

# The Effect Profitability, Liquidity, Asset Structure and Size of The Company on The Capital Structure With The Business Risk as A Control Variable. (Manufacturing Companies Listed in Indonesia Stock Exchange Period 2011- 2014)

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#### **Abstract**

Financing decisions are influenced by capital structure. The capital structure is important to the company because it has the effect to the company's financial position, and the managers in a company should be able to know what factors affect the capital structure, it is intended that the company can maximize shareholder wealth. The aim of this study is to determine the effect profitability, liquidity, asset structure and size of the company on the capital structure with the business risk as a control variable. Location of the study is manufacturing companies listed in Indonesia Stock Exchange period 2011-2014. The method of sample selection in this study is purposive sampling method or sample selection by certain criteria. The analysis technique used is multiple linear regressions. The results Showed that that simultaneous independent variables are profitability, liquidity, asset structure, company size, business risks simultaneously affect the capital structure. Only variable Liquidity (CR) which is a significant negative effect on the Debt Equity Ratio (DER) on manufacturing companies listed in Indonesia Stock Exchange during the period 2011-2014.

Keywords: Debt Equity Ratio (DER), profitability, liquidity, asset structure and size of the company

# 1. INTRODUCTION

Global economic conditions continue to advance at this time, could lead to a very tight competition. This will encourage managers of companies in increasing the productivity of production, marketing and corporate strategy. In addition, the company's management should also maximize the welfare of shareholders (shareholder). In fulfillment of that goal, then it is treated right decision from the company's manager better investment decisions, financing decisions and dividend decisions (Margaretha and Ramadan, 2010).

The funding decision views of the capital structure, capital structure that is both optimal capital structures. Optimal capital structure is a condition in which a company can use a combination of debt and equity base, which balances the value of the company and the cost of its capital structure. Riyanto (2011: 209) states that the fulfillment of the funds are from internal sources (internal source) or from or from external source. The funds come from internal resources is a fund formed or produced by the company itself, namely retained earnings and depreciations, while the funds obtained from external sources are the funds derived from creditors, owners and partakers in the company (fund which will be implanted that will become equity).

Capital from the creditors is debt for the company concerned and capital from the creditors of the so-called foreign capital, while the funds that come from the owner, participant or a participant in the company is a fund will remain invested in the company in question, and these funds will be in the capital itself. External financing undertaken by the company through debt would lead to a capital cost of the cost of the interest charged by the lender. Therefore any financial managers need to determine the capital structure decisions are related to the determination of whether the financing needs will be met by their own capital or foreign capital.

Financing or capital structure decisions are not careful will directly influence the decrease in profitability of firms. A company with a capital structure that is not good, which has a very large debt would place a heavy burden on the company concerned (Riyanto, 2011: 296). Funds received by the company is used to purchase assets that will be used to produce goods or services, purchase of materials for production and sales, to borrow the funds through debt to the bank, to stockpile cash, and buy securities are often called effect or securities for the benefit of the transaction and to maintain the company's liquidity (Margaretha, 2013: 99).

Factors that influence the decision of the capital structure of the company is the stability of sales, asset structure, profitability, operating leverage, growth rate, control of taxes, management attitude, the attitude of the lender and



donor agencies ratings, market conditions, the company's internal condition and financial flexibility (Brigham and Houston , 2010).

Profitability is the company's ability to earn income from business activities that do (Ghost, et.al., 2000). Profitability also shows the company's ability to repay long-term debt and interest. One of indicators that can be used to measure a company's profitability is Return On Assets (ROA). ROA is the return on assets of companies by connecting the net income to total assets (Keown, 2010: 80). ROA shows a company's capital structure which is the ratio between profit after taxes by total assets.

According to Weston and Brigham (2010: 173), the company with the level of return on assets high, generally use relatively little debt, it with a high return on assets was possible for the company to use its capital with retained earnings. Another assumption says with a high return on assets which means the net profit of the company are high to finance most of the funding needs with internally generated funds. The higher profits mean lower external financing needs (debt), so the lower the capital structure.

Liquidity Ratio is the rate the company's ability to meet its short-term liabilities with its current assets. The greater the ratio of the company's liquidity the greater the company's ability to pay obligations and vice versa. Companies that have high liquidity will tend not to use of debt financing. This is caused by the high level of liquidity the company has a large internal funds, so that the company will be using internal funds to finance its investment in advance, prior to using external financing using debt. One proxy of liquidity ratio is the Current Ratio, where the ratio is calculated by dividing current assets to current liabilities..

According Ozkan (2001), companies with large liquid assets that can use these assets to invest. Debt policy that would take the company also deals with the company's ability to repay its debt. The company's ability can be reinforcing the confidence of creditors to lend funds to the company. The ability is often called the company's liquidity. Companies with high liquidity means having sufficient liquid assets to restore its current debt thus providing an opportunity to get the ease of obtaining debt from investors.

According to Brigham (2011), companies that have high growth rates tend to use outside funds. Company with a rapid growth rate should be more reliant on external capital than a company that grows slowly. Occurrence of assets followed the results of operations will further add credence outside parties (creditors) against the company, the proportion of debt will be greater than their own capital. It is based on the belief creditors on funds invested into the company guaranteed by the magnitude of the assets owned by the company (Robert Ang, 1997).

According to Riyanto (2011) asset components outlined in its composition, ie current assets and fixed assets. In general, companies have a proportion of a larger asset structure would also likely be established in the industry, have a lower risk, and will generate substantial leverage levels (Chen and Hammes, 2002 in Supriyanto and Falikhatun, 2008). The structure of assets is the most amount of assets that can be used as collateral, as measured by comparing the fixed assets to total assets.

The size of the company is a picture of its financial capability in a given period. Financial capability viewed from several sides, namely in terms of net sales or total assets owned by the company. Size companies which are big that is considered as indicators that reflect the level of risk for investors to invest in the company, because if the company has the financial ability of a good, it is believed that the company is able to meet its obligations and to provide an adequate rate of return for investors.

Small companies will tend to use their own capital and short-term debt than large companies. Small companies will tend to favor short-term debt than long-term debt because of lower costs. Likewise, the large companies will tend to have a strong funding source (Raharjo & Hartatiningrum 2006). Size of the company is proxy by the value of the natural logarithm of total assets. (Ln Total Asset). When the size of companies in proxy with total assets owned increasingly large, companies can easily obtain a guarantee because it has a sufficient level of liquidity.

In the agency theory say that managers are more likely to dislike risk since there is an uncertainty. Therefore, managers prefer to use debt as a financing company. Companies that have a high level of risk tends to avoid additional funding through foreign capital compared with companies that have a low risk level. It also increases the likelihood of bankruptcy. Results of previous studies also showed that companies with high business risk should use less debt to avoid bankruptcy.

The manufacturing company is used as a research object because the manufacturing companies listed in Indonesia Stock Exchange (BEI) is composed of a variety of industry sub-sector so as to reflect the overall capital market reaction. Researchers chose a manufacturing company because the company needs funds from investors for the survival of their business, so that the necessary information on a good performance so that investors are interested in companies. Meanwhile, as is well known manufacturing industry is an industry with the company's most widely registered in the Indonesia Stock Exchange. The manufacturing company is a company that does the production process that transforms raw materials into finished goods or goods ready for consumption and thus require substantial funds to run its operations. From the background of the problems in doing further research on matters relating to the capital structure because there is a difference between the results



of previous studies are not consistent so it is necessary to conduct further research on "The Effect of profitability, liquidity, asset growth, asset structure and size companies on the capital structure with the business risk as a control variable in company that listed on the Indonesia Stock Exchange period 2011-2014.

#### 2. REVIEW

### **Signaling Theory**

Signaling theory shows the tendency of asymmetry of information between management and those outside the company. Cue or signal according to (Brigham and Weston, 2010) is an action taken by management to give guidance for investors on how to look at the management company's prospects. (in Brigham and Weston, 2010). Companies with profitable prospects will try to avoid the sale of shares and exploit every new model that need by other means, including the use of debt which exceeds the target capital structure.

# The Modigliani-MillerModel

Theories regarding capital structure began in 1958, when Modigliani and Miller (hereinafter referred to as MM) published a finance article of the most influential ever written is "The Cost of Capital, Corporation Finance, and The Theory of Investment". MM prove that the value of a company is not influenced by its capital structure (Brigham and Houston, 2011).

MM found in a state of perfect markets, the use of debt is not relevant to the company's value, but with the tax payable will be relevant (Modigliani and Miller, 1960 in Hartono, 2010). However, MM studies are based on a number of assumptions that are not realistic, among others (Brigham and Houston, 2011); no brokerage fees (brokerage) no taxes, no bankruptcy costs.

# **Capital Structure Theory**

The capital structure is in proportion or ratio between the numbers of long-term debt to equity (Bambang Riyanto, 2011). Capital structure theory to explain the influence changes in capital structure to the company's value (as reflected in the company's stock price), if investment decisions and dividend policy are held constant. In other words, if the firms own capital to replace part of debt (or vice versa) whether the stock price will change, if the company does not change the other decisions of financial. In other words, if the capital structure changes do not change the value of the company, there is no best capital structure.

# **Pecking Order Theory**

Pecking Order Theory was developed by Stewart C.Myers and Nicolas Majluf in 1984. This theory states that companies prioritize sources of funding (from internal financing to equity). In accordance with the principle of least effort, or at least resistance, chose to raise equity as the last financing. In brief, this theory states that a) companies like internal financing (funding of the company's operating results tangible retained earnings) .b) if funding from outside (externals financing) required, the company will publish the safest securities in advance, starting from publishing bonds, followed by characterized securities such as bonds conversion of a new, if still insufficient, the new shares will be issued. In accordance with this theory is not a target debt to equity ratio, because there are two types of equity capital that is internal and external.

# The Trade Off Model

The trade-off assumes that the capital structure of the company is the result of a trade-off of a tax advantage by using debt at a cost that would result from the use of such debt (Hartono, 2010). The essence of the trade-off theory of capital structure is balancing the benefits and sacrifices that arise as a result of the use of debt. As far greater benefits, additional debt is still allowed. If the sacrifice for the use of debt is older, then the additional debt is not allowed.

#### Agency Theory

This theory was put forward by Michael C. Jensen and William H. Meckling in 1976. According to this approach, capital structure is arranged in such a way to reduce conflicts between different interest groups (Mamduh M. Hanafi, (2014). Basically the agency theory is a theory about the ownership structure of the company that is managed by the manager is not the owner, based on the fact that the professional manager is not the agent was perfect from the owner of the company, thus not necessarily always act in the interests of the owners. in other words, managers as rational human decision-making companies will maximize the satisfaction of himself (Hidayati, et al., 2001).

## Asymmetric Information Theory

Asymmetric information or information inequality by Brigham and Houston (2011) is a situation where



managers have different information (better) about the prospects. Company which is structure Asset flexible, tend to use leverage flexible where their tendency to use the leverage that is greater than company which is structure assets un-flexible.

The purpose of this study was to analyze the significance of the effect of profitability, liquidity, asset growth, asset structure and size of the company with the capital structure and business risk asset growth as control variables in companies that listed on the Indonesia Stock Exchange in the period 2011- 2014. The hypothesis of the study is:

- H1: Profitability negative effect on the capital structure
- H2: Liquidity negative effect on the capital structure
- H3: Asset structure on positive effect of capital structure
- H4: Size positive effect on the company's capital structure
- H5: Business risk positive effect on the capital structure

#### 3. RESEARCH METHODS

The method used in this research is the method of associative research. The study was conducted at companies in the manufacturing sector issuers listed on the Indonesia Stock Exchange by the end of 2014 which had a complete financial statement published in the Indonesian Capital Market Directory (ICMD). The object of this study was the effect of profitability, liquidity, asset growth, asset structure and size of the company with the capital structure and business risk asset growth as control variables in companies that listed on the Indonesia Stock Exchange period 2011- 2014.

The type of data in this research is quantitative data that the financial statements of companies engaged in manufacturing registered as an issuer in the Indonesia Stock Exchange. Source of research data is the data that is collected, processed and published by the Indonesian Capital Market Directory (ICMD). (Sugiyono, 2010: 204). The variable in this study is the profitability, liquidity, asset growth, asset structure, company size, capital structure and business risk as well as growth in assets, the definition of each variable is:

# 1) Capital Structure

The capital structure is proxy by Debt to Equity Ratio (DER). DER is the ratio between total debt to equity capital, expressed as a percentage (%)

## 2) Profitability

Profitability is a company's ability to generate profits in a given period. To measure the level of profitability in this measurement, used ROA (Return on Assets). ROA is the ratio between profit after tax to total assets, expressed as a percentage (%)

## 3) Liquidity

To measure the level of liquidity in these measurements, used ratio CR (Current Ratio). CR is the level of the company's ability to meet its short-term liabilities with current assets at the possessed. CR is the ratio between lancer assets against current liabilities, expressed as a percentage (%).

#### 4) Asset Structure

The structure of assets is the proportion of fixed assets owned by the company. This variable proxy is by FAR (Fixed Asset Ratio). FAR is the ratio between the total assets by total assets, expressed as a percentage (%) in manufacturing companies in Indonesia Stock Exchange period 2011-2014.

## 5) Company Size

Company size is a size or magnitude of the assets owned by the company. The size of the company is the value of the natural logarithm of total assets, expressed in a ratio or a percentage (%) in manufacturing companies in Indonesia Stock Exchange period 2011-2014.

# 6) Business Risk

Business risk is the value of the operational uncertainties, which uses long-term debt as a source of funding. Business risk is the standard deviation of EBIT divided by total assets, expressed as a percentage (%) in manufacturing companies listed in Indonesia Stock Exchange period 2011-2014.

# 4. RESULT AND DISCUSION

# Classic assumption test

Data normally distributed with the value asymp 2-tailed sig 0.662 > 0.05. Research has also been free of symptoms autocorrelation with DW count value is in the region du: 1,721 < dw = 1.8531 < 4 - du = 2,279. Multi-



colinierity also not found in this study with each variable has a value of VIF 1,016, 1,064, 1,277, 1,197 <10. There is also heterokedastisitas symptoms in this study because of the significance of the regression results in Table coefficients each of 0763, 0809, 0897, 0.085> 0.05.

# Hypothesis testing

Test The coefficient of determination (R2 Test)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.416 <sup>a</sup>	.173	.129	.661819

From the results of the regression calculation is known that the coefficient of determination (R2) obtained amounted to 0.173. This means that 17.3 percent of variations in capital structure variables can be explained by variable sales growth, profitability, asset structure, the size of the company while the remaining 86.7 percent is explained by other variables not included in this research model.

2) F- Test

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	8.604	5	1.721	3.929	.003 <sup>b</sup>
1	Residual	41.172	94	.438		
	Total	49.777	99			

a. Dependent Variable: DER

b. Predictors: (Constant), Risk, CR, ROA, FAR, Size

In Table 2 it can be seen F value of 3.929 with a significance level of 0.003. Because this equation models have smaller significance level of  $\alpha$  (0.05) is equal to 0,003 this indicates that the capital structure can be explained by the growth in sales, profitability, asset structure, and the size of the company. It can be seen that the independent variables of this study together (simultaneously) have an influence on the dependent variable capital structure.

3) T- Test

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		ıs
		В	Std. Error	Beta			Zero- order	Partial	Part
1	(Constant)	.290	.611		.474	.636			
	ROA	460	.433	102	-1.062	.291	157	109	100
	CR	102	.036	285	-2.810	.006	280	278	264
	FAR	088	.050	175	-1.757	.082	123	178	165
	Size	.054	.041	.143	1.311	.193	.246	.134	.123
	Risk	.039	.043	.099	.910	.365	.206	.093	.085

a. Dependent Variable: DER



# 1. Effect of Profitability on capital structure

The first hypothesis states that there is a negative influence between the return on assets to variable capital structure. After calculation by simple linear regression analysis using SPSS 16.0 was obtained regression coefficient of -0.460 and a probability of 0.291. This means that the probability is greater than 0.05 so it can be concluded that there is no positive effect Return On Asset (ROA) Debt to Equity Ratio (DER).

The results showed that profitability does not have a significant effect on the capital structure. These results are consistent with research Hartoro and Atahau (2007), Hovakimian and Tehranian (2004), and Ramlall (2009). But not prove to research conducted by Joni and Lina (2010), Palupi (2010) showed that the profitability of a significant negative effect on the company's capital structure

# 2. Effect of liquidity on the capital structure

The second hypothesis testing results show that the Liquidity negative effect on the capital structure. Based on the regression calculation obtained t calculate equal to -2.810 with a significance value of 0.006. If seen from the significance value less than 0.05, it can be concluded that liquidity significant negative effect on the variable Capital Structure (DER) so that the second hypothesis can be accepted.

# 3. Effect of Structure of assets (FAR) on capital structure

Testing the fourth hypothesis indicates that the structure of assets has no effect on the capital structure, with the t value amounted at 1.757 and a significance value of 0.082. This means that the probability is greater than 0.05 so it can be concluded that there is no influence of asset structure (FAR) on the capital structure. The influence of the structure of assets to capital structure is negative but not significant to the capital structure. This is proven by the positive effect although the effect was not statistically significant, but quite illustrates that management still consider the asset structure. But this does not prove some of the research done by Joni and Lina (2010) and Palupi (2010), argues that the structure of assets (FAR) significant positive effect on the capital structure

## 4. Effect of Size on capital structure

Tests on the fifth hypothesis is indicates that company size affect the capital structure, with the t value amounted at 1.311 and a significance value of 0.193. It can be concluded that the size of the company (SIZE) and no significant positive effect on the variable Capital Structure (DER) so H4 is unacceptable. This indicates that a large company where the company's shares are so widespread.

In this study looked at the research gap from the results of the research that has been done. According Palupi (2010), Ida Bagus Gede Nicko Adiyana Sabo (2014), Sari (2013) the size of the company's is positive effect on the capital structure. But Laili (2001) and Nugroho (2009) in his research states that the size of the negative effect on the company's capital structure. Unlike the Nuril Hidayati (2010) who found no effect on the capital structure of firm size. The results are consistent with research conducted by Nuril Hidayati (2010), which states there is no influence on the size of the company's capital structure.

### 5. Effect of Business Risk to capital structure

Tests on the fifth hypothesis is indicates that business risks affect the capital structure, with the t value amounted at 0.910 and a significance value of 0.365. It can be concluded that the size of the business risk and no significant positive effect on the variable Capital Structure (DER) so H5 is unacceptable. This is because the company has a high level of risk tends to avoid additional funding through foreign capital compared with companies that have a low risk level. It also increases the likelihood bankruptcy.

Results of previous studies also showed that companies with high business risk should use less debt to avoid bankruptcy. This is evidenced by several studies conducted by Linda Wimelda and Aan Marlinah (2013) argues that the business risk (BRISK) positive effect on the capital structure, while research conducted by Joni and Lina (2010), Palupi (2010), argues that the risk business (BRISK) a negative effect on the capital structure.

# CONCLUSIONS AND RECOMMENDATIONS

The conclusions for this research are:

1. Profitability (ROA) but no significant negative effect on the Debt Equity Ratio (DER) on manufacturing companies listed in Indonesia Stock Exchange during the period 2011-2014. It can be seen from the significant value of 0.291.



- 2. Liquidity (CR) a significant negative effect on the Debt Equity Ratio (DER) on manufacturing companies listed in Indonesia Stock Exchange during the period 2011-2014. It can be seen from the significant value of 0.006.
- 3. Structure of Assets (FAR) but no significant negative effect on the Debt Equity Ratio (DER) on manufacturing companies listed in Indonesia Stock Exchange during the period 2011-2014. It can be seen from the significant value of 0.082.
- 4. Company Size (SIZE) but not significant positive effect on the Debt Equity Ratio (DER) on manufacturing companies listed in Indonesia Stock Exchange during the period 2011-2014. It can be seen from the significant value of 0.193.
- 5. Business Risk (RISK) but not significant positive effect on the Debt Equity Ratio (DER) on manufacturing companies listed in Indonesia Stock Exchange during the period 2011-2014. It can be seen from the significant value of 0.365.

Based on the discussion of the results and conclusions of the above, then the advice that can be given by researchers are as follows:

## a. for Management

For financial management are advised to pay attention to liquidity and the size of the company in its capital structure policy, because in this study the liquidity and size of the company has a significant effect on the company's capital structure.

#### b. for Investor

For investors, it is recommended before investing in a company needs to pay attention to the company's capital structure by considering the positive and negative effects of capital structure policy. Investors may pay attention to the liquidity variables and the size of the company has a significant impact on the capital structure. This is a consideration that the investments made give maximum benefit levels and to minimize investment risk.

#### c. For Further Research

Subsequent research can extend the period of observation so as to improve the distribution of better data. Researchers also consider the variables suspected to affect the capital structure to determine the actual condition of the capital markets, resulting in a more supporting information.

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