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Research Article

The Influence of Return on Assets (ROA) and Return on Equity (ROE) on Stock Prices in Banking Companies on the Indonesia Stock Exchange for the 2023-2024 Period

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Abstract: This study aims to evaluate the effect of Return on Assets (ROA) and Return on Equity (ROE) simultaneously on stock prices in banking companies listed on the Indonesia Stock Exchange (IDX) during the period 2023-2024. The data used is secondary data obtained from the financial statements of 47 banks, with a sample selection of 5 companies determined through purposive sampling method. The analysis was carried out with a quantitative approach and supported by SPSS version 25 software, through descriptive statistical testing, partial and simultaneous hypothesis testing, and regression model feasibility testing. The results show that both ROA and ROE have a positive and significant effect on stock prices, both individually and jointly. This finding confirms that profitability indicators have an important role in shaping investor perceptions and determining the market value of banking companies in Indonesia. Thus, the conclusions of this study support the utilization of a combination of these financial indicators as a basis for making investment decisions and corporate management strategies.

Keywords: Argument Quality; Costumer Well Being; Purchase Intention; Source Credibility

1. Introduction

ROA (Return on Assets) and ROE (Return on Equity) are two important indicators used to assess how well a company's financial performance is, especially in the banking sector. ROA measures how efficient a company is in generating profits from its total assets, while ROE shows how effective a company is in generating profits from the capital provided by shareholders. In the banking industry, these two ratios are very important because they reflect the operational efficiency and the bank's ability to provide profits to its investors. Research by (Bunga Nirwana et al., 2024) shows that large banks in Indonesia such as BCA and BRI have ROA and ROE values that exceed the standards set by Bank Indonesia, indicating good financial performance. In contrast, Bank Danamon has ROA and ROE values below these standards, indicating the need for improvements in its business strategy. Several recent studies have shown that the effect of ROA and ROE on the stock prices of banking companies on the Indonesia Stock Exchange (IDX) varies. In general, ROA tends to have a more significant impact than ROE. For example, research by (Hoerunnisa et al., 2024) found that

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simultaneously, ROA and ROE had a significant effect on bank stock prices on the IDX for the 2018–2020 period. However, partially, only ROA showed a significant effect on stock prices, while ROE did not. Similar findings were reported by (Annisa et al., 2021), who analyzed banking company data on the IDX for the 2018–2022 period. The study showed that ROA significantly affected stock prices, while ROE did not have a significant effect.

The Indonesian capital market has experienced significant dynamics in recent years, especially in the banking sector. This sector plays an important role in the national economy as a major financial service provider. Stock price fluctuations in the banking sector are often influenced by macroeconomic conditions, monetary policy, and the company's internal financial performance. Research by (Lestari et al., 2024) explains that financial performance reflected through the ROA and ROE ratios simultaneously affects the dynamics of banking company stock prices in the period 2019 to 2023. However, several other research results show that the impact of each variable can vary, depending on the conditions of each company. For example, in a study conducted on PT Bank Central Asia Tbk published by the Journal of Management and Economic Research (2024), it was found that ROA and ROE had a significant positive effect on stock prices. This finding reflects that the bank is able to run its operations efficiently and provide a high rate of return on investment (Pamungkas et al., 2025). Although there have been many studies examining the impact of Return on Assets (ROA) and Return on Equity (ROE) on stock prices, there is still a gap in understanding how these two indicators specifically influence each other in the current period (2023–2024). Policy dynamics, technological developments, and the challenges of the global economy that continue to develop can influence or change the relationship between a company's financial performance and the market's response to it

2. Literature Review

2.1. Return On Assets (ROA)

Return On Assets (ROA) is obtained by dividing the company's net profit by the total assets owned, which aims to show the extent to which the company is efficient in utilizing assets to generate profits. Based on the opinion of (Brigham, E.F and Houston, 2010), a high asset range (ROA) indicates that the business has the ability to generate greater profits from each unit of assets it owns. This is a good signal for investors because it shows good operational efficiency. Research conducted by (Manoppo, 2015) revealed that ROA has a positive and significant effect on stock prices. The study found that an increase in ROA value is in line with an increase in stock prices, because investors tend to choose companies that are able to maximize their assets to generate profits. The calculation of ROA can be done using the following formula.

$$\textbf{ROE} = \frac{Net\ Profit}{Equity} \cdot \textbf{100 \%}$$

2.2 Stock Price

Stock price reflects the economic value of an entity in the market and reflects investor expectations of the company's potential future performance. This value is formed through the interaction mechanism between supply and demand in the capital market, which is influenced by the company's fundamental aspects, macroeconomic conditions, and perceptions and sentiments of market players. A number of factors that influence stock price fluctuations include:

a. Financial Performance

   The company's financial condition is one of the main determinants in the formation of stock prices. This performance can be evaluated through a number of financial ratios, such as Return on Assets (ROA) and Return on Equity (ROE), where positive performance tends to increase investor confidence in the company's prospects.

b. Market Information

   Financial reports and dividend announcements, as well as other information about business performance, can influence investors' investment decisions and, in turn, influence stock prices.

3. Metodh

This study uses a quantitative method to examine the effect of independent variables Return on Assets (ROA) and Return on Equity (ROE) on stock prices in banking sector companies listed on the Indonesia Stock Exchange (IDX) in the 2023–2024 period. The data sources used are secondary data taken from financial reports and stock price data of banking companies listed on the IDX. (https://www.idx.co.id/id)

This study observes all banking entities listed as issuers on the Indonesia Stock Exchange (IDX) in the 2023–2024 period, with a research population of 47 entities. The sampling technique uses a non-probability sampling method through a purposive sampling approach, where the sample selection criteria are based on the following table:

Table. 1 Research Sample Criteria

NO	Jenis Sampel
1	Perusahaan perbankan terdaftar secara konsisten di BEI selama periode 2023-2024.
2	Perusahaan perbankan menerbitkan laporan keuangan tahunan secara lengkap selama periode 2023-2024.
3	Perusahaan perbankan memiliki data lengkap terkait variabel penelitian (Harga Saham, ROA, dan ROE) selama periode 2023-2024.

Based on the Criteria in Table 1, the number of samples studied uses 5 companies in the banking sector listed on the Indonesia Stock Exchange with a period of 2023-2024.

Table 2. List of Research Samples

Kode	Nama Bank	Sektor
BBCA	Bank Central Asia Tbk.	Bank
BBRI	Bank Rakyat Indonesia (Persero) Tbk.	Bank
BBNI	Bank Negara Indonesia (Persero) Tbk.	Bank
BBHI	Allo Bank Indonesia Tbk.	Bank
BMRI	Bank Mandiri (Persero) Tbk.	Bank

This study adopts a quantitative approach to analyze data and test the formulated hypotheses. Data analysis is carried out using SPSS statistical software version 25, which is used to process secondary data that has been obtained. Several statistical tests that will be carried out include:

a. Descriptive Statistics

Descriptive statistics are used to provide an overview of the characteristics of the variables studied. Some of the measures included in the descriptive statistics that will be calculated are:

- Mean (Average)

  The average value of each variable (Stock Price, ROA, and ROE).
- Median (Middle Value)

  The middle value of each variable.
- Standard Deviation:

  A measure of the spread of data from the mean value.
- Minimum and Max Values

  The smallest and largest values of each variable.

b. Classical Test

- Normality

  Assesses whether the distribution of residual data follows a normal distribution pattern. If the data is not normally distributed, then the data can be modified or using a non-parametric analysis approach. Kolmogorov-Smirnov and Shapiro-Wilk tests are two tests that are often used for this purpose.
- Multicollinearity Test

  The purpose of this test is to identify a strong relationship between the independent variables (ROA and ROE). The analysis is carried out by examining the Variance Inflation Factor (VIF) value, where if the VIF value exceeds 10, it can be concluded that there is a multicollinearity problem.
- Heteroscedasticity Test

  Used to determine whether there is a difference in residual variance for each observation. The Glejser, Park, and White tests are the most commonly used tests. If there is heteroscedasticity, it can be overcome by using the Weighted Least Squares (WLS) method or data transformation.

- Autocorrelation Test

  This is the most common test to determine whether there is a correlation between error terms in different periods.

c. Multiple Linear Regression Analysis: (Pujiono et al., 2023) Multiple linear regression analysis is applied to test the effect of independent variables (ROA and ROE) on the dependent variable (Stock Price). The regression model used in this analysis is:

$$Y = 1X12X2$$

Description;

Y : Stock Price

X1 : Return On Assets (ROA)

X2 : Return On Equity (ROE)

〈 : Constant (intercept)

®1 : Regression coefficient for ROA

®2 : Regression coefficient for ROE

Hypothesis Testing

- Partial Test (t-Test): Used to test the extent to which each independent variable, namely ROA and ROE, influences the dependent variable, namely stock price, separately or individually.
- Simultaneous Test (F-Test): Applied to test the significance of the overall influence of independent variables (ROA and ROE) simultaneously on the dependent variable (Stock Price).

d. Determination Coefficient Test

To find out how much the independent variables can explain the dependent variable.

4. Results and Discussion

Secondary data used in this study were taken from the financial reports of companies in the banking sector listed on the Indonesia Stock Exchange (IDX) for the period 2023 to 2024. This data source was obtained from the official IDX website. In the study population, there were 47 companies, but only 5 companies were sampled, which were selected based on purposive criteria, (https://www.idx.co.id/id). The sample selection criteria will be explained in more detail in this study.

Descriptive statistical tests present information on the average value (mean), maximum value, minimum value, standard deviation, and other variable values. This study involved 5 samples from the banking sector listed on the Indonesia Stock Exchange for the period 2023-2024. The results of this descriptive analysis will be presented in the following table.

Table 3. Descriptive Statistical Test

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
ROA (X1)	10	1,34	3,78	2,6790	,76466
ROE (X2)	10	5,55	20,87	15,2890	5,56487
Y	10	1290	9425	5204,70	2478,853
Valid N (listwise)	10				

Based on the Descriptive Statistical Test Results above, we can describe the distribution of data obtained by the researcher as follows:

- For the ROA variable (X1), the data shows that the lowest value is 1.34, while the highest value reaches 3.78. The average ROA calculated is 2.6790, with a standard deviation of 0.76466.
- The ROE variable (X2), from the data it can be described that the minimum value is 5.55 while the maximum value is 20.87, the average ROE value is 15.2890 and the standard deviation of ROE is 5.56487.
- For the Price variable (Y), the data shows that the minimum value is 1290, while the maximum value reaches 9425. The average price obtained is 5204.70, with a standard deviation of the price of 2478.853.

a. Normality Test

The Kolmogorov-Smirnov Test is one of the most frequently used techniques to determine whether data follows a normal distribution. The results of the Kolmogorov-Smirnov Test are presented in the following table:

Table 4. Results of the One Sample Kolmogorov-Smirnov Test One-Sample Kolmogorov-Smirnov Test

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		10
Normal Parametersa,b	Mean	,0000000
	Std. Deviation	1076,80094853
Most Extreme Differences	Absolute	,232
	Positive	,232
	Negative	-,146
Test Statistic		,232
Asymp. Sig. (2-tailed)		,135c

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.

Based on the table above, the results of the Kolmogorov-Smirnov test show an Asymp. Sig. (2-tailed) value of 0.135, which is greater than the significant value of 0.05 (0.135 > 0.05). Thus, it can be concluded that the data for the dependent and independent variables are

normally distributed, which means that the data used in this study are normal, so that the study can be continued.

b. Multicollinearity Test

The multicollinearity test is used to find a strong linear relationship between independent variables in a regression model. This should not happen with a good regression model because it can lead to unstable coefficient estimates. The requirements for this test are:

Variance Inflation Factor (VIF) value: If the VIF is less than 10, then there is no significant multicollinearity problem. Conversely, if the VIF is more than 10, this indicates a high potential for multicollinearity.

Tolerance value: Tolerance greater than 0.1 indicates that there is no multicollinearity problem. However, if the Tolerance is less than 0.1, it can indicate a multicollinearity problem

The results of the multicollinearity test will be explained in the following table (Silvia, 2023):

Table 5 Multicollinearity Test Coefficientsa

Coefficientsa

Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	-1262,803	1532,063		-,824	,437		
	ROA	225,752	635,063	,070	,355	,733	,702	1,424
	ROE	383,460	87,263	,861	4,394	,003	,702	1,424

a. Dependent Variable: Y

The results of the multicollinearity test show that the VIF value for each independent variable is below 10, with the highest value reaching 1.424. In addition, the tolerance value obtained is 0.702, which is greater than 0.1. Thus, it can be concluded that the regression model applied in this study does not show any symptoms of multicollinearity.

c. Heteroscedasticity

The heteroscedasticity test is carried out to determine whether there is a difference in residual variance between one observation and another in the regression model. Some of the criteria or requirements for this test are as follows:

1) Heteroscedasticity occurs: If the points are spread randomly around the Y axis (number 0) without a certain pattern, then the model is considered not to have heteroscedasticity.
2) Heteroscedasticity occurs: If the points form a certain pattern, such as wavy or narrowing, then it can be concluded that there is a heteroscedasticity problem

The results of the heteroscedasticity test can be explained in the following figure:

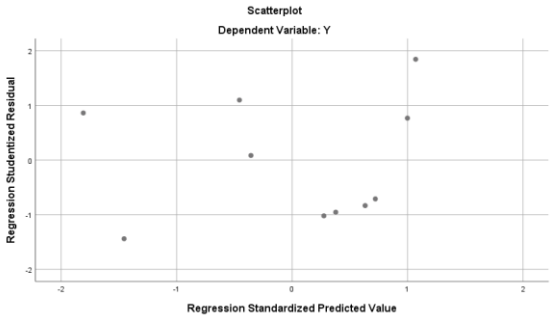

Figure 1. Heteroscedasticity Test

Based on the image above, we can see that the points are spread randomly between the Y axis (number 0), so it can be concluded that there is no heteroscedasticity

d. Autocorrelation Test

Table 7. Autocorrelation Test

Model Summaryb

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,901a	,811	,757	1220,978	1,422

a. Predictors: (Constant), ROE, ROA
b. Dependent Variable: Harga

Based on the Durbin-Watson table, with the number of observation data (n) of 10 and the number of independent variables (k) of 2, the dL value is 0.70 and dU is 1.64. The Durbin-Watson value obtained from the autocorrelation test shows that dL < d < dU, which is 0.70 < 1.422 < 1.64. Therefore, no conclusion can be drawn regarding the existence of autocorrelation

Table 8. Multiple Linear Regression Analysis

Coefficientsa

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.	Collinearity Statistics Tolerance	Collinearity Statistics VIF
1	(Constant)	-1262,803	1532,063		-,824	,437		
	ROA	225,752	635,063	,070	,355	,733	,702	1,424
	ROE	383,460	87,263	,861	4,394	,003	,702	1,424

a. Dependent Variable: Y

Then the regression equation obtained based on the results of the multiple linear regression analysis test is:

$$Y = -1.262{,}803 (\quad) + 225{,}752\ (X1) + 383{,}460\ (X2) +$$

The multiple regression equation model is meaningful if:

a. The constant obtained is -1,262.803, which means that if the value of the independent variable is 0 (constant), then the dependent variable or the value of the company's shares in the banking sector will be at -1,262.803.

b. The regression coefficient for Return On Assets (ROA) which is symbolized as X1 is positive with a value of 225.752. This indicates that if the value of X1 increases, the stock price (Y) will also increase, and vice versa.
c. The regression coefficient for Return On Equity (ROE) which is symbolized as X2 has a positive value of 383.460. This indicates that if the value of X2 increases, the stock price (Y) will also increase, and the same applies vice versa

4.1 . The Effect of Return On Assets (X1) on Share Prices (Y)

Based on the test results in this study, Return On Assets (ROA) is proven to have a significant effect on stock prices. This is indicated by the ROA significance value (p-value) which is smaller than 0.05, which indicates a fairly strong relationship between ROA and stock prices. This means that changes in ROA can have a direct impact on stock price fluctuations. The partial test also shows that ROA has a low significance value and a large enough t-count to indicate a significant effect. In other words, statistically, the more efficient a company is in managing its assets to generate profits (as reflected in ROA), the greater the likelihood that its stock price will increase in the market. This reflects that investors tend to give a positive assessment to companies that are able to maximize the use of their assets to make a profit. In theory, high ROA indicates good financial performance and operational efficiency of the company, which can then increase investor confidence and attract market interest. This finding is also supported by theory and previous research results which concluded that ROA has a positive and significant effect on stock price movements.

4.2 The Effect of Return on Equity (X2) on Stock Prices (Y)

From the test results in this study, it is known that Return on Equity (ROE) has a significant effect on the stock prices of banking companies listed on the Indonesia Stock Exchange during the 2023–2024 period. Regression analysis shows that the p-value for ROE is 0.003, which is below the significance limit of 0.05. This means that there is a statistically acceptable relationship between ROE and stock prices. In addition, the t-count of 4.394, which is greater than the t-table of 2.364, strengthens the evidence of a strong and positive influence. In other words, the greater the ROE a company has, the higher its stock price in the capital market. From a practical perspective, this shows that investors prefer banking companies that are able to maximize profits from their equity, so that their shares tend to be valued higher. The results of this test also indicate that ROE is one of the main indicators that influences market perception of a company's value. Companies with high ROE usually get a positive response from market players, which can ultimately drive up stock prices. Overall, these findings support previous theories and studies that state that ROE has a positive and significant effect on stock prices.

4.3 The Effect of Return on Assets (X1) and the Effect of Return on Equity (X2) on Stock Prices (Y)

Based on the results of the analysis that has been carried out in this study, the simultaneous effect between Return on Assets (ROA) and Return on Equity (ROE) on the stock prices of banking companies on the Indonesia Stock Exchange for the period 2023-2024 shows a statistically significant effect. This is indicated by the Sig. F value of 0.000, which is much smaller than the significance level of 0.05, indicating that the overall regression model does not fit by chance and the two variables, namely ROA and ROE, together affect stock prices. In addition, based on the results of the F test, it can be seen that the combination of these financial variables significantly affects stock prices and also makes a significant contribution in determining the market value of banking companies. Both indicators, namely ROA and ROE, together reflect the efficiency of asset management and the ability to generate profits from equity, both of which complement each other in shaping market perceptions of company value. In practice, these findings make it clear that the use of ROA and ROE together is very useful as an analytical tool to evaluate a company's financial performance and predict stock price movements in the Indonesian capital market. Banking companies that are able to manage assets efficiently and maximize profits from their equity tend to get a positive response from the market and experience an increase in their stock value.

5. Conclusion

Based on the results of the research that has been conducted, it can be concluded that Return On Assets (ROA) and Return On Equity (ROE) both have a positive and significant influence on stock prices in banking companies listed on the Indonesia Stock Exchange during the 2023–2024 period. These two variables, when analyzed simultaneously, make a significant contribution in determining the company's market value. Efficiency in utilizing assets and the ability to generate profits from equity are aspects that are considered important by market players. The results of the regression analysis show that the better the company's financial performance—as reflected through ROA and ROE—the more likely investors are to give a positive assessment, which ultimately has an impact on increasing stock prices. This finding strengthens the understanding that ROA and ROE are profitability indicators that are very influential in the investment decision-making process and in assessing the value of a banking company in Indonesia during that period. Based on the results of this study, banking companies are advised to strive to improve operational efficiency in order to maximize financial performance indicators such as ROA and ROE because both have a positive influence on stock prices. This can be done through more effective asset management and cost control so that the resulting profit is more optimal. Company management also needs to conduct periodic evaluations of financial performance and implement strategic policies that

support increased profitability while increasing transparency of financial reports so as to strengthen investor confidence in the capital market. In addition, companies should pay attention to these indicators as the main parameters in internal decision-making and business development strategies. They must also improve asset and working capital management to increase profits and efficiency, which can ultimately increase the company's market value and stock price. For investors and potential investors, the most important advice is to pay attention to ROA and ROE indicators in the company's fundamental analysis before making an investment. Companies that are able to show high ROA and ROE values usually reflect the efficiency and effectiveness of good financial management, so they have the potential to provide profitable and stable investment results in the long term. In choosing stocks, portfolio diversification is also important in order to mitigate risk and increase profit opportunities.

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