ISSN No:-2456-2165

Determinant of Capital Structure of Coal Sub-Sector Mining Companies Listed on Indonesia Stock Exchange

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Abstract:- This study aims to test the determinant of the capital structure consisting of variable profitability proxified by return on asset (ROA), asset structure, liquidity projected with current ratio (CR) and the size of the company against the structure of capital in the mining business of the coal subsector listed on the Indonesia Stock Exchange in 2014-2018. This research sample was obtained by purposive sampling method. Based on the criteria for selection of the sample, 10 companies were sampled for the study. The data analysis technique used is the regression of the data panel with the selected model *random effect model.* . The Value Adjusted R-square (R^2)=0.434760 means that independent variables are able to explain the variation of dependent variables by 43.47%, while the remaining 56.53% is explained by other factors beyond this study. The F test of 0.00000 is smaller than the level of significance of α=0.05, noting that simultaneously independent variables have a significant effect on the capital structure. The results show liquidity variables had a significant negative effect on the capital structure. While variable profitability, asset structure and size of the company have no effect on the capital structure.

Keywords:- *Capital Structure, Profitability, Asset Structure, Liquidity, Size of Business.*

I. INTRODUCTION

The availability of naturalre sources is a staple in drivingdevelopment growth. Indonesia is known as a country that has abundant natural resources. To create the security of national energy supply in a sustainable manner and efficient use of energy, it is necessary to use alternative energy resources, such as coal. Coal companies need considerable funds to manage and produce their products. Following up on the mandate of Law No. 4 of 2009, the government issued Government Regulation No. 1 of 2014 on the prohibition for mining companies in Indonesia to export raw mining materials starting in January 2014.. Mining sector companies also need very large capital to conduct natural resource investigations and mining sector development. So many mining companies enter the capital market to obtain investment and to strengthen their financial position.

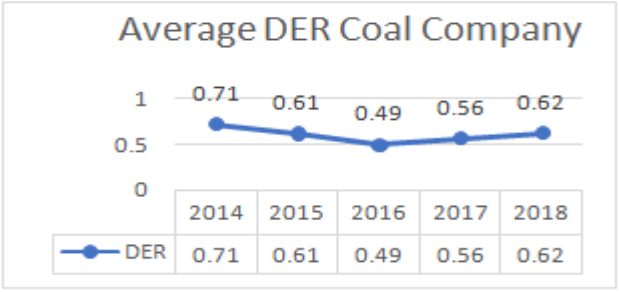

Fig 1 :- Average DER Coal Company

The increase in the average DER of coal companies are most likely due to the value of debt greater than the capital held by coal companies.

The decision of the capital structure determined by each company will not only affect the company's operational activities, but will also affect the risks that must be borne by the company itself. The capital structure proxied by debt *to equity ratio (DER) can be used* to calculate the level of risk of the company's capital. *Debt to equity ratio (DER) is a* comparison between total debt and equity in the company's funding and demonstrates the company's own capital ability to meet all its obligations (Shahyunan, 2015).

Brigham and Houston (2011), states there are several factors that affect the capital structure namely sales stability, asset structure, operating leverage, growth rate, profitability, taxes, control, management attitudes, lenders and rating agencies attitudes, market conditions, internal company conditions, and financial flexibility. According to Sartono (2010) several variables can be considered before determining the capital structure namely liquidity, asset structure, corporate growth, profitability, profit variables and tax protection, corporate scale and interen company conditions as well as macroeconomics.

Profitability is the company's ability to generate profit from its operations. Sartono (2010), Profitability is the company's ability to make a profit in relation to sales, total assets and its own capital. Profitability in this study is projected with return on asset (ROA). Return on asset is the company's ability to make a profit from the assets used (Sartono, 2010). Brigham and Houston (2013) stated that companies with high levels of profit generally use relatively little debt because with such high profits can be used by companies doing capital with retained profits only. This is in

accordance with the pecking order theory which is that the company prefers to choose a fundraiser that comes from its own capital first then for the latter option which is to raise funds from outside the company.

The asset structure is an important variable in the company's funding structure because the assets remain in touch with the liquidity company's production process. The higher the structure of the company's assets, showing the higher the ability of the company to be able to guarantee the long-term debt it borrows.

Liquidity is how much the company is able to meet its short-term obligations. According to Sartono (2010), Liquidity is the company's ability to pay for short-term financial capabilities in time. The liquidity of the company can be measured by the current ratio (CR) which is the ratio to measure the company's ability to meet its obligations that are due soon (Wiagustini, 2014). According *to the pecking order theory*,a company that has a high level of liquidity will prefer its internal funds to fund its debt and when it isunderfunded, only to seek external funding.

The size of a company is how small a company's assets are. The size of the company describes the small size of a company indicated in the total assets, the number of sales, the average sales (Riyanto 2011). Because one of the advantages of large companies is that it tends to be more trusted by creditors because it is considered to have a smaller risk compared to companies that have small company sizes.

II. LITERATURE

1. *Capital Structure*

Riyanto (2011), the capital structure is a balance or comparison between long-term debt and self-capital. The capital structure is a mirror of the company's discretion in determining the type of securities issued, since the issue of capital structure is closely related to capitalization issues, which are composed of the types of funds that make up the capitalization of its capital structure.

2. *Pecking Order Theory*

Myers and Majluf (1984) raised the theory of pecking order, they established a sequence of funding decisions in which managers would first choose to use retained profits, then debt, and external own capital as a last resort (Weston and Copeland, 2010).

3. *Trade-Off Theory*

(Bradley, Jarrel and kim, 1984) This theory discusses the relationship between the capital structure and the value of the company.

4. *Modigliani and Miller Theory (MM Theory)*

Modigliani and Miller (1958) published theories about the modern capital structure of what it called the most influential financial article it had ever written.

V = VB+ VE

V = total market value of the company

VB = market value of debt

VE = market value of equity

5. *Agency Theory*

Jensen and Meckling (1976) described the agency as "an agency relationship as a contract under which one or more person (the principals) engage another person (the agent) to perform some service on their behalf which involves delegating some decision making authority to the agent".

6. *Signaling Theory*

Signalling theory is a management move within the company that should provide implicit guidance to investors on how management views the company's prospects.

7. *Financial Leverage*

For companies that use debt, they certainly hope to be able to earn operating profit from the use of the debt which is greater than the cost of interest (Husnan,1992).

8. *Profitabilitys*

Profitability is the ability of the company to generate profit during a certain period (Riyanto, 2011).

9. *Asset Structure*

Brigham and Houston (2011) companies whoseassets are sufficient to be used as collateral are likely to use enough debt.

10. *Liquidity*

Liquidity ratio is. Harahap (2010), stated that the ratios to measure liquidity are current ratio, fast ratio, cash-to-asset ratio, cash-to-current debt ratio, current asset ratio of total assets and current asset ratio and total debt. one of the liquidity ratios to be used in this study is the current ratio.

11. *Company Size*

The size of the company can be interpreted as the size of the company. The size of the company also indicates the activity that the company has.

Conceptual Framework

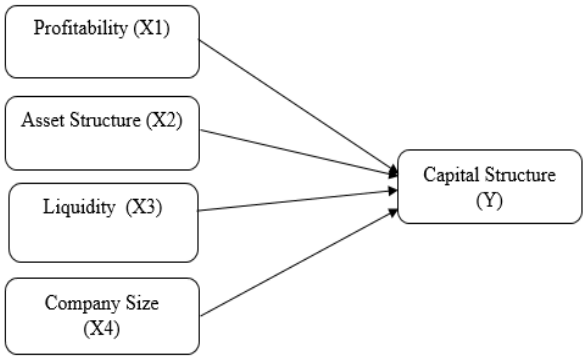

Fig 2:- Conceptual Framework

Hypothesis

H1 : Effect of profitability on capital structure

H2 : Effect of asset structure on capital structure

H3: The effect of liquidity on the capital structure
H4: The effect of the company's size on the capital structure

III. RESEARCH METHODS

The data used is secondary data from the financial statements and annual reports of coal sub-sector mining companies listed in IDX from 2014 to 2018. The method that researchers use to obtain secondary data is the documentation method. Data analysis method using data panel regression analysis method, according to Basuki (2017), data panel regression is a regression technique that combines time series data with cross section.

1. Population and Samples

The population in this study was a coal sub-sector mining company listed on the Indonesia Stock Exchange during the period 2014-2018. The population of this study was 25 coal sub-sector mining companies listed on the Indonesia Stock Exchange for the period 2014-2018.

NO	ISSUER CODE	COMPANY NAME	IPO DATE
1	ADRO	Adaro Energy Tbk.	16 Jul 2008
2	BSSR	Baramulti Suses Sarana Tbk.	08 Nov 2012
3	DEWA	Darma Henwa Tbk.	26 Sep 2007
4	GEMS	Golden Energy Mines Tbk.	17 Nov 2011
5	ITMG	Indo Tambangraya Megah Tbk.	18 Des 2007
6	KKGI	Resource Alam Indonesia Tbk.	01 Jul 1991
7	MBAP	Mitrabara Adiperdana Tbk.	10 Jul 2014
8	MYOH	Samindo Resources Tbk.	27 Jul 2000
9	PTBA	Bukit Asam Tbk.	23 Des 2002
10	TOBA	Toba Bara Sejahtra Tbk.	06 Jul 2012

Table 1 :- Research Sample

2. Data Panel Regression Method

The Data Panel Regression method is a combination of cross section data and time series data, where the same cross section units are measured at differenttimes.There are three approaches in the method of estimating the data panel regression model (Widarjono, 2013) namely Common Effect Model ,Fixed Effect Model, Random Effect Model Chow Test, Hausman Test,Lagrange Multiplier Test

3. Hypothesis Testing

The steps to test the hypothesis proposed in this study are the Goodness of Fit (R2)Test, the F StatisticalTest, and the 3.5.4.3Partial Test (TTest).

IV. RESULTS

1. Common Effect ModelRegressionodel Model

In this estimation approach, *intercept* and*slope* are fixed all the time and individuals, the difference between the interception and slope is assumed to be explained by theist reference variable*(error* or *residual).* Here are the test results:

Dependent Variable: DER
Method: Panel Least Squares
Date: 08/25/20 Time: 19:07
Sample: 2014 2018
Periods included: 5
Cross-sections included: 10
Total panel (balanced) observations: 50

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.628624	0.740545	-0.848866	0.4004
ROA	0.060426	0.329024	0.183652	0.8551
STRUKTUR_AKTIVA	-0.060708	0.281374	-0.215755	0.8302
CR	-0.173775	0.034422	-5.048376	0.0000
SIZE	0.054089	0.023711	2.281175	0.0273

R-squared	0.446807	Mean dependent var	0.602200
Adjusted R-squared	0.397635	S.D. dependent var	0.256032
S.E. of regression	0.198712	Akaike info criterion	-0.299283
Sum squared resid	1.776887	Schwarz criterion	-0.108081
Log likelihood	12.48208	Hannan-Quinn criter.	-0.226472
F-statistic	9.086500	Durbin-Watson stat	0.546038
Prob(F-statistic)	0.000018		

Table 2 :- Common *Effect Model Estimation Results*

It can be explained variabel current ratio dan ukuran perusahaan memiliki The effect of significance with a probability value smaller than $\alpha = 0.05$. While roa variables and asset structures do not have a significant influence where the probability value is greater than $\alpha = 0.05$.

2. Regression Fixed Effect Model

The model in which it will be used is between fixed effect estimation models, *in* this estimation approach, not considered individual dimensions or time. It is assumed that the behavior of data between companies is the same over a period of time. Here are the test results:

ISSN No:-2456-2165

Dependent Variable: DER
Method: Panel Least Squares
Date: 08/25/20 Time: 19:08
Sample: 2014 2018
Periods included: 5
Cross-sections included: 10
Total panel (balanced) observations: 50

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-7.642282	3.882907	-1.968185	0.0568
ROA	0.036387	0.427534	0.085108	0.9326
STRUKTUR_AKTIVA	0.536326	0.474030	1.131419	0.2654
CR	-0.180469	0.036604	-4.930247	0.0000
SIZE	0.288057	0.130565	2.206228	0.0338

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.466220	Mean dependent var	0.602200
Adjusted R-squared	0.441799	S.D. dependent var	0.256032
S.E. of regression	0.144426	Akaike info criterion	-0.800608
Sum squared resid	0.750915	Schwarz criterion	-0.265242
Log likelihood	34.01520	Hannan-Quinn criter.	-0.596738
F-statistic	9.076217	Durbin-Watson stat	1.369413
Prob(F-statistic)	0.000000		

Table 3 :- Fixed *Effect Model Estimates Results*

It can be explained variabel that the current ratio variable and the size of the company have a significant influence with a probability value smaller than α = 0.05. While roa variables and asset structures do not have a significant influence where the probability value is greater than α = 0.05.

3. Regresi Random Effect Model

The random effect model test results are as follows:

Dependent Variable: DER
Method: Panel EGLS (Cross-section random effects)
Date: 08/25/20 Time: 19:08
Sample: 2014 2018
Periods included: 5
Cross-sections included: 10
Total panel (balanced) observations: 50
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.553784	1.390976	-1.117046	0.2699
ROA	0.260403	0.350497	0.742953	0.4614
STRUKTUR_AKTIVA	0.158486	0.375991	0.421514	0.6754
CR	-0.188422	0.033900	-5.558226	0.0000
SIZE	0.083869	0.045866	1.828574	0.0741

Effects Specification

	S.D.	Rho
Cross-section random	0.179830	0.6079
Idiosyncratic random	0.144426	0.3921

Weighted Statistics

R-squared	0.480902	Mean dependent var	0.203559
Adjusted R-squared	0.434760	S.D. dependent var	0.190700
S.E. of regression	0.143373	Sum squared resid	0.925014
F-statistic	10.42221	Durbin-Watson stat	1.117121
Prob(F-statistic)	0.000005		

Unweighted Statistics

R-squared	0.418579	Mean dependent var	0.602200
Sum squared resid	1.867559	Durbin-Watson stat	0.553317

Table 4 : Random Effect Model Estimation Results

It can be explained that the current ratio variable has an effect of significance with a probability value smaller than α = 0.05. As for the ROA variable, the Asset Structure and Company Size do not have a significant influence where the probability value is greater than α = 0.05.

4. Data Panel Regression Model Selection

a) Chow Test

This test can see the p-value if the result is less than 5% (significant) then the estimated model to be used is a fixed effect, but if the p-value exceeds the number 10% (insignificant) thus the estimated model used is the common effect model.

Redundant Fixed Effects Tests			
Equation: Untitled			
Test cross-section fixed effects			
Effects Test	Statistic	d.f.	Prob.
Cross-section F	5.465175	(9,36)	0.0001
Cross-section Chi-square	43.066246	9	0.0000

Table 5 :- Hasil Uji Chow Test

Knows that value of Prob. is 0.0000 which is less than the value of α= 0.05. From these results it can be concluded that the appropriate model for the data regression panel is the Fixed Effect Model, which means H0 is rejected and H1 is accepted.

b) Hausman Test

This study can see the p-value if the result isless than 5% (significant) then the estimated model to be used is a fixed effect, but if the p-value exceeds the number 5% (insignificant) thus the estimation model used is a random effect model. Here are the test results:

Correlated Random Effects - Hausman Test			
Equation: Untitled			
Test cross-section random effects			
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	3.346556	4	0.5016

Table 6 :Hausman *Test Results*

Knows that prob *value*.is 0.5016, where the value is greater than the value α = 0.05. From these results it can be concluded that the appropriate model for the data regression panel is *the Random Effect Model,* which means H_1 is rejected and H_0 is accepted.

c) Langrange Multiplier Test (LM-Test)

The Langrange Multiplier (LM-Test) test is a test to determine the use of methods between random effect models or common effect models. The Langrange Multiplier test hypothesis is:

Lagrange multiplier (LM) test for panel data			
Date: 08/25/20 Time: 20:08			
Sample: 2014 2018			
Total panel observations: 50			
Probability in ()			
Null (no rand. effect)	Cross-section	Period	Both
Alternative	One-sided	One-sided	
Breusch-Pagan	16.56524	1.907226	18.47247
	(0.0000)	(0.1673)	(0.0000)
Honda	4.070042	-1.381024	1.901423
	(0.0000)	(0.9164)	(0.0286)
King-Wu	4.070042	-1.381024	1.108572
	(0.0000)	(0.9164)	(0.1338)
GHM	--	--	16.56524
	--	--	(0.0001)

Table 7 :- Hasil Langrange Multiplier Test

The Probability Brusch-Pagan value looks at the probability value is 0.0000,Thevalue is smaller than the value α=0.05 then H0 is rejected, and H1 is accepted so it can be concluded that the more appropriate model is the Random Effect model.

Regression Analysis Data Panel

In this study used the Random Effects model method for the diagram model. The selection of the Random Effects model method as the data analysis method of the panel in this study was previously tested through chow test, hausman test, and langrange multiplier test first, so that it is selected the most appropriate Random Effect method for the model.

Dependent Variable: DER
Method: Panel EGLS (Cross-section random effects)
Date: 08/25/20 Time: 19:08
Sample: 2014 2018
Periods included: 5
Cross-sections included: 10
Total panel (balanced) observations: 50
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.553784	1.390976	-1.117046	0.2699
ROA	0.260403	0.350497	0.742953	0.4614
STRUKTUR_AKTIVA	0.158486	0.375991	0.421514	0.6754
CR	-0.188422	0.033900	-5.558226	0.0000
SIZE	0.083869	0.045866	1.828574	0.0741

Effects Specification	S.D.	Rho
Cross-section random	0.179830	0.6079
Idiosyncratic random	0.144426	0.3921

Weighted Statistics			
R-squared	0.480902	Mean dependent var	0.203559
Adjusted R-squared	0.434760	S.D. dependent var	0.190700
S.E. of regression	0.143373	Sum squared resid	0.925014
F-statistic	10.42221	Durbin-Watson stat	1.117121
Prob(F-statistic)	0.000005		

Unweighted Statistics			
R-squared	0.418579	Mean dependent var	0.602200
Sum squared resid	1.867559	Durbin-Watson stat	0.553317

Table 8 :- Random Effect Model Data Panel Regression Estimates

DER = -1.553784 + 0.260403ROA + 0.158486STRUKTUR_AKTIVA – 0.188422CR + 0.083869SIZE

Hypothesis

***Goodness of Fit Test* (R^2)**

Adjusted *R-Squared value is* 0.434760. This indicates that independent variables namely *ROA,Asset Structure,Current Ratio* and Size *are able* to explain the variation in dependent variables of capital structure by 43.47%, while 56.53% is influenced by other factors beyond these study variables.

Simultaneous Test (Test F)

The DER variable (Y) as a dependent variable has a value of F = 10.42221, and a Prob value. = 0.000005 is smaller than the value α = 0.05 which means H0 is rejected. This indicates that all independent variables consisting of return on asset (ROA), asset structure, current ratio and company size (size) together affect the capital structure of coal sub-sector mining companies listed on the Indonesia Stock Exchange in 2014 – 2018.

Partial Test (t-Test)

Hypothesis Testing in this study is as follows:

1. Effect of ROA on Capital Structure

The ROA variable has a β coefficient value of 0.260403 with a t-count value of 0.742953 and a significance value of 0.4614 greater than α = 0.05. This indicates that the ROA variable proved to have no effect on the capital structure of coal sub-sector mining companies listed on the Indonesia Stock Exchange in 2014 – 2018.

2. Effect of Asset Structure on Capital Structure

The Variable Asset Structure has a β coefficient value of 0.158486 with a t-count value of 0.421514 and a significance value of 0.6754 greater than α = 0.05. This indicates that variable Asset Structure proved to have no effect on the capital structure of coal sub-sector mining companies listed on the Indonesia Stock Exchange in 2014 – 2018.

3. Influence of Liquidity (Current Ratio) onCapital Structure

The current ratio has a β coefficient value of -0.188422 with a t-count value of -5.558226 and a significance value of 0.0000 smaller than α = 0.05. This indicates that variable Asset Structure proved to have a negative and significant effect on the capital structure of coal sub-sector mining companies listed on the Indonesia Stock Exchange in 2014 – 2018.

4. Effect of Size on Capital Structure

The Size variable has a β coefficient value of 0.083869 with a t-count value of 1.828574 and a significance value of 0.0741 greater than α = 0.05. This indicates that the ROA variable proved to have no effect on the capital structure of coal sub-sector mining companies listed on the Indonesia Stock Exchange in 2014 – 2018.

V. DISCUSSION

Discussion to prove the hypothesis set out in this study. The discussion was conducted by decrypting whether the independent variables used in this study consisting of Profitability, Asset Structure, Liquidity and Company Size on capital structure affect dependent variables namely capital structureproxied by debt to equity ratio (DER) in coal sub-sector mining companies listed on the Indonesia Stock Exchange in 2014 – 2018.

a. *The Effect of Profitability on Capital Structure*

Empirical test results prove that variable profitability proxies with return on assets have no effect on the capital structure of coal sub-sector mining companies listed on the Indonesia Stock Exchange for the period 2014-2018. This is evidenced by a probability t-statistic value of 0.4614 greater than the value α = 0.05 which means H0 is accepted. These results contradict a previously established hypothetical statement stating that profitability negatively affects the capital structure.

When referring to the pecking order theory, it is stated that the higher the profitability then the lower the debt, because internal funding takes precedence. Then if you refer to the theory trade-off that states that there is a positive relationship between profitability and the use of debt. Companies with high profitability will use more debt to get a bigger profit due to tax shield. Because by indebted there is an interest fee that reduces the company's profit or loss. Modigliani and Miller (1963), developed the theory of capital structure and expanded on income tax and income tax, stating that interest costs could save tax payments because interest could reduce taxable profits so that the taxes paid by companies became smaller.

The results of this study are in line with previous research conducted by Pertiwi and Darmayanti (2018), Andika and Sedana (2019) stating that variable profitability has no effect on the capital structure. In contrast to research conducted by Zulvia (2016), Fitriany and Nuraini (2018), Ahmad et al (2017) stated that variable profitability has a significant negative effect on the capital structure.

b. *Effect of Asset Structure on Capital Structure*

Empirical test results prove that variable asset structure has no effect on the capital structure of coal sub-sector mining companies listed on the Indonesia Stock Exchange for the period 2014-2018. This is evidenced by the probability value of t-statistic 0.6754 greater than α = 0.05 which means H0 is accepted. These results contradict a previously established hypothesis that the asset structure has a positive effect on the capital structure.

This means that coal sub-sector mining companies are able to use their own capital in investment activities to grow their businesses without using debt. In addition, the company's fixed assets can be used for the company's operating activities in generating profit, so that the profit earned by the company can be used to increase its investment back. The use of its own capital in conducting investment activities will reduce the risk of bankruptcy faced by the company.

Companies with large assets can use assets as collateral to obtain debt from outside parties. Companies with large asset values are easier to trust to get loans from outside parties because it is easier access to funds than smaller companies. This is contrary to Trade Off Theory and in line with Pecking Order Theory. When a company has a larger proportion of tangible assets, its asset valuation becomes easier so that the problem of information asymmetry becomes lower. Thus, the company will reduce its debt usage when the proportion of tangible assets increases.

The results of this study are in line with previous research conducted by Buchori (2018), Kartika (2016), Handayani and Darma (2018) Serghiescua and Văideanb (2014) stating that variable asset structures have no effect on capital structure. This study differs from the findings of Zulvia (2016), Lessy (2016), Astakoni and Utami (2019)

which states that variable asset structures have a significant negative effect on the capital structure.

c. *The Effect of Liquidity on Capital Structure*

Based on empirical test results proving that liquidity variableproxed with current ratio negatively and significantly affects the capital structure of coal sub-sector mining companies listed on the Indonesia Stock Exchange for the period 2014-2018. This is evidenced by a probability value of 0.0000 smaller than α = 0.05 which means H0 is rejected. These results are in line with a forefined hypothesis statement stating that liquidity proxied by the current ratio negatively affects the capital structure.

Based on the pecking order theory, the company will choose a funding scenario with an internal source, namely retained profit. Companies that have high profitability then the flow of proceeds will also be high. Proceed is an inflow of cash in, if a company has a high inflow of cash, coupled with receivables and supplies in abundant conditions then the company can pay off its current debt as due. This will encourage the company to use its current assets to the maximum to cover its current debt.

The results of this study are in line with previous research conducted by Widayanti et al (2016), Pertiwi and Darmayanti (2018), Lessy (2016), Ahmad et al (2017) which stated that liquidity variables negatively and significantly affect the capital structure. This study differs from the findings of Fitriany and Nuraini (2018) stating that liquidity variables have no effect on the capital structure of consumer goods companies listed on the indonesian stock exchange.

d. *The Effect of Company Size on Capital Structure*

Based on empirical test results, the asset structure variable has no effect on the capital structure of coal sub-sector mining companies listed on the Indonesia Stock Exchange for the period 2014-2018. This is evidenced by the probability value of t-statistic 0.0741 smaller than α = 0.05 which means H0 is accepted. These results contradict a previously established hypothesis statement stating that the size of the company has a positive effect on the capital structure.

Based on pecking order theory and trade-off theory, the relationship between the size of the company and the capital structure is positive. This means that the larger the size of a company, the easier it will be to find external sources of funds or debt. Because creditors will see that the larger the company, the more assets are owed, so that the assets can be used as collateral in debt. But in this study it was found that between the size of the company has no effect on the capital structure. From the results of the study has not been able to interpret from pecking orders or trade-off theory, because the increase in the size of the company measured by using natural logarithm of total assets very small each year will not affect the increase in debt significantly. Not necessarily every company will be willing to guarantee all its assets for funding through debt. In addition, there is the ability of internal companies to fund through internal by optimizing existing assets.

The results of this study are in line with previous research conducted by Lessy (2016), Ahmad et al (2013) which stated that the variable size of the company has no effect on the capital structure. In contrast to research conducted by Ariani and Wiagustini (2017), Saarani and Shahadan (2013) stated that the company's size variable negatively affects the capital structure.

VI. CONCLUSION

Based on the results of research on "Determinant of Capital Structure against Coal Sub Sector Mining Companies Listed on the Indonesia Stock Exchange for the period 2014-2018" using Eviews 10 software, the researchers successfully concluded that:

1. Variable Profitability has no partial effect on the capital structure of coal sub-sector mining companies listed on the Indonesia Stock Exchange in 2014 – 2018.
2. Variable Asset Structure has no partial effect on the capital structure of coal sub-sector mining companies listed on the Indonesia Stock Exchange in 2014 – 2018.
3. Liquidity Variables partially have a negative and significant effect on the capital structure of coal sub-sector mining companies listed on the Indonesia Stock Exchange in 2014 – 2018.
4. Variable Size of the company partially has no effect on the capital structure of coal sub-sector mining companies listed on the Indonesia Stock Exchange in 2014 – 2018.

SUGGESTION

1. For companies, mining sub-sector coal listed on indonesia stock exchange, in decentralized capital structure needs to consider liquidity because it proves to have an effect on the capital structure. Peruasahaan with a high level of liquidity can meet its internal operating needs with internal funds so that debt decreases and the risk of bankruptcy can be minimized. Internal funds through withheld profit or cash inflow that can be achieved by increasing the collection of receivables to customers.
2. For academics, this research can be useful for those who want to know how much influence profitability, asset structure, liquidity and size of companies on coal sub-sector mining companies listed on the indonesia stock exchange for the period 2014-2018. For further researchers, in to get the maximum research results in providing information on factors that affect the capital structure, it is recommended to add other fundamental factors as well as the period of year of observation so that a larger number of samples will be obtained later.
3. For investors, it should be before investing understand all relevant information available in the capital market in the form of financial statements published or related to issues related to capital markets. investors should also consider a variety of factors that affect the capital structure before making a decision to invest in a company because the capital structure may affect a company's prospects in the future.

REFERENCES

[1]. Ariani, N, K, A., dan Wiagustini, N, L, P. (2017). Faktor-Faktor Yang Mempengaruhi Struktur Modal Perusahaan Property & Real Estate Yang Terdaftar Di BEI. *E-Jurnal Manajemen Unud*. Vol. 6, No. 6, 2017: 3168-3195 ISSN : 2302-8912.

[2]. Astakoni, I, M, P. Utami, N, M, S. Handayani. Mahasaraswati. (2019). DeterminanStruktur Modal Perusahaan (Studi Pada Perusahaan Manufaktur Sub-SektorKosmetik&KeperluanRumahTangga Yang Terdaftar Di Bursa Efek Indonesia Periode 2010 – 2016). WacanaEkonomi (*JurnalEkonomi, Bisnis Dan Akuntansi*) Volume 18, Nomor 1, Maret 2019; PP. ISSN Print: 1978-4007 and ISSN Online: 2655-9943.

[3]. Basuki, Agus. (2017). *Ekonometrika dan Aplikasi dalam Ekonomi*. Yogyakarta: Danisa.

[4]. Brigham, Eugene F dan Joel F. Houston. (2001). *Essentials of Financial Management: Dasar – dasar Manajemen Keuangan*. Edisi 8 Buku 1.(Alih Bahasa: Dodo Suharto dan Herman Wibowo). Jakarta: Erlangga.

[5]. Brigham, Eugene F. dan Houston, Joel F. 2011. *Dasar-dasar ManajemenKeuangan Terjemahan*. Edisi 10. Jakarta: Salemba Empat.

[6]. Brigham, Eugene F dan Joel Houston. 2013. *Dasar-dasar Manajemen Keuangan*. Edisi 11. Jakarta: Salemba Empat.

[7]. Brealey, Richard A. Myers, Stewart C, dan Marcus, Alan J. (2008). *Dasar-Dasar Manajemen Keuangan Perusahaan*. Edisi 5 jilid 2. (Alih Bahasa: Bob Sabran). Jakarta: Erlangga.

[8]. Dumas, Lusangaji. (2012). Pengaruh Ukuran Perusahaan, Struktur Aktiva, Pertumbuhan Perusahaan, dan Profitabilitas terhadap Struktur Modal (Studi pada Perusahaan Makanan dan Minuman yang Tercatat di BEI). *Jurnal Manajemen*. Vol. 1, No. 2.

[9]. Frank M.Z., dan K.V. Goyal (2007) "*Trade-Off and Pecking Order Theories of Debt* ", Handbook of Corporate Finance: Empirical Corporate Finance, Vol.2, pp. 1-82.

[10]. Ghozali, Imam. 2013. *Aplikasi AnalisisMultivariate dengan Program IBM SPSS 21 Update PLS Regresi*. Semarang: Badan Penerbit Universitas Diponegoro.

[11]. Gujarati, D.N.,2012, *Dasar-dasar Ekonometrika*, Terjemahan Mangunsong, R.C., Salemba Empat, buku 2, Edisi 5, Jakarta.

[12]. Agus, Riyanto, (2011). *Aplikasi Metodologi Penelitian Kesehatan*. Nuha. Medika Yogyakarta.

[13]. Harahap, S. S. (2010). *Analisis Kritis Atas Laporan Keuangan (1st ed)*. Jakarta: Raja Grafindo Persada.

[14]. Hendra, Sumantri, Raharjaputra. (2009). *Manajemen Keuangan dan Akuntansi untuk Eksekutif Perusahaan*. Jakarta: Salemba Empat.

[15]. Harjito, Agus, dan Martono. (2010). *Manajemen Keuangan (Edisi 3)*. Yogyakarta: Ekonisia.

[16]. Imam Ghozali. (2011). *Aplikasi Analisis Multivariate dengan Program IBM SPSS19*. Semarang: UNDIP.

[17]. Indrajaya, G. Herlina. (2011). Pengaruh Struktur Aktiva, Ukuran Perusahaan, Tingkat Pertumbuhan, Profitabilitas dan Risiko Bisnis Terhadap Struktur Modal: StudiEmpiris Pada Perusahaan Sektor Pertambangan yang Listing di Bursa Efek Indonesia Periode 2004-2007. *Akurat Jurnal Ilmiah Akuntansi* Nomor 06 Tahun ke-2 September-Desember 2011.

[18]. Joni dan Lina. (2010). *Faktor-faktor yang Mempengaruhi Struktur Modal*. Jurnal Bisnis dan Akuntansi. Vol. 12 No. 2. Hlm. 81-96.

[19]. Kartika, Andika. 2009. Faktor-Faktor yang Mempengaruhi Struktur Modal Pada Perusahaan Manufaktur yang Go Publik di BEI. *Dinamika Keuangan dan Perbankan*, 1 (2): 105-122.

[20]. Kasmir, 2011, "*Analisis Laporan Keuangan*", Raja Grafindo Persada: Jakarta.

[21]. Margaretha, F dan Ramadhan, A.R., (2010), Faktor-faktor yang Mempengaruhi Struktur Modal pada Industri Manu-faktur di Bursa Efek Indonesia, *Jurnal Bisnis dan Akuntansi.*

[22]. Myers, Stewart C., R.A. Brealey, dan A.J. Marcus. (2001). *Fundamentals of Corporate Finance (3rd Edition).* Singapore : Mc Graw-Hill.

[23]. Pertiwi, N, K, N, I. Darmayanti, N, P, A. (2018). Pengaruh Profitabilitas, Likuiditas, Struktur Aktiva dan Kebijakan Deviden Terhadap Struktur Modal Perusahaan Manufaktur di BEI. *E-Jurnal Manajemen Unud*, Vol. 7, No. 6,2018:3115-3143ISSN : 2302-8912.

[24]. Riyanto, Bambang. 2011. *Dasar-dasar Pembelanjaan Perusahaan. Edisi Keempat. BPFE.* Yogyakarta. (Riyanto, 2011:305).

[25]. Syamsuddin, Lukaman. 2009. *Manajemen Keuangan Perusahaan*. Jakarta: Raja Grafindo Indonesia.

[26]. Sartono, A. R. 2010. *Manajemen Keuangan Teori dan Aplikasi*. Edisi Keempat.Yogyakarta: BPFE."

[27]. Sitanggang, J. P. 2013. *Manajemen Keuangan Perusahaan Lanjutan*. Edisi ke 1.Jakarta: Mitra Wacana Media.

[28]. Sudana, I Made. 2012. *Manajemen Keuangan Perusahaan Teori dan Praktik*. Erlangga. Jakarta.

[29]. Syahyunan. (2015). *Manajemen Keuangan Perencanaan Analisis Dan Pengendalian Keuangan*. Edisi Kedua. Medan: USU Press.

[30]. Titman, S dan Wessels, R. (1998). *The Determinant of Capital Structure Choice*. Jouurnal of Finance. Vol: 43, No.1. Hal.1-19.

[31]. Weston, J. Feed dan Thomas E. Copeland. 2010. *Manajemen Keuangan*. Jakarta: Binarupa Aksara.

[32]. Weston, J. F. dan Copeland, T. E. (1997). *Manajemen Keuangan, Edisi Sembilan*.Jakarta:Penerbit Bina Rupa Aksara.

[33]. Wiagustini, Luh Putu. 2014. *Dasar-dasar Manajemen Keuangan*. Denpasar: Udayana University Press.

[34]. Widayanti, L, P. Triaryati, N. Abundanti, N. (2016). PENGARUH PROFITABILITAS, TINGKAT PERTUMBUHAN PERUSAHAAN, LIKUIDITAS, DAN PAJAK TERHADAP STRUKTUR MODAL PADA SEKTOR PARIWISATA. *E-Jurnal Manajemen Unud*, Vol. 5, No. 6, 2016: 3761-3793ISSN : 2302-8912.

[35]. https://market.bisnis.com/read/20190730/7/1130254/delapan-sektor-topang-laju-ihsg-di-zona-hijau-infrastruktur-pendorong-utama
[36]. https://industri.kontan.co.id/news/volume-ekspor-batubara-indonesia-turun-10-nilainya-merosot-18
[37]. https://finance.yahoo.com/
[38]. https://www.idx.co.id/perusahaan-tercatat/laporan-keuangan-dan-tahunan/