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THE EFFECT OF CURRENT RATIO, DEBT TO EQUITY RATIO, AND TOTAL ASSET TURNOVER ON RETURN ON EQUITY IN OIL AND GAS MINING COMPANIES LISTED ON THE INDONESIA STOCK EXCHANGE PERIOD 2017-2021

[1]Nanda Fitriyana, [2*]Muhammad Fuad, [3]Meutia Dewi
Program Studi Manajemen, Universitas Samudra, Langsa, Aceh, Indonesia
muhammadfuad@unsam.ac.id

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Abstract

This study aims to determine the effect of Current Ratio (CR), Debt to Equity Ratio (DER) and Total Asset Turnover on Return On Equity (ROE) in Oil and Gas Mining Companies listed on the Indonesia Stock Exchange for the 2017-2021 period . The population in this study amounted to 19 companies and a sample of 14 companies using a purposive sampling technique. Methods of data analysis in this study using multiple linear regression analysis, t test, F test and test the coefficient of determination. The results showed Y = -0.473– 0.008X1 +0.012X2 +0.547X3. The results of the study using the t test show that partially Current Ratio and Total Asset Turnover have no significant effect on Return On Equity, for the Debt to Equity Ratio variable partially have a significant effect on Return On Equity. The results of the study using the F test show that the Current Ratio (CR), Debt to Equity Ratio (DER) and Total Asset Turnover simultaneously have a significant effect on Return On Equity (ROE). For the coefficient of determination test (Adjusted R2) a value of 97.7% was obtained and the remaining 2.3% was influenced by other factors not examined in this study.

Keywords: Current Ratio (CR), Debt to Equity Ratio (DER), Total Asset Turnover, Return On Equity (ROE)

INTRODUCTION

Background of the problem

Indonesia as an archipelagic country has many natural resources (SDA), one of which is in the mining sector, namely oil and natural gas which is one of the driving forces for improving the country's economy because it is one of the mainstays for earning foreign exchange. Therefore, it is necessary to look at the development of oil and gas mining companies in order to attract investors to buy company shares. The company's financial performance is one of the factors that can be used to determine the extent to which the company's current condition is good or bad.

The ultimate goal to be achieved by a company is most importantly to obtain maximum profit and increase the value of the company so that it can provide prosperity and welfare for owners, employees, shareholders and the company. By obtaining the maximum profit as planned and targeted, the company can improve the quality of its production and make new investments. The amount of profit that the company gets can be seen from the net profit (Earning After Tax) that the company gets every certain period of year in the company's income statement. In measuring financial performance on net profit or company profit can be done by using the Return On Equity (ROE) ratio. Return On Equity (ROE) is one of the ratios used to measure return on equity,

Factors that are considered to affect Return On Equity (ROE), namely the

Current Ratio (CR), Debt to Equity Ratio (DER) and Total Asset Turnover. The Current Ratio (CR) is used as a measuring tool to measure a company's ability to pay current liabilities with its current assets. Based on the results of previous research, there is a positive and significant influence between the variable Current Ratio (CR) on Return On Equity (ROE) (Winanda, 2018; Syahputra, 2017; Sari, 2018). The results of this study are in contrast to other studies, where the Current Ratio (CR) variable has an effect but not significant on Return On Equity (ROE) (Fikram, 2019). The Debt to Equity Ratio (DER) ratio is used to assess the total debt with the company's own capital, This ratio is useful for knowing how much a company's debt is financed by the assets owned by the company. From the results of previous research, it shows that there is a positive and significant influence between the Debt to Equity Ratio (DER) variable on Return On Equity (ROE). (Winanda, 2018; Syahputra, 2017; Sari, 2018; Fikram, 2019; Andriawan, 2019). The Total Asset Turnover ratio is used to measure asset activity and the company's ability to generate sales through its assets.From the results of previous research there is a positive influence between the Total Asset Turnover variable on Return On Equity (Sari, 2018). The results of this study are in contrast to other researchers, who state that the value of Total Asset Turnover has an effect but not significant on Return On Equity (Andriawan, 2019).

From the results of previous studies that have been previously described, it appears that there are still inconsistent and consistent results between the influence of Current Ratio (CR), Debt to Equity Ratio (DER) and Total Asset Turnover on Return On Equity (ROE). Therefore, in this study the researcher intends to analyze the effect of Current Ratio (CR), Debt to Equity Ratio (DER) and Total Asset Turnover on Return On Equity (ROE) in oil and gas mining companies listed on the Indonesia Stock Exchange (IDX) for the 2017-2021 period. The formulation of the problems raised in this study are:

1. Does Current Ratio (CR) affect Return On Equity (ROE)?
2. Does the Debt to Equity Ratio (DER) affect Return On Equity (ROE)?
3. Does Total Asset Turnover affect Return On Equity (ROE)?
4. is *Current Ratio*(CR), Debt To Equity Ratio (DER), and Total Asset Turnoversimultaneously affect the Return On Equity (ROE) ?

THEORETICAL BASIS

Definition and Measurement of Current Ratio (CR)

*Current Ratio*is a financial ratio used to measure a company's ability to pay short-term debt with all of its current assets. If the company's Current Ratio increases, the company's profitability will also increase because the company does not experience financial conditions due to default, so that the profit (profit) or return that will be obtained by the company will also increase.

In this study the liquidity ratio is measured using the Current Ratio to measure short-term liquidity risk. According to Ermaini, et al. (2021:99), the Current Ratio is formulated as follows:

$$\text{Current Ratio} = \frac{\text{Total Aktiva Lancar}}{\text{Total Kewajiban Lancar}}\ x\ 100\ \%$$

The calculation result of this ratio can be just a number as it is or a percentage because it is multiplied by the number 100.

Definition and Measurement of Debt to Equity Ratio (DER)

According to Kasmir (2014: 158), states that "The Debt to Equity Ratio is used to assess debt with equity. This ratio is useful for knowing the amount of funds provided by borrowers (creditors) with company owners. For companies, the greater this ratio, the better, conversely, with a low ratio, the higher the level of funding provided by the owner and the greater the security limit for the borrower in the event of a loss or depreciation of the asset value.

Furthermore, according to Ermaini, et al. (2021: 100), in measuring the Debt to

Equity Ratio (DER) you can use the following formula:

$$\text{Debt to Equity Ratio(DER)} = \frac{\text{Total Utang}}{\text{Ekuitas}} \times 100\ \%$$

The calculation result of this ratio can be just a number as it is or a percentage because it is multiplied by the number 100.

Definition and Measurement of Total Asset Turnover

According to Ermaini, et al. (2021:102), "The activity ratio is the ratio that describes the company's ability to utilize or use its assets in obtaining income through sales." This ratio does not measure the high and low ratios that are calculated to determine the merits of the company's finances. However, this activity ratio measures management performance in running the company to achieve the planned targets or goals.

According to Ermaini, et al. (2021:103), the formula for calculating Total Assets Turnover is as follows:

$$\text{Total asset turnover} = \frac{\text{Penjualan Bersih}}{\text{Total Aset rata-rata}}$$

The calculation results of this ratio are only numbers as they are or in nominal decimals in Rupiah units.

Definition and Measurement of Return On Equity (ROE)

Ermaini, et al. (2021:104), “It is a comparison between net profit after tax and total equity. Return On Equity (ROE) is a ratio that shows the extent to which a company manages its own capital (net wort) effectively, measuring the level of profit from investments that have been made by the owners of their own capital or the company's shareholders.

Factors that affect Return On Equity (ROE) which are usually used to measure how effectively the company's total equity or own capital is utilized in generating net profit after tax. Put forward by Lukman Syamsudin (2013:65), the factors that influence Return On Equity (ROE) are as follows:

1. *Total Assets Turnover*(efficiency in the use of assets) is the ratio measuring the level of efficiency in the use of total assets in generating sales.
2. *Net Profit Margin*is the ratio measuring the level of profitability of sales generated.
3. *leverage*(debt ratio) is a measurement of the amount of debt of the company's total assets.

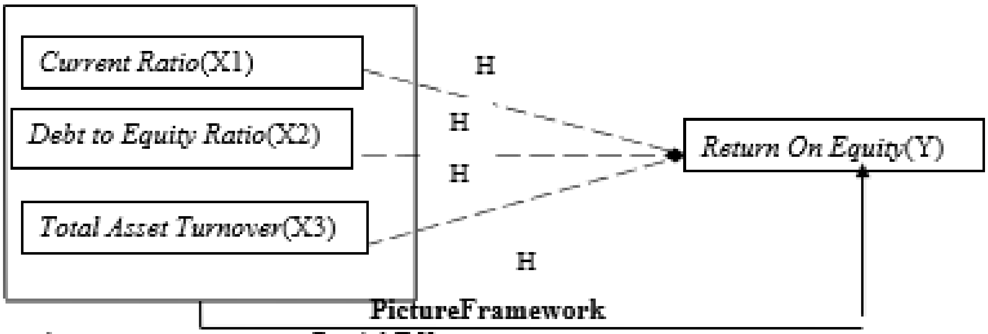
According to Ermaini, et al. (2021:104) Return On Equity can be calculated using the following formula:

$$\text{Return On Equity(ROE)} = \frac{\text{Laba Bersih Setelah Pajak}}{\text{Ekuitas}} \ \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots$$

The calculation result of this ratio can be just a number as it is or a percentage because it is multiplied by the number 100.

Framework

Based on the explanation above, it can be described regarding the relationship between Current Ratio (CR), Debt to Equity Ratio (DER), and Total Asset Turnover with Return On Equity (ROE). Schematically, the framework for thinking in this study is seen in the following figure:



PictureFramework

Information :-------------- = Partial Effect
→ = Simultaneous Influence

Research Hypothesis

The hypothesis is a temporary conclusion or a temporary answer to the existing statement of the research problem. Therefore, the formulation of research problems is usually arranged in the form of a question sentence (Sugiyono, 2011:93). Conclusions or temporary answers to the research conducted will be determined if the researcher has conducted research data analysis. The hypothesis in this study is as follows:

H1: Current Ratio (CR) has a significant effect on Return On Equity (ROE) in Oil and Gas Mining Companies listed on the Indonesia Stock Exchange.

H2: Debt to Equity Ratio (DER) has a significant effect on Return On Equity (ROE) in Oil and Gas Mining Companies listed on the Indonesia Stock Exchange.

H3: Total Asset Turnover has a significant effect on Return On Equity (ROE) in Oil and Gas Mining Companies listed on the Indonesia Stock Exchange.

H4: Current Ratio (CR), Debt to Equity Ratio (DER) and Total Asset Turnover simultaneously have a significant effect on Return On Equity (ROE) in Oil and Gas Mining Companies listed on the Indonesia Stock Exchange.

METHOD

The objects in this study are oil and gas mining companies listed on the Indonesian Stock Exchange. The independent variable consists of four variables, namely Current Ratio (CR), Debt To Equity Ratio (DER) and Total Asset Turnover, while the dependent variable consists of one variable, namely Return On Equity (ROE).

Data type, the type of data used in this study is qualitative data in the form of theories related to this research, namely regarding Current Ratio (CR), Debt To Equity Ratio (DER), Total Asset Turnover, and Return On Equity (ROE) as well as an overview general oil and gas mining companies, and quantitative data, namely in the form of data on the annual financial reports of oil and gas mining companies in the 2017-2021 period, the financial reports that are seen are the balance sheet and profit/loss reports.

Data source,The data sources in this study are secondary data obtained from the financial reports of oil and gas mining companies listed and published on the Indonesia Stock Exchange (IDX), as well as the financial reports of oil and gas mining companies taken from issuer performance websites.

Population, the population in this study were all oil and gas mining companies listed on the Indonesia Stock Exchange, totaling 19 companies.

Sample, The sampling technique used in this research is purposive sampling technique. Purposive sampling isis one of the purposive sampling techniques in accordance with the required sample requirements (Sugiyono, 2017: 138). The criteria for sampling in this study are companies listed in the category of oil and gas mining companies on the Indonesia Stock Exchange during the 2017-2021 period and companies that publish financial reports for 2017-2021. So from these criteria, the results of a sample of 14 companies were obtained.

The data collection method use in this research is library research,is a link with theoretical studies and other references related to values, culture, norms that develop in the social situation studied (Sugiyono, 2017: 291) obtained from the Samudra University library and journals related to this research. And also documentation, which is a record of past events in the form of writing, drawings, or monumental works from someone (Sugiyono, 2017: 124) where the data used in this study was collected by documenting the financial reports of oil and gas mining companies earth that has been audited and reports related to this research sourced from the official website of the Indonesia Stock Exchange (IDX).

In this study, the data analysis method used was multiple linear regression analysis, t test, F test and coefficient of determination test.According to Sugiyono (2017: 275), the multiple linear regression equation can be formulated as follows:

$$Y = a + b_1X_1 + b_2X_2 + b_nX_n + \varepsilon \quad \ldots\ldots 3.1$$

Where :

Y		=dependent variable
X1,X2		= Variable*Independent*
Xn		= nth independent variable
a		= Constant
b1,b2		= regression coefficient
bn		= nth regression coefficient
Ɛ		= standard error

The multiple linear regression equation above is modified as follows:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + \varepsilon \quad \text{-3.2}$$

Where :

Y =*Return On Equity*

a = Constant

b = The number of the direction of the regression coefficient

X1 =*Current Ratio*

X2 =*Debt to Equity Ratio*

X3 =*Total Asset Turnover*

Ɛ =*standard error*

RESULTS AND DISCUSSION

Results

Results of Multiple Linear Regression Analysis

The data analysis method used in testing the hypothesis in this study is the Multiple Linear Regression Statistical analysis method, because there are more than one independent variable in the study. Processing results using the SPSS Version 29.0 program. presented in table 4.6 below:

Table 1. Results of Multiple Linear Regression Analysis

Coefficientsa						
Model		Unstandardized Coefficients B	Unstandardized Coefficients std. Error	Standardized Coefficients Betas	t	Sig.
1	(Constant)	-.473	.667		-.708	.481
	Current Ratio	-.008	.020	-.008	-.423	.673
	Debt to Equity Ratio	012	.000	.989	53,673	<.001
	Total Asset Turnover	.547	.991	010	.552	.583
a. Dependent Variable: Return on Equity						

Source: Results of Data Processing SPSS.29

These results are entered into the multiple linear regression equation so that the following equation is known:

$$\mathbf{Y = -0.473 - 0.008X1 + 0.012X2 + 0.547X3}$$

Information :

1. The constant value (a) of -0.473 indicates that if all the independent variables namely Current Ratio (X1), Debt to Equity Ratio (X2) and Total Asset Turnover (X3) are constant or do not change (equal to zero), then Return On Equity (Y) remains at -0.473.
2. The Current Ratio (X1) regression coefficient value is -0.008 indicating a negative effect, which means that any decrease in the Current Ratio will be followed by an increase in Return On Equity of -0.008 and vice versa, assuming other independent variables are considered constant or have a fixed value.
3. The regression coefficient value of the Debt to Equity Ratio (X2) of 0.012 shows a positive effect, which means that every increase in the Debt to Equity Ratio will be followed by an increase in Return On Equity of 0.012 assuming the other independent variables are considered constant or have a fixed value.

4. The regression coefficient value of Total Assets Turnover (X3) is 0.547 showing a positive effect, which means that every increase in Total Assets Turnover will be followed by an increase in Return On Equity of 0.547 assuming other independent variables are considered constant or have a fixed value.

Hypothesis test

Partial Test Results (t test)

This test is carried out to test each independent variable (X) individually whether it has a significant influence on the dependent variable (Y). The influence of the independent variable on the dependent variable can be seen from the direction of the sign and the level of significance.

Test criteria as follows:

If the t sig value > α = 0.05 then the hypothesis H0 is accepted and Ha is rejected

If the t sig value < α = 0.05 then the hypothesis H0 is rejected and Ha is accepted

Based on the results from table 1 above, it can be explained that:

1. The result is a significant value of 0.673 > 0.05 which means that the Current Ratio (CR) has no significant effect on Return On Equity (ROE) So the hypothesis is rejected.
2. The result is a significant value of 0.001 <0.05, which means that the Debt to Equity Ratio (DER) has a significant effect on Return On Equity (ROE) so that the hypothesis is accepted.
3. The result is a significant value of 0.583 > 0.05 which means that Total Asset Turnover has no significant effect on Return On Equity (ROE) So the hypothesis is rejected.

Simultaneous Test Results (Test F)

The F statistical test is used to determine whether the independent variable (X) simultaneously or together has a significant relationship or not to the dependent variable (Y). The F test is carried out to test whether or not there is a significant influence or not simultaneously or simultaneously the independent variable (X) on the dependent variable (Y).

The test criteria are as follows:

If the F sig > α = 0.05 then the hypothesis H0 is accepted and Ha is rejected

If the F sig value < α = 0.05 then the hypothesis H0 is rejected and Ha is accepted

Based on the results of data processing with the SPSS Version 29.0 program, the following results are obtained:

Table 2. Simultaneous Test Results (Test F)

ANOVAa						
Model		Sum of Squares	df	MeanSquare	F	Sig.
1	Regression	35449.222	3	11816.407	960,603	<.001b
	residual	811,868	66	12,301		
	Total	36261090	69			

a. Dependent Variable: Return On Equity

b. Predictors: (Constant), Total Asset Turnover, Debt to Equity Ratio, Current Ratio

Source: Results of Data Processing SPSS.29

Based on the results in table 2, it is obtained a significant value of 0.001 <0.05, it can be concluded that the variables Current Ratio (CR), Debt to Equity Ratio (DER), and Total Asset Turnover simultaneously or simultaneously have a significant effect on Return On Equity (ROE)), so the hypothesis is accepted.

Test Results for the Coefficient of Determination (R-Square)

The coefficient of determination serves to determine the percentage of the influence of the independent variable (X) and the dependent variable (Y), by squaring the coefficients found. In use, the coefficient of determination is expressed as a percentage (%). To find out how far the contribution or percentage of the influence of the Current Ratio (CR), Debt to Equity Ratio (DER) and Total Asset Turnover on Return On Equity can be known through the Determination Test.

Based on the results of data processing with the SPSS Version 29.0 program, the following results are obtained:

Table 3 Test Results for the Coefficient of Determination

Summary models				
Model	R	R Square	Adjusted R Square	std. Error of the Estimate
1	.989a	.978	.977	3.50728
a. Predictors: (Constant), Total Asset Turnover, Debt to Equity Ratio, Current Ratio				

Source: Results of Data Processing SPSS.29

Based on the results of the test for the coefficient of determination (Adjusted R-Square) in table 3 above, the value of the Adjusted R-Square in the regression model is 97.7%, this means that the contribution given is Current Ratio (CR), Debt to Equity Ratio (DER) and Total Asset Turnover together on Return On Equity (ROE) of 97.7% while 2.3% is influenced by other variables not examined in this study.

Discussion

Effect of Current Ratio on Return On Equity

Based on the research results obtained in the partial test (t test) shows that the significant value is 0.673 > 0.05, so partially there is an insignificant effect of the Current Ratio on Return On Equity. This shows that investors pay more attention to the Current Ratio as a tool for the company's ability to pay off current debt with its current assets where the average value of the company's current assets is greater than the average value of the company's current debt. It also shows that investors believe in the company's ability to pay off its current liabilities. The results of this study are in line with research conducted by Winanda (2018), Fikram (2019), and Sari (2018) which state that partially (t test) the Current Ratio has no significant effect on Return on Equity.

Effect of Debt to Equity Ratio on Return on Equity

Based on the research results obtained in the partial test (t test) shows that the significant value is 0.001 <0.05, so partially there is a significant effect of the Debt to Equity Ratio on Return On Equity. This means that the higher the Debt to Equity value can increase the company's profits, this is because large working capital can provide the company's ability to manage capital effectively and generate large profits as well. The results of this study are in line with research conducted by Winanda (2018), Andriawan (2019), Syahputra (2017), and Fikram (2019) which state that partially (t test) the Debt to Equity Ratio has a significant effect on Return on Equity.

Effect of Total Asset Turnover on Return on Equity

Based on the research results obtained in the partial test (t test) shows that the significant value is 0.583 > 0.05, so partially there is an insignificant effect of Total Asset Turnover on Return On Equity. The average value of sales is smaller than the average value of total assets, this is suspected because companies that have a lot of inventory in warehouses will reduce sales, with decreased sales followed by a decrease in total assets so that the net profit obtained by small companies so that the company's Return On Equity decrease. The results of this study are in line with research conducted by Sari (2018) which states that partially (t test) Total Asset Turnover has no significant effect on Return on Equity.

Effect of Current Ratio (CR), Debt to Equity Ratio (DER), and Total Asset Turnover on Return On Equity (ROE).

Based on the results of the simultaneous test (F test) it shows that the significant value is 0.001 <0.05 so it can be concluded that the variables Current Ratio (CR), Debt to Equity Ratio (DER) and Total Asset Turnover simultaneously have a significant effect on Return On Equity (ROE)). The higher the Current Ratio, the current assets are higher than current liabilities, it can be said that the company is able to pay its current obligations at maturity and can pay interest expenses, the use of capital in the company is not disturbed so that it can increase profits as a result it can increase Return On Equity . The higher the level of Debt to Equity Ratio, the greater the company's profit, This is because the company has large working capital and is accompanied by the company's ability to manage this large working capital effectively, resulting in large profits. Return On Equity will increase. The high level of Total Asset Turnover shows the effectiveness of using company assets in generating sales, with efficient use of assets so that they can contribute to increasing profits and Return On Equity will increase. Based on the research conducted (Sari, 2018) states that the research conducted aims to determine the simultaneous and partial effects of the independent variables, namely Current Ratio, Debt to Equity Ratio,

CONCLUSION

Based on the results of the research and discussion that has been stated previously, the following conclusions can be drawn:

1. From the results of the t test it is known that the Current Ratio and Total Asset Turnover have no significant effect on Return On Equity in oil and gas mining companies listed on the Indonesia Stock Exchange, while the Debt to Equity Ratio has a significant effect on Return On Equity in oil and gas mining companies earth listed on the Indonesia Stock Exchange for the 2017-2021 period.
2. From the results of the F test it is known that the Current Ratio (CR), Debt to Equity Ratio (DER) and Total Asset Turnover have a significant effect on Return On Equity (ROE) in oil and gas mining listed on the Indonesia Stock Exchange for the 2017-2021 period.
3. From the results of the analysis of the coefficient of determination it can be explained that the contribution of the Current Ratio (CR), Debt to Equity Ratio (DER) and Total Asset Turnover variables together to Return On Equity (ROE) is 97.7% while 2.3% influenced by other variables not examined in this study.

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