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The Effect of Current Ratio and Debt to Equity Ratio on Return on Assets at PT Aneka Tambang Tbk Period 2011-2020

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Abstract

The purpose of this study is to determine the current ratio and debt to equity ratio to return on assets at PT Aneka Tambang Tbk. The data collection method used is the documentation technique. The research subject used is the financial statements of PT Aneka Tambang Tbk for the period 2011 - 2020. The object of research used is the return on assets of PT Aneka Tambang Tbk. The statistical method in this study uses the EViews 11 program. The analytical techniques used are Descriptive Analysis Test, Classical Assumption Test (Multicollinearity Test, Heteroscedasticity Test, Auto Correlation Test and Normality Test), and Hypothesis Testing (Partial Test, Stimulant Test and Coefficient of Determination Test).). The results showed that partially current ratio has a negative and insignificant effect on return on assets with t count (0.040083) smaller than t table (1.85955) and probability value (0.6458) greater than (0.05). While partially debt to equity ratio has a positive and significant effect on return on assets with a t-count value (3.204127) greater than r table (1.85955) and probability (0.0150) less than (0.05). Stimulatingly, the current ratio and debt to equity ratio have an effect on return on assets with the calculated f value (5.370354) greater than f table (4.06618) and probability (0.038587) less than (0.05). The contribution of the current ratio and debt to equity ratio to return on assets is 60.54%.

Keywords: Current Ratio, Debt to Equity Ratio, Return On Assets

1. Introduction

Indonesia's economic development can be measured by annual national income. The Indonesian government is able to provide macroeconomic progress that is very influential in today's economic growth. Over time, the company will always improve its performance in order to increase its preferences and profits. To achieve this goal, the company must be able to carry out financial management appropriately. In this case the financial manager has an obligation to establish policies in the management of funding sources, because the selection of the right sources of funds is very supportive of the company's continuity to achieve the expected goals. Economic growth can be seen from the number of requests which will be the main support for economic performance.

Indonesia as a developing country is required to continuously improve the economic growth of its people through the development of economic pillars that are considered capable of sustaining and improving the welfare of the community in a fair and equitable manner. In addition to cooperatives and the private sector, one of the economic pillars that is considered capable of realizing the welfare of the Indonesian people is State-Owned Enterprises (BUMN). To make that happen, The government through State-Owned Enterprises (BUMN) is expected to always make improvements in the face of

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economic developments both nationally and internationally. State-Owned Enterprises (BUMN) as the largest economic actors in Indonesia are expected to continue to grow and develop so that they are able to compete in an increasingly open era.

PT Aneka Tambang Tbk is an export-oriented mining company through areas spread throughout Indonesia which are rich in mineral materials. The activities of PT Aneka Tambang Tbk include exploration, mining, processing and marketing of nickel ore, ferronickel, gold, silver and coal commodities. From its quality-assured production, PT Aneka Tambang Tbk hopes to have loyal long-term customers in Europe, Asia and other continents.

In addition, the company's activities are export-oriented, making PT Aneka Tambang Tbk has added value compared to other companies. Nickel is one of the productions that is the advantage of PT Aneka Tambang Tbk. which are in great demand, especially consumers from abroad. This phenomenon makes PT Aneka Tambang Tbk as one of the companies that is in great demand by investors. Based on the results of Bank Indonesia, PT Aneka Tambang Tbk is one of the most sought after stocks by investors because LQ45 makes PT Aneka Tambang Tbk one of the companies whose shares can be purchased on the index. However, with the emergence of the pandemic at the end of 2019, PT Aneka Tambang Tbk experienced both good and bad impacts. The problem that occurred in early 2021 was that a number of companies were busy asking for an extension of the tenor of maturing debts, one of which was PT Aneka Tambang Tbk. PT Aneka Tambang Tbk has a tenor that will mature in January 2021 However, in recent years PT Aneka Tambang's commodity prices have experienced an ups and downs phase. Nickel is one of them which fluctuates every year which triggers uncertainty in the company's income. This is triggered by uncertain economic conditions that have an impact on various sectors, one of which is the mining sector.

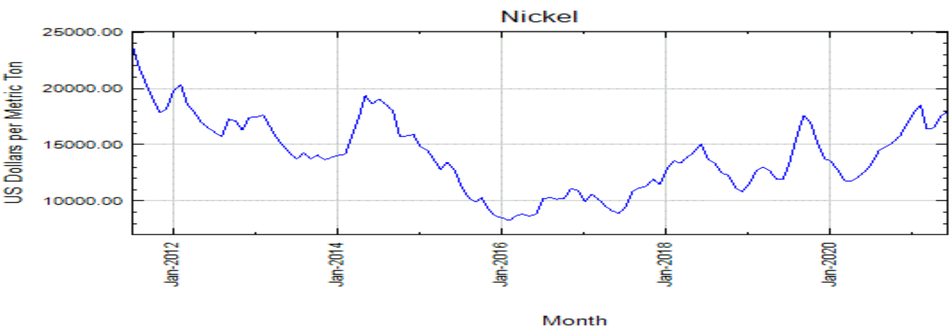


Figure 1. Nickel Price Movement Chart 2016-2021

In the midst of price fluctuations, the cost control strategy has become the grip of a number of nickel issuers in maintaining their performance, especially for PT Aneka Tambang Tbk. This strategy is carried out in an effort to maintain business competitiveness well amidst the volatility of international commodity prices which are currently on a negative trend. Apart from being a mining material processor, PT Aneka Tambang Tbk also operates in the trading, transportation and service industries related to the mining of various types of minerals. With the wide scope of the company's activities, apart from benefiting in this case, PT Aneka Tambang Tbk also has duties and responsibilities to satisfy shareholders, especially in the distribution of dividends. at PT Aneka Tambang Tbk went well. However, the Return on Assets (ROA) of PT Aneka Tambang Tbk shows a problem because from 2011 to 2020 it tends to decrease. Even in 2015 the ROA level touched -5.50%. Based on the above analysis and other supporting data, the authors are interested in conducting research with the title "The Effect of Current Assets and Debt to Equity Ratio on Return On Assets of PT Aneka Tambang Tbk Period 2011-2020".

2. Literature Review

Current Ratio

According to (Kasmir, 2016, p. 134) states that, "the current ratio is a ratio to measure the company's ability to pay short-term obligations or debts that are due immediately when billed in their entirety" The current ratio shows whether the demands from short-term creditors can be met by assets that are expected to become current assets in the same period as the maturity of the debt. A low current ratio is usually considered to indicate a problem in liquidity. On the other hand, a company that has a current ratio that is too high is also not good, because it shows a lot of idle funds which in turn can reduce the company's profit ability (Hanafi & Halim, 2014, p. 202)

Debt To Equity Ratio

Debt to Equity Ratio (DER) is the ratio used to assess debt to equity. This ratio is sought by comparing all debt, including current debt with all equity. This ratio is useful for knowing the amount of funds provided by the borrower (creditor) with the owner of the company. (Horne, 2012, p. 235). According to (Kasmir, 2016, p. 114) that "the definition of debt to equity ratio is a financial ratio used to assess debt and company equity. This ratio is used to find out the total funds provided by the borrower and the owner of the company.

Return On Assets

AReturn on Assets is a ratio that measures the company's overall ability to generate profits with the total number of assets available in the company. The higher this ratio, the better the state of a company. This ratio is used to measure how much net profit is generated. According to (Kasmir, 2014, p. 201) Return On Assets is a ratio that shows the results of the total assets used in the company.

Framework

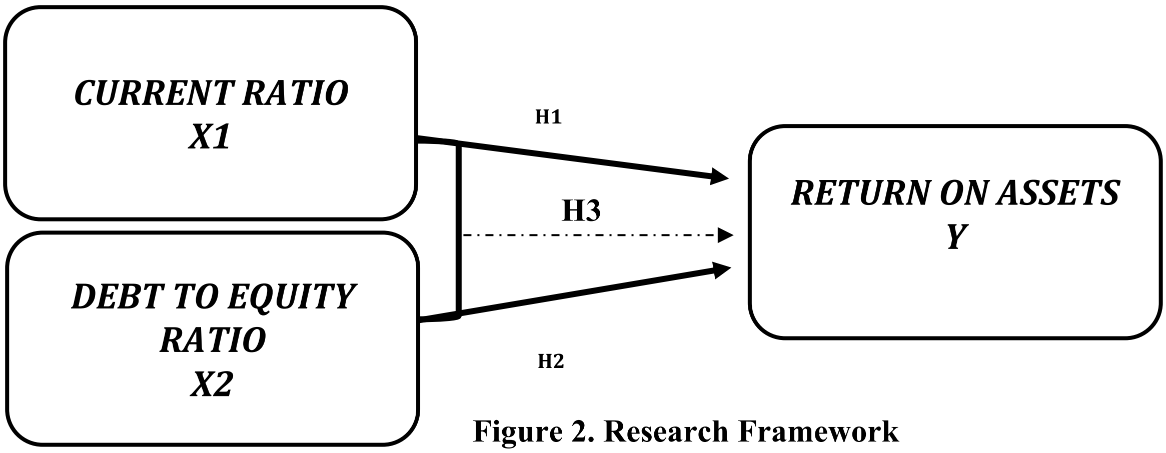


Figure 2. Research Framework

Hypothesis:

1. H_0: $\rho_1 = 0$. There is no influence between Current Ratio on Return On Assets at PT Aneka Tambang Tbk Period 2011 – 2020.
H_a: $\rho_1 \neq 0$. There is an influence between the Current Ratio on Return On Assets at PT Aneka Tambang Tbk Period 2011 – 2020.
2. H_0: $\rho_2 = 0$There is no effect of Debt Equity Ratio on Return On Assets at PT Aneka Tambang Tbk Period 2011 – 2020.
H_a" $\rho_2 \neq 0$. There is an effect of Debt Equity Ratio on Return On Assets at PT Aneka Tambang Tbk Period 2011 – 2020.
3. H_0" $\rho_3 = 0$. It is suspected that there is no simultaneous effect between the Current Ratio and Debt Equity Ratio on Return On Assets at PT Aneka Tambang Tbk for the period 2011 – 2020.
Ha H_a" $\rho_3 \neq 0$. It is suspected that there is an influence between the Current Ratio and Debt Equity Ratio on Return On Assets simultaneously at PT Aneka Tambang Tbk for the period 2011 – 2020.

3. Methods

This research uses quantitative research. According to (Sugiyono, 2015, p. 14) that the quantitative approach is research based on the philosophy of positivism to examine certain populations or samples and take random samples with data collection using instruments, data analysis is statistical. The population in this study is the company at PT Aneka Tambang Tbk in 2011 – 2020. The sample used in this study is the income statement and balance sheet at PT Abeka Tambang Tbk from 2011 to 2020. This research uses Descriptive Analysis Test, Classical Assumption Test which consists of Multicollinearity test, Heteroscedasticity test, Autocorrelation test, Normality test, then performs hypothesis testing both partially and simultaneously which is continued with the Determination coefficient test.

4. Results and Discussion

Descriptive Analysis

Data Current Ratio, Debt to Equity Ratio and Return On Assets that have been collected from the financial statements are then processed with descriptive statistics as follows:

Table 1. Descriptive Analysis

Date: 08/01/21 Time: 11:33
Sample: 2011 2020

	X1	X2	Y
Mean	1.792000	0.645000	0.029000
Median	1.630000	0.665000	0.015000
Maximum	2.590000	0.850000	0.150000
Minimum	1.080000	0.410000	-0.050000
Std. Dev.	0.542971	0.113944	0.065056
Skewness	0.386195	-0.406851	0.818988
Kurtosis	1.759093	3.633151	2.630203
Jarque-Bera	0.890182	0.442913	1.174881
Probability	0.640766	0.801351	0.555748
Sum	17.92000	6.450000	0.290000
Sum Sq. Dev.	2.653360	0.116850	0.038090
Observations	10	10	10

Based on the table above, it is obtained from Current Ratio data, Debt to Equity Ratio and Return On Assets for the last 10 years and can be explained as follows:

a. The Curret Ratio data of PT Aneka Tambang Tbk shows the minimum value of 1.080000 and the maximum value of 2.590000 with a standard deviation of 0.542971. While the average obtained is 1.792000. It can be concluded that the Curret Ratio of PT Aneka Tambang Tbk is classified as good in its obligations to pay current debts because the average calculation is above 1 (one) or 100%.

b. The Debt to Equity Ratio data of PT Aneka Tambang Tbk shows the minimum value of 0.410000 and the maximum value of 0.850000 with a standard deviation of 0.113944. While the average obtained is 0.645000. It can be concluded that the Debt to Equity Ratio of PT Aneka Tambang Tbk is ideal, because the average calculation is below 1 (one) or 100%, which means that the company's debt is less than its assets.

c. The Return On Assets data of PT Aneka Tambang Tbk shows a minimum value of -0.050000 and a maximum value of 0.150000 with a standard deviation of 0.065056. While the average obtained is 0.029000. It can be concluded that the average calculation of the Return On Assets of PT Aneka Tambang Tbk is still lacking, because the good standard of a company is the average return on assets of 2%.

Multicollinearity Test

Table 2. Multicollinearity Test

Variance Inflation Factors
Date: 08/01/21 Time: 13:44
Sample: 2011 2020
Included observations: 10

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	0.009922	46.21081	NA
X1	0.000813	13.15763	1.004198
X2	0.018451	36.75698	1.004198

Based on the results of the data that has been processed, the table above shows that the Variance Inflation Factor (VIF) value is 1.004198 or the value is < 10. So in this study H0 is accepted. So the calculation of this model can be said that there is no multicollinearity.

Heteroscedasticity Test

Table 3. Heteroscedasticity Test

Heteroskedasticity Test: White
Null hypothesis: Homoskedasticity

F-statistic	3.892943	Prob. F(5,4)	0.1062
Obs*R-squared	8.295313	Prob. Chi-Square(5)	0.1407
Scaled explained SS	4.354349	Prob. Chi-Square(5)	0.4996

Based on the results of the data that has been processed, the table above shows the value of Obs*R-Squared from the white test of 8.295313 and Prob. The Chi Square value is 0.1407. Because Prob. Chi Square value > 0.05. So in this case H0 can be accepted and this data does not occur heteroscedasticity but is homoscedasticity.

Autocorrelation test

Breusch-Godfrey Serial Correlation LM Test:
Null hypothesis: No serial correlation at up to 2 lags

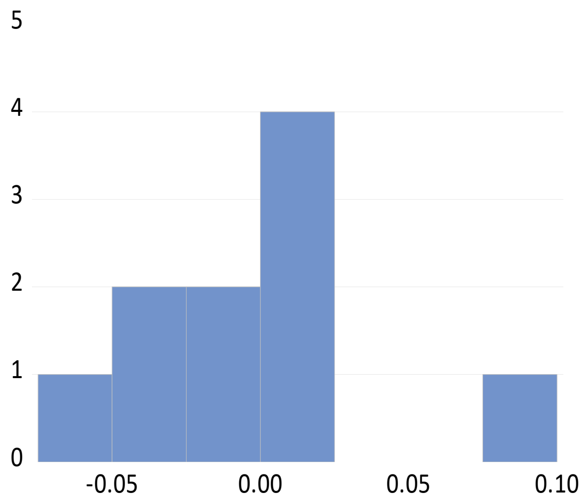
F-statistic	0.123950	Prob. F(2,5)	0.8861
Obs*R-squared	0.472379	Prob. Chi-Square(2)	0.7896

Table 4. Heteroscedasticity Test

Based on the results of the processed data, the table above shows the value of Obs*R-Squared from the auto correlation test using the Breusch Godfrey LM test of 0.472379 and Prob. The Chi Square value is 0.7896. Because Prob. Chi Square value > 0.05. So in this case H0 can be accepted and the data is decided that there is no autocorrelation.

Normality test

Table 5. Normality Test



Series: Residuals
Sample 2011 2020
Observations 10

Mean	5.97e-17
Median	0.001446
Maximum	0.085126
Minimum	-0.061551
Std. Dev.	0.040865
Skewness	0.527918
Kurtosis	3.142517
Jarque-Bera	0.472959
Probability	0.789402

Based on the table above, it can be seen that the variables are normally distributed, this is indicated by the probability value obtained by 0.789402 and the Jarque Bera value of 0.472959. So it can be concluded that H0 is accepted and the data is normally distributed.

Partial Test

Table 6 Hypothesis Test

Dependent Variable: Y
Method: Least Squares
Date: 08/01/21 Time: 18:41
Sample: 2011 2020
Included observations: 10

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.334251	0.099607	3.355683	0.0122
X1	-0.013685	0.028506	-0.480083	0.6458
X2	-0.435236	0.135836	-3.204127	0.0150

Based on the table above, H1: Suspected to have a negative and insignificant effect on Return On Assets. This can be seen from the probability 0.6458 is greater than 0.05 and the t count is 0.480083 smaller than the t table 1.85955. The conclusion is that Return On Assets is not influenced by the Current Ratio. Based on the data above, H2: Suspected to have a positive and significant effect on Return On Assets. This can be seen from the probability that 0.0150 is smaller than 0.05 and the t count is 3.204127 which is greater than the t table 1.85955.

Goodness of Fit

Table 7 . ANOVA

R-squared	0.605427	Mean dependent var	0.029000
Adjusted R-squared	0.492692	S.D. dependent var	0.065056
S.E. of regression	0.046336	Akaike info criterion	-3.062463
Sum squared resid	0.015029	Schwarz criterion	-2.971688
Log likelihood	18.31232	Hannan-Quinn criter.	-3.162044
F-statistic	5.370354	Durbin-Watson stat	1.759390
Prob(F-statistic)	0.038587		

Based on the table above, the calculated f is 5.370354 which is greater than the f table of 4.06618 or 4.07 . And the probability level is 0.038587 which is smaller than the 0.05 probability level. So it can be concluded that the variables Current Ratio and Debt to Equity Ratio stimulants have a significant effect on Return On Assets.

Coefficient of Determination (R2)

Table 8 Coefficient of Determination Test (R-Square Test)

R-squared	0.605427	Mean dependent var	0.029000
Adjusted R-squared	0.492692	S.D. dependent var	0.065056
S.E. of regression	0.046336	Akaike info criterion	-3.062463
Sum squared resid	0.015029	Schwarz criterion	-2.971688
Log likelihood	18.31232	Hannan-Quinn criter.	-3.162044
F-statistic	5.370354	Durbin-Watson stat	1.759390
Prob(F-statistic)	0.038587		

Based on the table above, there is an R-Square value of 0.605427. This shows the value of the influence of the independent variable on the dependent variable is 60.54%. Or it can be concluded that the independent variable is able to explain 60.54% of the dependent variable. While the remaining 39.46% is influenced by factors outside of the independent variables including the quick ratio, cash ratio in the independent variable liquidity and debt to assets ratio, long term debt equity ratio, time interest earned ratio and fixed charge covarage ratio in the solvency independent variable.

Discussion

Effect of Current Ratio on Return On Assets at PT Aneka Tambang Tbk Period 2011 – 2020

Based on the results of descriptive analysis, obtained an average of 1.792000 with the variable Current Ratio as its variable. The Current Ratio variable is already above the standard calculation, which is above 1 (one). This means that the company has efficiently run the company, especially in paying current debts owned by the company.

In the partial test or t test, it is obtained that the Current Ratio variable has no effect on Return On Assets because the probability (0.6458) is greater than the significance level (0.05) and the t count (0.480083) is smaller than the t table (1.85955).

The Effect of Debt to Equity Ratio on Return On Assets at PT Aneka Tambang Tbk Period 2011 – 2020

Based on the results of descriptive analysis, obtained an average of 0.645000 with the variable Debt to Equity as the variable. The indicator variable can be said to be good because the value of the average is good, which is below 1 (one). It can be concluded that the company uses its debt wisely by not taking the risk of too much debt and relying more on profits and also current assets owned.

In the partial test or t test, it is obtained that the Debt to Equity Ratio variable has a positive effect because it has a significance or probability (0.0150) smaller than the significance level (0.05) and a partial effect because it has a t count (3.204127) smaller than the t table (1.85955).

The Effect of Stimulants Between Current Ratio and Debt to Equity Ratio on Return On Assets at PT Aneka Tambang Tbk Period 2011 – 2020

Based on the stimulant test or f test, it is obtained that f arithmetic is 5.370354 which is greater than f table of 4.06618 or rounded to 4.07. And also obtained probability of 0.038587 smaller than the level of significance of 0.05. So it can be concluded that the variables Current Ratio and Debt to Equity Ratio stimulants have a significant effect on Return On Assets.

In addition, the value of the coefficient of determination of 0.605427 or 60.54% has an effect on the dependent variable. For the remaining 39.46%, it is influenced by external factors other than the existing independent variables.

5. Conclusion

Based on the results of research and analysis in the discussions that the authors have done in the previous chapter, the researchers make the following conclusions.

1. Partially Current Ratio has a negative and insignificant effect on Return On Assets, this can be seen from the significant value or probability (0.6458) greater than 0.05 and t count (0.480083) smaller than t-table (1.85955). This means that partially Current Ratio has no significant effect on Return On Assets.
2. Partially Debt to Equity Ratio has a positive and significant effect on Return On Assets, this can be seen from the significant value or probability (0.0150) less than 0.05 and t count (3.204127) greater

than t-table (1.85955). This means that partially Debt to Equity has a significant effect on Return On Assets.
3. Simultaneously obtained f arithmetic is greater than f table that is (5.370354) compared to (4.06618 or 4.07) and the significant level or probability level of (0.038587) is smaller than (0.05) so it can be concluded that there is a significant influence between the Current variables Ratio and Debt to Equity Ratio to Return On Assets which is the dependent variable.

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