not considered capital.

Other economists argue that capital encompasses not only economic factors arranged for the production of goods and services, such as financial assets, but also includes the accumulated knowledge of the economic and technical aspects of the enterprise, the level of management and operation by executives, and the quality of the workforce within the business, as well as the reputation and advantages of the enterprise. Some perspectives consider capital as the value that generates surplus value.

According to the concept presented in the "Tai chinh doanh nghiep - Enterprise Finance" curriculum at the Academy of Finance, "*Business capital is expressed as the monetary representation of the entire value of assets mobilized and used for production and business activities, aiming to generate profits*."

Capital is used by enterprises to invest in their assets. Assets reflect the investment decisions of business managers.

These various perspectives on capital, approached from different research angles and in different historical contexts, collectively fulfill the accounting and management requirements for capital in today's market mechanisms. In general, capital can be defined as a part of national income in the form of physical and principal assets contributed by individuals and organizations for business purposes, aiming to maximize profit.

The general view is that capital is an indispensable condition for an enterprise to establish and conduct production and business activities. In every business, capital consists of two parts: equity and debt capital, each of which is composed of many different items. However, the choice of capital in different businesses is not the same, it depends on factors such as:

+ The state of the economy.

+ The industry or field of operation of the enterprise.

+ Size and organizational structure of the enterprise.

+ The level of science and technology and the level of management.

+ Development strategy and investment strategy of the enterprise.

+ Attitude of the business owner.

+ Tax policy, etc.

The capital structure of an enterprise is the ratio between liabilities and equity in the capital of the business. In other words, capital structure is the combination of the amount of permanent short-term debt, long-term debt, preferred equity, and common equity used to finance a firm's investment decisions.

Through capital structure, we can know the origin and method of forming capital to finance all activities that the business is applying.

The capital structure is not fixed, and can be changed when the enterprise makes the change between selling shares, stock options, dividend policy and retained earnings, issuing bonds and borrowing. In the above changes, the sale of shares, stock options, dividend policy and retained earnings will directly change equity, thereby changing the capital structure. Issuing bonds and borrowing will change the capital structure through changes in borrowed capital. The difference when using borrowed capital and equity in the source of capital lies in the advantages and disadvantages of each type. Therefore, it is necessary to determine the factors affecting the capital structure in the plastic manufacturing enterprises in Northern Vietnam.

2. Actual Situation of Factors Affecting Capital Structure in Plastic Manufacturing Enterprises in Northern Vietnam

2.1 Subjective Factors

2.1.1 Psychology of Financial Managers

This belongs to the psychology of financial managers. If the financial manager has a "liberal" mentality, likes to take risks, he will use a capital structure with a lot of debt. On the contrary, if financial managers have a "conservative" mentality, they do not like risky vouchers, so they often choose a financing plan that uses very little debt, even without debt, but they only use equity.

2.1.2 Leadership Qualifications

The issue of leadership qualifications is very important, because when the leaders are not qualified enough, they cannot understand the issues of financial leverage, the use of debt capital structure will not be selected. Because they do not see the role of financial leverage, they do not effectively use the debt of their business. For example, when debt is fully effective, they do not know it so that they can rely on financial leverage to make the income on common equity increase the largest. Or sometimes when financial leverage is showing its downside, more debt is unconsciously used, leading to negative consequences for the business (while the return on equity is much lower than the cost of borrowing, using more debt will naturally lower the return on equity). That's why the competence of leaders greatly affects the choice of a suitable capital structure for the business.

2.1.3 Business Development Strategy

Using a reasonable capital structure is a business development strategy. If a company has a strategy to expand its scale, it will require capital, so borrowing, using common or preferred stock is a necessity and is influenced by financial decisions from management. If a company is shifting from a less risky industry to a more risky one, then it will certainly need to adopt a new capital structure. At this point, the ratio between debt and equity in the capital structure will determine the risk and expected profit that the company plans to achieve in the future.

2.1.4 Business Reputation

For businesses, ensuring efficient operations is extremely important. If they want to use capital structure with a high debt ratio, the first thing they need to do is to find sources to borrow or issue preferred stock. For some businesses, this is not difficult, but for others, it can be very challenging. What is the reason for this? It can be explained from the perspective of the business' reputation in the market. If a company has a good reputation in the market, borrowing or issuing stock is not difficult or expensive. However, for companies that cannot establish trust with creditors and investors, raising capital will be very difficult and more costly. This affects the level of financial leverage that the business can use. A company with a good reputation can use financial leverage more easily. For example, if a company is experiencing financial difficulties but has a good reputation, it may be able to negotiate a delay in repayment of its debt, or even be able to raise more debt to overcome the current situation. This not only limits the downside of financial leverage but also prevents the company from going bankrupt. However, if a new business is operating at a loss and is facing difficulties, it may be difficult to raise more debt. At this point, the business can only rely on its own equity to overcome losses, invest, and maintain operations.

2.2 Objective Factors

2.2.1 Financial Market

When a company operates in a relatively developed financial market, raising capital will be more favorable, creating good conditions to help the company obtain a reasonable capital structure. For example, a company operating in an underdeveloped financial market will face difficulties in raising debt, common or preferred stock, causing financial managers to worry about having enough capital to operate normally and seeking investment opportunities for development. If the market is growing, companies should mobilize capital by raising debt capital. Borrowing partly drives the company's operations, generates profits, and ensures payment requirements for creditors. If the market is down, the likelihood of successful operations is low, then companies should rely mainly on equity capital to avoid increasing debt and to reduce fixed interest expenses and risk.

2.2.2 Interest Expense

This is a crucial factor that affects a company's capital utilization. When the cost of borrowing is low, companies will use more debt to finance its activities, and those companies will tend to use more debt than equity. Conversely, when the borrowing cost is high, the companies need to reduce its debt usage, thereby increasing the proportion of using equity capital and raising additional common stock capital. If different options have the same amount of debt but different borrowing costs, the less expensive option will naturally be chosen to bring higher pre-tax income and increase earnings per share.

2.2.3 State Laws and Policies

Companies are always affected by macroeconomic policies by the State. One specific example is the corporate income tax policy, the higher the corporate income tax, the more it encourages companies to use more debt. By doing that, the company will save a large portion of taxes. Encouraging companies to use more debt also means encouraging companies to use more financial leverage.

2.2.4 Business Sector

Each industry has different requirements for capital and its utilization. At the same time, it also carries different levels of safety or risk that companies must bear, so the capital structure chosen by companies will also vary.

2.2.5 Product Consumption and Business Performance

When a company sells more products, its revenue increases, indicating that its capital mobilization and utilization methods are effective. In other words, a reasonable capital structure is the basis for a company to operate better. In the case of poor business performance with stagnant goods and capital, while fixed expenses still have to be paid regularly, the pre-tax income will undoubtedly decrease. Therefore, the company needs to adjust its debt structure in the total capital source to reduce interest expenses, which are becoming a burden on the company's income.

2.2.6 Economic Conditions

This is a factor that affects the operations of all companies. When the economy is in a strong development phase, most companies have good business results, thus increasing the use of debt to continue to increase profits. Conversely, if the economy is in a recession, companies are stagnant in their operations, then it is not beneficial to continue using debt. Instead, equity capital will be a more preferred choice.

2.2.7 Other Factors

These are natural factors that affect the normal operations of companies, such as natural disasters, floods, pandemics, etc.

In the past two years, 2021 and 2022, the company's capital structure has experienced many changes. However, the results were not very positive, the earnings before tax and interest was too low, the company could not pay dividends to common shareholders. This has posed a lot of challenges for the company. The company has decided in the upcoming time to increase capital mobilization by 12 billion VND in order to rise the total capital and push business activities out of the recent long-term error. With this capital of 12 billion VND, the company can mobilize by bank loans and common equity as follows:

Table 1. New capital raising options (Unit : Million VND)

Targets	**Sponsorship plan**				
	Equity= 100%	**Debt/Equity= 25/75**	**Debt/Equity= 50/50**	**Debt/Equity= 75/25**	**Debt=100%**
EBIT	130	130	130	130	130
Loan interest (I)	0	0.3	0.6	0.9	1.2
Earnings before tax (EBT)	130	129.7	129.4	129.1	128.8
Income Tax (22%)	28.60	28.534	28,468	28,402	28,336
Profit after Tax	101.40	101,166	100,932	100,698	100.464
Preferred stock dividends	-	-	-	-	-
Profits for common shareholders	101.40	101,166	100,932	100,698	100.464
Number of common shares (shares)	620000	590000	560000	530000	50000
Profit on share capital (1000 VND/share)	0.16355	0.17147	1.18024	1.19000	0.20093

(Source: According to the author's research and calculation)

From the above table, we can see that there is a change in most of the indicators when changing the method of mobilization. If mobilized by loan, there will be interest expense. If raising capital with common shares, interest expenses will be reduced, but old shareholders are forced to share the profits and the control of the business with new shareholders. This is something that perhaps the former shareholders do not want. When we fix the level of profit after tax and interest that can be achieved, with the level of capital raising that provides the highest return on common equity, that option should be applied. In the above plans, we can see that, when the debt mobilization ratio increases, the loan interest payable increases in a proportional relationship (assuming a fixed loan interest rate of 10%), and at the same time the number of common shares decreases. Increasing debt capital did not increase profit after tax, but it clearly made the return on common equity of shareholders higher than raising equity. Debt ratio = 0%, profit on common equity is 0.16355 thousand VND/share. Debt ratio = 50%, return on equity is usually 0.18024 thousand VND/share. And debt ratio = 100%, return on equity is usually 0.20093 thousand VND/share. At this time, if the company decides to raise all new 12 billion VND with debt capital, the equity value will reach the highest level. The company should consider choosing this option.

Corresponding to the above capital mobilization plans, the company's capital structure will change. As follows:

Table 2. Change in capital structure under new capital raising plans (Unit : Million VND)

Increased capital structure	**Equity= 100%**	**Debt/Equity= 25/75**	**Debt/Equity= 50/50**	**Debt/Equity= 75/25**	**Debt capital =100%**
Total new debt capital	3.187	6.187	9.187	12,187	15.187
Total new equity	61.052	58.052	55,052	52,052	49,052
Total new capital	64.240	64.240	64.240	64.240	64.240
New debt ratio	4.96	9.63	14.30	18.97	23.64
Equity ratio/Total capital	95.04	90.37	85.70	81.03	76.36

(Source: According to the author's calculation)

At the end of 2022, the company's debt ratio is at 6.10%, and all of that is current liabilities. With two consecutive years of negative profit, if the company applies financial leverage with increasing liabilities during this period, it can increase financial risks, amplify losses, so business results may even fail, like in 2021. At the end of 2022, the company's debt ratio is at 6.10%, and all of that is current liabilities. With two consecutive years of negative profits, if the company applies financial leverage by using a lot of debt during this period, it will increase financial risks, amplify losses, and the business results will be even worse, like in 2021. In 2022, thanks to the reduction of debt, or in other word, the reduction of the proportion of payable in the total capital, the business results were improved. The company is determined to achieve the earnings before interest and taxes (EBIT) index of 130 million dong by raising an additional 12 billion dong in capital and cutting costs to improve business performance. Positive profit creates good conditions for the company to mobilize capital. The above financing options all change the total liabilities, shareholder’s equity, and capital structure. If the company raises the entire 12 billion VND through common stocks, the debt-to-capital ratio is 4.96% - 95.04%, which is lower than in 2022. However, if the company raises the entire 12 billion VND through liabilities, the debt-to-capital ratio is 23.64% - 76.36%. At other transportation companies, the debt-to-capital ratio is always above 50%, so a debt-to-capital ratio of only 23.64% is still low, indicating that the capital is not being used effectively. The company should adjust its capital structure with more liabilities taking advantage of tax-saving opportunities, and increase profits on common shares.

3. Solution to Complete Capital Raising in the Plastics Enterprise in Northern Vietnam

Based on the company's orientation in the coming time, combined with the current situation and the theory of capital structure, I would like to propose some solutions to contribute to improve the capital structure at Northern Plastic Company are as follows:

3.1 Regarding Capital Structure

The company should have a plan to change the new capital structure in accordance with the current operating situation and future development orientation, by keeping the amount of equity unchanged, increasing debt-to-capital ratio, paying attention to the balance between long-term and short-term liabilities, between total liabilities and shareholder’s equity. In the plan to mobilize 12 billion dong of capital in the near future, the company should mobilize 100% in the form of debt to achieve better capital use efficiency, on the basis of increasing the profit from common shares to shareholders to the highest level. To do this well, the company can cut costs, increase profits, create trust with investors and partners, and have a reasonable use of borrowed capital.

3.2 Regarding Payables

First of all, the company needs to review all account payable, classify them according to each group of payable objects such as: employee payables, payables to the State budget, and to the insurance organization, payable to suppliers, etc.

Afterward, arrange the debts according to the time of payment: overdue debts, and debts due for payment. It is necessary to closely monitor and regularly assess the ability to pay long-term and short-term debts, especially debts due for payment, to avoid having too much debt or multiple debts due for payment at the same time, calculate the time value of money, and make a reasonable debt repayment plan to reduce the interest rate and suit the company's business situation.

Next, finding sources to pay off debts could be achieved through the following solutions:

➢ Actively recover outstanding debts.

➢ Improve and enhance service quality to fulfill business contracts effectively.

➢ Strengthen communication and brand promotion to reach consumers.

➢ Exploit and expand existing markets while seeking new potential markets.

➢ Enhance the management system, rationalize human resources, and allocate suitable personnel based on qualifications and tasks to increase labor productivity.

➢ Strengthen regular management activities, analyze business operations of the company to evaluate effectiveness, strengths, weaknesses, and underlying causes, in order to implement measures to improve business efficiency. The company should utilize its longstanding reputation and efficient business operations to leverage advance payments from customers, such as payments from sellers or prepayments from buyers. These funds cannot be used to repay debts but should be utilized to meet capital requirements for business operations, expedite the business process, generate profits, and serve as an important financial source for debt repayment. It is essential to consider payment deadlines and interest rates (if applicable) in purchase and service contracts, actively negotiate to achieve the most effective payment capability and utilize funds efficiently.

➢ Calculate economic efficiency, assess the capital needs of the company, changes in interest rates, borrowing capital, as well as the tax-saving benefits of borrowed capital to utilize debt rationally. Only pay off debts when necessary, avoiding excessive dependence on debts.

The company also needs to closely monitor and regularly review indicators that evaluate the capital structure, adjusting the debt ratio and the debt-to-equity ratio, as well as the appropriate working capital based on the business situation and the company's payment capability, to avoid financial dependence.

3.3 Regarding Capital Sources

➢ Have a plan to mobilize appropriate capital sources in accordance with the upcoming business plan and the company's financial situation, ensuring a balanced capital structure. Calculate the economic efficiency of retaining profits.

➢ Research and explore capital sources, find new ways to mobilize capital that comply with legal regulations and the company's financial capacity.

➢ Take advantage of opportunities in the financial market to mobilize capital with the lowest cost and highest effectiveness.

➢ Carefully evaluate the economic efficiency of investment projects, avoid excessive and wasteful investments or borrowing beyond necessary requirements.

➢ Pay close attention to and keep up with the financial policies of the government, taking timely actions in response to market changes.

➢ Enhance business cooperation with domestic and international enterprises on a voluntary, equal basis, with mutual benefits and respect for independence in decision-making to form a strong alliance. This is a common trend to concentrate economic strength, pool capital, solve capital shortages, create opportunities to improve operational efficiency, increase profits, and thus increase the company's capital. However, the company needs to calculate and assess its customers and partners (regarding reputation, operational efficiency, risk level, etc.), not only considering short-term benefits but also long-term operational effectiveness.

In their production and business activities, the company's board of directors needs to pay attention to cost management in the company to constantly find ways to reduce costs in the upcoming time. Thereby, increasing profit and return on equity. Currently, the return on equity is lower than the interest expense, on the other hand, the company's pre-tax and interest earnings is currently higher than indifferent. However, the gap is not large. So the first thing is to increase debt to increase the ability to use financial resources that the company has not fully exploited.

➢ With the increase in labor productivity, the company's board of directors must constantly improve knowledge, as well as improve the qualifications of employees in the company in general and must innovate equipment to improve productivity rate. Thereby, improving the lives of employees, increasing revenue and also reducing costs for the company's activities. Due to the characteristics of the company as a transportation company, the amount of fixed assets is very large, so the annual depreciation is enormous, which will raise the cost. Thus, in the coming time, the company's board of directors needs to consider liquidating fixed assets with low efficiency, little use and low necessity. Simultaneously, the company's board of directors should also come up with a better capital structure. In addition, it is crucial to preserve and repair the assets in use to reduce costs. The board of directors must also pay attention to the reduction of the labor workforce, as well as the management apparatus of the company, to create a compact and efficient apparatus. Create a really serious and productive working environment. When the applied measures have been implemented and brought effective, the company's management should pay attention to further improving the efficiency of using financial leverage. For example, when earnings before interest and taxes go beyond the indifference point, more debt should be used to amplify earnings on equity.

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