

# **The Effect of Profitability, Company Size, Asset Structure and Business Risk on Capital Structure in Mining Sector Companies on the Stock Exchange in 2016-2020**

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**Keywords** Profitability, Company Size, Asset Structure, Business Risk.

**Abstract** : *This study aims to examine the effect, Profitability, Firm Size, Asset Structure, Business Risk on Capital Structure. This research was conducted on mining companies listed on the Indonesia Stock Exchange for the 2016-2020 period. The number of observations is 131 samples. Sampling using non-probability sampling with purpose sampling technique. The analytical technique used in this research is multiple linear regression analysis.*

## **1 INTRODUCTION**

The goal of the company is to achieve maximum profit, so that the value of the company can increase and can prosper the shareholders. Maximizing the funding cassette is an important matter that must be considered. In the selection of sources of capital, it must also be done carefully and selectively. Thus, the company must have a strategic plan regarding its financial aspects (Yuliati, 2011). The current state of the economy is very dependent on the problem of financing, especially for companies that are growing constantly and are always faced with the problem of increasing capital, whose goal is to develop a more expanding market scale of production and to achieve a more efficient expansion of the market. The profit that you get every year can affect the sustainability of the company's development. The size of the company is an important factor when it comes to making decisions related to the capital structure. The larger the size of a company, the more likely it is to use a larger debt. Debt is one of the sources of funds chosen if the company's own capital is not sufficient. That the size of the company directly affects the capital structure policy to carry out his business processes.

Business risk is the uncertainty faced by the company in carrying out its business activities. If the company is unable to bear the costs of the cooperative that it incurs in its cooperative activities, then the company will be exposed to the risk of bankruptcy. The company's risk can be measured by the impact of the project on uncertainty about the company's profit in the future (Brigham and Houston, 2001). So when we are in the management of financial resources, the company must be able to run well, both for expenses and expenses for every activity and profit, if the company can run well. If the company is unable to properly manage every expenditure and income from the activities of the company, then your company will experience difficulties. If the company is experiencing financial difficulties and if the cooperative's profit is not sufficient, then the stockholders must be able to cover this shortfall. And if you are still unable to cover up these difficulties, then your company will go bankrupt. ROE (Return On Equity) is a ratio for measuring net profit after tax with own capital. The current ratio shows the efficient use of capital alone, the higher this ratio the better. This means that the position of the owner of the company is getting stronger, and vice versa. Profitability in relation to the capital structure has an influence where companies that have high profitability will reduce their dependence on outside parties because a high level of profit allows the company to obtain most of its funding from retained earnings.

One of the corporate sectors that has been affected by the impact of the global crisis is the mining company sector. What is happening now is because the export products of mining companies in Indonesia are very dependent on export destination countries such as America, Canada, Britain, the Netherlands, France, Spain and Italy, as well as other countries with slow growth. A mining sector company is a company that processes natural resources that cannot be updated and cannot be obtained in all countries but are very much needed in almost every country with a large number of people. In this way, mining sector companies can survive even in very difficult economic conditions. Therefore, the selection of mining companies as research objects is based on the reason that mining companies have varied activities where this company is an export company with bright prospects with a large number of transactions and requires large funds to fund the company's operational activities in the form of long-term debt and here, it is necessary to choose the optimal capital structure. A lot of empirical research on the factors that influence the capital structure has already been done and published in Indonesia. The research results from Dewiningrat and Mustanda (2018) use the variables of cash liquidity, profitability, sales growth and asset structure. The results of this research show that profitability and sales growth have a negative effect on the capital structure, while the asset structure has a positive effect on the capital structure. Subsequent research was conducted by Dewa and Sudiartha (2017), who conducted research on the effect of profitability, size of firms and growth of assets on capital structure and firm value for industrial companies in the goods and consumption sector for the 2014 period. The research results show that profitability has a significant positive effect on the capital structure, while the size of the company and asset growth have a negative effect on the capital structure..

## 2 LITERATURE REVIEW

### Capital Structure

Capital Structure (DER) is that every investment activity carried out by the company will require funding. For this reason, if the internal funds (own capital) you own are not sufficient, then the company must make efforts for the funds that come from sources outside the company. Indeed, it would be ideal if the company could use internal funds to make investments. However, in reality, investments generally require large amounts of funds and internal funds that are owned by the company, often not enough to finance these investments. you can see from the liability and equity grid on the company's balance sheet. According to (Cahyo, kdkk. k2014) Capital structure is a comparison or a balance between case capital and own capital.

### Profitability

Profitability is one part of the financial ratio that describes the financial performance of a company in terms of efficiency and effectiveness of the company in obtaining a profit. If the company's management performance, which is measured using the profitability dimensions, shows good performance, then it will have a positive impact on investors' decisions in investing their capital, and creditors will provide loans (2017 credit). Return on equity (ROE) is the ratio used to measure net profit after tax with own capital.

### Company Size

The size of the company can be interpreted as a benchmark for the size of the company, judging from the size of the equity value, the sales value, or even the typical value of the total assets owned by the company (Susanti and Agustin, 2015). The level of the company's size is indicated by changes in the volume of sales that cause disproportionate physical changes in the company's income statement (Susanti and Agustin, 2015). A large company describes an indicator of the level of risk for investors to invest in the company, because if the company is able to have good finances, it is believed that the company is also able to fulfill all its obligations and provide an adequate rate of return for investors.

### Asset Structure

According to Sitanggang (2013: 75) the composition of fixed assets is in the form of a large company, you will have the opportunity to obtain additional capital through debt, because these fixed assets can be used

as an employer. The structure of the large assets means that the company has a large debt ratio. The current results are supported by the research that was carried out by Musthapa, note. Calk (2011).

### Business Risk

The business risk of the company will affect the survival of the company, the level of business risk for the company will affect the interest of investors to invest in the company and will affect the ability of the company to run its cooperative activities. According to (Brigham and Houston, 2011:157) business risk is the risk of the company's assets if the company does not use debt.

### Framework

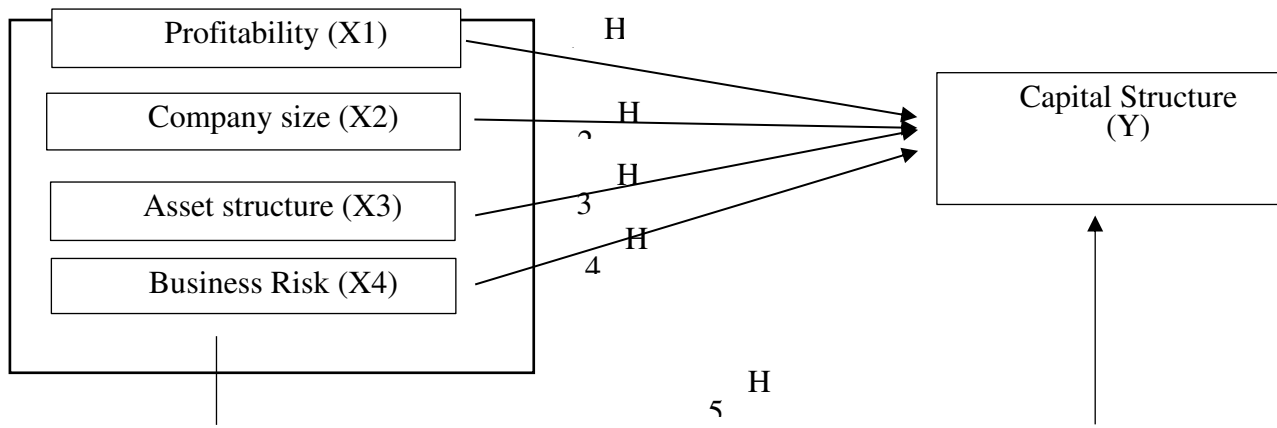


Figure 1. Research Framework

Hypothesis:

H1: Profitability has a positive effect on Capital Structure

H2: Firm Size has a positive effect on Capital Structure

H3: Asset Structure has a negative effect on Capital Structure

H4: Business Risk has a positive effect on Capital Structure

## 3 RESEARCH METHOD

In this research, the research approach used by the researcher is the quantitative method. The quantitative method now uses linear data, meaning that this research process has systematic steps. The data used can be in the form of numbers. The type of descriptive research used by the researcher. According to Sugiyono (2016: 53) descriptive research is a problem formulation related to the question of the existence of one or more variables. The nature of the research used by the researcher is comparative causal research and can be called a causal relationship. According to Sugiyono (2016: 37), a causal relationship is a causal relationship. The objects that are used in the current research are Profitability, Company Size, Assets Structure and Business Risk. The subjects used in this research are mining companies registered with the Indonesian Stock Exchange for the year 2016-2020. Researchers conducted research on mining companies by taking a population of 49 mining companies registered with the Indonesian Stock Exchange (IDX) for the 2016-2020 period. The definition of a sample according to Sugiyono (2016: 81) is a fraction of the number and characteristics of the population owned by the population. The sampling technique used is purposive sampling. The criteria for sampling are used by the

researchers: Companies that have complete financial reports for the 2016-2020 period. Companies that do not have complete data that can be used in research.

## 4 FINDINGS AND DISCUSSION

### Statistic analysis

**Table 1. One-Sample Kolmogorov-Smirnov Test**

		Unstandardized Residual
N		131
Normal Parameters <sup>a,b</sup>	Mean	,0000000
	Std. Deviation	1,07375998
Most Extreme Differences	Absolute	,061
	Positive	,049
	Negative	-,061
Test Statistic		,061
Asymp. Sig. (2-tailed)		,200 <sup>c,d</sup>

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

d. This is a lower bound of the true significance.

Based on the data in the table above, the normality test using the Kolmogrov-Smirnov statistic, it can be seen that the Kolmogrov-Smirnov value with the variables Profitability (X1), Firm Size k(X2), Asset Structure (X3), Business Risk (X4) and Capital Structure (Y) with a significant value of  $0.200 > 0.05$  which can be concluded that the data is normally distributed.

### Multicollinearity test

This test aims to test whether the regression model found a correlation between the independent variables. To test multicollinearity, it can be shown by using the Tolerance value 0.10 or equal to the value of kVIF 10. The results of the multicollinearity test can be seen from the table below:

**Table 2. Coefficients**

Model		Unstandardized		Standardized	T	Sig.	Collinearity	
		Coefficients	Std. Error	Coefficients			Tolerance	VIF
1	(Constant)	21,596	4,221		5,117	,000		
	LNX1	,649	1,225	,049	,530	,597	,877	1,140
	LNX2	,016	,011	,130	1,472	,144	,981	1,019
	LNX3	-,179	,113	-,143	-1,586	,115	,935	1,070
	LNX4	-,005	,061	-,008	-,090	,928	,877	1,140

The table above shows that the tolerance value of the Profitability variable (X1), Company Size (X2), Asset Structure (X3), Business Risk (X4). is greater than 0.1 ( $1.140 > 0.1$ ), so it can be concluded that there is no multicollinearity. The VIF value obtained is for the variables of Profitability, Company Size, Asset Structure, Business Risk .

#### Auto Correlation Test

This test aims to test whether in the linear regression model there is a correlation between the confounding error in period  $t$  and the confounding error in period  $t-1$  (previous). To test whether there is an autocorrelation, the Durbin-Watson Test (DW Test) can be used.

**Table 3. Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,195 <sup>a</sup>	,038	,007	1,09067	1,993

a. Predictors: (Constant), LNX4, LNX2, LNX3, LNX1

b. Dependent Variable: LNY

The table above shows that the DW value obtained is 1,993. The method of measuring the autocorrelation test is  $du < dw < 4-dl$ . The value of  $dl$  in this study uses 4 variables and the value of  $du$  uses a research sample of 210. The value of  $dl = 1.6523$  and the value of  $du = 1.7780$ , then the measurement results are  $1.7780 < 1.993 < (4-1.6523)$  so that  $1.7780 < 1.993 < 2.3477$  so it can be concluded that auto correlation test occurs.

#### F Test

Simultaneous hypothesis testing is used to determine whether the independent variables simultaneously or simultaneously affect the dependent variable.

Table 4. ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	5,926	4	1,482	1,245	,295 <sup>b</sup>
Residual	149,885	126	1,190		
Total	155,811	130			

a. Dependent Variable: LNY

b. Predictors: (Constant), LNX4, LNX2, LNX3, LNX1

From the table above, it can be seen that the result of Fvalue is 1,245 with a significant value of 0.295, while Ftable is 2.67 with a significant value of 0.05, so it can be concluded that Fvalue > Ftable is 1.245 < 2.67 and significant 0.295 > 0.05, so the decision is H0 is rejected and Ha is accepted, which means the variables are Profitability (X1), Company Size (X2), Asset Structure (X3), Business Risk (X4). influential and insignificant to the Capital Structure of Mining Companies listed on the Indonesia Stock Exchange for the 2016-2020 period.

#### Partial Significance Test (t-Test)

The t-test shows how far the influence of one explanatory/independent variable individually in explaining the variance of the dependent variable.

Table 5. Partial Significance (t-Test)

Model	Unstandardized Coefficients	Standardized Coefficients	T	Sig.	Collinearity Statistics	Tolerance	VIF
	B	Std. Error	Beta				
1 (Constant)	21,596	4,221		5,117	,000		
LNX1	,649	1,225	,049	,530	,597	,877	1,140
LNX2	,016	,011	,130	1,472	,144	,981	1,019
LNX3	-,179	,113	-,143	-	,115	,935	1,070
LNX4	-,005	,061	-,008	-,090	,928	,877	1,140

a. Dependent Variable: LNY

1. Partial statistical test results are as follows:

2. 1. The table above shows the Profitability variable has a tvalue of 0.530 with a significant value of 0.000, while the ttable is 1.97852 with a significant value of 0.05 so it can be concluded that tvalue < ttable is 0.530 > 1.97852 and a significant value of 0.000 > 0.05 which means H0 rejected and Ha accepted, which means that the profitability variable has no and no significant effect on the capital structure of mining companies listed on the Indonesia Stock Exchange for the 2016-2020 period.

3. 2. The table above shows that the company size variable has a tvalue of 1.472 with a significant value of 0.144, while the ttable is 1.97852 with a significant value of 0.05 so it can be concluded that  $tvalue < ttable$  is  $0.530 < 1.97852$  and a significant value of  $0.597 < 0.05$  which means  $H_0$  is rejected and  $H_a$  is accepted, which means that the variable company size has no significant and significant effect on the capital structure of mining companies listed on the Indonesia Stock Exchange for the 2016-2020 period.
4. 3. The table above shows that the Asset Structure variable has a tvalue of -1,586 with a significant value of 0.115, while a ttable of 1.97852 with a significant value of 0.05 so that it can be concluded that  $tvalue < ttable$  is  $-1.586 < 1.97852$  and a significant value of  $0.115 < 0.05$  which means that  $H_0$  is rejected and  $H_a$  is accepted, which means that the asset structure variable has a negative and insignificant effect on the capital structure of mining companies listed on the Indonesia Stock Exchange for the 2016-2020 period.
5. 4. The table above shows that the Business Risk variable has a t-value of -0.90 with a significant value of 0.928, while a t-table of 1.97852 with a significant value of  $k0.05$  so that it can be concluded that  $tvalue < t-table$  is  $-0.90 < 1.97852$  and a significant value of  $0, 928 < 0.05$ , which means  $H_0$  is rejected and  $H_a$  is accepted, which means that the Business Risk variable has a negative and insignificant effect on the Capital Structure of Mining Companies listed on the Indonesia Stock Exchange for the 2016-2020 period.

### **Effect of Profitability on Capital Structure**

This study states that profitability has no effect and is not significant on the capital structure of mining companies listed on the Indonesia Stock Exchange for the 2016-2020 period. According to research from Khairin and Harto (2014) stated that profitability has a significant positive effect on capital structure. The results of this study are supported by the results of research conducted by Setyawan et al. (2016), as well as other studies which show that profitability has a positive and significant effect on capital structure. And research conducted by Ferdiansya & Isnurhadi (2013) and Dewi & Sudhiarta (2017) shows the results of research that profitability has a positive effect on capital structure. In contrast to research by Pattweekongka and Napompech (2014), Juliantika and Dewi (2016), and Ananto (2015) found that profitability has a negative and significant effect on the company's capital structure. Research conducted by While the results of research from Bhawa and Dewi (2015) which show the results that profitability has a negative effect on capital structure.

### **The Effect of Firm Size on Capital Structure**

This study states that company size has no effect and is significant on the capital structure of mining companies listed on the Indonesia Stock Exchange for the 2016-2020 period. Research conducted by Syaputra (2017) which in his research gives the result that company size has a negative effect on capital structure. Meanwhile, previous researchers who had the same test results, namely well-established companies would have the convenience of obtaining additional capital, such as obtaining loans from outside parties (Sartono, 2010: 248). In addition, other researchers also have similar results, namely with a large company size, the company will have the convenience of doing additional or borrowing debt from outside parties (Fith Yuniar and Dini Widyawati, 2015).

### **Effect of Asset Structure on Capital Structure**

This study states that the asset structure has a negative and insignificant effect on the capital structure of mining companies listed on the Indonesia Stock Exchange for the 2016-2020 period. Dewi ningrat and Mustanda (2018) and Dewi & Suweta (2016) which give the results that the asset structure has a positive effect on the capital structure, while the results of Ridho's research (2019) show that the asset structure has a negative effect on the capital structure. From the previous test results, fixed assets in a company that are more dominant can be used as collateral for debt loans so that the portion of debt in the capital structure will increase (Kamaludin and Rini, 2012:325). In addition, other researchers also have the same results where the larger the portion of fixed assets, the composition of debt loans in the capital structure will also increase (Tijou et al, 2018).

## Effect of Business Risk on Capital Structure

This study states that business risk has a negative and insignificant effect on the capital structure of mining companies listed on the Indonesia Stock Exchange for the 2016-2020 period. The results of research conducted by Ferdiansya and Isnurhadi (2013) and Syaputra (2017) state that business risk has a significant and positive effect on capital structure. And the results of research from Primantara and Dewi (2016) state that business risk has a negative effect on capital structure. In contrast to Riyazahmed's research (2012) that business risk has a positive and insignificant effect on capital structure. If the variability of income is high, then the company's business risk will be high so that the profit generated tends to fluctuate which means income is unstable, with a high business risk the company tends not to reduce debt, but still uses debt to meet its funding needs.

## 5 CONCLUSIONS

In this study, it can be concluded that profitability has no effect and is not significant, while company size has no effect but is significant for mining companies listed on the Indonesia Stock Exchange for the 2016-2020 period. Asset structure and business risk have a negative and insignificant effect on capital structure in mining companies listed on the Indonesia Stock Exchange for the 2016-2020 period. capital and take other company sectors to get more samples. And be more careful in taking/selecting reports contained in the company sectors on the IDX.

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