



The Determinants of Capital Structure : The Used of Total Debt, Short Debt, Long Debt, and Bank Debt

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ABSTRACT

The capital structure is an integral part of every company's operating activities. The goal of this study is to figure out the elements that influence the capital structure of the company. In this study, the populace used all the firms listed on IDX. The study sample includes all firms listed in IDX from 2010 to 2019 a total of 700 companies. Analysis techniques used multiple regressions with the Ordinary Least Square (OLS) method. The test results showed that profitability had a considerable negative influence on the capital receipts projected with total debt and short debt. Non debt tax shield has a considerable beneficial impact on total debt. Tangibility has a strong negative impact on total and short debt, but a big favorable impact on long debt and bank debt. The dividend payout ratio has a substantial negative influence on capital structure.

Keywords: Capital Structure, Profitability, Non-Debt Tax Shield, Tangibility, Dividend Payout.

1. INTRODUCTION

Today's business world competition is getting tougher, requiring companies to be able to compete with other companies. Advances in increasingly sophisticated technology are factors that influence business development. Companies must be able to adjust business developments so that they can maintain their existence. Challenges and obstacles must be carried out by the company in order to survive and develop at the same time. In order to compete and fulfill their goals, companies must have a competitive edge that benefits them. The primary goal of the corporation is to enhance shareholder wealth. This is accomplished if the firm makes the most profit possible. Maximum profit or profit can be achieved one of them by managing the capital structure or good funding policies and vice versa.

The firm need a funding policy to support its operating activities as well as to grow its business. Company finance can come from both internal and external sources. The funding choice is an essential part of financial management since it will impact the company's operations and risks. The consequence that arises is that companies must minimize the cost of capital arising from these funding sources. Therefore, companies

must be careful in determining the organization's capital structure.

Organization capital structure is a mix of debt and equity that is utilized to support its operations. Capital structure becomes the most critical managerial decision since it influences shareholder risk and return [2]. The cost of capital will fall if this structure is well-organized, increasing the company's value [1]. According to Enekwe & Nnagbogu [3], leverage is the management of money strategy that is utilized to gather funds. Companies that satisfy financial demands through debt will give benefits and drawbacks that will influence the usage of debt. As a result, leverage may have a variety of repercussions on a business. If a company's revenue exceeds its fixed expenses, excessive leverage is virtually always profitable. If profits are less than fixed expenses, leverage will result in losses for the firm and lead the company's financial performance to worsen, causing the company to fall into an unhealthy state until bankruptcy happens.

To examine capital structure, we use four debt ratio indicators: total debt to assets [4], long debt to assets [5], short debt to assets [6], and bank debt to assets. The leverage ratio describes a company with a higher ratio, the higher the risk because it has a larger proportion of debt. Balance is required in developing the capital

structure by considering the aspects that influence the capital structure. Several elements, including profitability, tax savings, tangibility, and dividends, are employed in this study to determine the influence on the business's financing strategy.

The profitability ratio is the organization's ability to generate profits [7]. Profits or profits earned by the company can be allocated to retained earnings or for business development. Company profitability can be measured through the ratio of Return on Assets (ROA), which assesses the level of profit on the assets utilized to create the profit [7]. Research by Salawu & Agboola [8] and Dakua [9] discovered a link between profitability and capital structure. Meanwhile, research by Cortez & Susanto [10] and Lim [11] discovered a negative link between profit and capital structure.

Non-debt tax shield (NDTS) is a large non-cash cost that causes tax savings and is used as capital to reduce debt [4]. NDTS is calculated by comparing depreciation to total assets. The major reason a firm borrows is to benefit from the interest tax shield. As stated by trade-off theory, there is an adverse interaction between NDTS and capital structure, with enterprises with high NDTS booking less debt in their capital structure. Cortez & Susanto [10] and Lim [11] found an opposite relation between NDTS and capital structure.

Tangibility is a tangible asset of a company which is one of the influences in financing decisions. Comparing the total fixed assets to the total assets owned by the firm demonstrates tangibility. According to Alzomaia [12] business with a large tangibility of assets rely more on debt financing since the tangibility of assets may be used as collateral for loans. Research by Salawu & Agboola [8], Abu Mouamer [13], and Cortez & Susanto [10] discovered a link between tangibility and capital structure. Meanwhile, research by Maryanti [14] and Dakua [9] discovered that tangibility has not much impact on capital structure.

Dividends are the portion of net income that is distributed to common stockholders. The dividend payout ratio (DPR) proxy can be used to compute dividends. The DPR ratio is calculated by comparing the dividend per share to earnings per share. The more often the company pays dividends, it shows that the company has high profits, so managers can maximize capital from within the company and minimize the use of external debt. Research by Salawu & Agboola [8] found that dividends have a considerable impact on the capital structure of the firm.

This study is intended to contribute to the current literature on the factors influencing capital structure. It is also believed to be a factor for investors when selecting the correct firm with a suitable capital structure. Part 2 of

this essay analyzes the literature. The data and technique are described in Section 3. Part 4 provides and discusses the empirical data, while Part 5 finishes the study's findings.

2. LITERATURE REVIEW

2.1. Trade Off Theory

External debt financing is critical for enhancing future business productivity and, more importantly, future growth [15]. External debt financing is employed as extra funds as well as loans from external sources when internal resources are insufficient to satisfy organizational needs [16]. Debt exchange theory suggests that firms trade off tax benefits from debt financing for the challenges posed by possible bankruptcy [17]. Debt offers tax reductions (debt tax shields) since interest paid as a tax reduction cost makes loans less expensive than common or preferred stocks. The trade off theory states that debt is very beneficial for companies because interest can be reduced in calculating taxes, but debt also creates costs associated with actual and potential bankruptcy [14]. Brigham & Houston [17] argued that according to the capital structure hypothesis, corporations exchange tax benefits for debt which causes concerns that might lead to insolvency. Following the trade off theory, as the usage of debt rises, so do the advantages of utilizing debt. But on the other hand, when a company needs capital and sources of funds, the company owner tends to issue new shares and other securities.

2.2. Pecking Order Theory

Companies have a funding sequence that goes from internal to external, as mentioned by the pecking order idea [18]. When a company experiences financing problems, the company's funding is prioritized from internal sources first, because financing through internal sources, such as retained earnings has the lowest capital costs. The reason why companies use the pecking order theory is because there are no emission costs arising from funding in the form of direct credit or retained earnings, and costs are relatively lower than when issuing new debt. The emission costs for issuing new shares are quite high, and the information asymmetry makes funding from new shares less attractive [17]. In summary, Myers [19] states that as argued by pecking order theory, corporations prioritize internal sources of capital and adjust their objective dividend payout percentage to potential investments. Firms would initially choose debt (as the safest vehicle), then hybrid instruments such as convertible bonds, and then equity as a last resort if they needed external funds due to a generous dividend policy, unpredictability in profitability, or investment

possibilities. In general, the pecking order concept explains why firms may rationally allow cash flows to determine leverage. This demonstrates that when faced with a dearth of internal financing, firms turn to loan capital. As a result, internal cash from earnings was used first, followed by short-term obligations, preferred shares, debt, and ordinary shares last.

3. METHOD

Table 1. Variables Measurement

Variables	Description	Measurement
Debt to Assets Ratio (DAR)	Measures the company's capacity to cover a portion or all of its long-term and short-term obligations with its total assets.	$\frac{Total\ Debt}{Total\ Assets}$
Short Debt (SD)	Measuring the company's capability to cover short-term debt with its assets.	$\frac{Short\ term\ Debt}{Total\ Assets}$
Long Debt (LD)	Measuring the company's capability to cover long-term debt with its assets.	$\frac{Long\ term\ Debt}{Total\ Assets}$
Bank debt (BD)	Measuring the company's capability to cover bank debt with its assets.	$\frac{Bank\ debt}{Total\ Assets}$
Return On Asset (ROA)	Measures how much net profit will be generated from each asset owned.	$\frac{EAT}{Total\ Asset}$
Return On Equity (ROE)	Measures how much net profit will be generated from each equity owned.	$\frac{EAT}{Total\ Equity}$
Non-Debt Tax Shield (NDTS)	One of the tax savings that comes from sources other than debt is that which comes from imposing fixed asset depreciation.	$NDTS : \frac{Depreciation}{Total\ Asset}$
Tangibility (TANG)	The tangible assets of the company are one of the influences in financing decisions.	$\frac{Fixed\ assets}{Total\ Asset}$
Dividend Payout Ratio (DPR)	Measures the percentage of the amount of cash dividends distributed to shareholders from each share owned.	$DPR : \frac{Dividend\ per\ Share}{Earning\ per\ Share}$

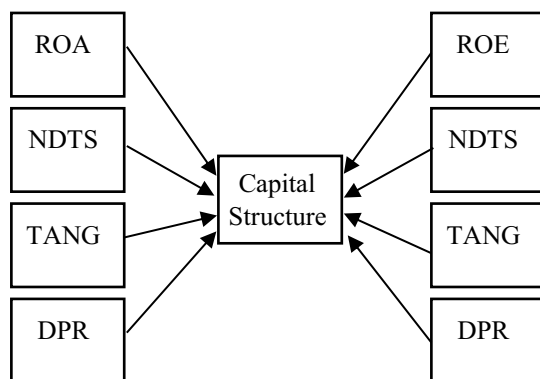


Figure 1. Research Framework

The primary objective of this paper was to look at the impact of profitability (return on assets & return on equity), non-debt tax shield, tangibility, and dividend payout ratio on capital structure. The capital structure in this study is divided into 4 proxies, namely debt to assets, short debt, long debt, and bank debt.

3.1. Variables Measurement

3.2. Population and Sample

This paper's population consists of all firms listed on the IDX from 2010 to 2019. This study's sample consisted of 700 organizations listed on the IDX from 2010 to 2019, with a total of 4785 imbalanced panels derived via observations.

4. RESULT AND DISCUSSION

4.1. Profitability on Capital Structure

According to the findings of a multiple regression analysis using the Ordinary Least Square (OLS) method for companies listed on the IDX from 2010 to 2019, profitability, as defined by return on assets and return on equity, has a significant negative effect on capital structure, as defined by debt to assets and short debt. While profitability shows results that have no effect on

long debt and bank debt. This demonstrates that the greater the profitability, indicates that the lower the total usage of debt and short-term debt in the organization's capital structure.

From the results of the research showing that profitability is negatively related to capital structure, it is possible to deduce that the majority of firms listed on the

IDX in 2010-2019 are strongly suspected of applying the pecking order idea as a method. Based on the pecking order idea, firms have a funding sequence that ranges from inside, such as retained earnings, to outside, specifically debt. Internal funding is preferred because funding from internal sources has a low cost of capital. In this paper the results conclude that profitability affects

Table 2. Regression Output

VARIABLES	(1)		(2)		(3)		(4)	
	DAR	DAR	SD	SD	LD	LD	BD	BD
ROA	-0.242** (0.118)		-0.240*** (0.088)		-0.021 (0.069)		-0.014 (0.021)	
ROE		-0.000 (0.000)		-0.001** (0.000)		0.001 (0.000)		0.000 (0.000)
NDTS	1.835** (0.750)	1.937** (0.788)	1.605*** (0.544)	1.694*** (0.585)	0.622 (0.397)	0.646 (0.402)	0.037 (0.079)	0.047 (0.080)
TANG	-0.099* (0.060)	-0.094 (0.060)	-0.288*** (0.047)	-0.283*** (0.048)	0.154*** (0.029)	0.154*** (0.029)	0.189*** (0.013)	0.189*** (0.013)
DPR	-0.069*** (0.015)	-0.084*** (0.014)	-0.041*** (0.012)	-0.055*** (0.011)	-0.030*** (0.011)	-0.031*** (0.010)	-0.035*** (0.008)	-0.036*** (0.008)
Constant	0.552*** (0.011)	0.540*** (0.010)	0.447*** (0.010)	0.436*** (0.009)	0.139*** (0.007)	0.138*** (0.007)	0.103*** (0.004)	0.102*** (0.004)
Observations	4,785	4,785	4,785	4,785	4,785	4,785	4,785	4,785
R-squared	0.041	0.027	0.048	0.032	0.040	0.040	0.070	0.070

Note: *, **, *** significant at 10%, 5%, 1%.

short-term debt. Short-term debt such as accounts payable, tax payable, debt from suppliers and others that have small costs compared to external debt such as bank debt. The results of the study show that there is no effect of profitability on long debt and bank debt, so that profitability can be concluded that it does not affect long-term financing considerations and bank debt. Various types of long-term debt such as bank loans, bonds payable, mortgages payable, pension obligations or employee benefit obligations. Higher profitability does not affect these debts because the company focuses more on internal funding sources, retained earnings. Yoshendy et al. [4] explains that the profitability relationship does not show an effect on long-term debt which is a consequence of the tendency to use internal funding sources, namely retained earnings. There is no effect of profitability on long-term debt and bank loans because the companies studied have not been able to generate effective profitability values. Judging from the average profitability, many companies are below average so that it can be said that the organization is less effective in managing assets to make profits, so that this ineffectiveness has no effect on the financial structure of the firm.

The findings of this study are in line with prior studies by Yoshendy et al. [4] which revealed a substantial negative association between profitability and capital structure as proxied by total debt and short debt, but

showed no influence on long debt. Maryanti [14] also found that profitability did not have a significant effect on capital structure, this was due to a decrease in the total profit of several companies each year. However, the findings of this study contradict previous studies Salawu & Agboola [8] which found that profitability is positively connected to total debt and long-term debt.

4.2. Non-Debt Tax Shield on Capital Structure

Based on the results above, non-debt tax shield (NDTS) has a significant positive effect on capital structure which is proxied using debt to assets and short debt. Meanwhile, NDTS becomes meaningless on capital structure measured by long debt and bank debt. The results of this study prove a positive relationship between NDTS and capital structure. This study's findings suggest a beneficial association between NDTS and capital structure. This indicates that the more the company's depreciation, the greater the capital structure. The bigger a firm's depreciation, the greater the fixed assets owned by the company, making it simpler for the company to access funding sources in the form of debt. Companies that have a high number of fixed assets will gain tax advantages, because depreciation or depreciation costs can be deducted in tax calculations. This result is also suspected because the companies in the study are reluctant to pay taxes. Companies reduce tax costs by

increasing NDTs or increasing depreciation and amortization costs other than debt. This reluctance is also suspected that the company does not get a positive impact from paying taxes, but the company feels that the tax will burden the company.

Research by Salawu & Agboola [8] found results that are in line with this study, who found that NDTs has a positive link to capital structure by proxies for total debt to asset and short debt but has a negative effect on long debt. Research Cortez & Susanto [10], found that NDTs significantly have a reverse association with total debt.

4.3. Tangibility on Capital Structure

Based on the results above, it shows that tangibility of assets has an important effect on capital structure. Tangibility has a major adverse effect on total and short debt, but a big favorable impact on long debt and bank debt. In general, there is a positive link between tangibility and the capital structure of the firm in the form of debt, which means that the more the tangibility, the greater the organization's debt. This is because the organization's fixed assets might be used as collateral to repay debts [20]. However, in this study it was prove that tangibility had a significant adverse impact to capital structure as measured by total debt and short debt. This indicates that the bigger the fixed assets of the organization, the lower the total debt and short-term debt. Companies with a strong fixed asset base tend to have superior production efficiency, allowing them to lower costs and create more profits. High profits will reduce the use of debt because companies prefer funding from retained earnings [20], [21]. This study also discovered a link between tangibility and capital structure, as defined by long-term debt and bank debt. As a result, the greater the firm's fixed assets, the easier it is for the company to get finance sources. Long-term debt and bank debt are common sources of finance for companies with big fixed assets. It is hoped that these fixed assets might be used as collateral in obtaining the funding. According to Yoshendy et al. [4], in relation to debt maturity, following pecking order idea, the share of fixed assets is connected to long-term debt financing and adversely to short-term debt financing.

The results of previous research by Maryanti [14] and Dakua [9] found that tangibility is meaningless on capital structure. Research by Liem et al. [22], Salawu & Agboola [8] and Abu Mouamer [13] showed a favorable association between tangibility and the company's financial structure.

4.4. Dividend Payout on Capital Structure

Based on the results above, dividends consistently have a strong adverse connection on capital structure, either proxied using debt to total assets (DAR), short debt, long debt, and bank debt. This indicates that increasing business dividends reduces debt in the organization's capital structure, while decreasing company dividends increases debt in the organization's capital structure. Companies that pay low dividends to shareholders communicate to the market that they have poor earnings as well. As a result, the firm seeks external money from outsiders in the form of debt to satisfy their demands, causing the organization's capital structure to become high. The dividend policy that occurs is not always followed by an increase in the amount of the organization's debt. In making funding decisions, in this case, debt is influenced by other factors such as profitability. If the company's profit is high, they will use lower debt because the company can pay dividends without incurring debt.

The findings of this analysis contradict those of Salawu and Agboola [8], who discovered a positive link between dividends and capital structure as evaluated by total debt and long debt.

5. CONCLUSION

This study concludes that profitability has a considerable negative influence on capital structure as proxied by total debt to asset and short debt, but has no effect on the usage of long debt and bank debt. Non-debt tax shield (NDTS) has a considerable beneficial impact on overall debt and short debt, but meaningless on long debt or bank debt. Tangibility has a strong adverse relation on total and short debt, but a big favorable impact on long debt and bank debt. Dividends continuously have an adverse impact on capital structure, as measured by total debt, short debt, long debt, and bank debt. The amount of dividends paid is also determined by the company's profit. The more companies pay dividends, it shows that the company has high profits, so managers can maximize capital from within the company and minimize the use of external debt. Overall, dividend is the only consistent determinant of capital structure. The greater the dividends distributed, the more prosperous the shareholders will be. Shareholder welfare is the main objective of the company. If the welfare of shareholders is guaranteed, then investors will have more confidence in the company to invest their capital, so that the company will not be too dependent on using debt for the company's operating needs.

Theoretically, those findings bring more discussion regarding the selection of pecking orders as the most appropriate method for companies to obtain funding.

Apart from that, this work may be utilized as further research material, as a reference for other academics, especially discussions regarding factors that influence company financing decisions. Company managers should always pay attention to profitability, non-debt tax shield, tangibility, and dividends because these variables have a direct influence on the amount of company debt. The limitations of this research are a) Sample used is a company listed on the IDX which has large assets; therefore, the results of this research may not relate to companies outside the IDX and/or MSMEs. b) This study only uses the OLS method without considering using FEM or REM.

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