# **Factors Influencing Capital Structure**

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**Abstract.** The large potential of the coal mining sector with increasingly higher prices, requires companies to manage their financial performance well. The financial ratio is used as a measure to determine the financial condition being faced by the company. This study aims to determine the effect of liquidity, profitability, TANGT, FSIZE, BEPR on DAR and simultaneously on coal sector coal mining listed on the Indonesia Stock Exchange (IDX) in 2017-2021. The analytical method used is descriptive statistics with classical assumption test. Partially, the results show that liquidity, profitability and FSIZE have a positive and significant effect on DAR. Simultaneously all variables have a positive and significant effect on DAR.

Keywords: Liquidity, Profitability, TANGT, FSIZE, BEPR and DAR.

# 1. Introduction

Height price coal not free from recovery world economy . in the middle weakening the Indonesian economy and the world economy in three year last (2016-2018), production domestic coal continues increase with the price is getting high . In 2016 Indonesia's coal production was 456 million tons, in 2017 it increased to 461 million tons and in 2018 it increased to 557 million tons[1] . Most of Indonesia's coal is exported to various countries with fluctuating export values. In 2016 Indonesia's coal exports were 311 million tons valued at US\$ 12.91 billion, in 2017 as many as 317 million tons valued at US\$ 17.88 billion, in 2018 as many as 343 million with an export value of US\$ 20.63 billion and in 2019 coal exports increased to 374.93 million tons[2].

Even though output is still working to recover from the pandemic's impact since 2020, demand for coal has continued to rise. The coal market is unbalanced, which has driven up prices into 2021. Due to China's supply shortage and rising demand, coal prices will increase further in 2021. The increase in coal prices has encouraged us to learn more about this industry and uncover a number of data points on influencing variables and capital structure in the coal industry in Indonesia.

Decision on capital structure is very important for every organization business . In activity business company , in general and is Duty management is make decision capital structure with good so that score company could maximized . Analysis in maximize score company no easy job \_ because involve election type debt and allocation good and balanced capital with consider the costs and benefits that will obtained .

Three determination main created by manager finance companies, namely : investment decisions, financing decisions and working capital decisions[3]. Effort in determination the

source you want used in funding company based on pecking order theory, there are level funding company, namely : credit company, profit custody, debt and issuance share regular [4].

"The capital structure is aim for blend the next permanent source of funds used company with expected way will capable maximize score company . For very good company important for strengthen stability its finances, because change in predictable capital structure can cause change score company[5]." Good capital structure could reflected from effective or whether or not company use funds for activity operational in company for get profit and pay costs incurred from activity funding that, so that ability company in maximizing profit will improve and will increase price stock, because will attract investors to invest.

Profitability is very important factor in determine capital structure, if profitability company tall so company will more a little use debt to operational in needs funding the company. The more tall level profitability something company so ability company in produce profit will also tall Thing this will reflect that company in condition good.

Liquidity is ability company in Fulfill obligation for pay off long term debts in short, must quick paid with use treasure smoothly. such as accounts payable, dividend payable, tax payable, and others. Companies with level high liquidity will have opportunity more good for get various Support from many party, start from institution finance, creditors, and supplier.

Even though output is still working to recover from the pandemic's impact since 2020, demand for coal has continued to rise. The coal market is unbalanced, which has driven up prices into 2021. Due to China's supply shortage and rising demand, coal prices will increase further in 2021. The increase in coal prices has encouraged us to learn more about this industry and uncover a number of data points on influencing variables and capital structure in the coal industry in Indonesia.

The decision regarding the amount of cash allocated to each component of the asset, including current assets and fixed assets, is known as asset structure or asset tangibility. Fixed Assets (FA), or fixed assets that are utilized as collateral to satisfy business needs, are expected to form the structure of assets in this study. The percentage of fixed assets to total assets is referred to as asset structure.

Business risk is a negative consequence of the company's activities that expect profit. Some risks can be avoided and some are unavoidable but can be minimized. Every company will definitely face business risks in their business activities.

# 2. Literature Review And Hypotheses Development

Modigliani and Miller were the creators of the modern capital structure theory tahun 1958. They demonstrate that the decision to finance a company with debt or equity has no appreciable impact on the firm's value. Because, in a perfect capital market, any combination of debt and equity securities would be competitive, the company's management should stop worrying about the balance between debt and equity securities[6].Pecking As a result, management of the company should stop worrying about the balance between debt and equity securities because, in a perfect capital market, any combination of debt and equity securities would be competitive. The purpose of Pecking Order Theory is to provide an explanation for the connection that exists between the problem of asymmetric information and the capital structure when businesses are required to fund new investment projects[7]. According to this hypothesis, if the company's financial situation is sound, it will use internal funding. If the

company's financial condition is not good, the company will choose external funding (using debt) as a source of company funding [3].

#### Effect of Liquidity on Capital Structure

The current ratio is one ratio used to evaluate a company's ability to meet short-term obligations without difficulty. The current ratio is a ratio that is utilized to evaluate a company's capacity to pay short-term debts or commitments that are due immediately upon full payment[8]. Liquidity has a detrimental impact on debt policy[9]. Debt policy is unaffected by liquidity[10]. According to that explanation, the following submission was made:

H1: Liquidity take effect positive significant to capital structure .

#### Influence Profitability To Capital Structure

The Profitability is ratio for evaluate ability company in look for advantage[8]. For could determine profitability company could be measured with Return On Asset Ratio (ROA). Ratio profitability is ratio used for measure ability company in produce profit from its normal business activities[11]. Ratio this for study to what extent a company use source owned power for capable give profit on equity[11]. Research shows that profitability have influence positive to debt policy[9]. Profitability take effect negative to debt policy[10]. Based on explanation that , submitted hypothesis as following :

H2 : Profitability take effect positive significant to capital structure .

#### Influence Tangibility To Capital Structure

That tangibility from asset could interpreted as something size on level guarantee or capable collateral offered company on debtor or giver loan funds[12]. Research shows, structure asset take effect positive to debt policy[10]. Structure asset take effect negative to debt policy[13]. Structure asset no take effect to debt policy[14]. Based on explanation that , submitted hypothesis as following :

H3 : Tangibility take effect positive significant to capital structure .

#### Influence Company Size Against Capital Structure

The size company show about big or small company to assets company[15]. Based on big small size company, allows existence freedom for company for get funds from party third or creditor. Size company have influence positive and significant partial to use of debt (leverage) [16]. This thing seen from company size big tend use big debt for activity operation and more easy for get or increase capital from party external[16]. Based on explanation that, submitted hypothesis as following:

H4 : Size company take effect positive significant to capital structure .

#### Effect of Business Risk on Capital Structure

The risk is the amount of deviation that may occur from the expected return[17]. Most investors know that the results obtained are actually less than the expected results. There are some risks that may be within the control of the company, in this case, there is still a company

person to be able to manage the existing risks. Research shows a positive influence between business risk and debt policy[18]. Meanwhile research shows that business risk has a negative influence on debt policy [9]. Based on this explanation, the following hypothesis is proposed:

H5: Business risk has a significant positive effect on capital structure

# Effect of Liquidity, Profitability, Tangibility, Company Size and Business Risk on Capital Structure

Based on the description above, the following hypothesis is proposed:

H6 : Liquidity, profitability, tangibility, firm size and business risk simultaneously affect the capital structure.

This research model can be described as follows:



Fig. 1. Research model

# 3. Method

Purposive sampling was used in the study, and the company sector coal listed on the Indonesia Stock Exchange for the years 2017 to 2021 was chosen as the sample research based on the following criteria:

Table 1. Sample study

No	Criteria Sample	Amount
1	Companies in the coal sector listed on the IDX.listed in 2017 – 2021	22
2	Consecutively listed companies on the IDX no profit 2017 - 2021	(2)
3	Amount sample	20
4	Total data year (20 x 5 years)	100

Data analysis in study this is statistics descriptive . Statistics descriptive that is statistics used with destination study information by describe or explain information already collected like existence . Statistics descriptive worn for explain as well as convey explanation about deployment variables in research[19]. Variable bound or dependent in study this proxied liquidity with current ratio (CR), proxied profitability with return on asset ratio (ROA), asset tangibility (TANGT), size company (FSize) and risk business (BEPR) while for variable free or independent is proxied capital structure with a debt to total asset ratio (DAR).

Variable	Definition
Current ratio	Current assets to Current liability [8]
Return on asset ratio	Profit clean to total assets [20]
Asset tangibility	Asset permanent to total assets [12]
Company size	Ln total assets [21]
Risk Business Debt to Asset Ratio	EBIT to total assets [22]
Debt To Asset Ratio	Total debt to total assets[8]

Table 2. Operationalization variable

Method of data analysis using SPSS computer application program. By performing the traditional assumption test, which includes the autocorrelation test, normality test, multicollinearity test and heteroscedasticity test. Using the following equation model, multiple linear regression testing was carried out so that the effect and relationship between the dependent and independent variables could be observed:

 $Y = \beta_0 + \beta_1 CR + \beta_2 ROA + \beta_3 TANGT + \beta_4 FSize + \beta_5 BEPR + e$ 

Test hypothesis good by Partial nor simultaneous conducted with using the individual parameter significance test / T test, and the significance test by whole using the F. Purnomo test (2016) states that coefficient determination ( $R^2$ ) is a explanatory value how much far capability variable dependent with independent and value coefficient determination ( $R^2$ ) switch between 0 to 1, which means when score coefficient determination ( $R^2$ ) is getting resembling 1 then bond Among variable independent with variable dependent will the more strong. So if score coefficient determination ( $R^2$ ) is getting resembles 0, so that all bond variable independent will Becomes more weak.

# 4. Results And Discussion

Testing the data on the research sample of coal sector companies is fulfilled as a whole for the classical assumption test. With the test results that the data is normally distributed with a significance value above 0.05, which is 0.093.

		Unstandardized
		Residual
Ν		100
Normal Parameters <sup>a,b</sup>	mean	.0000000
	Std. Deviation	15.39510757
Most Extreme Differences	Absolute	.082

Table 3. One-sample kolmogorov-smirnov test

	Positive	.082
	negative	052
Test Statistics		.082
Asymp . Sig. (2-tailed)		.093 °

For the heteroscedasticity test , the distribution of dots still in lines and graphs each other close and like form a straight line as following :



Fig. 2. Heteroscedasticity Test

Table 4. Statistical analysis descriptive					
	Ν	Minimum	Maximum	mean	Std. Deviation
CR	100	21	2012	221.60	242.136
ROA	100	-32	52	10.55	12,966
TANGT	100	1	58	21.80	14,038
FSIZE	100	2663	3239	2993.92	148,782
BEPR	100	-29	69	15.96	15,729
DAR	100	9	115	46.73	22,415
Valid N (listwise)	100				

Descriptive statistical analysis obtained by researchers are as follows:

The coefficient of determination test is used to measure how far the model's ability to explain the variation of the independent variable to the dependent variable. The results of the coefficient of determination can be seen in the table below:

 Table 4. Statistical analysis descriptive

Mode	R	R	Adjusted R	Std. Error of
I		Square	Square	the Estimate
1	.757 <sup>a</sup>	.573	.551	.347

Table 5. Results of the coefficient of determination

R Square shows a value of 0.573, which means that the capital structure of DAR (Debt Asset to Ratio) is quite strongly influenced by liquidity, probability, asset tangibiltas, company size and business risk. The higher the value of current assets owned, the company has enough opportunity to invest in fixed assets. The higher current assets are generated by a high level of profitability. Large companies have a high enough opportunity to manage their operations and the funding obtained will be easier because it is supported by the level of liquidity and profitability. In this sector, the business risks faced are quite high, permit processing is time-consuming and faces competition from fellow business partners.

Table 6. Regression coefficient test results

Mod	lel		dardized ficients	Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant	-18,320	5,750		-3,186	.002
	)					
	CR	477	.051	697	-9,288	.000
	ROA	-129	.065	264	-1,990	.049
	TANGT	.082	.042	.147	1,953	.054
	FSize	3.045	.719	.294	4.234	.000
	BEPR	.059	.067	.118	.878	.382
a.	Dependent Var	iable: DAR				

Based on the regression coefficient table above, the multiple linear regression equation for the results of this study is as follows:

(Y) = -18,320 - 0,477 (CR) - 0,129 (ROA) + 0,082(TANGT) + 3,045 (FSize)+ 0,059(BEPR)

Hypothesis test results first where liquidity (CR) shows p value 0.00 < 0.05, H1 is accepted. This result is in line found in research, which demonstrate that influence among liquidity to capital structure[9]. However results study this have positive influence leave behind with study the influential negative[9]. The level of liquidity is influenced by high current assets which will directly affect and produce a good capital structure for the smooth operation of the company.

Hypothesis test results second (H2) profitability (ROA) shows a p-value of 0.049 < 0.05. H2 is accepted. This result in line with research which in his research have results liquidity have influencer positive to capital structure [9]. High profitability is resulted by high income and efficient costs, so the profit earned will be quite large.

Hypothesis test results the third (H3) tangibility (TANGT) showed p-value 0.054 > 0.05. H3 is rejected. This is not in line with the research, tangibility does not affect the capital structure of coal sector companies [10][13]. In operational activities, the company does not entirely utilize its own fixed assets Because they look at the turnover of funds and take into account their efficiency, generally companies use finance lease assets.

Hypothesis test results fourth (H4) size company (FSize ) shows a p-value of 0.000 < 0.05. H4 is accepted . This result in line, size company have influence positive and significant partial to capital structure [16]. Great company tend more easy get financing from party third , more again sector promising coal score sure return with existence increase price embers.

Hypothesis test results fifth (H5) risk business (BEPR) shows p-value 0.382 > 0.05. H5 is rejected . This study's findings are inconsistent , where business risk has no significant effect on capital structure [18][9]. Companies with large sizes are generally able to face the business risks that will be faced, because of the flexibility of their assets. And for companies that currently have enough opportunities, licensing management is facilitated, but still has to pay attention to efficiency in its implementation.

Hypothesis test results The sixth (H6) shows a p-value of 0.000 < 0.05, H6 is accepted. Show liquidity, profitability, tangibility, size company and risk business by together influence to capital structure. It is seen in the table under this:

Model		Sum of Squares	df	Mean	F	Sig.
				Square		
1	Regression	15.251	5	3.050	25,264	.000 <sup>b</sup>
	Residual	11,349	94	-121		
	Total	26,600	99			

b. Predictors: (Constant), CR, ROA, TANGT, FSize, BEPR

## **5.** Conclusion

Based on testing hypothesis, can concluded that liquidity, profitability and size company influence positive significant to capital structure. Whereas for Tangibility and risk business no take effect to capital structure. Therefore management company must capable produce high profitability and current assets, for make it easy get payment from party third.

Limitations in study this, the population used only limited to the mining subsector coal with amount sample still a little bit, hope could expand to sector other mining, such as oil earth, tin and others. Comparing other models that influence capital structure with variable independence, long-term debt and short-term debt, and the use of variable moderation or intervention is something we haven't looked into yet.

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