

The Effect of Financial Performance on the Profitability to Coal Mining Company Subsectors in Indonesia Stock Exchange

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ABSTRACT

This study aims to determine the effect of financial performance on profitability in coal companies, the period 2014-2019. This study uses a panel data regression method with a Fixed Effect Model research model approach where samples of 19 companies with populations of 26 in the Coal Sub-sector companies are obtained according to the criteria set by the author based on observations for 6 years, namely 2014-2019 using the E-views program 10 and Microsoft Excel 2016. The result shows that partially the variable Net Working Capital, Firm Size, Current Ratio, Debt to Equity Ratio, and Total Assets Turnover influence Return On Assets. The variables of Net Working Capital, Firm Size, Debt to Equity Ratio have a negative relationship, while the variables Current Ratio and Total Assets Turnover have a positive relationship. In coal mining companies listed on the Indonesia Stock Exchange in 2014-2019.

INTRODUCTION

According to (Kotijah, 2012) Minerals and coal are natural resources that support the growth of a country. And one of the pillars of a country in economic development is mining because it is a source of energy for a country. Even (Ramadhan, 2019) stated that the largest contribution to state revenue was claimed to come from the mining sector.

Indonesia as one of the largest coal producers and importers relies on this commodity as a source of state revenue.

According to (Hasan, 10AD), Indonesia ranks fifth as a coal-producing country in the world with an estimated production of 386 million tons per year and coal reserves estimated at 5.5 billion tons. Even (Ramadhan, 2019) stated that the largest contribution to state revenue was claimed to come from the mining sector. During 2018, the number of deposits to the state from this sector reached Rp 46.6 trillion.

(Sari, 2019) one of his writings stated that to win the business competition, business people must manage and run their

companies more effectively and efficiently. To face global market competition, they must improve their performance and must continue to push it continuously. To know the development of a company, information about its financial performance must be considered. (Biantara & Handayani, 2019) explains that for a company to continue to increase its growth and potential, it is necessary to pay attention to its financial performance. Because financial performance is a factor that can affect the company's future.

To understand the financial performance of a company, it is necessary to do a comparison or ratio. The ratio that is commonly used to compare a company's profit in one year with previous years is called the profitability ratio. As the name suggests, the profitability ratio is a ratio that compares the profits of a company.

The development of Return On Assets (ROA) of companies that have been listed on the Indonesia Stock Exchange (IDX) for the period 2014-2019 can be seen in Figure 1.1 below:

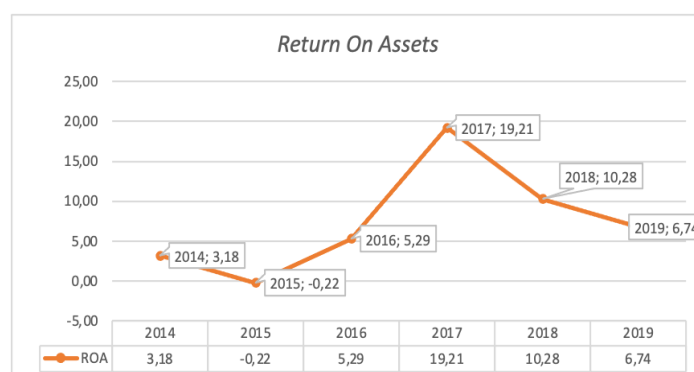


Figure 1
Development of Return On Assets (ROA) in a coal company that has been registered on the Indonesia Stock Exchange (IDX) for the 2014 - 2019 period

Source: IDX (edited by researchers, 2020)

Figure 1.1 shows that the Return On Assets (ROA) during the 2014-2019 period experienced movements or fluctuations. From 2014 to 2015, decreased from 3.18% to -0.22%

In the 2014-2015 period, it decreased from 3.18% to -0.22%, while from 2016 to 2017 there was an increase of 5.29% to 19.21%. However, it again decreased in 2018-2019 from 10.28% to 6.74%.

The fluctuation was caused by the price of coal which experienced a very high increase until it reached its peak in 2011 at US\$ 120 per ton. The increase was caused by two factors, namely an increase in coal production and an increase in early 2013. This increase was due to the recovery in crude oil prices and the increasing demand for coal in Indonesia because Indonesia was in the process of building a Coal Power Plant at that time.

Unfortunately, in 2016 China decided to cut coal production in its country, even though China is the largest coal consumer and producer in the world. This was done so that coal prices remained at a higher level and because of the problem of the NPL credit ratio in Chinese banks.

What China has done has proven successful with the existing NPL increasing to 2.3% in 2015. Indonesia throughout 2017 produced 641 million tons of coal. This number is a significant increase compared to 2011 and is expected to continue to increase in 2018 and beyond.

Production costs are also lower. In 2011, the price of oil could reach US\$ 100-110 per barrel because of that, the price of oil used as fuel for excavators has increased. However, the main cause of the decline was the policy of the Ministry of Energy and Mineral Resources regarding Domestic Market obligations.

Domestic Market Obligation is the obligation of coal producers to meet domestic coal needs. The provisions in the Domestic Market Obligation are aimed at around 80%-85% electricity. Figure 1.2 shows the realization and target of coal production, exports, and domestic demand for coal in Indonesia before the issuance of Ministerial Decree no. 1924/K/30/MEM/2018 increased by 5.21% YoY (Year Over Year). Meanwhile, the estimated production after the Decree of the Minister of Energy and Mineral Resources will increase by 26.90% YoY (Year Over Year). The domestic consumption target is 19.50% and the export target is 80.50% of the production target. The export growth target in 2018 is 29.40% after the issuance of the Ministerial Decree.

In early July 2018, an issue emerged, namely boosting the Rupiah exchange rate so that the government would boost exports, one of which is coal exports, so that the Domestic Market Obligation policy will be revoked by the government. This issue provides a positive sentiment towards the movement of coal issuers' stock prices. However, at the end of July 2018, the government announced it would cancel the policy. Many triggering factors, including in

the long term, show opportunities because world coal demand is still very high. Several factors that influence stock price movements in the coal mining sub-sector are macroeconomic factors. Meanwhile, the most influential coal mining sub-sector is the composition of debt and the level of profit. This made all coal stocks corrected negatively, until the end of August 2018 the mining stock index showed a decline.

The decline was also caused by the trade war between the United States and China. This trade war affects global market conditions. Indonesia also experienced a decline and imposed restrictions on coal imports due to the prolonged trade war between the United States (US) and China.

In addition, there was also a decline in coal demand from Europe which resulted in excess coal stocks. The condition of a significant decline continued in 2019 along with the emergence of the Corona Virus (COVID-19) which caused many Chinese factories to stop operating. This phenomenon is the core of the research because of the changing economic conditions and company profits. Profits in a company should always increase but during Covid-19 company, profits have decreased.

Based on previous research, this study will examine financial performance such as Current Ratio, Net Working Capital, Firm Size, Debt to Equity Ratio, and Total Assets Turnover in Coal Mining companies listed on the Indonesia Stock Exchange in 2014-2019. From the background above, the problem can be formulated as follows:

- A. Does Net Working Capital affect the company's profitability?
- B. Does Company Size affect the company's profitability?
- C. Does the Current Ratio affect the company's profitability?
- D. Does the Debt to Equity Ratio affect the company's profitability?
- E. Does Total Asset Turnover affect the company's profitability?

A. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

The company can make a profit and the greater the profit earned by the company, the better the level of management in the company. This ability is called profitability. Profitability theory is important to be applied in a company

because this theory is used as a reference in measuring company profits and efficiency. Efficiency can be obtained after the company compares the profits it has with the initial capital.

Sutisno's statement is also supported by stating that profitability is the ability of a company used to earn profits and everything related to sales, total assets, and long-term debt. Therefore, the level of profitability is the level of the company's ability to earn profits.

The order of choice according to Myers and Majluf's Picking Order Theory (1984) is that the issuance of shares will be used as the third option, the second option is to meet debt and fund needs, while the first option is profit retention. According to this theory, once this is done, profitability and profit will increase.

(Sukmawardini & Ardiansari, 2018) also states that the profitability ratio is a ratio or comparison to measure the company's ability to earn profits and to relate total assets, capital, and sales. Profitability ratios are very important because potential investors will pay attention to this. financial and other factors.

(Jogiyanto, 2014) states that the information needed by investors in the capital market is not only fundamental but also technical information. Fundamental information is obtained from the company's internal conditions, and technical information is obtained from outside the company, such as economics, politics, etc.

Information obtained from the company's internal conditions commonly used is financial statement information. However, profitability ratios are closely related to stock prices and dividends.

Although profitability is used as a measure of the success of a company, each company has its way and formula for calculating profitability ratios. It all depends on the profits, assets, capital, and operations of the company. In addition, the size of the company can also affect the existing earnings management and the size of the company is influenced by the existence of information asymmetry. Reported earnings have a strong influence on company activities and

decisions made by management (Mulford & Comiskey, 2010). (Santoso, 2012) has found that information asymmetry has a positive effect on earnings management, which means that information asymmetry is one of the triggers for earnings management.

As research conducted by (Sosiawan, 2012) states that the ability to generate profits for a company can encourage management to carry out earnings management.

(Makaombohe, Pangemanan, & Tirayoh, 2014) prove that the larger the size of the company, the lower the earnings management behavior.

According to (Muliati, 2011): "Earnings management is a management intervention against

financial statements, namely in the form of choices made by management to accounting policies, which are played out in the external reporting process

to achieve certain goals/purposes, to reduce the credibility of the financial statements". (Manggau, 2017): "earnings management is an action taken by managers by manipulating data or information

accounting formation so that the amount of profit recorded in the financial statements is by the wishes of the manager, both for personal and corporate interests. company for personal interest or to increase the value of company shares

Large companies are considered to have fewer management practices than small companies.

The inclusion of information asymmetry as a contributing factor to signaling theory. This theory exists because of the idea that managers only announce the good news to increase

profitability, Agency Theory with financial statements are external users (outside management). According to Agent Theory, Company Managers provide information about ROA and Current Ratio to shareholders to increase their profitability. It is also used to attract investors to invest their shares in the company by spreading the level of profitability outside the company.

METHOD

1. Research Population and Sample

describes the population as a field of generalization consisting of objects/subjects with specific characteristics and properties that are determined to study by researchers.

In this study, the sampling used is the purposive sampling technique which is the sampling technique with certain issues. The sampling criteria are as follows:

- Coal mining sub-sector company is active and has listed its company on the Indonesia Stock Exchange from 2014 to 2019.
- It provides financial reports for the period of 2014 to 2019.
- It has published periodic financial reports from 2014 to 2019 in a complete.

Based on the criteria above, 19 companies were selected as the research samples.

2. Operational Definition

This study has two variables. They are the dependent variable as the dependent or affected variable and the independent variable as the independent or influencing variable, namely:

Table 1
Operational Definition

Variable	Definition	Indicator	Scale
Dependent Variable (Y) ROA	The ratio between net income and total assets	$Return\ On\ Assets = \frac{Net\ Profit/EAT}{Total\ Assets}$	Ratio
Independent Variable (X1) Net Working	The ratio between current assets and	$NWC = \frac{(Current\ Assets - Current\ Liabilities)}{Current\ Liabilities} \times 100\%$	Ratio

Variable	Definition	Indicator	Scale
Capital	current liabilities		
Independent Variable (X2) Firm Size	Company size	$Company\ size = Ln(Total\ Assets)$	Ratio
Independent Variable (X3) Current Ratio	The ratio between current assets and current liabilities	$Current\ Ratio = \frac{Current\ Assets}{Current\ Debt} \times 1$	Ratio
Independent Variable (X4) Debt to Equity Ratio	The ratio between total debt and total equity	$Debt\ to\ Equity\ ratio = \frac{Total\ Debt}{Total\ Equity}$	Ratio
Independent Variable (X5) Total Assets Turnover	The ratio between sales and current assets	$Total\ Asset\ Turnover = \frac{Sale}{Total\ Assets}$	Ratio

Source: Author (2020)

3. Method of Collecting Data

This study uses data collection methods in the form of secondary data collection. The data is obtained in the form of publications from the Indonesia Stock Exchange (www.IDX.co.id). This study uses data that is obtained from an annual report of the coal mining subsector companies that have been audited from 2014 to 2019. Other data is also obtained through the literature study method by reviewing journals, books, and other sources.

4. Method of Data Analysis

This study aims to determine the effect of the Current Ratio, Net Working Capital, Firm Size, Debt to Equity Ratio, and Total Assets Turnover on ROA in the coal mining sub-sector.

This study aims to determine the effect of the Current Ratio, Net Working Capital, Firm Size, Debt to Equity Ratio, dan Total Assets Turnover on ROA in the coal mining sub-sector which register their company in Indonesia Stock Exchange for the observation period of 2014-2019. The regression analysis method is the method used in this study. Panel data regression uses Eviews 10 computer program

(software). The methods used in the data analysis in this study are:

1. Descriptive Statistics Analysis
descriptive statistics is a description that can provide and bring up an overview of data. This overview is seen from the standard deviation, mean, maximum, variance, kurtosis and skewness, minimum, number, and range.
2. Selection of Panel Data Parameter Estimate
Analysis of the characteristics of the independent and dependent variables is by entering the data by the steps of:
 - a. first, it was done proving which is the best between CEM and FEM. If the CEM is the best model, then it's done.
 - b. after doing the Hausman test to find the best model between FEM and REM and FEM is the best model, the research will stop. If the best model is REM, further tests must be carried out, namely the classical assumption test.
3. Classical Assumption Test analysis

The test is used to state multicollinearity, normality, autocorrelation, and heteroscedasticity.

4. Panel Data Regression Model Analysis
The model can be formulated as follows:

$$ROA_{it} = \alpha + \beta_1 NWC_{it} + \beta_2 SIZE_{it} + \beta_3 CR_{it} + \beta_4 DER_{it} + \beta_5 TATO_{it} + \epsilon_{it}$$

Keterangan :

ROA = Return On Assets
 α = Identifier
 β = Regression coefficient
 NWC = Net Working Capital
 SIZE = Firm Size
 CR = Current Ratio

DER = Debt to Equity Ratio
 TATO = Total Asset Turnover
 ϵ_{it} = Error Term

RESULT AND DISCUSSION

1. Descriptive Test Result

Data that is obtained from Eviews 10 and descriptive statistical results of the research variables can be seen in Table 2 below:

Table 2
Descriptive Test

	ROA (Y)	NWC (X1)	FIRM SIZE (X2)	CR (X3)	DER (X4)	TATO (X5)
Mean	7.412982	1.770632	16.28122	191.2286	1.250623	0.779982
Median	4.805000	1.575000	15.82400	165.7850	0.735000	0.711000
Maximum	122.4100	6.914000	22.03700	922.2400	11.91000	2.007000
Minimum	-64.39000	0.062000	12.80500	9.900000	-16.47500	0.005000
Std. Dev.	16.25608	1.259329	1.976687	136.2944	2.864764	0.482489
Skewness	2.590089	1.381172	0.925543	2.077805	-1.068502	0.282097
Kurtosis	26.40567	5.751937	3.747491	10.42994	17.50072	2.298396
Jarque-Bera	2729.634	72.21757	18.92998	344.2475	1020.479	3.850174
Probability	0.000000	0.000000	0.000078	0.000000	0.000000	0.145863
Sum	845.0800	201.8520	1856.059	21800.06	142.5710	88.91800
Sum Sq. Dev.	29861.40	179.2078	441.5240	2099106.	927.3766	26.30592
Observations	114	114	114	114	114	114

Source: Eviews 10 processed secondary data
(2020)

Based on Table 4.1 it can be seen from the research statistical data that the number of samples is 114, the number is as follows:

- Return On Assets (ROA) has an average of 7,412982; the median is 4.805000; the maximum is 122,4100; the minimum is -64.39000; the standard deviation is 16.25608. By looking at the standard

deviation that is greater than its standard, the reflection of the deviation is not low, so that the data can be categorized as normal and unbiased.

- Net Working Capital (NWC) has an average of 1.770632; the median is 1.575000; the maximum is 6,914000; the minimum is 0.062000; the standard deviation is 1.259329. If the average

- value is greater in standard deviation, Net Working Capital (NWC) has a small distribution.
- c. Firm Size has an average of 16,28122; the median is 15,82400; the maximum is 22,03700; the minimum is 12.80500; the standard deviation is 1.976687. It can be seen that if the average value is greater than the standard deviation, then you must use data that has a small distribution in the variation of Firm Size.
 - d. Current Ratio (CR) has an average of 191.2286; the median is 165.7850; the maximum is 922,2400; the minimum is 9,900,000; the standard deviation is 136.2944. By looking at the average value is greater than the standard deviation, the data in CR has a small distribution.
 - e. Debt to Equity Ratio (DER) has an average of 1.250623; the median is 0.735000; the maximum is 11.91000;

the minimum is -16.47500; the standard deviation is 2.864764. By seeing the average value that is greater than the standard deviation, the DER has a small distribution

- f. Total Assets Turnover (TATO) has an average of 0.779982; the median is 0.711000; the maximum is 2.007000; the minimum is 0.005000; the standard deviation is 0.482489. By seeing the average value that is greater than the standard deviation, the data in the TATO has a small distribution.

2. Regression Model Testing Result
a. Chow Test

In testing the model selection, where the estimation model will be used, the Chow Test / Likelihood Test determines what method is most appropriate (common effect or fixed effect) for estimating panel data. The hypothesis for this test is:

Table 3
Chow Test Estimation Results

Redundant Fixed Effects Tests			
Equation:Untitled			
Test cross-section fixed effects			
Effects Test	Statistic	d.f	Prob.
Cross-section F	8.323506	(13,65)	0,0000
Cross-section Chi-square	82.327720	13	0,0000

Source: Processed by researchers, 2020

Based on Table 4.2, the results show that the probability is 0.0000, or <0.05, so that H0 is rejected and H1 is accepted. Hence, from this Chow Test, it is recommended to use the Fixed Effect Model.

b. Hausman Test

Two models can be used to search for panel data regression. They are the fixed effect model and the random effect model. To select the best model, the following Hausman tests are carried out:

Table 4
Estimation Results of the Hausman Test

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	25.988661	5	0.0001

Source: Processed by researchers, 2020

Based on Table 4.3, shows the results that the probability of random cross-section is $0.0001 < 0.05$. This means that the above results accept H_a , so the best model to use is the Fixed Effect Model. Based on the regression model and panel pair test, it can be concluded that FEM can be used further.

3. Panel Data Regression Model Results

Three methods can be used to find the panel data regression estimation results. Based on what has been tested in Table 5 it can be concluded that FEM can be used further.

Table 5
Panel Data Regression Model

No.	Method	Testing	Result
1.	Chow Test	<i>Common Effect - Fixed Effect</i>	<i>Fixed Effect</i>
2.	Hausman Test	<i>Random Effect - Fixed Effect</i>	<i>Fixed Effect</i>

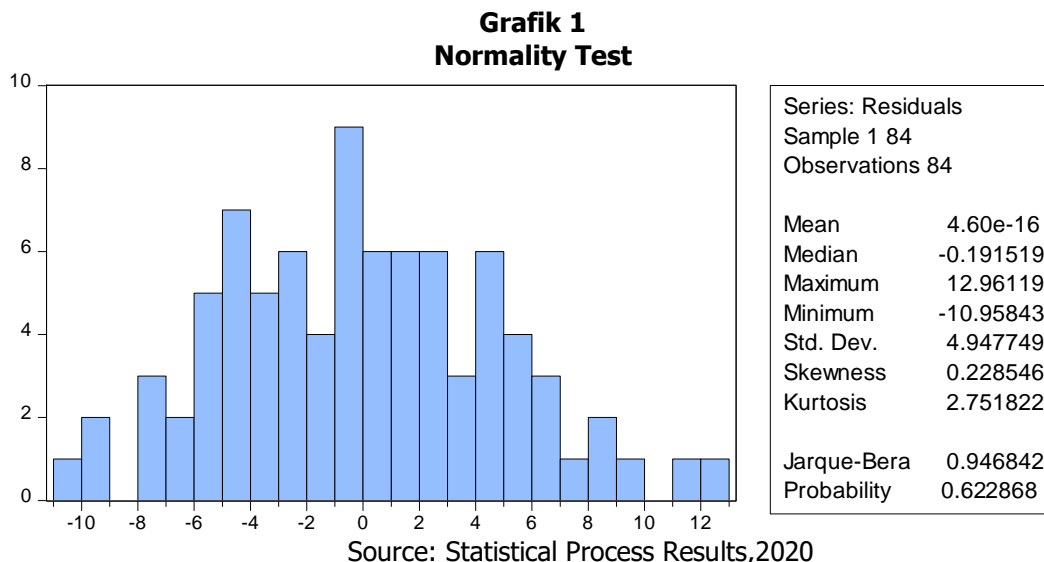
Source: Processed by researchers, 2020

4. Classical Assumption Test Results

Panel data regression testing is used to test the hypothesis. To get the best regression, several tests such as the Normality Test, Autocorrelation Test, Heteroscedasticity Test, and Autocorrelation Test.

a. Normality Test Results

Jarque-Bera normality test is used simultaneously or to test whether the data group is normally distributed. The Jarque-Bera normality test criteria are normal if the significance value is > 0.05 . This can be seen in Table 4.2 below:



Based on Table 4.5, states that the JB value obtained is 0.946842 with a probability value of 0.622868. The data can be concluded as having normal distribution since the probability value is

greater than 0.05. On the same data (n=84) it is conducted a test on heteroscedasticity, multicollinearity, and autocorrelation.

b. Autocorrelation test results

The autocorrelation test is used to test whether there is a relationship between one residual to the other. Time series data is more difficult to emerge than autocorrelation because, by its nature, data on the past can affect the future explains that autocorrelation has a relationship or correlation between members of a series of observations that are sorted according to space or time. Autocorrelation can be determined by paying attention to the statistical DW value. Where the value of DW or

statistic of Durbin Watson describes the DW coefficient in the range of 0 to 4. To detect autocorrelation, this study uses the Durbin-Watson method. There is positive autocorrelation if $d < dL$ or $d > dU$. Conversely, there is negative autocorrelation if $(4-d) < dL$ or $(4-d) > dU$. If $dL < d < dU$ or $dL < (4-d) < dU$, thus the test does not have a definite conclusion.

Information:

- d = Durbin-Watson value
- dL = Durbin-Watson lower limit
- dU = Durbin-Watson upper limit

Table 6
Autocorrelation Test

R-squared	0.621648	Mean dependent var	4.832217
Adjusted R-squared	0.597394	S.D. dependent var	7.055394
S.E. of regression	4.476733	Akaike info criterion	5.904413
Sum squared resid	1563.209	Schwarz criterion	6.078043
Log likelihood	-241.9854	Hannan-Quinn criter.	5.974211
F-statistic	25.6314	Durbin-Waston stat	1.504303
Prob (F-statistic)	0.000000		

Source: Statistical Process Results,2020

In the sum of samples (n) 84, the dL value is 1.522 and the dU value is 1.773 so the 4-dL value is 2.478 and the 4-dU value is 2.227. Based on Table 6, states that the DW value obtained is 1.504303. It is because the DW value is lower than the dL value (1.522) and it can be concluded that there is positive autocorrelation.

In a regression model, to find out if there is an inequality of variants from the residuals of one observation to another, a test called the heteroscedasticity test is conducted. Meanwhile, finding the residual variance from one observation to another is called homoscedasticity. The homoscedasticity model is a good regression model.

c. Heteroscedasticity Test Results

Table 7
Heteroscedasticity Test

Heteroskedasticity Test:Breusch-Pagan-Godfrey			
F-statistic	1.600669	Prob.F(5,78)	0.1698
Obs* R-squared	7.816918	Prob. Chi-Square(5)	0.1666
Scaled explained SS	5.903726	Prob. Chi-Square(5)	0.3157

Source: Statistical Process Results, 2020

Based on Table 7, states that the obtained Chi-square prob value is 0.1698. Because the value is higher than 0.05, it is concluded that there is

no heteroscedasticity violation in the regression model.

d. Multicollinearity Test Results.

Multicollinearity is a condition where there is a linear relationship

between independent variables. To determine the existence of multicollinearity, it can be done by finding out the correlation coefficient

for each independent variable. If the correlation coefficient between each independent variable is not smaller than 0.8 then multicollinearity occurs.

Table 8
Multicollinearity Test

Variance Inflation Factorsa
Sample:1 84
Included observations:84

Variable	Coefficient Variance	Uncertered VIF	Certered VIF
C	31.28442	100.8808	NA
NWC	2.058413	32.63248	11.13509
FIRM SIZE	0.115714	100.4399	1.328709
CR	0.000178	33.90655	11.58486
DER	0.090441	1.86656	1.161087
TATO	2.087621	4.528648	1.160923

Source: Statistical Process Results, 2020

Based on Table 8, states that all variables with a VIF value are higher than 10. It indicates that there is a multicollinearity violation in the

regression model. To overcome this, data has to be transformed first. The transformation is as follows:

Table 9
Multicollinearity Test after Data Transformation

Variance Inflation Factorsa
Sample:1 84
Included observations:84

Variable	Coefficient Variance	Uncertered VIF	Certered VIF
C	22.68978	95.10147	NA
NWC	0.325008	6.656796	2.338740
FIRM SIZE	0.075602	85.39589	1.136525
CR	2.84E-05	6.339173	2.073553
DER	1.652561	10.95728	1.994458
TATO	1.587633	4.708605	1.1187774

Source: Statistical Process Results, 2020

Based on Table 9, states that all variables have a VIF value that is lower than 10 so that it can be concluded that there is no multicollinearity in the regression model.

5. Panel Data Regression Results

The analysis used in this research is panel data regression analysis. To find out the value of the influence of the independent variables (independent), namely X1 Net Working Capital (NWC),

X2 Firm Size (SIZE), X3 Current Ratio (CR), X4 Debt to Equity Ratio (DER), and Total Assets Turnover X5 (TATO) on the dependent variable (dependent) is Return On Assets (ROA) (Y). Before carrying out the panel data regression test and selecting the regression model, the researcher first tested the classical assumption test which are normality, heteroscedasticity, autocorrelation, and multicollinearity. The result is the

equation passes the classical assumption test and can be continued to test using

panel data regression analysis.

Table 10
Multicollinearity Test after Data Transformation

Dependent Variable: Return On Assets
Method: Panel Least Squares
Sample: 2014 2019
Periods Included: 6
Cross-sections Included: 14
Total panel (balanced) observations: 84

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	17.38682	4.234609	4.105885	0.0001
NWC	-1.138762	0.485079	-2.347578	0.0220
FIRM SIZE	-0.535566	0.222847	-2.403289	0.0191
CR	0.011890	0.004123	2.884228	0.0053
DER	-5.673684	1.601079	-3.543663	0.0007
TATO	3.310683	1.632253	2.028290	0.0466
Effect Specification				
Cross-section fixed (dummy variables)				
R-squared	0.858013	Mean dependent var		4.832217
Adjusted R-squared	0.818694	S.D. dependent var		7.055394
S.E. of regression	3.004191	Akaike infocriterion		5.233845
Sum squared resid	586.6357	Schwarz criterion		5.783673
Log likelihood	-200.8215	Hannan-Quin criter		5.454871
F-statistic	21.82162	Durbin-Watson stat		2.030297
Prob (F-statistic)	0.000000			

Source: Processed secondary data Eviews (2020)

Based on the equation formed from the estimation above, it can be described by the formula below:

$$ROA = 17,38682 - 1,13876 X_1 - 0,53557 X_2 + 0,01189 X_3 - 5,67368 X_4 + 3,31068 X_5$$

6. Hypothesis Test Results and Discussion

a. Simultaneous Test (F Test)

The results of the F test can be seen in Table 4.10. Where the estimation results obtained from the probability value of F-statistic is 0.000000, significant at α 5%. This means that overall the independent variables NWC, Firm Size, CR, DER, and TATO affect the dependent variable ROA

b. Partial Test (T-Test)

The results of the T-Test can be seen in Table 4.10 to prove whether the independent variable individually affects the dependent variable. The

results of the T-Test for multiple linear regression analysis in this study are as follows:

- The t-statistic value for the NWC variable is -2.34758 with a probability of 0.02200, significant at a 5%. Because the probability value is <0.05 , it shows that NWC has a significant effect on ROA.
- The t-statistic value for the FIRM SIZE variable is -2.40329 with a probability of 0.01910, significant at a 5%. Because the probability value is <0.05 , it shows that the FIRM SIZE has a significant effect on ROA.
- The t-statistic value for the CR variable is 2.88423 with a probability of 0.00530, significant at a 5%.

Because the probability value <0.05 , it shows that CR has a significant effect on ROA.

- d. The t-statistic value for the DER variable is -3.54366 with a probability of 0.00070, significant at α 5%. Because the probability value is <0.05 , it shows that DER has a significant effect on ROA.
- e. The t-statistic value for the TATO variable is 2.02829 with a probability of 0.04660, significant at α 5%. Because the probability value <0.05 , it shows that TATO has a significant effect on ROA.

c. Coefficient of Determination

The coefficient of determination test from Table 4.10 explains that the value of the coefficient of determination obtained is 0.858013, meaning that the dependent variable ROA is influenced by the variables NWC (X1), FIRM SIZE (X2), CR (X3), DER (X4), and TATO (X5) of 85.8% while the rest is the influence from other variables that are not examined in this study.

d. The Effect of Net Working Capital on Return On Assets

The results of this study indicate that Net Working Capital (NWC) affects Return On Assets. The results of testing the Net Working Capital (NWC) variable on Return On Assets show that Net Working Capital (NWC) has a significant effect on Return On Assets, thus it can be concluded that H1 is accepted. The results of this study are in line with research conducted by, (Falope & Ajilore, 2009), which conclude that Net Working Capital affects Return On Assets.

e. Effect of Firm Size on Return On Assets

The results of this study indicate that Firm Size affects Return On Assets. The results of testing the Firm Size variable on Return On Assets show that Firm Size has a significant effect on Return On Assets, thus it can be concluded that H2 is accepted. The results of this study are in line with research conducted by, (Ammar, Hanna, Nordheim, & Russell, 2003),

(Boadi & Li, 2015), and (Babalola, 2013) that conclude that Firm Size affects Return On Assets.

f. Effect of Current Ratio on Return On Assets

The results of this study indicate that the Current ratio affects Return On Assets. The results of testing the variable of Current Ratio to Return On Assets show that the Current Ratio has a significant effect on Return On Assets. Thus it can be concluded that H3 is accepted. The results of this study are in line with research conducted by, (Suwandi, Thalia, Syakina, Munawarah, & Aisyah, 2019),(Agha, 2015),(Falope & Ajilore, 2009) which conclude that the Current Ratio affects Return On Assets.

g. Effect of Debt to Equity Ratio on Return On Assets

The results of this study indicate that the Debt to Equity Ratio affects Return On Assets. The results of testing the variable of Debt to Equity Ratio to Return On Assets show that the Debt to Equity Ratio has a significant effect on Return On Assets, thus it can be concluded that H4 is accepted. The results of this study are in line with research conducted by, (Babalola, 2013), which concludes that the Debt to Equity Ratio affects Return On Assets.

h. Effect of Total Assets Turnover on Return On Assets

The results of this study indicate that Total Assets Turnover affects Return On Assets. The results of testing the Total Assets Turnover variable on Return On Assets show that Total Assets Turnover has a significant effect on Return On Assets, thus it can be concluded that H5 is accepted. The results of this study are in line with research conducted by, (Suwandi et al., 2019), which conclude that Total Assets Turnover affects Return On Assets.

CONCLUSION

Based on the results of the research and discussion in the previous chapters, it shows that Net Working Capital harms the

profitability of coal mining in 2014-2019. Thus, based on the results, it means that the Net Working Capital is a variable that is relevant to profitability (ROA). Firm Size harms the profitability of coal mining in 2014-2019. Thus, it means that Firm Size is a variable that is relevant to profitability (ROA). The current ratio has a positive effect on the profitability of coal mining in 2014-2019. Thus, it means that the Current Ratio is a variable that is relevant to profitability (ROA). Debt to Equity Ratio harms the profitability of coal mining in 2014-2019. Thus, it means that the Debt to Equity Ratio is a variable that is relevant to profitability (ROA). Total Asset Turnover has a positive effect on the profitability of coal mining in 2014-2019. Thus, it can be interpreted that Total Asset Turnover is a variable that is relevant to profitability (ROA).

SUGGESTION

Suggestions that can be published for future research are that it is better for the company to try to reduce debt, whether it is current or short-term debt, and increase capital inflows to increase existing liquidity. The company must pay more attention to the assets they already have and manage them better so that company profits can increase. As profit increases, profitability will also increase.

Future researchers can also try to examine the financial ratios with different variables to get different results.

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