ANALYSIS OF THE EFFECT OF LIQUIDITY, LEVERAGE AND FIXED ASSET TURNOVER TO RETURN ON ASSETS OF OIL GAS MINING SUB-SECTOR COMPANIES (LISTED IN IDX FOR THE PERIOD 2018-2021)

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Abstract

Oil and gas is one of the factors of the current economic turning wheel. As The company in an industry that is quite significant for the country, this oil and gas company needs to pay attention to   financial ratios in order to produce good financial performance. The ratios used in this study are Liquidity (Current Ratio), Leverage (Debt to Asset Ratio), Activity (Fixed Asset Turn Over) and Profitability (Return on Asset). The research method used is a descriptive quantitative. The data used in this study is sourced from the financial statements contained with fifteen companies in IDX period 2018-2021. The analysis technique is used multiple linear regression. The results of the partial current ratio study have a negative direction and debt to asset ratio has a positive direction and has no significant effect on return on assets while Fixed Asset Turn Over has significant influence on Return on Assets and has a positive direction.   Simultaneous current ratio as a liquidity variable, debt to asset ratio as leverage variable and fixed asset turnover have a significant influence on return on assets.

Keywords: Current Ratio (CR), Debt to Asset Ratio (DAR), Fixed Asset Turn Over (FATO) and Return On Asset (ROA)

1. Introduction

The report from the official source written by the ESDM RI website stated that in the midst of this pandemic, the oil and gas industry has provided revenue to the state of around Rp 96.7 trillion. Various efforts were made by SKK Migas together with contractors to be able to deal with this pandemic and can make quite good income for the country.

Kasmir in Tanor et al.(2015), The data are used as calculations and can be generated by dividing from one number with another source of numbers as an index. There are several methods or steps taken to get value from the level of liquidity, solvency, activity and profitability of a company is to assess financial performance. Various things that can provide an influence in providing results from financial performance in the company that can be analyzed in this study include Current Ratio (CR), Debt to Asset ratio (DAR), and Fixed Asset Ratio (FATO), as Independent Variables. Ratio is used to calculate the performance of the finances used to conduct this study, namely Return On Assets as Dependent Variables.

Oil and gas (oil and gas) or petroleum companies are land or targets for investors to plant investments that are very important natural resources. Oil and company is a company in the main energy sector where oil and gas is one of the factors of the current economic turning wheel. The demand for fuel that always increases over time causes the increase in oil prices almost all over the world with a fairly high increase even though people continue to use it every day because of the need. It makes oil and gas prices increase and influenced by the increasing market demand for energy consumption from fuel every year and there are certainly limitations in the provision of oil and gas in the world.

2. Literature Review

Definition of Financial Ratio

In assessing the good or bad of a company's performance can be in the value of a company's financial ratio. A company's financial statements can provide value for the good or bad performance of a company. Comparing a financial statement from the present time with the previous time period can be determined how a company's achievements. Comparing the financial ratios of several similar companies also includes this assessment step, so that the company's performance value can be assessed whether the company has good performance or vice versa.

Hery in Miatri (2019), calculating the financial ratio to perform the calculation of a financial has a function to be an indicator in assessing how the financial situation and how a company is performing is a step of this ratio. Financial ratios how to see the value that can be used in obtaining calculation results with the aim of comparing one report with another calculation where there is a significant relationship. This comparison will be seen in one section of another section of a financial statement or between posts between financial statements.

Current Ratio

The current ratio has a function as a tool to measure the level of a company's ability to meet its short-term obligations that will mature as a whole with its current assets, namely by

making a comparison between the amount of current assets and current debt. The provision in the calculation of this current ratio is 200% or 2: 1. The magnitude of this ratio is often considered a good or good measure for the liquidity level of a company.

(Munawir, 2016)   "Rasio, which is often used to analyze the finances of an industry, namely the Current Ratio, is to conduct and see the level of comparison between the amount of current assets and current debt. The ratio shows that the value of current wealth there are several times short-term debt"

Figure 1. Current Ratio Formula

$$Current\ Ratio = \frac{Asset\ Lancar}{Hutang\ Lancar}$$

Debt to Asset Ratio

This ratio indicates the high level of the company's overall assets utilized by loans or how much comparison between obligations owned and wealth owned. The higher the DAR, the more likely the company is to have problems with the obligations to be repaid. The keriteria is that the company should have a DAR of less than 0.5 or 50%.

Santoso in Lutfi AuliaRahman, (2018) If the increase in this ratio gives an idea that the industry is not in good condition because high debt can have an effect on increasing or decreasing net income that will be given to each stock investor including dividends received.

Figure 2. Debt to Asset Ratio Formula

$$Rasio\ Utang\ Terhadap\ Aset = \frac{Total\ Utang}{Total\ Aset}$$

Fixed Asset TurnOver

The asset turnover ratio is still used as one of the company's ratios to find out how and how appropriate it is in the use of fixed assets to be able to support every activity of the company's sales.

Hadid Fajar riyadi (2020), Asset turnover remains a calculation of the turnover rate of assets or fixed assets that are interpreted from the time of permanent turnover of assets by dividing the sales value against total assets remains net.

Figure 3. Fixed Asset Turn Over Formula

$$FATO = \frac{Penjualan}{Aktiva\ tetap}$$

Return On Asset

In conducting financial statement analysis, this ratio is also quite important because this ratio is able to show the success rate of a company to get a profit. ROA is able to get the results of measuring the company's ability to make profits in the past to then be projected in the future.

ROA is a ratio that is often also used by industry to find out how an industry's ability to benefit. This ROA will show the ability of the industry to source revenue in the past so that it can be utilized in the future. Mardiyanto in Wijaya, (2019) ROA can also be interpreted as a ratio used to see how efficient the industry is in obtaining profits from assets owned.

Figure 4. Return On Asset Formula

$$ROA = \frac{LABA\ BERSIH}{Total\ Aktiva} \times 100\%$$

Purwanto & Sulistyastuti in Balqish,(2020), Hypothesis is a statement or accusation that while the problem of researchers whose truth is still not too strong so it must be tested empirically.

Figure 5. Frame of Mind
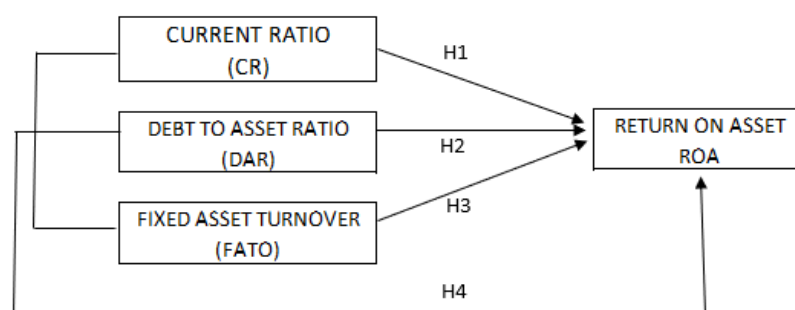
Based on the structure of the above frame of mind that has been described in the form of a chart, the researcher can determine the hypothesis, namely:

H1: It is suspected that there is a significant influence of the Current Ratio partially on return on assets

H2: It is suspected that there is a significant influence of Debt to Asset Ratio partially on Return On Assets.

H3: It is suspected that there is a significant influence of Fixed Asset TurnOver partially on Return On Assets.

H4: It is suspected that there is a significant influence of Current Ratio, Debt to Asset Ratio and Fixed Asset TurnOver simultaneously on Return On Assets.

3. Methodology

This research is a quantitative descriptive research. Descriptive research is research that is tried to describe certain indications, phenomena or events. Information collection is attempted to obtain data tied to the phenomenon of circumstances, or certain variables and is not intended to apply hypothesis testing. Sugiyono in Sari & Hartini, (2020) Descriptive research is carried out to obtain independent variable results, one variable or more without using comparisons, or connecting between one variable to another variable.

In this study, descriptive methods provide explanations of the variables studied, namely Current Ratio, Debt to Asset Ratio, Fixed Asset Turn Over in oil and gas mining sub-sector companies listed on the Indonesia Stock Exchange in 2018-2021. The author compared the research data with theoretical knowledge as the basis for solving and concluding the object of discussion.

4. Result

Descriptive test

In descriptive data analysis can be used measuring instrument methods such as mean, standard deviation, minimum and maximum, such as the following table.

Table 1. Descriptive Analysis

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
CR	35	15,00	407,00	144,2571	68,91271
DAR	35	40,00	73,00	60,1429	9,14312
FATO	35	0,00	278,00	83,7429	90,38458
ROA	35	-351,00	524,00	138,4000	185,41975
Valid N (listwise)	35				

Source: SPSS process result data version 24

From the table, it can be seen that the average value of the Current Ratio variable is 144.2571, the standard deviation value is 68.91271, where in this variable the average value produced is greater than the standard deviation value which means another Current Ratio

that is a sample of this research is low variation and the minimum and maximum values respectively, namely 15.00 and 407.00.

The table describes the average value of the Variable Debt to Asset Ratio which is 60.1429 and the standard deviation value of 9.14312, where the average value is greater than the standard deviation value which means another meaning Debt to Asset Ratio which is another meaning Debt to Asset Ratio sampled in this study is low variation and minimum and maximum values respectively of 40.00 and 73.00.

While the average value of the Fixed Asset Turnover variable is 83.7429 and the standard deviation is 90.38458, which can be concluded that the average value obtained is smaller than the standard deviation value which indicates that the Fixed Asset Turnover in this research sample is high in variation and the minimum and maximum values are respectively at 0.00 and 278.00.

The average Return On Asset variable shows the number 138.4000 and has a standard deviation value of 185.41975, which means that this variable has a high variation because it has an average level in which it can be smaller than the standard deviation result, as well as the minimum and maximum on this variable indicating the numbers -351 and 524.00.

Normality Test

The purpose of the normality test is to find out whether in the regression model, the disruptor or residual variable has a normal distribution. There are two ways to analyze the normality of a data, namely by analyzing charts and statistical tests.

Table 2. One-Sample Kolmogrov-Smirnov

One-Sample Kolmogorov-Smirnov Test		Unstandardized Residual
N		35
Normal Parameters[a,b]	Mean	0,0000000
	Std. Deviation	153,75856459
Most Extreme Differences	Absolute	0,169
	Positive	0,105
	Negative	-0,169
Test Statistic		0,169
Asymp. Sig. (2-tailed)		.013[c]

Source: SPSS process result data version 24

From the results of the normality test on the table can be seen asymp results. Sig. (2-tailed) 0.013 is smaller than 0.05 which indicates that the data is distributing abnormally. Le

Gujarati (2015) and Ulfa Yanti and A Munir (2021), provides a statement if the number of observations collected is large enough or greater than thirty that can ignore the assumption of normality. It means the data greater than thirty samples can be considered normal.

Heteroscedasticity Test

Heteroscedasticity test is targeted for testing whether in a regression model there is a variable discomfort from residual in one observation to another. When variables are different, it is called Heteroscedasticity. The Spearman Rho test is used to perform subsequent tests due to the presence or absence of Heteroscedasticity only researchers assume. So based on the results of data processing obtained the following results:

Table 3. Heteroskedastity Test

Correlations			Unstandardized Residual
Spearman's rho	CR	Correlation Coefficient	-0,075
		Sig. (2-tailed)	0,668
		N	35
	DAR	Correlation Coefficient	0,035
		Sig. (2-tailed)	0,841
		N	35
	FATO	Correlation Coefficient	-0,155
		Sig. (2-tailed)	0,374
		N	35
	Unstandardized Residual	Correlation Coefficient	1,000
		Sig. (2-tailed)	
		N	35

Source: SPSS process result data version 24

The results thatnCurrent Ratio is 0.668 is above 0.05, Debt Asset Ratio is 0. 841 is more than 0.05, and Fixed Asset Turnover is 0. 374 is also above 0.05.

Autocorrelation Test

Autocorrelation occurs due to observations that occur continuously over time related to each other. To find out whether or not there is autocorrelation in this study by looking at dw values (Durbin Watson).

Table 4. Autocorrelation Test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.559[a]	0,312	0,246	161,02671	1,666

Source: SPSS process result data version 24

In the table can be seen about the value of D-W at 1,666 which means that this study can be concluded that there is no autocorrelation.

Linear Regression Test

In analyzing data is used multiple linear regression analysis to determine the influence of each free variable on the bound variable.

Table 5. Linear Regression Test

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	257,616	285,617		0,902	0,374
	CR	0,140	0,448	0,052	0,311	0,758
	DAR	-3,590	3,849	-0,177	-0,933	0,358
	FATO	0,915	0,365	0,446	2,506	0,018

Source: SPSS process result data version 24

A: Constant has a value of 257.616, where if the current ratio, debt to asset ratio and fixed asset turnover have a value of zero, then the company's return on assets can be measured at 257,616.

B1: The value of 0.140 indicates that it has a positive direction, if the Current Ratio increases so that it will be followed by an increase in Return on Assets of 0.140. Assuming other independent variables are considered constant.

B2: A value of -3,590 indicates that it has a negative direction towards Return on Assets. It can be interpreted that if the variable debt to asset ratio increases, the return on assets will decrease by 3,590.

B3: The value of 0.915 indicates that it has a positive direction towards return on assets. It can be interpreted that if variable fixed asset turnover increases, the return on assets will also increase by 0.915.

Multiple Correlation Analysis

Multiple correlation analysis to see how much the relationship between independent variables, namely Current Ratio, Debt to Asset Ratio and Fixed Asset Turnover with dependent variables, namely Return On Asset. The results of this multiple correlation analysis are as listed in the table below.

Table 6. Multiple Correlation Analysis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.559[a]	0,312	0,246	161,02671	1,666

Source: SPSS process result data version 24

In the value contained in the table can be seen about the value of the double correlation coefficient (R) in the variable Current Ratio, Debt to Asset Ratio and Fixed Asset Turnover to Variable Return On Asset at 0.559 or 55.9%. It means if the value of Current Ratio, Debt to Asset Ratio and Fixed Asset Turnover increases, so the Return on Asset will increase as well.

Determination Coefficient Test (R-Square)

The R-square value of the determination coefficient is used to see the large percentage of influence of independent variables and dependent variables i.e. by squaring the coefficients found. In its use, this coefficient of determination is expressed in percentages (%). To find out the extent of the contribution or percentage of Current Ratio, Debt To Asset Ratio and Fixed Asset Turnover to Return On Asset so that it can be known through determination tests.

Table 7. Determination Coefficient Test (R-Square)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.559ᵃ	0,312	0,246	161,02671	1,666

Source: SPSS process result data version 24

The value of R-Square is 0.312 or about 31.2%. This indicated that the rate of relationship between idependent variables and dependent variables in oil and gas mining companies is 31.2% and the remaining 68.8% is influenced by other variables not studied in this study.

Adjusted R Square

To see the amount of Adjusted R Square in this research can be seen in the following table.

Table 8. Adjusted R Square

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.559ᵃ	0,312	0,246	161,02671	1,666

Source: SPSS process result data version 24

From the table above using the SPSS 24 program, the Adjusted R Square value in this research model is 0.246 or 24.6% other meanings in this research, the bound variable,

namely Return On Asset, can be explained directly by unbound variables, namely Current Ratio, Debt to Asset Ratio and Fixed Asset Turnover.

Simultaneous Test F

Testing on SPSS is based on probability. On a 5% probability scale. If F values greater than F table then there is an influence between variable current ratio, debt to asset ratio and fixed asset turnover against return on asset.

The simultaneous significant value aims to compare F with significance less than 0.05. If F value is below F table then Ho is accepted and H1 is rejected and vice versa if F value is above F table then H1 is accepted and Ho is rejected.

Table 9. Simultaneous Test F

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	365118,730	3	121706,243	4,694	.008ᵇ
	Residual	803817,670	31	25929,602		
	Total	1168936,400	34			

Source: SPSS process result data version 24

The test results using SPSS Version 24, can be seen the value of F value 4.694 with a significant level of 0.008, for it is concluded that F with a significance level of $0.008 < 0.05$. This means that all independent variables or variables measured by CR, DAR and FATO simultaneously have a significant positive effect on profitability variables as measured by ROA. Having an understanding if there is an increase in variables then ROA will also increase.

T Test

It is done to determine the significant level of each variable independent to variable dependent by testing the coefficient of the variable. It is used to make the decision to accept or reject a hypothesis is as follows:

Table 10. T Test

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	257,616	285,617		0,902	0,374
	CR	0,140	0,448	0,052	0,311	0,758
	DAR	-3,590	3,849	-0,177	-0,933	0,358
	FATO	0,915	0,365	0,446	2,506	0,018

Source: SPSS process result data version 24

It indicated that the CR has a positive and insignificant effect on ROA., the T test of 0.311 has a significance of 0.758 0,. Therefore, it can be concluded that the sig level is above 0.05 means that Hypothesis 1 is rejected.

Hypothesis 2 proves DAR variables have a negative and insignificant effect on ROA. The results show the DAR variable has a T value of -0.933 with no significance of 0.358 that is above 0.05. The negative sign on T value is the direction of its influence, it can be concluded that T value is less than T table 2.03 and sig > 0.05, therefore, Hypothesis 2 is rejected.

Hypothesis 3 proves FATO variables have a positive and significant effect on ROA. ROA variable has a value of 2,506 with a significance of 0.018. Positive signs on the value are the direction of its influence. It can be concluded that Tvalue is above T table and sig value less than 0.05. It means that Hypothesis 3 is accepted.

Discussion

Partial Discussion (T Test)

The Variable Current Ratio has a value of 0.311 with a significance of 0.758 > 0.05, with T table at 2.03. Hypothesis 1 was rejected. Therefore, the Current Ratio variable does not have a significant influence on return on assets. However, according to the data from oil and gas mining sub-sector companies in 2018-2021, they have a smaller amount of debt than their current assets. This indicates that the larger the current ratio, the higher the profit earned by the company, this is because the company does not incur costs to fulfill obligations that must be met immediately so that it has an impact on the profits earned by the company.

Variable DAR has a value of -0.933 with no significance of 0.358 > 0.05, with T table of 2.03 Negative signs on T value is the direction of its influence. It can be concluded that T value is less than T table with sig > 0.05. Hypothesis 2 was rejected. In the results of the study, it can be concluded that there is no influence between the Current Ratio and the Return On Asset. With no effect of the debt to total assets ratio on return on assets, it indicates that the oil and gas mining sub-sector companies in 2018-2021 lack the ability to manage debt well.

Variable Fixed Asset Turnover has a a significance of 0.018 with T table of 2.03. Positive signs on t value is indicated the direction of its influence. It can be concluded that T value of 2,506 is above T table, and sig < 0.05 means that Hypothesis 3 is accepted that partially FATO has a significant influence on ROA.

Simultaneous Discussion (Test F)

The results of this test are seen as a calculated F value of 4,694 with a significant level of 0.008, then it can be concluded that Fghibel > with a significance level of 0.008 < 0.05. This means that all independent variables or variables measured by CR, DAR and FATO simultaneously have a significant positive effect on profitability variables as measured by ROA. The point is that if there is an increase in variables, the profitability of the company as measured by ROA also increases.

5. Conclusion

The conclusions of the research on the influence of Current Ratio, Debt to Asset Ratio and Fixed Asset Turnover on Return on Assets contained in oil and gas mining sub-sector companies on the Indonesia stock exchange in 2018 - 2021, among others:

1. Partial Test Results on the Current Ratio variable do not have a significant effect on Return on Assets.

2. Partial Test Results on variable Debt to Asset Ratio do not have a significant effect on Return on Assets.

3. Partial Test Results on variable Debt to Asset Ratio do not have a significant effect on Return on Assets.

4. Simultaneous Test Results on variable Current Ratio, Debt to Asset Ratio and Fixed Asset Turnover have a significant influence on Return on Asset.

Recommendation

After doing the research and having the above results, therefore the authors can give some recommendation, where these are related to the research that has been done and can be used as input or as a reference and be taken into consideration for parties who have an interest in the output of this research.

The company should further improve the company's performance every year, especially on the Debt to Asset Ratio measuring instrument, the company must pay attention to its debt in order to produce good performance in the coming year. With this, many investors will be able to provide capital assistance to oil and gas companies.

Company managers should pay attention to the Current Ratio, Debt to Asset Ratio and Fixed Asset Turnover with the aim of increasing company profitability. Because these ratios can be used for investors as a measuring tool in analyzing before making decisions in investing in companies. If the ratio calculation has a good value, then the company's performance and profitability can increase

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