

IMPACT OF RETURN ON ASSET, CURRENT RATIO AND DEBT TO EQUITY RATION ON PRICE WITH BI RATE AS MODERATION VARIABLE IN MINING COMPANY

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ABSTRACT

The study analyzes empirically the impact of Return on Asset (ROA), Current Ratio (CR), and Debt to Equity Ratio on the stock price with BI Rate as a moderation variable. This study analyzes the impact of Return On Asset, Current Ratio and Debt To Equity Ratio on the stock price and measures the effect of BI Rate as a moderation variable on the relationship between ROA, current ratio, DER and stock price. The research period is from 2019 – 2021 with a sample population of 20 companies in the mining sector listed on the Indonesian Stock Exchange. Data analysis using double linear regression methods, F test and T test. And to test moderation variables using residual test. The results of the research revealed that simultaneously ROA, QR, DER had a significant influence on the stock price, but partially ROA variables had a positive effect on the share price while CR and DER did not have an impact on the price of the stock and BI Rate did not moderate the relationship between ROA, CR, and DER with the stock prices.

Keywords : ROA, CR, DER, Stock Price, BI Rate

INTRODUCTION

The Indonesian economy is heavily influenced by mining - based companies. Mining companies play a role as contributors to the Indonesian economy. (Asmarawati, Yuniarto & Yustrianthe, 2022). Mining companies contribute large amounts of income to the state through taxes, royalties, and dividends (Putra, 2019). Commodity prices, global demand, price fluctuations, and production rates are some of the factors that affect the performance of mining companies (Nugroho et al., 2022). Mining companies are very vulnerable to commodity price fluctuations. Commodity prices can change greatly in a short time due to global factors such as demand, supply, and geopolitics. It affects the financial performance of the mining companies and the price of their stocks.

Investors assess the stock price by considering various factors that reflect the company's health and future prospects. Investors perform fundamental analysis to evaluate the financial performance of a company. This includes auditing financial statements, financial ratios, profit growth, and other fundamental factors that can provide an overview of the intrinsic value of a company.

LITERATURE REVIEW

Signalling Theory

The Signalling Theory or Signal Theory can be applied in the context of research on the influence of Return on Asset (ROA), Current Ratio, and Debt to Equity Ratio (DER) on the stock price with BI Rate as a moderation variable in mining companies listed on the Indonesian Stock Exchange. (BEI). According to the Signalling Theory, if a company has a measure of the company's efficiency in generating profits from its high assets, it can be considered a positive signal to investors (Ichwanudin, 2022). Companies may believe that a high ROA will cause investors to have a better perception of the company's performance, which can drive a rise in the stock price. High current ratio can be seen as a signal that the company has better financial stability. This can make investors feel more confident about their investments, which in turn can affect the stock price.

If a company has a low DER, this can be seen as a positive signal that the company has lower financial risk. On the contrary, a high DER can be seen as a risk signal. Investing in a company with a low financial risk can affect the positive stock price. Signalling Theory also suggests that companies can use external information such as inflation rates to provide additional signals to investors. For example, if a company is able to



maintain positive performance (e.g., high ROA) amid high inflation conditions, this can be seen as an additional positive signal about the company's ability to face difficult economic challenges.

Financial ratio

Financial ratio is a method of financial analysis used to measure and evaluate the financial performance of a company or business entity. A financial ratio is a comparison between two or more items in a financial statement, such as a balance sheet or a loss report, which helps in describing a company's financial situation, operational efficiency, and investment viability. The figures in the financial statements become insignificant when only one side is seen. (Kasmir, 2017).

Stock Price

The stock price is the primary measure of a company's market value. Factors such as a company's financial performance, profit reports, economic news, market sentiment, and certain company events can influence the price of stocks (Sari et al., 2022). Stock price movements are often complex and difficult to predict because they are influenced by many variables that interact with each other. Therefore, investing in stocks involves risk and requires careful analysis as well as a good understanding of the markets and companies invested.

Return on Asset

Return on Asset is a concept in financial analysis used to measure to what extent a company can make a profit from the assets it holds.. ROA is one of the financial ratios commonly used and important in evaluating the financial performance of a company. According to (Kasmir, 2017) a profitability ratio is a ratio for evaluating a company's ability to obtain profit or profit. The ROA ratio is calculated by comparing the company's net profit to the total assets owned by the company.

Current Ratio

Framework of Thought

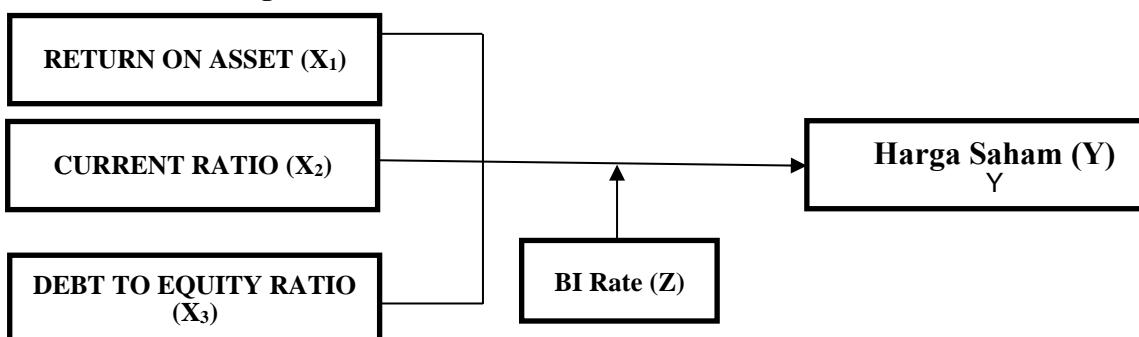


Image 1. Framework of Thought



Current Ratio (CR) is making their companies able to pay short-term liabilities with smooth assets (Fachrian & Hidayat, 2023). When CR is higher, companies have better tools to meet their needs over a short period of time. Management will assure investors that the company has the capacity to meet its long - term obligations, which can affect the stock price.

However, it is important to keep in mind that a high CR can also indicate that a company does not use its assets efficiently, thereby reducing its growth potential and affecting the stock price.

Debt to Equity Ratio

Debt to Equity Ratio (DER) is an important financial ratio in financial analysis and investment decision - making (Ferriswara et al., 2022). The DER is calculated by dividing the total debt of a company by the total equity (own capital) of the company. As a result of rising debt, DER increases business risk.

A low DER may indicate that a company has a sound financial structure and is not too dependent on profits, so it can influence the stock price. It may suggest that a firm has a healthy financial structure, and it is not very dependent upon profits.

However, some investors view the higher DER as a sign that a company uses leverage to increase profits, growth potential, and stock prices.

BI Rate

BI rate is a reference interest rate that affects the capital cost of the company. As interest rates rise, the cost of borrowing also rises, which can reduce the profitability of companies due to rising financial costs. This could lead to a fall in the stock price as investors may lower expectations of the company's future profits. It's like a study (Yudistira & Adiputra, 2020) that BI Rate has no effect on the stock price.

Hypothesis

Based on the framework of thought the hypothesis on this study is as follows :

H1 : ROA, CR, DER have a partial and simultaneous influence on the price of shares in manufacturing companies listed on the Indonesian stock exchange for the period 2019 – 2021

H2 : BI Rate is able to moderate the relationship between ROA, CR, DER against the price of shares in manufacturing companies listed on the Indonesian Stock Exchange during the period 2019-2021.

RESEARCH METHODS

This research uses the kind of causal research that is useful to explain the relationship between a phenomenon or a variable. The research

population is a Mining sector company listed on the Indonesian Stock Exchange during the period 2019 - 2021. The sample in this study uses the Purposive Sampling method that determines the data passes certain criteria. Based on these criteria, 60 companies in the mining sector were selected to be listed on the Indonesian Stock Exchange during 2019 - 2021, making an observation of 240 observation data. The analytical techniques used are double linear regression analysis. Testing using descriptive statistics, classical assumption tests and hypothesis tests.

Operational Variable

In this section mention the variables used, sort them according to the needs of this research, e.g. Varibel dependent, Independent variable, Interverning variable (if any) and Moderating variable.

Table 1

Operational Defence and Variable Measurement Scale Research

N o.	Research variable	Operational defense	Parameters	Scale
1.	Stock price	It is the result of an equity investment	$Rit = \frac{Pit - Pit - 1}{Pit - 1} \times 100\%$	Ratio
2.	Current Ratio (Variabel Independen)	The ratio between assets is smooth decreased by reserves to liabilities are smooth	$Current Ratio = \frac{Current Assets}{Current Liabilities}$	Ratio
3.	Debt to Equity Ratio (Variabel Independen)	Comparison of total liabilities to total equity	$Debt to Equity Ratio (DER) = \frac{Total Liabilitas}{Total Ekuitas}$	Ratio
4.	Return On Asset (Variabel Independen)	Net Profit and Asset Comparison	$ROA = \frac{Net profit}{Total Assets}$	Ratio
5.	BI Rate (Variabel Moderating)	Interest rate policy to strengthen monetary policy communication (www.BI.go.id)	$BI - Rate = \frac{(vol1 \times rate1) + (vol2 \times rate2) + (vol3 \times rate3) + (volN \times rateN)}{Total Volume}$	Ratio

Source: From various references

RESULTS AND DISCUSSION

Descriptive Statistics

Descriptive statistics are crucial in analyzing and understanding data before conducting more in-depth statistical analysis. Using descriptive

statistical techniques, we can present data in a clear and informative way, as well as identify patterns or trends that may be present in the datasets..

Table 2. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Stock Price	60	50.00	4900.00	1404.4667	1317.49082
ROA	60	-10.00	52.00	8.0000	11.95755
CR	60	27.00	1007.00	179.3667	151.38154
DER	60	10.00	2485.00	170.4667	326.64735
Valid N (listwise)	60				

Source: Data Analysis Results

The table shows the amount of data used in this study of 60 samples of data taken from the report of companies of the mining sector so that the observation of 240 observation data.

Testing Hypothesis I

Multiple Linear Regression Analysis

The regression equation results for hypothesis I can be seen in table 3

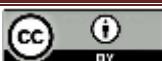


Table 3. Multiple Linear Regression Analysis

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1131.583	297.833		3.799	.000
	ROA	44.164	13.712	.401	3.221	.002
	CR	.080	1.071	.009	.075	.941
	DER	-.556	.512	-.138	-1.086	.282

a. Dependent Variable: Stock Price

Source: Data Processing Results

Based on the result of the regression equation between independent variables against dependent variables can be formulated in the form of the equation as follows:

$$HS = 1131,583 + 44,164 \text{ ROA} + 0,080 \text{ CR} - 0,556 \text{ DER}$$

Tabel 4. Determination Coefficient Test

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.462 ^a	.214	.172	1199.09560

a. Predictors: (Constant), DER, CR, ROA

b. Dependent Variable: Stock Price

Source: Data Processing Results

The R value shows the correlation between the independent variable and its dependent variable. In table 4, we can see the R value of 0.462 or 46.2%. In this case, because of the double linear regression with the free variable then the double correlation between, Return On Asset, Current Ratio, Debt to Equity Ratio versus Stock Price is already strong as the value of R is above 46.2%.

A square R value or determination coefficient of 0.214 or 21.4%, means that the share price disclosure can be explained by ROA, CR, Debt to Equity Ratio, of 0.014 % and the remaining 78.6 % is influenced by other variables not

Determination Coefficient Test

The R value shows the correlation between the independent variable and its dependent variable. In table 4, you can see the R value of 0.481 or 48.1%.

Tabel 4. Determination Coefficient Test

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.462 ^a	.214	.172	1199.09560

a. Predictors: (Constant), DER, CR, ROA

b. Dependent Variable: Stock Price

included in this study model.

The Adjusted R Square value is a determination coefficient that has been corrected with the number of variables and the size of the sample to reduce bias if the variable is added. Adjusted R Square of 0.172 or 17.2% means the variation in share price disclosure can be explained by ROA, CR and DER variables of 17.2%.

Simultaneous Testing (Uji F)

Using a 95% confidence rate and a significant rate of 0.05, df 1 = the number of variables – 1 = 3 + 1-1 = 3 and df 2 (n-k-1) or 60-3-1 = 54 then obtains a F_{table} of 2.78.

Table 5. Results of F Test Statistics

Model		ANOVA ^a				
		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	21892647.127	3	7297549.042	5.075	.004 ^b
	Residual	80518493.806	56	1437830.247		
	Total	102411140.933	59			

a. Dependent Variable: Stock Price

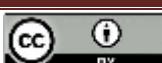
b. Predictors: (Constant), DER, CR, ROA

Source: Data Processing Results

Based on table 5, the value of $F_{count} > F_{table}$ ($5.075 > 2.78$) with a significance level of $0.004 < 0.05$, means that Return on Assets, Current Ratio, Debt to Equity Ratio simultaneously have a significant effect on stock prices.

Partial Test (Uji t)

Table value with $df = n - k - 1 = 60 - 3 - 1 = 56$ then table value is obtained as 1,672. Research has found that regression coefficients, t values and partial significance at:



Tabel 6. Hasil Uji T Statistik

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1131.583	297.833		3.799	.000
	ROA	44.164	13.712	.401	3.221	.002
	CR	.080	1.071	.009	.075	.941
	DER	-.556	.512	-.138	-1.086	.282

a. Dependent Variable: Stock Price

Source: Data Processing Results

Based on the results of the partial test (test) of table 6 can be concluded as follows:

- The variable Return on Assets has $t_{count} > t_{table}$ where $3.221 > 1.672$ with a significance level of $0.002 < 0.05$ so it can be stated that Return on Assets has a positive and significant effect on stock prices.
- The current ratio variable has $t_{count} > t_{table}$ where $0.075 < 1.672$ with a significance level of $0.941 > 0.05$ so it can be stated that the current ratio has no significant effect on stock prices

- The debt to equity ratio variable has $t_{count} > t_{table}$ where $-1.086 < 1.672$ with a significance level of $0.282 > 0.05$ so it can be stated that the debt to equity ratio has no significant effect on stock prices.

Hypothesis Test II

Moderating Variable Test

To test hypothesis II in this study, moderation analysis was used with the Residual method. The results can be seen in the following table :

Table 7. Residual Test Results (Analisis Moderasi)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1404.467	79.316		17.707	.000
	Unstandardized Residual	1.000	.068	.887	14.605	.000

a. Dependent Variable: Stock Price

From table 7 of the Residual Test (Moderation Analysis) - Residual Trial Regression Model, the significant value (p sig) of the stock price is 0,000 with the value of Standardized Coefficents Beta of -0,887, it can be concluded that BI Rate is not a variable moderating or weakening the relationship between independent variables versus dependent variables. This is because the significant value of the signal is greater than 0.05 despite the value of a positive parameter coefficient. (yang berarti tidak terdapat kecocokan antara variable independent dengan variable pemoderasi). As for the mathematical equation of the regression model of the residual test is as follows:

$$|e| = 1.404.46 + 1.000 Y$$

Discourse

Effect of the variable Return on Asset with the price of the stock

Return on Asset serves as a ratio that measures the success of the company to generate profits from the assets it holds. High ROA indicates the efficiency of use of assets in

generating profit. The positive relationship between ROA and stock price indicates that investors tend to be more interested in companies that are efficient in generating profits from their assets. This could provide support for the stock price rise.

Effect of Variable Current Ratio to Stock Price

CR is a financial ratio that measures a company's ability to pay off short-term debt with a smooth asset. Increased CR indicates good liquidity. The absence of a correlation between CR and the stock price suggests that the liquidity of the company's smooth assets is undergoing a decline that is eventually avoided by investors and scattered into a fall in the share price.

Effect of Variable Debt to Equity Ratio on Stock Price

According to partial hypothesis testing that the DER variable is a ratio that measures to what extent the company finances its operations with debt compared to its equity. No relationship between the DER and the stock price indicates that investors may be more skeptical of companies with high debt rates. It can squeeze the stock price.



Effect of Variable Current ratio, Debt to Equity Ratio, Earning Per Share, Price to Book Value, Return On Equity on Stock Price

ROA, CR, and DER can influence the stock price of a company, and BI Rate can act as a moderating variable that affects this relationship. It is an important consideration for investors, corporate management, and researchers in understanding stock price dynamics and the influence of related variables - variables.

BI Rate does not moderate the relationship between the variables Return On Asset, Current ratio, Debt to Equity Ratio

Using BI Rate as a moderation variable is a smart approach. BI Rate can affect the entire economy, including corporate and stock markets. In this context, BI Rate can moderate the relationship between ROA, CR, DER, and stock price. An insignificant result in BI rate moderation may indicate that such variables remain influential on the stock price without being significantly influenced by BI Rate fluctuations. It shows that the BI Rate level in the data range used in this study does not substantially affect the relationship between the financial factors and the stock price.

CONCLUSION

The results of the research lead to a conclusion that Return on Asset (ROA) has a significant positive influence on the stock price. Current Ratio (CR) and Debt to Equity Ratio (DER) have no influence on the price of the stock. Also with BI Rate does not significantly moderate the relationship between ROA, CR, and DER with the stock price.

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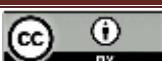
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