RETURN ON ASSETS (ROA) AND RETURN ON EQUITY (ROE) ON FIRM VALUE

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Abstract: High company value is one of the determining factors for investors to invest. The purpose of this study was to determine the effect of Return on Asset (ROA) and Return on Equity (ROE) simultaneously and partially on the value of mining companies listed on the Indonesia Stock Exchange (IDX) in 2021-2023. This study uses secondary data in the form of financial reports and annual reports obtained from the Indonesia Stock Exchange website (http://www.idx.co.id/), as well as other sources. The sampling technique used purposive sampling method with multiple linear regression testing conducted on 56 mining sector companies. The results showed that ROA and ROE simultaneously had an influence on the firm value variable, while partially ROA and ROE did not significantly affect firm value.

INTRODUCTION

Company value is currently the concern of many parties, especially investors and related interested parties. Company value can affect investors perspectives on the company, because company value can be seen to provide an overview of the actual state and condition of the company. Investors will assume that the company has good performance if the company value is high, so investors will be interested in investing in the company. Every company certainly hopes that its company value can increase so that the company is valued favorably by investors and the business community. But in reality, not all companies can increase their value, because there are still many companies that experience a decrease in value.

Some aspects that have been in the spotlight in recent years are how the role of profitability, especially in increasing firm value. Many companies have the goal of maximizing company value in order to invite investors to invest. Efforts to maximize the value of a company play an important and crucial role in optimizing company goals. When investors consider the value of the company, they will look at the company's financial statements and annual reports before making investment decisions. In investing additional resources in an efficient capital market, investors look for opportunities and pay special attention to stock prices in making their decisions (Arkan, 2016). The uncertainty of stock prices in this case is a problem. The

fundamental step that investors take before investing so that they are not trapped in adverse conditions is the analysis of stock prices (Apriliyanti, 2015).

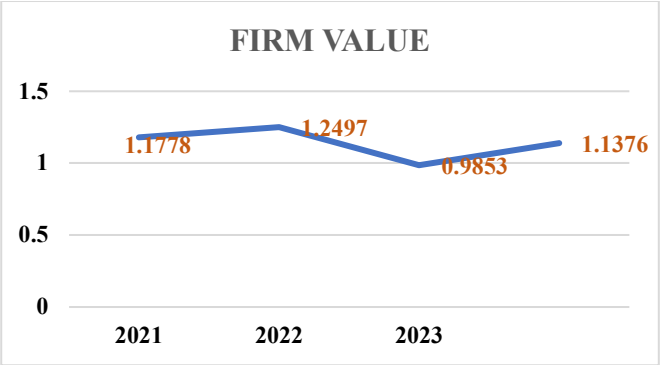
The theories underlying this research are signaling theory and Resource-Based View (RBV) theory. Signaling theory explains that information submitted by companies such as financial reports and annual reports can provide signals to the market about the state of the company and the company's prospects in the future. Good signals can increase company value and investor confidence. High company value can be a positive signal to investors about the sustainability of the company in the future. Because of this, companies are currently competing to increase company value. To ensure that the signal has a positive impact, the company needs to have superior internal resources. An announcement of published information will provide a signal to investors in making investment decisions on their capital (Hartono, 2014). The relationship between signaling theory and ROA is that if the ROA value increases, it means that the company is able to use its assets productively so that it can generate large profits. ROE has a relationship with signaling theory if ROE increases, it can be assumed that the company is able to show efficiency in the use of its own capital. This can be used as a signal for investors in predicting how much the value of the shares owned by the company will change.

The Resource-Based View (RBV) was first introduced by Wernerfelt in 1984 and then this theory was developed by Barney in 1991. The company's competitive advantage comes from the company's unique and strategic internal resources with the characteristics of Value, Rarity, Imitability, and Organization (VRIO) (Barney, 1991). This theory explains the important role of internal resources in the form of assets and capital to have a sustainable competitive advantage. In relation to the context of companies in the mining sector, the efficiency of resource management is very important and crucial to increase company value. RBV theory is used by researchers to analyze the significant effect of Return on Asset (ROA) and Return on Equity (ROE) on company value. In this study, ROA and ROE can be considered as indicators of efficiency in managing strategic resources and reflecting the ability of a company to increase its value. ROA can show the efficient use of assets to generate profits, while ROE reflects the management of shareholders' own capital to create profits. RBV theory supports and complements this view by explaining that a company's sustainable competitive advantage is determined by the ability of the company to manage resources that have value, are rarely found, difficult to imitate, and cannot be replaced.

ROA and ROE are not only limited to providing signals to the market, but can also reflect the extent to which the company can manage and utilize existing resources to create

value for investors and shareholders. In the perspective of RBV theory, high firm value can reflect the company's ability to manage and utilize internal resources optimally. This provides a positive signal to investors regarding the sustainability of the company in the future. In the context of RBV theory, company assets are strategic internal resources and the efficiency of their management is an important indicator of the company's success in increasing value. Equity capital is one of the company's main financial resources, which can reflect the owner's confidence in the company's ability to generate profits. Thus, ROA and ROE can be an indicator of how a company utilizes strategic internal resources to increase value and competitiveness.

The combination of RBV theory and signaling theory can provide a more comprehensive view. Signaling theory highlights the role of external information to shape market perceptions, while RBV theory highlights the importance of a company's internal capacity in providing support for signals to have credibility.



Source: www.idx.co.id (data process, 2024)

Figure 1. Chart of Mining Company Value Development 2021-2023

Based on the company value data analyzed from 2021-2023, the average company value per year in 2021 was 1.1778 and an increase in 2022 to 1.2497, but there was a significant decline in 2023 with an average company value per year of 0.9853 and an overall annual average of 1.1376. This reflects a downward trend in the value of the company in that period. After observing the phenomenon of decreasing company value in the mining sector from 2021-2023, it is important to conduct an in-depth analysis to identify the causes, such as internal and external factors that affect company performance.

The decline in the value of companies in the mining sector in Indonesia reflects significant fluctuations in value between 2021-2023. The significant decline in companies such as ANTM and PGAS shows the major challenges facing the mining sector industry. Challenges

in this case such as commodity price fluctuations, economic uncertainty, increasing global competition, and high pressure from investors. This phenomenon is the basis for companies to evaluate business strategies and innovations to increase competitiveness in order to increase company value. The decline in the value of companies in this sector can be reflected in their stock prices in the capital market experiencing changes. If there is a decrease in share price, it can indicate a decrease in company value which must be resolved immediately in order to maintain investor confidence so that they do not switch to other companies that have better prospects in the future. Firm value has several factors including ROA and ROE as indicators of profitability.

Previous research was mostly conducted in sectors other than mining. Mining companies have different characteristics from other companies. Previous research is still inconsistent and the results are mixed regarding the effect of profitability with ROA and ROE indicators on firm value, so this study was conducted to retest and provide new empirical evidence about the determinants of firm value. ROA and ROE are two measurements that are widely used in profitability ratios (Martono, 2002).

The results of this study can provide benefits and contributions for investors in making investment decisions related to firm value. Theoretically, this research is expected to contribute to the study of signal theory and RBV theory to understand existing phenomena comprehensively related to the variables in this study and as reference material for future researchers. Practically, it is expected to provide input and consideration for company management to ensure asset and equity management that has an impact on firm value.

Company value is a reflection of public trust in the process of activities achieved by the company now (Noerirawan, 2012). Company Value is also defined as the price that investors are willing to pay if the company is sold (Sartono, 2014). For publicly listed companies, the value of the company can be reflected in the price of shares traded in the capital market, because the entire company will be reflected in it (Halim, 2015).

Profitability is the company's ability to earn profits through existing sources through sales activities, cash, capital, number of employees and so on (Harahap, 2015). Profitability ratio is one of the indicators that is often seen by investors because it is very useful as a consideration tool for making decisions. Profitability ratios such as ROA and ROE represent the company's ability to create profits (Audrey, 2023). ROA is often used by management to assess operational performance and measure financial performance in utilizing the company's resources (Hanum, 2015). ROE measures the return on investment of the company's

shareholders. If in the use of capital, the company makes a profit, then the value of the company will increase, indicated by the share price.

Based on the background above, the framework for this research is as follows:

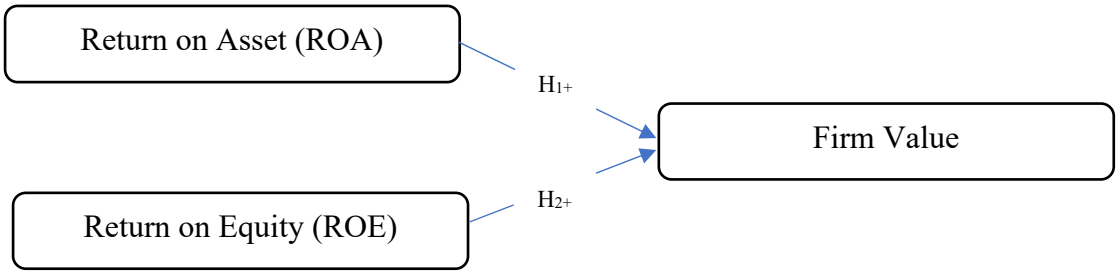


Figure 2. Research Framework

RESEARCH METHODS

This research is a quantitative study using secondary data in the form of financial statements and company annual reports. Data obtained from the Indonesia Stock Exchange website (http://www.idx.co.id/), as well as other sources. The data used are time series and cross section data. The data collection technique in this research is documentation. The sampling method is done by purposive sampling, which is a sampling technique using certain considerations (Arikunto, 2010). The purposive sampling criteria are mining companies listed on the IDX in 2021-2023, mining companies that consistently publish financial reports and annual reports for 2021-2023, and companies that have complete data for this study. The population in this study were 66 mining companies and 56 companies were obtained as research samples with a total of 168 observations.

Table 1. Measurement of Research Variables

Variable Code	Description	Indicator
ROA	Return on Assets	$\text{ROA} = \frac{Net\ Profit}{Total\ Asset} x100\%$ (Kasmir, 2014)
ROE	Return on Equity	$ROE = \frac{Net\ Profit}{Total\ Equity} x100\%$ (Kasmir, 2014)
PBV	Firm Value	$PBV = \frac{Price\ per\ Share}{Book\ Value\ per\ Share}$ (Rahardjo, 2009); (Fahmi, 2019)

Sources: Data Process

The data analysis technique used is multiple linear regression and first carried out a classical assumption test (normality test, heteroscedasticity test, multicollinearity test, and autocorrelation test). Hypothesis testing with the t test and analysis of the Coefficient of Determination (R2). The multiple linear regression equation model tested is as follows:

$$\mathbf{Y = \alpha + b_1X_1 + b_2X_2 + e}$$

Description:

Y = Firm Value

α = constant

b_1b_2 = regression coefficient

X_1 = ROA

X_2 = ROE

e = *error term*

RESULTS AND DISCUSSION

Testing of the analysis requirements was carried out first. The data in this study underwent transformation from 168 data to 104 data. In this section of the results and discussion presents descriptive statistics. The results of statistical tests consisting of the minimum, maximum, mean, and standard deviation values of each variable with N as much as 104 data are presented in table 2.

Table 2. Descriptive Statistics

Variable	N	Minimum	Maximum	Mean	Std. Deviation
X_1 (ROA)	104	-.11	.26	.0667	.08175
X_2 (ROE)	104	-.20	.43	.1079	.12444
Y (Firm Value)	104	-.37	2.50	.9640	.60860
Valid N (listwise)	104				

Source: data process (2024)

Testing of analysis requirements includes data normality test through statistical analysis using Kolmogorov-Smirnov obtained Asymp. Sig. (2-tiled) of 0.074 > 0.05, so it can be concluded that the data is normally distributed. The multicollinearity test results show the value under tolerance > 0.1 and has a VIF value < 10, so there is no multicollinearity (see table 3). The autocorrelation test results show that the DW value is 1.749. Decision making on the presence and absence of autocorrelation is if dU < DW < 4-dU. in this study, the resulting Durbin Watson (DW) value is 1.749, the dU value for K = 2 and n = 104 is 1.7198 and the 4-dU value = 2.2802. this shows that the DW value is between dU and 4-dU so that no

autocorrelation occurs. Likewise, the results of the heteroscedasticity test with the scatterplots graph show that there is no certain pattern and a number of points spread randomly and spread in various directions so that there is no heteroscedasticity (see figure 3).

Table 3. Multicollinearity Test

Model		Collinearity Statistics		Descriptions
		Tolerance	VIF	
1	(Constant)			
	X_1	.198	5.056	No Multicollinearity
	X_2	.198	5.056	No Multicollinearity
a. Dependent Variable: Y				

Source: data process (2024)

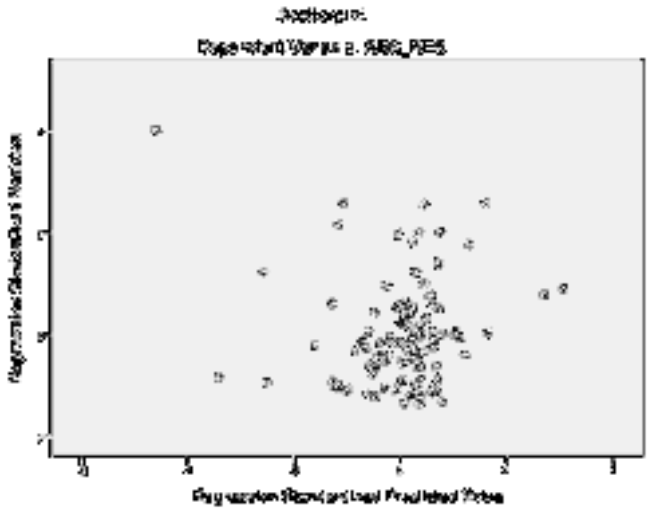


Figure 3. Heteroscedasticity *Scatterplots*

The results of multiple linear regression testing are summarized in table 4, which shows the results of the F test (simultaneous effect) based on ANOVA output, the coefficient of determination, and the t test (partial effect). Based on table 4, it can be seen that the Adjusted R Square value is 0.392 or 39.2% of the company value can be influenced by the ROA and ROE variables. While the influence of the remaining other variables not included in the regression equation of this study amounted to 60.8%. The calculated F value is 34,138 with a sig value. 0.000 < 0.05 indicates that the company value is simultaneously influenced by ROA and ROE. The t test results (partial test) show the significance value of ROA and ROE > 0.05, it can be concluded that partially there is no significant effect with a positive direction on firm value.

Table 4. Multiple Linear Regression Test

Variable	Regression Coefficient	t	Sig.	Description
(Constant)	0.950	11.861	0.000	
X_1 ROA	0.150	0.090	0.928	H_1 Not Significant
X_2 ROE	0.037	0.034	0.973	H_2 Not Significant
R Square	0.403			
Adjusted R^2	0.392			
F Value	34.138			
Sig. F	0.000			

Source: data process (2024)

Based on the results of statistical testing of the positive effect of ROA on firm value (PBV) in this study, it is suspected that ROA has a significant positive effect on firm value, so hypothesis 1 is rejected because it has a significance value of 0.928> 0.05 and a coefficient value of 0.150. Thus it can be stated that ROA has a positive but insignificant effect on the value of mining companies listed on the IDX in 2021-2023.

The results of this study are in line with research (Utami & Welas, 2019) which states that Return On Asset (ROA) partially has no effect on firm value. The results of this study are supported by (Limesta & Wibowo, 2021), (Hakim & Laksmiwati, 2023) Return On Asset (ROA) has no effect on firm value. The results of the study differ from the research (Dwiastuti & Dillak, 2019) that ROA has a significant effect with a positive direction on firm value. This is argued to occur because profitability with ROA indicators through corporate profits is used more to fulfill obligations than for other investments that can increase company value.

Based on the results of statistical testing on the positive effect of ROE on firm value in this study, it is suspected that ROE has a significant positive effect on firm value, so hypothesis 2 is rejected because it has a significance value of 0.973> 0.05 and a coefficient value of 0.037. Thus it can be stated that ROE has a positive but insignificant effect on firm value. This shows that partially the ROE variable does not have a significant effect on the value of mining companies listed on the IDX in 2021-2023.

The results of this study are in line with (Thaib & Dewantoro, 2017) which states that ROE is not significant to firm value. The results of this study are supported by (Bimantara, 2020), (Novita et al., 2022) stated that ROE has no significant and positive effect on firm value. This indicates that the rate of return on equity is not always the main consideration for investors in seeing the value of mining sector companies. In the observation year there were also companies with negative equity, which may be one of the reasons.

The results showed that ROA and ROE did not have a significant effect on firm value in the mining sector listed on the Indonesia Stock Exchange (IDX) for the period 2021-2023. These findings differ from predictions based on the Resource-Based View (RBV) theory, that in managing internal resources such as asset efficiency and equity capital should contribute positively to firm value. The insignificant results are caused by external factors whose influence is more dominant, such as fluctuations in mining commodity prices, government regulations, and global market instability that affect investors' perceptions of the value of mining sector companies. In addition, the possibility of information asymmetry that is less transparent in the company's financial statements and annual reports can be an obstacle in providing signals to investors.

These findings indicate that financial efficiency (ROA and ROE) alone is not sufficient to reflect the value of the company in mining companies that have different characteristics. Supposedly profitability as measured by ROA and ROE indicators is information that can be considered as a signal for investors, if the signal is good then investors will be interested in trading shares, so the market will react and there is a change in the volume of stock trading (Suwardjono, 2010).

CONCLUSIONS AND RECOMMENDATION

Simultaneously, the Return on Asset (ROA) and Return on Equity (ROE) variables as indicators of profitability have a significant effect on firm value in mining companies listed on the Indonesia Stock Exchange in 2021-2023. The ROA and ROE variables have an influence of 39.2% on firm value. The influence of other variables not included in the regression equation in this study amounted to 60.8%. Partially, ROA and ROE variables do not have a significant influence with a positive direction on the value of mining companies listed on the Indonesia Stock Exchange in 2020-2023. This shows that in the context of mining companies, the efficiency of internal resource management as expressed in the Resource-Based View theory may not be the main factor affecting company value.

This study has limitations on the number of samples due to the lack of broad sample criteria. The determinants of firm value tested by researchers have relatively low predictive power. Based on the research that has been done, suggestions for managers need to improve management of assets and equity to provide stronger signals to investors. Regulators need stricter policies to encourage transparency in the financial statements of mining companies. As for future researchers, to explore other variables, increase the number of samples and

observation years, pay attention to economic, socio-political, and regional and international conditions that can affect company value to increase generalization. Future researchers can also consider moderating variables and mediating variables.

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