P-ISSN: 2621-2536: E-ISSN: 2621-2544: DOI: 10.15408/aism.v6i2.34423

© 2023 The Author(s). This is an open article under CC-BY-SA license (http://creativecommons.org/licenses/by-sa/4.0/)

# Analysis of the Effect of Liquidity, Profitability, and Debt to Equity Ratio (DER) on Firm Value in Mining Companies Listed on the Indonesia Stock Exchange

Masno Marjohan<sup>1</sup>, Hadi Supratikta<sup>2</sup>, Hilya Hasanah<sup>3</sup>

Abstract—Firm value is the view of investors when measuring the success rate of a company. ROE is the variable most strongly associated with firm value to calculate the profit level of a company. Liquidity is a ratio to measure the company's ability to meet its short-term obligations. DER is a ratio used to assess debt against equity. The purpose of this study is to analyze the effect of liquidity (CR) on company value, profitability (ROE), and debt-to-equity ratio (DER) on company value and simultaneously in mining companies in the metal and mineral sub-sector listed on the Indonesia Stock Exchange for the period 2012-2021. This type of research is quantitative. The population in this study are mining companies listed on the Indonesia Stock Exchange. Samples were taken from 4 companies that met the criteria, with 10 years of observation totaling 40 sample units. The sampling technique used is the purposive sampling method. Data is downloaded via the website www.idx.co.id and the company's website. Data analysis uses descriptive analysis, the classical assumption test, regression analysis, hypothesis testing, and the determination coefficient test. The results of the study based on statistical calculations obtained simultaneous results that financial performance has no effect on the value of the company, while partial liquidity (CR) debt on equity (DER) has no effect on the value of the company, and profitability (ROE) significantly affects the value of the company.

Index Terms—liquidity, profitability, debt-equity ratio, firm value.

## I. INTRODUCTION

The economy during the Covid-19 pandemic has caused companies to decline. Then again, the current economy has also created serious competition between domestic and foreign companies. Company competition can affect each company to further develop better performance so that it can be superior to other companies and avoid bankruptcy experienced by each company.

Good performance can increase the company and company shares, this will reflect the prosperity of shareholders who invest in the company. Therefore, the company's value is very important

Received: 21 August 2023; Revised: 9 September 2023; Accepted: 12 September 2023

because it reflects the company's performance which can affect investors' perceptions of the company. If the share price rises, the company value will also increase, which is indicated by the high rate of return on investment to shareholders.

Basically, every company in an effort to realize its goals in order to achieve the main goal of obtaining maximum profit, prospering the company owner or providing dividends for shareholders in order to increase the company's value which is reflected in the stock price. Firm value is also defined as market value. There are several factors that affect firm value, namely current ratio, debt to equity ratio, return on assets and company growth.

Current ratio is a ratio to measure the company's ability to pay short-term obligations or debts that are due immediately when billed as a whole. In other words, how much current assets are available to cover short-term liabilities that are due soon. The current ratio can also be said to be a form of measuring the level of security of a company. The calculation of the current ratio is done by comparing total current assets with total current debt. The results of research conducted by Mainisa and Purba [1] stated that Current Ratio has an effect on firm value.

Debt to equity ratio is a ratio used to assess debt with 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 borrowers (creditors) with company owners. In other words, this ratio serves to know every rupiah of own capital used as debt collateral. The results of research conducted by Simanjuntak and Ningsih [2] state that the debt to equity ratio affects the value of the Company.

Return on Equity (ROE) is an indicator that measures how well the company utilizes capital (equity) to generate profits. ROE gives an idea to investors whether the invested capital is used as well as possible to make a profit or vice versa. According to Kasmir [3] return on equity is a ratio used to measure net profit after tax (EAT) with own capital. The ROE ratio can show the level of efficiency of the company in using its own capital. The higher the ROE value, the better. That indicates that the company's position will look stronger, and vice versa.

#### II. RELATED WORK

# A. Signaling Theory

Signaling theory underlies voluntary disclosure. This signal is in the form of information about the efforts made by management to realize the wishes of the owner. Signals can be in the form of promotions or other information that can state that the company is better than other companies.

<sup>&</sup>lt;sup>1</sup>M. Marjohan, Management Postgraduate Program, Pamulang University (e-mail: <a href="mailto:dosen00124@unpam.ac.id">dosen00124@unpam.ac.id</a>).

<sup>&</sup>lt;sup>2</sup>H. Supratikta, Management Postgraduate Program, Pamulang University (e-mail: <a href="mailto:hadisupratikta@gmail.com">hadisupratikta@gmail.com</a>)

<sup>&</sup>lt;sup>2</sup>H. Hasanah, Faculty of Economic and Business, Pamulang University (e-mail: <a href="mailto:hilya.hsn16@gmail.com">hilya.hsn16@gmail.com</a>)

Management always tries to disclose private information which, in its opinion, is of great interest to investors and shareholders, especially if the information is good news. Management is also interested in conveying information that can increase its credibility and the success of the company even though this information is not required. Voluntary disclosure is a positive signal for the company.

### B. Stock Return

Return is the result obtained from an investment. Stock returns can be divided into two, namely realized return and expected return. The return received by investors in the capital market can be divided into two types, namely current income (current income) and capital gain/capital loss (price difference profit). In this study, the stock return used is capital gain (loss). Capital gain (loss) is the difference in profit (loss) experienced by shareholders because the current share price is relatively higher (lower) than the previous share price. Therefore, in this study, the concept of return used is realized return or actual return (capital gain/loss) which is the difference between the current period stock price and the previous period stock price (in this study the stock returns used are daily stock returns) [4].

#### C. Types of Financial Ratios

# 1) Liquidity Ratio

The liquidity ratio measures the company's ability to fulfill its short-term obligations. The size of this ratio is influenced by: 1) the Current Asset Ratio; 2) Cash Ratio; 3) Quick Ratio [3], [5]-[7]. The liquidity ratio or fluency ratio shows the level of fluency of a company in meeting its short-term obligations [8]. This ratio gives an idea of how capable the company is of paying all its obligations that are due in less than one year. Usually, the ratios in this group are related to the elements of current assets and current liabilities. The relationship between current assets and current liabilities is an important indicator that determines whether a company is liquid or not. The company can be said to be in a liquid state, if the company has current assets that are greater than its current liabilities.

## 2) Leverage ratio

Leverage is used to measure debt ratios with assets and own capital owned by the company. This ratio acts as information on the number of assets and funds used as collateral to creditors. This ratio describes the extent to which debt can be guaranteed by the company [3]. The company's management decision in the use of debt is a signal given by investors in assessing the company's prospects. Companies with good prospects will choose to use debt as alternative funding compared to self-financing.

# 3) Debt to equity ratio (DER)

Debt to equity ratio is one type of ratio that is often used as a basis for evaluating risk, so that it can be determined how risky a company is. This means that the greater the ratio indicates the greater the portion of debt used in financing investment in assets, which also means that the company's financial risk increases. Therefore, the company must be able to keep its debt adequacy ratio within acceptable limits, especially by the lender [8].

## 4) Financial performance

Financial performance is the ability of a company to gain profits in relation to sales, total assets, and own capital. Long-term investors have an interest in the company's financial performance because they can see the number of profits that can really be received in the form of dividends [9]. A group profitability ratio is a ratio that shows the combined effect of liquidity, asset management, and debt from operating results. Some ratios for measuring financial performance include Gross Profit Margin, Operating Profit Margin, Net Profit Margin, Return on Asset, and Return on Equity Research has been done by [10]-[12].

# 5) Return on equity (ROE)

Profit or profitability analysis is usually based on information contained in the income statement. This ratio shows how capable the company is in generating profits, both from existing sales and from total assets owned. One of the most important measures of profitability is net profit because investors and creditors are very interested in evaluating the company's ability to generate profits now and in the future [8]. Return on equity is a ratio that shows how capable the company is of using existing capital to generate profits or profits. A company is said to have a good return on capital if the ratio obtained is greater or higher than the cost of capital. This ratio is important for shareholders to determine the effectiveness and efficiency of managing their own capital carried out by the company's management [8].

# D. Research Hypothesis

The effect of the Current ratio (CR), DER, and Return on Equity on firm value, the Current ratio is a ratio that shows the company's ability to meet its short-term obligations (current debt). This ratio is measured as a comparison between current assets and current liabilities [8]. Return on equity is a ratio that shows how capable the company is of using existing capital to generate profits or profits. A company is said to have a good return on capital if the ratio obtained is greater or higher than the cost of capital [8]. Based on the description above, the hypotheses in this study are:

H1: Current ratio (CR), Debt to Equity ratio (DER), and Return on Equity has a significant influence on Company Nil.

Effect of current ratio (CR) on company value current ratio is a ratio used to measure the level of liquidity. Liquidity shows the company's ability to pay financial obligations to pay short-term financial obligations on time. The company value for companies is cash out, so the greater the liquidity of the company as a whole, the greater the company's ability to pay company value. A low CR is usually considered to indicate a problem in liquidation, on the other hand, 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 ability [13]. This shows investors will get a lower return if the company's ability to meet its short-term obligations is lower. Based on the description above, the hypotheses in this study are:

P-ISSN: 2621-2536; E-ISSN: 2621-2544; DOI: 10.15408/aism.v6i2.34423

© 2023 The Author(s). This is an open article under CC-BY-SA license (http://creativecommons.org/licenses/by-sa/4.0/)

H2: Current ratio (CR) has a significant influence on Firm Value.

Effect of Debt Equity Ratio (DER) on Company Value Investors tend to avoid those with high DER values because high DER values reflect relatively high company risk [3]. The greater the DER value, the greater the risk of default faced by the company. In addition, the higher the DER the company also has to pay high interest costs. If this happens, it can result in a decrease in dividend payments because it is considered bad information by investors, so demand for the company's shares will decrease, which results in a decrease in stock prices. Based on the description above, the hypothesis in this study is:

H3: Debt to Equity Ratio (DER) has a significant influence on firm value.

Effect of Return on equity (ROE) on company value, return on equity or called Return on equity is a ratio that shows how much equity contributes to creating net income. Returnon equity (ROE) is a measure of the company's ability to generate the company's rate of return or the company's effectiveness in generating profits by utilizing the equity (shareholder's equity) owned by the company.

#### III. RESEARCH METHOD

This research approach is descriptive quantitative, which explains the relationship between variables by analyzing numerical data using ratios and statistical analysis. This analysis aims to describe the relationship between the financial ratios of mining companies in the Metal and Mineral Sub-Sector listed on the IDX in the period 2012-2021 by applying the multiple regression method.

This study uses secondary data. The secondary data used in this study are financial statements, consisting of income statements and balance sheets for 2012-2021. Secondary data was selected from all companies engaged in natural resource exploration, namely mining companies in the Loga ana Mineral Sub-Sector. Thus, the research population is mining companies listed on the Indonesia Stock Exchange for the period 2012-2021. From the IDX Website, the number of mining companies listed in 2012 was 11 companies. The purposive sampling technique is used to determine the number of samples because the determination of the number of samples is based on certain criteria or considerations [14]. The criteria for determining the sample are as follows:

There are 11 mining companies in the Metal and Mineral Sub-Sector that are continuously listed on the Indonesia Stock Exchange from 2012-2021.

- Mining companies in the metal and mineral sub-sector that publish their complete financial reports through the official website of the Indonesia Stock Exchange (IDX) and the official website of the company during the research period from 2012 to 2021.
- Companies during the research period from 2012-2021, there were 4 companies.

- Mining companies in the metal and mineral sub-sector that do not publish their financial reports in full through the official website of the Indonesia Stock Exchange (IDX) or the company's official website during the research period from 2012-2021, there are 7 companies.
- The number of companies that meet the sample criteria, there are 4 companies, so the number of observations is  $4 \times 10$  years, 40 years.

The data analysis techniques used in this study are financial ratio analysis and multiple regression.

### A. Ratio Analysis

Current Ratio (CR) is a ratio that compares the amount of current assets with current debt to show how much current assets are available to guarantee current debt. The CR formula is as follows:

- Debt to Equity Ratio (DER) is a ratio used to describe the ratio of debt and equity in funding and shows the ability of the company's own capital to guarantee total liabilities, with the formula: Net Income divided by Company Equity.
- Return on Equity (ROE) is Return on Equity is a ratio measuring the profit after tax of own capital. With the formula = Net income divided by company equity.
- Company Value is Price to Book (PBV) is a comparison of the share price with the company's book value.

### B. Statistical Analysis

Statistical analysis consists of classical assumption tests and multiple regression analysis, namely:

• Classical Assumption Test

The assumption test is used to test the feasibility of the regression model which consists of:

- 1) Normality Test, the test aims to test whether, in the regression model, the dependent variable and the independent variable both have a normal distribution or not.
- 2) Autocorrelation Test, to find out a linear regression model there is a correlation between confounding errors in period *t* and errors in period *t*-1.
- 3) Multicollinearity Test, is used to determine whether or not there is a linear relationship between independent variables. A good regression model should not have a correlation between the independent variables.
- 4) Multiple Regression Analysis, is used to determine the effect of independent variables on the dependent variable with the following equation:

$$Y = a + b_1 X_1 + b_2 X_2 + b_3 X_3 + e$$
 (1)

where *Y* is stock return and *a* is a constant. Meanwhile,  $X_1$  express the CR,  $X_2$  denotes DER,  $X_3$  denotes ROA,  $b_{1,2,3}$  are regression coefficient of variable  $X_{1,2,3}$  and *e* is an error.

• Simultaneous Test (F-test)

This test is conducted to determine whether the independent variables simultaneously have a significant effect on the dependent variable. In this study, the f-count value will be compared with the f-table at a significant level (*a*) 5%.

• Partial Test (t-test)

This test is conducted to test whether each independent variable has a significant effect on the dependent variable. In this study, the t-count value will be compared with the t-table at a significant level (a) = 5%.

## • Coefficient of Determination

The coefficient of determination can be seen in the Adjusted R Square value which shows.

#### IV. RESULT

In this study, the data used is secondary data in the form of financial reports of mining companies in the metal and mineral sub-sectors listed on the IDX in 2012–2021. Of the 11 companies listed, only 4 companies that meet the requirements for research can be sampled, while the other 7 companies do not meet the requirements due to incomplete financial reports obtained through the official website, www.idx.co.id, and the company's official website. The financial statement data studied are the current ratio, debt-to-equity ratio, return on equity, and price-to-book value at the end of the year published by the Stock Exchange.

### A. Classical Assumption Test

# 1) Normality Test

The normality test is carried out with the Kolmogorov Smirnov test and the results are shown in Fig. 1.

## 2) Normality Test Results

Based on the results of the Kolmogorov-Smirnov normality test analysis, it is known that the significance value obtained is 0.529 greater than 0.5, so it can be concluded that the data tested is normally distributed.

#### 3) Autocorrelation Test

The autocorrelation test was carried out with Durbin-Watson and the results obtained in the Table 1. Autocorrelation occurs because successive observations over time are related to each other and arise due to residuals not being free from one observation to another. To detect the presence or absence of autocorrelation in this study using Durbin Watson. Based on the results of the autocorrelation test in the table above, it can be seen that the DW value is 1.9669. From the predetermined decision-making basis, the DW value is between the du (1.7209) and 4 - dL (4-1.2848 = 2.7152) or  $1.7209 \le 1.9669 \le 2.7152$ . Based on these results, it can be concluded that there is no autocorrelation in the regression model.

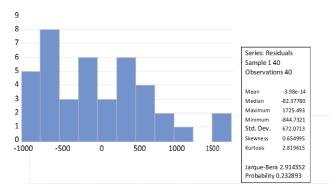


Fig. 1. Kolmogorov Smirnov test

Table 1. Autocorrelation Test Result

R-squared	0.449200	Mean dependent var	-3.98E-14
Adjusted R- squared	0.368200	S.D. dependent var	672.0713
S.E. of regression	534.2014	Akaike info criterion	15.53690
Sum squared residu	9702618.	Schwarz criterion	15.79024
Log-likelihood	-304.7381	Hannan-Quinn criteria.	15.62850
F-statistic	5.545688	Durbin-Watson stat	1.966969
Prob (F-statistic)	0.000771		

# 4) Multicollinearity Test

The multicollinearity test is carried out using the Variance Inflation Factor (VIF) value and the results are shown in Table 2. The multicollinearity test aims to test whether the regression model found a correlation between independent variables [15]. A good regression model should not have a correlation between the independent variables. To detect symptoms of multicollinearity, it can be done with the amount of VIF and tolerance. If the tolerance value> 0.1 and the VIF value < 10, it can be said that there is no multicollinearity, otherwise if the tolerance value < 0.1 and the VIF value> 10, then the regression model occurs multicollinearity. The multicollinearity test in this study is as follows:

Table 2. Multicollinearity Test Results

Variance Inflation Factors			
Date: 07/11/23 Time: 09:37			
Sample: 1 40			

Included observations: 40

included observations, 40			
	Coefficient	Uncentered	
Variable	Variance	VIF	
С	34217.53	2.797150	
CR	770.9055	1.756537	
DER	33929.58	3.361635	
ROE	517924.6	2.207736	

Based on the results of the table above, it can be seen that the centered VIF value of the three variables, namely Current Ratio (CR) of 1.114444, Debt to Equity Ratio (DER) of 2.165465, and Return on Equity (ROE) of 2.088741 is smaller than 10, it can be concluded that there is no multicollinearity problem between independents in the regression model.

## B. Simultaneous Test (F-Test)

The F test is carried out with the aim of showing all independent variables included in the model that have a joint influence on related variables [16]. The results of the F test in this study can be seen in Table 3.

Table 3. Simultaneous Test Results (F-Test)

			Statistics
R-squared	0.169714	Mean dependent var	618.9566
Adjusted R-squared	0.100523	S.D. dependent var	737.5669
S.E. of regression	699.5140	Sum squared resid	17615514
F-statistic	2.452847	Durbin-Watson stat	0.392582
Prob(F-statistic)	0.079043		

Waighted

Volume 6, (2) 2023, p. 113-119

P-ISSN: 2621-2536; E-ISSN: 2621-2544; DOI: 10.15408/aism.v6i2.34423

© 2023 The Author(s). This is an open article under CC-BY-SA license (http://creativecommons.org/licenses/by-sa/4.0/)

Based on the results of the F statistical test in the table above, the F-count value is 2.452847 and the probability value (F-statistic) is 0.079043. F-table can be seen in the statistical table at a significance level of 0.05 with:

- dfN1 (number of variables 1) = 4 1 = 3.
- dfN2 (number of data number of independent variables 1) = 40 3 1 = 36.

The results obtained for the F-table are 2.87, so that F-count (2.452847) < F-table (2.87) and systematically obtained a probability value of 0.079043, because the probability value of 0.079043> 0.05, the variables Current Ratio  $(X_1)$ , Debt to Equity Ratio  $(X_2)$ , and Return on Equity  $(X_3)$  together or simultaneously have no significant effect on Firm Value (Y).

## C. Partial Test (T-Test)

The *t*-test is used to show how far the influence of one independent variable on the dependent variable is partially (Ghozali & Ratmono, 2017). If the significance probability value <0.05, then the independent variable has a significant effect on the dependent variable. T table can be seen in the statistics at a significance level of 0.05 with df = n - k = 40 - 3 = 37 (n is the amount of data and k is the number of independent variables). The results obtained for the T table are 2.02619. the results of the t-test in this study can be seen in the Table 4. Based on the *t*-test results in the Table above, it can be concluded that:

- The Current Ratio  $(X_1)$  variable has a *t*-count value < t-table, namely -0.925897 < 2.02619, and the significance result is greater than a, namely 0.3607 > 0.05, meaning that Ha is accepted and Ho is rejected. This shows that the CR variable has no significant negative effect on Firm Value in the Metal & Mineral Sub-Sector Mining Company.
- DER variable ( $X_2$ ) has a t-count value < t-table, namely 0.280182 < 2.02619, and the significance result is greater than a, namely 0.7809 > 0.05. This shows that DER variable has no significant effect on Firm Value in the Metal & Mineral Sub-Sector Mining Company.
- ROE variable (*X*<sub>3</sub>) has a *t*-count > *t*-table value, namely 2.039121 > 2.02619 and the significance result is smaller than *a*, namely 0.0488 <0.05. This shows that ROE variable has a significant effect on Firm Value in the Metal & Mineral Sub-Sector Mining Company.

Table 4.
Partial Test Results (T-Test)

Partiai Test Results (1-
Dependent Variable: PBV
Panel EGLS (Period random effects)
Time: 09:26
Sample: 2012 2021
Periods included: 10

Cross-sections included: 4
Total panel (balanced) observations: 40

Swamy and Arora estem

Coefficient	Std. Error	t-Statistic	Prob.
749.8468	192.2109	3.901167	0.0004
-26.71264	28.85056	-0.925897	0.3607
53.62702	191.4004	0.280182	0.7809
1524.859	747.8025	2.039121	0.0488

# D. Determination Coefficient Test $(R^2)$

The coefficient of determination essentially measures how far the model's ability to explain variations in the dependent variable. The coefficient of determination is between zero and one [15]. A small  $R^2$  value means that the ability of the independent variables to explain the dependent variable is very limited. A value close to one means the ability of the independent variables to provide almost all the information needed to predict the dependent variable. The results of the coefficient of determination test can be seen in Table 5.

Table 5.
Determination Coefficient Test Results

R-squared	0.169714	Mean dependent var	618.9566
Adjusted R-squared	0.100523	S.D. dependent var	737.5669
S.E. of regression	699.5140	Sum squared resid	17615514
F-statistic	2.452847	Durbin-Watson stat	0.392582
Prob(F-statistic)	0.079043		

The results obtained based on the table above, the Adjusted R-Squared ( $R^2$ ) value is 0.100523. this shows that 10.05% of the variation in firm value can be explained by the independent variable, while the remaining 89.95% is influenced by other variables not included in this research model.

# E. Discussion

Based on the variable influence test table partially Current Ratio has no effect on firm value. The t-test results show that the current ratio variable obtained a significant value of 0.3607 > 0.05 with a t-statistic value of - 0.925897and t-table 2.02619, this indicates that the Current Ratio has no effect on firm value, meaning that the better or worse the current ratio will not affect the quality of firm value in a company. Investors often consider that the greater the CR indicates the company's ability to meet its operational needs, especially working capital, which is very important to maintain the company's performance, which in turn affects the performance of the stock price. This can give Investors confidence to own the company's shares so that it can increase the high company value, so the company in the eyes of investors is getting better. The results of this study are in line with research conducted in ref. [17]-[19] showed that Current Ratio has no effect on Company Value (Price to Book Value). However, contrary to the results of research conducted [20] that revealed the current ratio has a positive and significant effect on company value.

Based on the variable effect test table partially DER has no effect on firm value. The t-test results show that the DER variable obtained a significant value of 0.7809 > 0.05 with a t-statistic value of 0.280182 < 2.02619, this indicates that the DER has no effect on firm value. By some investors, DER is seen as the amount of the company's responsibility to third parties, namely creditors who provide loans to the company. DER that is too high has a bad impact on company performance because a higher level of debt, it means that the company's fixed costs will be greater and will reduce profitability. With a high level of debt charged to

shareholders, it will certainly increase investment risk to shareholders.

Mining companies are an industry that is qualified with risk, especially in the exploration to construction stage which has high uncertainty and requires enormous capital, due to the high level of risk that domestic banks sometimes do not dare to provide funding support for sub-metal and mineral mining companies that are still in that stage and only dare to provide loans if the company has entered the production stage. The results of this study are in line with research conducted in [19] and [20], showed that DER has no significant effect on Firm Value.

Based on the variable influence test table partially Return on Equity has a significant effect on firm value. The t-test results show that the Return on Equity variable obtained a significant value of 0.0488 < 0.05 with a t-statistic value of 2.039121 and a t-table of 2.02619, this indicates that Return on Equity has a positive and significant effect on firm value. This condition implies that the higher the ROE value, the higher the company value obtained by the company. Companies with large ROE will attract investors to invest their funds into the company. This is because a large ROE shows that the company's performance is getting better, when compared to higher debt, the ROE ratio should be greater than debt. A good level of company profitability will certainly attract investors to own the company's shares because a high ROE will increase the level of investor confidence in the returns enjoyed by investors. This it can be said that the higher the ROE shows the more effectively the company utilizes capital to add new branches and generate net profit after tax. If investor interest in buying shares is high because the value of sub-metal and mineral mining companies increases, the share price of mining companies also tends to increase followed by a large stock return. The results of this study are in line with research conducted [19]-[21] showed that ROE has a positive and significant effect on Firm Value. However, contrary to research in ref. [22], stated that ROE has no effect on company value.

The adjusted R-squared value is 0.100523. this illustrates that the independent variables in this study, namely Current Ratio, Debt to Equity Ratio, and Return on Equity, are able to explain the dependent variable, namely company value, by 10.05%, while the remaining 89.95% is influenced by other factors that are not included in this research model.

# V. CONCLUSION

The research reveals that a company's liquidity  $(X_1)$  and profitability  $(X_2)$  have no significant impact on firm value, indicating a lack of management and potential for shareholder prosperity. The debt policy  $(X_3)$ , calculated by the DER, does not affect firm value, as investors focus on the company's ability to efficiently manage funds and achieve shareholder welfare. Companies that are unable to manage funds effectively and efficiently can cause investors to suffer losses in investing in the company because the value of assets will continue to decline. However, if a company has a DER value, it can maintain and manage finances efficiently. Then the company can pay the amount of liabilities in DER and provide investors with the opportunity to obtain proceeds from the sale of company equity when the company's assets have risen again.

There are still certain limits to this research, despite its best efforts to be well-designed. This study exclusively uses mining companies in the Metal & Mineral Sub-Sector that are listed on the Stock Exchange; only CR, DER, and ROE are employed as the substitute financial ratios for liquidity, solvency, and profitability, respectively. This research only lasted for 10 years, the findings could not be comparable to those of earlier investigations.

The anticipated financial performance for the future can be used to determine which sectors are expected to be successful in the short and long term for investors. Further research should employ different ratio proxies for liquidity, solvency, and profitability as several variables were not validated in this study. The ROA ratio and NPM, for instance, can both be used to gauge profitability.

## REFERENCES

- [1] E. Mainisa and M. N. Br. Purba, "Analysis of Liquidity, Profitability and Inventory Turnover Ratios on the Value of Companies Listed on the Indonesia Stock Exchange," (in Indonesian), *Jurnal Aksara Public*, vol. 4, no. 12, pp. 60-72, 2020.
- [2] E. Simanjuntak and D. Ningsih,"The Effect of Debt to Equity Ratio and Net Profit Margin on Firm Value in Pharmaceutical Sub-Sector Companies Listed on the IDX in 2014-2018," (in Indonesian), *Jurnal Aksara Public*, vol. 4, no. 1, 2020.
- [3] Kasmir, Analysis of Financial Report, Jakarta: PT. Raja Grafindo Persada (in Indonesian), 2012.
- [4] Jogiyanto, Design Analysis and Information System Design, Jakarta: Alec Media Kompotindo (in Indonesian), 1998.
- [5] Al-Ajmi et al., "Decisions on Capital Structure in a Zakat Environment with Prohibition of Riba; The Case of Saudi Arabia," *The Journal of Risk Finance*, vol. 10, no. 5, pp. 460-476, 2009.
- [6] A. Chowdury and C. S. Paul, "Impact of Capital Structure on Firm's Value: Evidence from Bangladesh," *Business and Economic Horizons* - *BEH*, vol. 3, no. 3, pp. 111-122, 2010.
- [7] M. Paydar and B. Baejoyaibin, "Leverage Behavior of Malaysian Manufacturing Companies a Case Observation of the Industrial Sector's Companies in Bursa Malaysia," *International Research Journal of Finance and Economics*, vol. 90, pp. 54-56, 2012.
- [8] T. A. Gumanti, Investment Management Concept, Theory and Application, Bogor: Mitra Wacana Media (in Indonesian), 2011.
- [9] R. A. Sartono, Financial Management Theory and Applications, Fourth Edition, Yogyakarta: BPFE (in Indonesian), 2010.
- [10] Sadiamajeed, M. A. Madjidmakki, S. Saleem, and T. Aziz, "The Relationship of Cash Conversion Cycle and Fimr's Profitability: An Empirical Investigation of Pakistani Firms," *International Journal of Financial Management*, vol. 1, no. 1, pp 80-96, 2012.
- [11] R. K. Akoto, D. A. Vitor, and P. L. Angmor, "Working capital management and profitability: Evidence from Ghanaian listed manufacturing firms," *J. Econ. Int. Financ.*, vol. 5, no. 9, pp. 373-379, 2013.
- [12] B. Abuzayed, "Working capital management and firms' performance in emerging markets," *Emerald Int. J. Manage. Financ.*, vol. 8, no. 2, pp. 155-179, 2011.
- [13] A. Sawir, Financial Performance Analysis and Financial Planning, Jakarta: PT. Gramedia Pustaka Utama (in Indonesian), 2009.
- [14] Sugiyono, Quantitative Qualitative and R&D Research Methods, Bandung: Alfabeta (in Indonesian), 2007.
- [15] I. Ghozali and D. Ratmono, Multivariate Analysis and Econometrics Theory, Concepts, and Applications with Eviews 8, Semarang: Badan Penerbit Universitas Diponegoro (in Indonesian), 2013.
- [16] I. Ghozali, Applications of Multivariate Analysis with IBM SPSS Program, Ninth Edition, Semarang: Badan Penerbit Universitas Diponegoro (in Indonesian), 2018.
- [17] W. Yuliani, "Qualitative Methods in the Perspective of Guidance Counseling," (in Indonesian), *Jurnal Quanta*, vol. 2, no. 2, pp. 83-91, 2020.
- [18] A. F. Khasana and Triyonowati, "The Effect of Laverage, Profitability on Firm Value in Property and Real Estate Companies in BEI," (in Indonesian), *Jurnal Ilmu dan Riset Manajemen*, vol. 8, no. 1, 2019.
- [19] P. Anindita and R. Yuliati, "CSR Disclosure, Profitability and Firm Value," in Simposium Nasional Akuntansi XX, Universitas Prasetiya Mulya, 2017.
- [20] Ika & Ida, "The Effect of Return on Equity, Current Ratio, Company Size and Debt to Equity Ratio on Company Value," (in Indoensian), MAKSIMUM: Media Akuntansi Universitas Muhammadiyah Semarang, vol. 10, no. 2, pp. 47-57, 2020,

Applied Information System and Management (AISM)

Volume 6, (2) 2023, p. 113-119

P-ISSN: 2621-2536; E-ISSN: 2621-2544; DOI: 10.15408/aism.v6i2.34423

© 2023 The Author(s). This is an open article under CC-BY-SA license (http://creativecommons.org/licenses/by-sa/4.0/)

- [21] Dewi and Anindya, "The Influence of Institutional Ownership, Profitability, Liquidity, Dividend Policy, Debt Policy on Firm Value," Management Analysis Journal, vol. 7, no. 2, pp. 73-84, 2018.
- [22] N. I. Nafisah, A. Halim, and A. R. Sari, "The effect of return on assets (ROA), debt to equity ratio (DER), current ratio (CR), return on equity (ROE), price earning ratio (PER), total assets turnover (TATO), and earnings per share (EPS) on the value of manufacturing companies listed on the bei in 2014-2015," (in Indonesian), Jurnal Riset Mahasiswa Akuntansi, vol. 6, no. 2, pp. 1-17, 2018.