

CAPITAL STRUCTURE AND INFLUENCING FACTORS: A STUDY ON MANUFACTURING COMPANIES IN INDONESIA

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Abstract

This study aims to analyze the influence of determinants of capital structure on company value. The determinants of capital structure in this study consist of asset structure, profitability, firm size and sales growth. The analysis method used in this study is multiple regression analysis. The research was conducted on manufacturing companies listed on the IDX for the period 2016-2021. The results showed that improving asset structure, profitability and firm size can significantly affect capital structure. Where the better the amount of asset structure, profitability and capital structure can optimize the company's capital structure. Meanwhile, sales growth cannot affect the capital structure. This means that high or low sales growth of the company cannot affect the amount of the company's capital structure.

Keywords: Asset Structure, Profitability, Firm Size, Sales Growth, Capital Structure, Manufacturing Company

INTRODUCTION

The company has a goal that is to maximize shareholder value. Maximizing shareholder value is the same as maximizing company value and to find out the value of the company can be seen from the company's stock price (Brigham & Houston, 2018)

Company value benefits various parties, including employees, consumers, communities, creditors, suppliers and investors. Company values indicate that managers manage company finances professionally. One of the main tasks of managers in funding decisions is to determine the company's capital structure. Managers can choose the type of debt to form the capital structure.

Capital structure is closely related to signalling theory proposed by Ross (1977). This theory states that managers convey signals to parties outside the company with the use of debt. This signal tries to convince the market that the company is performing well. The goal of management in this case is to increase the price of the company's shares, so that investors are interested in investing. An increase in debt is a transfer of investment risk from capital owners' funds to creditors (banks).

One of the responsibilities of management (manager) in the company is to make decisions for financing (financing decision) of the company. Capital structure can be affected by several factors such as asset structure, growth rate, profitability, taxes, operating leverage and market conditions (Brigham & Houston, 2018). Another opinion states that firm size, profitability, legal form, industry classification and asset structure are internal factors that affect the capital structure. While external factors include banks and financial institutions, suppliers, customers

and competitors of the company, government policies, regulations and financial regulations (Copeland et al., 2014).

Empirical studies on this capital structure have been widely conducted. Especially research on the determinants of capital structure which found that size, type and ownership level, earning, growth and taxes can affect the company's capital structure positively and significantly (Amidu, 2007; Boateng, 2004; Chiang et al., 2010; Eldomiaty, 2007). However, there are studies on these factors showing negative results. This means that increasing these factors can reduce the amount of company funding in the form of debt (Karadeniz et al., 2009).

Other studies state that the significant influence of variable size, age, tangible assets, profitability growth, non-debt tax shield, business risk and uniqueness on leverage. For manufacturing companies in India, these factors are the main determinants of a company's capital structure. Other findings in this study are that dividend payout ratio, liquidity, interest coverage ratio, cash flow adequacy ratio, inflation rate and GDP (gross domestic product) were found that empirically did not affect the company's capital structure (Chadha & Sharma, 2015; Sofat & Singh, 2017).

Debt to a company can encourage managers to try to fulfill their promises to pay interest on debt, so that the debt has a more effective control function than limiting its promise to pay future free cash flow in a way that cannot be resolved by dividend policy or by providing stock returns as expected.

This research was conducted on manufacturing companies listed on the Indonesian Stock Exchange (IDX). The company in question is a company that processes raw materials into finished goods. The choice of manufacturing companies is because there are still many main problems found in the manufacturing industry, especially in Indonesia.

The reasons for determining manufacturing companies listed on IDX as a population in this study are: First, internal problems faced by the manufacturing industry in general in 2012 related to regulation, capital, infrastructure and labor issues. The external problems faced by the manufacturing industry in Indonesia include the financial crisis in Europe and the United States which attacked the performance of manufacturing exports, while at the same time production performance was hampered by raw materials and auxiliary materials that were still relied on from imported materials (KEMENPERIN, 2012)

Second, the growth of industries in the manufacturing sector in the second quarter of 2017 was at 3.54%. This value is lower than the industrial growth of the manufacturing sector in the first quarter which was 4.24%. This has an adverse impact on national economic growth due to a surge in imported goods (especially products originating from China), thus making the manufacturing industry face severe challenges (Rustam, 2017). Meanwhile, several sub-sectors of the manufacturing industry show different trends, such as those in the food and beverage sub-sector. The growth in the number of goods production in the manufacturing industry in Indonesia in this sub-sector in 2017 increased a lot from year to year due to improvements in all sectors in manufacturing companies, especially companies included in the food and beverage sector (Gumelar, 2017).

The Long Term Debt to Equity Ratio (LTDER) is a proxy of the capital structure used in this study. This ratio is intended to determine the tendency of companies to finance company activities using debt capital (Sofat & Singh, 2017; Titman & Wessels, 1988). The Long-Debt to Equity Ratio of several companies studied in the manufacturing sector listed on IDX during the research period 2016 to 2021 is as follows:

Table 1: Overview of LTDER Manufacturing Companies listed on IDX for the Period 2016-2021

No	Long Term Debt to Equity Ratio	Number of Companies (Year)						Average	
		2016	2017	2018	2019	2020	2021		
1	0% - 20%	21	26	20	18	15	15	19	31%
2	21% - 40%	34	27	38	41	40	41	37	61%
3	41% - 60%	6	8	3	2	4	5	5	8%
Total		61	61	61	61	61	61	61	100%

Source: Data Processed, 2023

Based on table 1, it can be seen that 31% of manufacturing companies in Indonesia included in the research sample have LTDER levels between 0%- 20%. This means that on average 19 companies are able to optimize debt to finance their operations. It can also be seen, 61% or an average of 37 companies that use debt capital ranging from 20%-40% which implies that most manufacturing companies in Indonesia still use relatively large debt capital for their operational activities. While as many as 8% or an average of 5 manufacturing companies that use debt capital above 40% for their operational activities.

Table 1 proves that the average manufacturing company in Indonesia in financing its operational activities tends to use debt rather than using its own equity or capital. In terms of debt use, the smaller the LTDER ratio, the better the company's debt capital management in its operational activities.

LITERATURE REVIEW AND HYPOTHESES

1. Asset Structure and Capital Structure

The composition between tangible assets and total assets owned by the company is also called the asset structure. The structure of wealth in a company is a balance either in absolute or relative terms of current assets and fixed assets. The asset side is a reflection of investment decisions, so the proportion between the company's current assets and fixed assets is the company's wealth structure (Brigham & Houston, 2018; Copeland et al., 2014).

Companies that want debt can use tangible types of assets as collateral. Capital structure can be affected by asset structure, companies can obtain relatively large amounts of debt if the company has a large asset structure. Thus, based on this, it can be said that the use of debt in a company is positively influenced by the company's asset structure. The composition or value of the company's asset collateral is the source of funding funds derived from debt (Myers, 1984). This is supported by research results that show that asset structure can affect the

company's capital structure positively and significantly (Amidu, 2007; Chiang et al., 2010; Eldomiaty, 2007; Sofat & Singh, 2017). Based on this explanation, the first hypothesis proposed in this study is:

H1: Asset structure has a significant effect on capital structure

2. Profitability and Capital Structure

Retained earnings are a source of funding for companies that have little risk and cost. This causes companies to choose to meet fund needs by using internal funding (retained earnings) rather than external sources of funds such as stocks and bonds (Myers, 1984). If the company has a larger size, then the need for external funding will be smaller. The company will use its accumulated profits, according to the pecking order theory.

Companies that have a relatively large level of profit, have a greater opportunity to allocate more retained earnings, so that companies have the convenience to meet the needs of funds to be used in expanding. Companies that have increasingly large retained earnings, can meet their operational needs by using retained earnings funds, so this can reduce the use of funds from outside the company in the form of debt. This causes the company's capital structure to decline (Amidu, 2007; Chadha & Sharma, 2015; Eldomiaty, 2007; Sofat & Singh, 2017). Based on this, the second hypothesis is proposed as follows:

H2: Profitability has a significant effect on capital structure.

3. Firm Size and Capital Structure

The ease of access to obtain debt for large companies is one of them due to the existence of a number of assets of large value, so this gives greater trust from investors to large companies than small companies. Direct bankruptcy is determined to form a smaller part of the value of the company when the company is larger. Therefore, large companies only need to incur relatively low costs to obtain outside capital compared to small companies. This argument states the positive effect of firm size on the company's debt level (Titman & Wessels, 1988).

Larger companies have easy access to capital markets and quick access to capital, so larger companies may have the opportunity to attract more debt than smaller companies. Large companies tend to have market portfolios that lead to bankruptcy conditions (Boateng, 2004; Karadeniz et al., 2009; Rajan & Zingales, 1995; Sofat & Singh, 2017; Zani et al., 2014). Based on this, the third hypothesis in this study is:

H3: Firm size has a significant effect on capital structure.

4. Sales Growth and Capital Structure

Companies controlled by own capital (equity) have a tendency to make investments below optimal for the prosperity of shareholders. Companies that have a relatively high growth rate, in the future the selection of investments has greater flexibility. In addition, the company can also transfer prosperity from creditors to shareholders.

Companies that are able to get profits from sales that can be used to manage the overall

resources owned by the company are a characteristic of companies that experience growth. Companies can experience high growth, one way is done by reducing the amount of company debt. This is intended to provide assurance for the prosperity of shareholders. The potential growth or growth of a company can be measured by observing / looking at the relative development of sales or assets from the previous year to the following year (Chadha & Sharma, 2015; Chiang et al., 2010; Karadeniz et al., 2009; Najjar & Petrov, 2011; Raza et al., 2013). The submission of the fourth hypothesis based on the previous discussion is:

H4: Growth sales has a significant effect on capital structure.

CONCEPTUAL FRAMEWORK

Based on empirical studies and theoretical explanations that have been described earlier, this study proposed a conceptual framework such as the following picture:

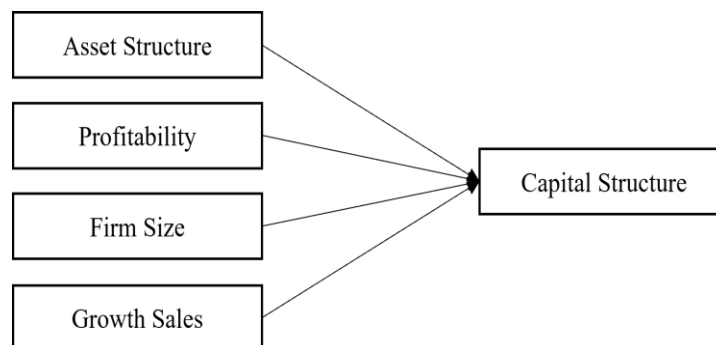


Figure 1: Research Concept Framework

Companies for their operational activities have personnel called financial managers. In running a company, financial managers have three important responsibilities that must be considered in terms of policy making consisting of financial policies, investment and dividends.

This financial policy is very important for managers in making decisions, especially in terms of funding company operations or better known as the company's capital structure. This requires managers to consider the source of company funds, whether to use own capital or use debt capital or maybe a combination of own capital and debt capital in the correct proportion, so that it will have a good impact on the running of the company.

Every company that seeks to maximize the value of its company will set a target (optimal) capital structure and add new capital without disturbing the structural balance (Brigham & Houston, 2018). An optimal capital structure should reduce the cost of capital, thereby increasing economic returns and company value.

METHOD

This research is classified as a type of explanatory research. Explanatory research is a type of research that provides an explanation of the causality of the relationship of several variables by means of hypothesis testing. In addition, in this explanatory research there is a complete

explanation of the descriptive description of each variable studied, especially if the study uses secondary types of data in its presentation.

This study examines and analyzes variables that affect capital structure such as asset structure, profitability, company size and sales growth. Manufacturing companies listed on the Indonesia Stock Exchange are the population and sample used in this study. This study provides an explanation of causal relationships between variables that have been determined through hypothesis testing that has been formulated previously so this research is included in explanatory research (Hair et al., 2014). This research is a number of manufacturing companies that went public and listed on the Indonesia Stock Exchange (IDX) for the research period 2016-2021 which amounted to 193 companies. The population in this study used several criteria according to the type of data needed, including:

1. The company is listed on the IDX continuously during the observation period, namely 2016 to 2021 (6 years).
2. The company made a profit during the study period.

Based on these criteria, the number of companies worth studying is 61 companies, so researchers use the entire population as a research sample. The data analysis method used in this study is multiple regression analysis.

RESULT

1. Descriptive Statistics

Descriptive statistics on the results of this study were carried out on each research variable consisting of descriptive statistics of asset structure variables as variable X1, profitability as variable X2, firm size as variable X3, sales growth as variable X4, capital structure as variable Y. The descriptive statistics of each of these variables as a whole are as contained in table 1 below:

Table 2: Descriptive Statistics of Research Variables

Variable	Number of Observations	Minimum Value	Maximum Value	Mean Value	Standard Deviation
Asset Structure (X1)	366	20.29	76.22	45.64	14.16
Profitability (X2)	366	2.65	57.46	16.63	10.24
Firm Size (X3)	366	6.20	9.00	7.78	0.54
Sales Growth (X4)	366	-14.42	54.45	11.56	11.10
Capital Structure (M)	366	10.15	59.38	26.40	9.97

Source: Data Processed (2023)

In table 2, it can be seen that there are as many as 5 research variables used with a total of 366 observational data and have almost the same data variations.

2. Data Analysis

A regression analysis is carried out to determine the effect of the independent variable consisting of asset structure as variable X1, profitability as variable X2, firm size as variable X3 and sales growth as variable X4 on the dependent variable capital structure as variable Y. The test results are as follows:

Table 3: Regression Analysis Results

Variable	Coefficient	t _{value}	Sig.
(Constant)	9.171	1.362	.174
Asset Structure (X1)	.214	6.238	.000
Profitability (X2)	.288	6.329	.000
Firm Size (X3)	2.589	2.897	.004
Sales Growth (X4)	.072	1.719	.086
a. Dependent Variable: Capital Structure (Y)			
R Square	.225		
F-Statistic	26.189		
Sig F Change	.000		

Source: Data Processed (2023)

The regression equation based on the table 3 is as follows:

$$Y = 9.171 + 0.214 X1 + 0.288 X2 + 2.588 X3 + 0.072 X4$$

Based on these equations, it can be explained that:

1. The effect caused by the asset structure variable on the capital structure variable obtained a path coefficient of 0.214. The significance level for this influence is 0.000 where the p-value < 0.05 which means there is a positive and significant influence. This result means that, if the asset structure variable increases, then the capital structure variable will increase.
2. The effect caused by the profitability variable on the capital structure variable obtained a path coefficient of 0.288. The significance level for this influence is 0.000, where the p-value < 0.05. This means that the capital structure is positively and significantly affected by profitability. The meaning of this influence is that the value of higher profitability can increase the value of the capital structure.
3. The effect caused by the company size variable on the capital structure variable obtained a path coefficient of 2.589. The significance of this influence is 0.004, where the p-value < 0.05. This means that his influence has a positive and significant direction. The meaning of this result is that if the value of the company is high, then it can improve the company's capital structure.
4. The effect caused by the sales growth variable on the capital structure variable obtained a path coefficient of 0.072. The significance of the influence is 0.086, where the p-value > 0.05. This means that the capital structure is not affected by sales growth. The meaning

of this result means that the increase or decrease in the value of the capital structure is not influenced by the high or low value of sales growth.

5. The simultaneous influence caused by asset structure variables, profitability variables, company size variables and sales growth variables on capital structure variables has an R Square value of 0.225. This value means that there is simultaneously a significant influence. The meaning of this value is that the company's capital structure variables can simultaneously be influenced by asset structure variables, profitability, company size and sales growth of 0.225 or 22.5%, while 77.5% are influenced by other variables outside the model.

DISCUSSION

1. The Effect of Asset Structure on the Company's Capital Structure

This study shows that an increase in asset structure variables causes an increase in company capital structure variables. A sufficient amount of assets in a company can be used as collateral to obtain collateral to obtain debt (Brigham & Houston, 2018). That is, if in a company the number of assets it has is increasing, then the possibility of the amount of debt that will be owned by the company is also greater.

The asset side is a reflection of investment decisions, so the proportion between the company's current assets and fixed assets is the company's wealth structure (Copeland et al., 2014). The structure of assets can affect the source of funding of the company. The larger the asset structure which is a reflection of the large amount of fixed assets of the company. Companies that have a large amount of fixed assets, especially if the products produced by the company are products that are needed by consumers, then it causes the company to need funding with long-term debt sources.

The source of the company's expenditure in the form of debt is influenced by the structure of assets. This is because the company can make the asset structure which is a tangible asset as collateral, if the company wants debt (Myers dan Majluf, 1984).

Companies that want debt can use tangible types of assets as collateral. Capital structure can be affected by asset structure, companies can obtain relatively large amounts of debt if the company has a large asset structure. So, based on this, it can be said that the use of debt in a company is determined by the size of the company's asset structure. The composition or value of the company's asset collateral is the source of funding funds derived from debt (Myers dan Majluf, 1984).

This research shows that the more levels of the company's asset structure, the more the number of assets that can be used as collateral in obtaining debt, so that the company's capital structure will be larger (Akinyomi & Olagunju, 2013; Chiang et al., 2010). However, several different research findings suggest that changes in a company's capital structure can be caused by changes in asset structure. This means that the company's capital structure will be smaller if the company has a larger asset structure. This is because the use of equity is more dominant

than debt capital as a source of funding (Amidu, 2007; Sofat & Singh, 2017).

Other research shows that changes in asset structure cannot increase or decrease a company's capital structure. That is, the amount of company capital derived from debt is not influenced by the size of the company's asset structure capital ownership. The company in this case does not rely on the amount of company assets to obtain debt capital, on the other hand the company can also use its own capital or company profits in funding its operational activation (Eldomiaty, 2007).

Tangible fixed assets are one of the things that are considered and important for a company where this can create a favorable and better condition for obtaining debt. This is because the creditor is easy to determine the value of tangible assets compared to the type of intangible assets (Jensen dan Meckling, 1976).

2. The Effect of Profitability on the Capital Structure

In theory, the use of internal funding sources will be carried out by the company, if the company has a sufficient amount of profit. Pecking order theory states that managers will not be interested in issuing shares (Myers & Majluf, 1984). For managers, issuing shares is a last resort for the company in order to increase capital. Internal funding takes precedence. If then the required funds are not achieved using internal sources of funds, then the company will issue bonds first, and then issue shares.

The results showed an increase in profitability accompanied by an increase in the company's capital structure. This result contradicts the pecking order theory. In this study, companies tend to use outside funding sources in the form of debt, with the aim of saving taxes. With debt, the amount of corporate tax payments will decrease. So even if the company earns a relatively high amount of profit, the company still uses funding sources in the form of debt. This is in accordance with the tradeoff theory (Myers, 2001)

Trade-off theory states that management often assumes that decision making to fund companies using debt and equity is a form of balancing tax protection on debt interest with the cost of financial problems. In the trade-off theory, it is implied that in order to obtain tax protection due to relatively large interest payments, companies should increase their debt. The increase in the amount of debt in question is to arrive at the optimal amount with a certain limit, so that the ratio of debt will be higher (Myers, 2001). This is in accordance with several studies that state that increased profitability leads to an increase in the company's capital structure (Amran & Ahmad, 2009; Chadha & Sharma, 2015).

In capital structure theory, it is explained that changes in funding decisions can affect the value of the company and the market price of the securities in the company, so this decision will have implications for the amount of company profit to be obtained. Company funding sourced from debt will incur interest costs. This interest cost, can reduce the company's profit, on the other hand the payment of this interest cost can cause a reduction in tax payments that must be made by the company, so that with an increase in the capital structure (amount of debt) the company will be able to improve the welfare of the owners of share capital which is reflected in the

income of shareholders (Modigliani & Miller, 1963).

However, the opposite condition can occur, where the company's capital structure will decline along with the increase in company profitability. This means that in its operational activities the company relies more on profit (Amidu, 2007; Eldomiaty, 2007; Sofat & Singh, 2017). The use of debt capital is considered to reduce the company's profits, so the use of sources of funds derived from profits is a policy that will be pursued by the company in accordance with the pecking order theory.

3. The Effect of Firm Size on the Capital Structure

This research shows that the size of the company determines the size of the capital structure of a company. An increase in company size in this study can lead to an increase in the company's capital structure. Conversely, if the size of the company is small, then the capital structure will also be smaller.

When compared to small companies, large companies have more access to individuals or groups that can help improve company performance (Johnson, 1995). This access also provides more diverse financing opportunities. In addition, large companies are treated and managed differently compared to small companies. On the other hand, smaller companies have a lower probability of survival and tend to have difficulty accessing capital markets (Dhawan, 2001)

The large size of the company will make it easier for companies to gain access to the capital market. This causes the ease and speed of obtaining funds for the company, so that the larger the size of a company, the opportunity to get debt is expected to be greater than companies with a small size. This is because small companies tend to have a market portfolio that leads to bankruptcy.

The ease of large companies in obtaining debt is caused by the large value of assets that can be used as collateral, so that companies will be more trusted by capital owners compared to small companies. Direct bankruptcy is determined to form a smaller part of the value of the company when the company is larger (Titman & Wessels, 1988). Therefore, the lower cost of acquiring debt will be more likely to be obtained by large companies compared to small companies. This argument states a positive effect of firm size on the amount of corporate debt.

As smaller symmetry of information occurs in large firms compared to small firms. This is because large companies have many assets that can be guaranteed to obtain debt (Boateng, 2004; Chen et al., 2014; Rajan & Zingales, 1995; Siagian et al., 2013; Zani et al., 2014).

4. The Effect of Sales Growth on the Capital Structure

This research shows that a company's capital structure is not affected by sales growth. This means that changes in the amount of growth that occur in the company's sales cannot contribute to an increase or decrease in the company's capital structure. Companies with a high growth rate reflect that the company has internal strengths in the form of earnings and retained earnings, so ideally a high growth rate in a company will make the company's leverage level low. This means that with a high sales growth rate, it shows that the company has sufficient internal funds so that the company does not need funding from outside the company. High

growth ultimately makes the company's capital structure decline. This is in line with the pecking order theory (Myers & Majluf, 1984) High growth in a company requires relatively high amounts of funding, so high growth has a very meaningful relationship with capital structure. This causes companies with a high amount of sales growth, tend to need capital in the form of debt from outside the company for their operational activities (Chadha & Sharma, 2015; Karadeniz et al., 2009; Najjar & Petrov, 2011; Raza et al., 2013) (Chadha dan Sharma, 2015).

CONCLUSION

Capital structure can be affected by asset structure, companies can obtain relatively large amounts of debt if the company has a large asset structure. In capital structure theory, it is explained that changes in funding decisions can affect the value of the company and the market price of the securities in the company, so this decision will have implications for the amount of company profit to be obtained. The ease of large companies in obtaining debt is caused by the large value of assets that can be used as collateral, so that companies will be more trusted by capital owners compared to small companies. In addition, it is necessary to pay attention to the growth of the company. High growth in a company requires relatively high amounts of funding, so high growth has a very meaningful relationship with the capital structure.

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