Analysis The Impact of Bank Fundamental Indicators (ROA, NPM, DER, EPS, PER, CAR, NIM, BOPO, AND LDR) on the Stock Returns of Indonesian State-Owned Banks for the Period

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Abstract

This research is motivated by the importance of financial performance analysis in determining stock returns, particularly in state-owned banks (Bank BUMN) listed on the Indonesia Stock Exchange for the 2019-2023 period. The research aims to identify the influence of fundamental financial variables, namely ROA, NPM, DER, EPS, PER, CAR, NIM, BOPO, and LDR, on stock returns. The research method employed is multiple linear regression analysis with a quantitative approach, where secondary data is processed to examine the simultaneous and partial effects of each variable on stock returns. The findings reveal that fundamental financial variables simultaneously have a significant impact, contributing 93.1%. Partially, ROA, NPM, EPS, PER, CAR, and NIM show a significant positive influence, while BOPO and LDR exhibit a significant negative effect on stock returns. DER, although negatively affecting, is statistically insignificant. The research concludes that operational efficiency, capital management, and financial stability are critical factors in enhancing stock returns. It further recommends that management improve efficiency and maintain liquidity balance to attract investors and strengthen the company's competitiveness.

Keywords: banking, fundamental indicators, indonesia, stock returns, state-owned enterprises.

INTRODUCTION

Capital markets and financial statements are two important domains in the modern economy (Palepu et al., 2020). Capital markets play a crucial role in the raising and allocation of long-term funds, while financial statements provide a clear picture of a company's financial health and performance. "Financial indicators such as ROA, NPM, DER, EPS, PER, CAR, NIM, BOPO, LDR and stock returns provide an in-depth view of various aspects of company performance" (Choi et al., 2023). The capital market is considered an effective means of supporting a country's development. The capital market allows the collection of long-term funds from the public and allocates them to productive sectors. "The capital market provides investment alternatives with the aim of achieving maximum returns at a certain level of risk" (Rabbani & Rahadian, 2022).

This research selects state-owned banks on the Indonesia Stock Exchange (BRI, BNI, Mandiri, BTN, BSI) as the object of research due to their position as major players in Indonesia's financial sector (Pramono & Azmi, 2023). This research aims to understand how these large banks manage their assets, leverage and profitability over the 2019-2023 period. The selection of these large banks also provides a broader picture of the health of the Indonesian banking industry.

Financial statements are prepared periodically to provide an overview of the company's progress. "Information in financial statements includes economic resources, liabilities, share capital, comprehensive income, and cash flow" (Hou et al., 2022). This report is expected to provide information related to the level of profit (Return On Investment), risk, financial flexibility, and operational capabilities of the company. The company that becomes the population in this research is a go-public company listed in the active stock group based on the Indonesia Stock Exchange classification (Kusuma, 2016). The sample selected was a state-owned bank company during the 2019 - 2023 research period. The sample was taken from the Jakarta Stock Exchange Statistic Report in 2019 and 2023 and the Indonesia Capital Market Directory 2019 and 2023 published by the IDX.

In the investment world, stock returns are one of the important performance indicators for investors in evaluating the profit potential of stock ownership (Edori & Egileoniso, 2024). High returns indicate that the company can provide more value to its shareholders, while low returns may indicate greater potential risks or problems in company management. This research focuses on ROA, NPM, DER, EPS, PER, CAR, NIM, BOPO, and LDR with the hypothesis that the higher these ratios have a positive impact on stock returns except DER (Rawajati Timur & Samuel, 2024).

Based on the findings of previous studies, there are a number of research gaps related to variables that affect stock returns (Bhowmik & Wang, 2020). There are differences in research results regarding the effect of variables such as profitability ratio, leverage ratio, market ratio, and bank ratio on stock returns. In accordance with the problems raised, the purpose of this research is to analyze the simultaneous influence of Return On Asset (ROA), Net Profit Margin (NPM), Debt Equity Ratio (DER), Earning Per Share (EPS), Price Earning Ratio (PER), Capital Adequacy Ratio (CAR), Net Interest Margin (NIM), Operating Expenses to Operating Income (BOPO), and Loan to Deposit Ratio (LDR) on stock returns of BUMN Bank companies on the Indonesia Stock Exchange for the 2019-2023 period. This research provides significant benefits for interested parties for potential investors, this research provides a basis for conducting stock analysis by considering fundamental indicators that affect stock returns (Mochkabadi & Volkmann, 2020). Thus, investors can make wiser investment decisions and form a better portfolio.

Based on the above background, the objectives in this study are to analyze the simultaneous and partial effects of Return On Asset (ROA), Net Profit Margin (NPM), Debt Equity Ratio (DER), Earning Per Share (EPS), Price Earning Ratio (PER), Capital Adequacy Ratio (CAR), Net Interest Margin (NIM), Operating Costs to Operating Income (BOPO), and Loan to Deposit Ratio (LDR) on stock returns in BUMN Bank companies listed on the Indonesia Stock Exchange during the 2019-2023 period. The benefits of this research are to make an academic contribution in the development of financial management science, especially related to fundamental analysis and the effect of financial ratios on stock returns, and to become a reference for further research. Practically, this research provides important information for investors, investment managers, and capital market players to make wiser investment decisions through understanding the variables that affect stock returns. In addition, the results of this study are also useful for regulators or the government as a reference in understanding the financial health conditions of state-owned banks

and their impact on the capital market, as well as assisting in the formulation of policies to improve the efficiency and competitiveness of the banking sector in Indonesia.

RESEARCH METHOD

This research is a quantitative research with causal (explanatory) research objectives and research methods is one of the Tridharma of Higher Education (Hikmawati et al., 2024). The research paradigm used is positivism with a deductive approach to theory development. The methodology applied is a quantitative method using a survey strategy. The unit of analysis in this research is an organization, especially state-owned banks in Indonesia. Research involvement is minimal, with a noncontrived research setting and longitudinal implementation time, covering the 2019-2023 period.

The research stages begin with data collection before entering into data analysis tests or techniques (Moser & Korstjens, 2018). Collecting annual financial reports from BUMN Banks which are research samples, as well as data from the Indonesia Stock Exchange and the website of each BUMN Bank's annual financial statements.

The companies that became the population in this research were all state-owned banks listed on the Indonesia Stock Exchange (IDX) during the 2019-2023 period, namely Bank Mandiri, BRI, BNI, BTN, and BSI. The initial sample was conducted on 45 stock codes included in the LQ45 list position as of July 2024 on the Indonesia Stock Exchange (IDX). From 45 stocks, 5 BUMN Bank stocks (BMRI, BBNI, BBRI, BBTN, and BRIS) were selected to be analyzed in this research. The following is an example of a sampling table that can be used in research on the effect of financial ratios on stock returns on BUMN Banks listed on the Indonesia Stock Exchange (BEI) for the 2019-2023 period.

RESULT AND DISCUSSION

The research results are presented systematically based on the research objectives. To provide an overview and information about variable data, descriptive statistical data tables are used.

Table 1. Descriptive Statistics Data

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Return Saham	25	-37.11	581.37	28.5716	117.53859
ROA	25	1.02	4.03	2.2520	0.92090
NPM	25	10.15	62.63	26.0532	13.82123
DER	25	2.20	16.08	6.7072	3.93823
EPS	25	7.62	983.00	349.6008	256.95164
PER	25	4.69	102.20	16.8268	20.34160
CAR	25	16.80	27.16	20.4864	2.21630
NIM	25	3.06	6.98	5.1516	1.13427
BOPO	25	67.26	98.12	78.8572	8.68881
LDR	25	73.39	113.50	85.7924	8.66058
Valid N (listwise)	25				

The average ROA value is 2.25 with the lowest value of 1.02 at Bank BTN and the highest value of 4.03 at Bank Mandiri. The average NPM value is 26.05 with the lowest value of 10.15 at Bank BTN and the highest value of 62.63 at Bank Mandiri. The average DER value is 6.7 with the lowest value of 2.2 at Bank BSI and the highest value of 16.08 at Bank BTN. The average EPS value is 349.6 with the lowest value of 7.62 at Bank BSI and the highest value of 983 at Bank BNI. The average PER value is 16.82 with the lowest value of 4.69 at Bank BNI and the highest value of 102.2 at Bank BTN. The average CAR value is 20.48 with the lowest value of 16.8 at Bank BNI and the highest value of 27.16 at Bank BRI. The average NIM value is 5.15 with the lowest value of 3.06 at Bank BTN and the highest value of 6.98 at Bank BRI. The average BOPO value is 78.85 with the lowest value of 67.26 at Bank Mandiri and the highest value of 98.12 at Bank BTN. The average LDR value is 85.79 with the lowest value of 73.39 at Bank BSI and the highest value of 113.5 at Bank BTN.

Normality Test

Normality checks are carried out to determine whether the data has a normal distribution or not. This test is important to ensure that data analyzed by parametric statistical methods meet the assumption of normal distribution (Orcan, 2020). The ideal regression model is characterized by normal or near-normal data distribution. Normality can be detected through the pattern of data distribution (dots) on the diagonal axis of the graph. An illustration of the test results can be seen in Figure 1 below:
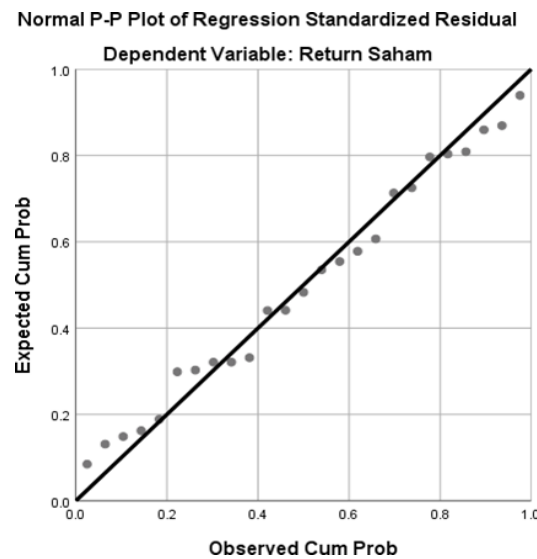

Figure 1. Testing Data Normality with Histogram Graphs

The points on the graph appear to be spread around the diagonal line with a distribution pattern that follows the direction of the line. In addition, the histogram graph also shows that the data distribution is close to the normal line. These results indicate that the data in the research has a normal distribution. A more accurate method than the two previous models is to use the Kolmogorov-Smirnov normality test (Aslam, 2019). This test is based on the resulting significance probability number. Based on testing with the Kolmogorov-Smirnov method, the data can be

declared normally distributed if the significance value is greater than 0.05. The following are the results of normality testing using Kolmogorov-Smirnov through the SPSS program in table 4.2:

Table 2. Kolmogorov Smirnov test

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		25
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	91.79249988
Most Extreme Differences	Absolute	.141
	Positive	.141
	Negative	-.125
Test Statistic		.141
Asymp. Sig. (2-tailed)		.200[c,d]

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

d. This is a lower bound of the true significance.

Based on Table 2, the Kolmogorov-Smirnov test results show a significance value of 0.2, which is greater than the specified significance level of 0.05. Therefore, the data shows that the regression model has a normal distribution. This indicates that the regression model can be validly used to predict the dependent variable (stock returns).

Multicollinearity Test

Normality testing aims to evaluate whether the data has a normal distribution or not. This test is important to ensure that the data used in parametric statistical analysis meets the normal distribution assumption (Verma & Abdel-Salam, 2019). A good regression model is characterized by a data distribution that is close to normal. Normality can be seen through the pattern of distribution of data points on the diagonal axis of the graph presented in table 4.3 as follows:

Table 3. VIF and Tolerance Values

Variables	Tolerance	VIF
ROA	0,109	9,214
NPM	6,662	6,662
DER	7,399	7,399
EPS	2,983	2,983
PER	4,073	4,073
CAR	3,126	3,126
NIM	7,270	7,270
BOPO	6,894	6,894
LDR	3,720	3,720

Based on the results in Table 3, it can be explained that the VIF (variance inflation factor) value is below 10 and the tolerance value is above 0.1, so it can be explained according to the first test, the regression model is free from multicollinearity problems.

Heteroscedasticity Test

The heteroscedasticity test aims to determine whether there are differences in the variance of the residuals between one observation and another in the regression model (Astivia & Zumbo, 2019). If the residual variance remains the same between observations, this condition is called homoscedasticity, while if it is different it is called heteroscedasticity.

In this research, heteroscedasticity testing was carried out using scatterplot. The scatterplot method is done by observing the graph between the predicted value of the dependent variable represented by ZPRED and its residuals, namely SRESID (Khairi & Darmawan, 2021). The presence of heteroscedasticity can be detected by observing whether there is a certain pattern on the scatterplot graph between SRESID and ZPRED. In this graph, the Y-axis shows the residuals (Y predicted - Y actual), while the X-axis shows the predicted values.

Testing heteroscedasticity using a graphical approach can provide a clear visual picture. An illustration of the test results can be seen in Figure 2 below:
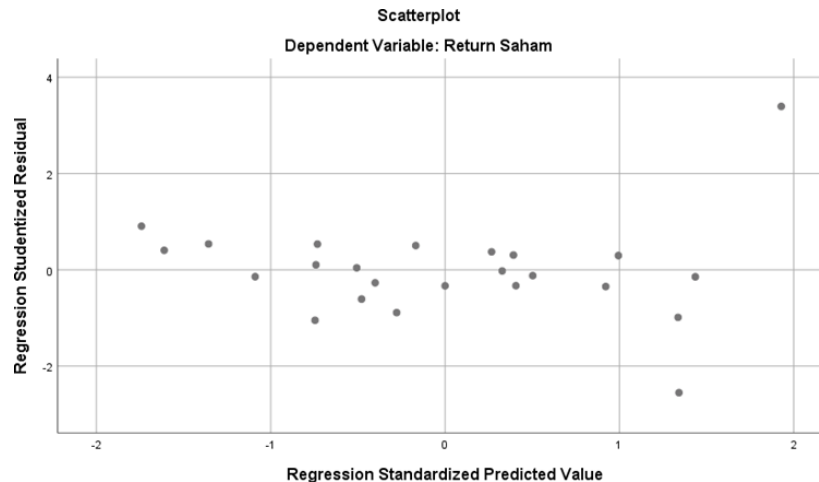

Figure 2. Heteroscedasticity test

Based on the scatterplot graph between the predicted value of the dependent variable (ZPRED) and its residuals (SRESID), it can be seen that there is no clear pattern, with points scattered above and below the zero line on the Y axis. These results indicate that the variables used in the research do not experience heteroscedasticity, so the regression model is considered suitable for use because it meets the heteroscedasticity test.

Autocorrelation Test

One form of deviation in the classical regression model is the appearance of autocorrelation, namely the existence of a correlation relationship between sample members in the model (Tarigan et al., 2022). Based on the calculation results, the Durbin Watson Test value obtained is 2.348. This value is within the range that indicates the absence of autocorrelation, as shown in table 4. below:

Table 4. Durbin Watson Test

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.978[a]	.957	.931	19.73859	1.888

a. Predictors: (Constant), LDR, NIM, BOPO, ROA, NPM, EPS, CAR, DER, PER

b. Dependent Variable: Return Saham

With a number of independent variables (k) of 9 and a sample size (n) of 25, at a significance level of 95% (α = 5%), the following values were obtained: dl = 0.6213; 4 - dl = 3.3787; u = 2.4192; 4 - du = 1.5808.

Based on the illustration above, the Durbin Watson test value of 1.888 is within the range of 1.5808 to 2.4192. Thus, this model does not experience autocorrelation problems. This indicates that the regression model used is free from autocorrelation problems. The absence of autocorrelation in the model means that there is no influence of variables through a certain time lag. In addition, this result also shows that the current value of a variable does not directly affect the value of other variables in the future. After going through classical assumption testing, the data is proven not to have violations of classical assumptions, as well as meeting the normality criteria. This provides a better level of prediction accuracy.

Hypothesis Test Results

Hypothesis Test between Return on Asset on Stock Return

The test results show that return on assets (ROA) in state-owned bank companies listed on the Indonesia Stock Exchange (IDX) has a positive and significant effect on stock returns (Kusumaningrum & Iramani, 2020). This is indicated by the calculated t value of 9.601, which is greater than the t table (2.0518), as well as a probability value of 0.000, which is smaller than the significance level α (0.05). Thus, it can be concluded that the ROA of state-owned bank companies on the IDX has a positive and significant effect on stock returns. This shows that an increase in ROA is always followed by an increase in stock returns in these companies. The results of the analysis show that a good or increased return on assets (ROA) in BUMN Bank companies on the IDX can increase the attractiveness of the company in the eyes of investors. Investors tend to view the potential shares of companies in LQ45 as prospective assets. This encourages an increase in the company's share price, so that changes in ROA have a significant impact on the stock return generated by the company (Sukesti et al., 2021).

Hypothesis Test between Net Profit Margin and Stock Return

The test results show that net profit margin (NPM) in state-owned bank companies listed on the Indonesia Stock Exchange (IDX) has a positive and significant effect on stock returns. This is indicated by the calculated t value of 5.085, which is greater than the t table (2.0518), as well as a probability value of 0.000, which is smaller than the significance level α (0.05). Thus, it can be concluded that the NPM of state-owned banks on the IDX has a positive and significant effect on stock returns. This shows that an increase in NPM is always followed by an increase in stock

returns in these companies. The analysis shows that the company's ability to generate net income compared to its total sales affects investors' interest in investing. This causes the company's shares to be targeted in the stock market. The increase in demand for the stock has a direct impact on the increase in stock prices, which in turn affects the company's stock returns.

Hypothesis Test between Debt Equity Ratio on Stock Return

The test results show that the debt to equity ratio (DER) in state-owned bank companies listed on the Indonesia Stock Exchange (IDX) has a negative and insignificant effect on stock returns. This is indicated by the calculated t value of -1.864, which is smaller than the t table (2.0518), as well as a probability value of 0.082, which is greater than the significance level α (0.05). Thus, it can be concluded that the DER of state-owned bank companies on the IDX has a negative and insignificant effect on stock returns.

Hypothesis Test between Earning per Share on Stock Return

The test results show that earnings per share (EPS) in state-owned bank companies listed on the Indonesia Stock Exchange (IDX) has the most positive and significant influence on stock returns. This is indicated by the calculated t value of 11.312, which is greater than the t table (2.0518), as well as a probability value of 0.000, which is smaller than the significance level α (0.05). Thus, it can be concluded that the EPS of state-owned bank companies on the IDX has a positive and significant effect on stock returns. This indicates that an increase in EPS is always followed by a strong increase in stock returns in these companies. The results of this test indicate that the company's ability to generate earnings per share is an attractive factor for investors to invest. This condition encourages an increase in stock prices, which indirectly affects the stock returns of companies listed on the Indonesia Stock Exchange (Antono et al., 2019).

Hypothesis Test between Price Earning Ratio on Stock Return

The test results show that earnings per share (PER) in state-owned bank companies listed on the Indonesia Stock Exchange (IDX) has a positive and significant effect on stock returns. This is indicated by the calculated t value of 2.163, which is greater than the table (2.0518), as well as a probability value of 0.047, which is smaller than the significance level α (0.05). Thus, it can be concluded that the PER of state-owned bank companies on the IDX has a positive and significant effect on stock returns. This indicates that an increase in EPS is always followed by an increase in stock returns in these companies.

The results of the analysis show that a high or increasing price earning ratio (PER) in BUMN Bank companies listed on the IDX can increase the attractiveness of the company for investors. The high PER reflects investor confidence in the company's growth potential, even though it requires a larger expenditure of funds. This condition contributes to an increase in the company's stock price, indicating that a good PER significantly affects the investment attractiveness and value of the company's shares (Khan et al., 2023).

Hypothesis Test between Capital Adequacy Ratio on Stock Return

The test results show that the capital adequacy ratio (CAR) in state-owned bank companies listed on the Indonesia Stock Exchange (IDX) has a positive and significant effect on stock returns. This is indicated by the calculated t value of 8.394, which is greater than the t table (2.0518), as

well as a probability value of 0.000, which is smaller than the significance level α (0.05). Thus, it can be concluded that the CAR of state-owned banks on the IDX has a positive and significant effect on stock returns. This indicates that an increase in CAR is always followed by an increase in stock returns in these companies.

The results of the analysis show that a high or increasing Capital Adequacy Ratio (CAR) ratio in BUMN Bank companies listed on the IDX signals confidence to investors in the strength of the company's capital in the face of financial risk (Ayusningtyas & Yendra, 2024). High CAR reflects the company's ability to maintain financial stability and fulfill banking regulatory obligations, thereby increasing investment attractiveness. This condition encourages increased investor interest, which in turn has an impact on increasing the company's share price. Thus, a good CAR significantly affects investor perceptions and the value of shares of state-owned bank companies in the capital market.

Hypothesis Test between Net Interest Margin on Stock Return

The test results show that the net interest margin (NIM) ratio in state-owned bank companies listed on the Indonesia Stock Exchange (IDX) has a positive and significant effect on stock returns. This is indicated by the calculated t value of 3.309, which is greater than the t table (2.0518), as well as a probability value of 0.005, which is smaller than the significance level α (0.05). Thus, it can be concluded that the NIM of state-owned banks on the IDX has a positive and significant effect on stock returns. This indicates that an increase in NIM is always followed by an increase in stock returns in these companies.

The results of the analysis show that a high Net Interest Margin (NIM) in state-owned bank companies listed on the IDX reflects the efficiency of banks in managing interest income against interest costs. An increasing NIM indicates the bank's ability to earn greater profits from intermediation activities, thus providing a positive signal to investors. This increases investor confidence in the company's profit growth potential, which in turn has an impact on increasing stock prices. Thus, a high NIM significantly affects the investment attractiveness and share value of state-owned banks in the capital market.

Hypothesis Test between Operating Cost to Operating Income to Stock Return

The test results show that operating costs to operating income (BOPO) in state-owned bank companies listed on the Indonesia Stock Exchange (IDX) have a negative and significant effect on stock returns. This is indicated by the calculated t value of -9.317, which is smaller than the t table (2.0518), as well as a probability value of 0.000, which is smaller than the significance level α (0.05). Thus, it can be concluded that the BOPO of state-owned bank companies on the IDX has a negative and significant effect on stock returns. This indicates that an increase in BOPO is always followed by a decrease in stock returns in these companies.

The results of the analysis show that the high ratio of Operating Expenses to Operating Income (BOPO) reflects less than optimal operational efficiency in state-owned bank companies. High BOPO indicates that the company requires large costs to generate revenue, which can reduce profit margins and reduce the attractiveness of the company for investors. This condition gives a negative signal to the potential profitability of the company, thus suppressing the stock price and

resulting in a decrease in stock returns. Therefore, a high BOPO ratio is an important factor that significantly affects the decline in investment attractiveness and stock value of state-owned bank companies in the capital market.

Hypothesis Test between Loan to Deposit Ratio on Stock Return

The test results show that the loan to deposit ratio (LDR) in state-owned bank companies listed on the Indonesia Stock Exchange (IDX) has a negative and significant effect on stock returns. This is indicated by the calculated t value of -7.153, which is smaller than the t table (2.0518), as well as a probability value of 0.000, which is smaller than the significance level α (0.05). Thus, it can be concluded that the LDR of state-owned banks on the IDX has a negative and significant effect on stock returns. This indicates that an increase in LDR is always followed by a decrease in stock returns in these companies.

The analysis shows that the high loan to deposit ratio (LDR) reflects a high dependence on financing through deposits, which can increase liquidity risk in state-owned bank companies. A high LDR indicates that banks are more aggressive in lending compared to the ability to raise funds, which can put pressure on the company's financial stability. This condition can give a negative signal to investors, reduce confidence in the company's long-term performance, and have an impact on the decline in stock prices. Therefore, a high LDR ratio is a significant factor affecting the decline in investment attractiveness and stock returns of BUMN Bank companies in the capital market.

Interpretation of Simultaneous Results

The simultaneous test results show that fundamental variables such as ROA, NPM, DER, EPS, PER, CAR, NIM, BOPO, and LDR collectively affect the stock returns of state-owned banks. This is in line with financial theory which states that fundamental indicators reflect company performance that is relevant to the value of its shares.

Interpretation of Partial Results

a) ROA, NPM, EPS, PER, CAR, and NIM: Gives a positive and significant influence, indicating that the ratio encourages a high increase in stock returns.

b) DER, BOPO and LDR: Negative and significant (except DER which is insignificant), reflecting that high DER, operating expenses, and LDR can reduce stock returns.

Relationship to Previous Research

The results of this research support the findings of (Nagari & Manda, 2022), which state that fundamental indicators have a significant influence on stock returns. However, this finding contradicts the research of (Anagnostopoulou, n.d.) regarding the effect of DER, which in this research is not significant. This discussion will cover what happened, how and why the problem arose, and whether the results obtained support theory or previous research. The findings of this research show that several fundamental variables, such as ROA, NPM, EPS, PER, CAR, and NIM, have a significant positive effect on stock returns, while DER, BOPO, and LDR have a significant negative effect. The results indicate that the fundamental variables studied collectively affect the stock returns of state-owned banks. Variables such as ROA, NPM, EPS, PER, CAR, and NIM

show significant positive effects, while DER, BOPO, and LDR show negative effects on stock returns.

The positive effect of ROA, NPM, EPS, PER, CAR, and NIM can be explained through the concept of financial theory which states that good company fundamental performance, reflected in these ratios, tends to increase stock value. This shows that investors are more interested in companies that have healthy financial performance, which is reflected in increased ROA, profit margins, and operational efficiency. Conversely, high DER, BOPO, and LDR reflect high levels of debt, inefficient operating costs, and liquidity imbalances that can reduce share value. This is due to the increased risk potential, which tends to reduce investor confidence in the company's prospects.

The results of this research support financial theory which states that the company's fundamental performance is directly related to stock value. These findings are also consistent with previous studies, such as those conducted by (Nagari & Manda, 2022), which found a significant effect of fundamental indicators on stock returns. However, the results of this research contradict the findings of (Anagnostopoulou, n.d.) regarding the insignificant effect of DER in this research. The discrepancy may be due to differences in samples, time periods, or different market conditions between the two studies.

CONCLUSION

The results of the research and analysis conducted indicate that the research data has met the normality requirements and is free from classical assumption deviations, such as multicollinearity, heteroscedasticity, and autocorrelation, thereby possessing high reliability for use in prediction or forecasting. Based on multiple regression analysis, it was found that Return on Asset (ROA), Net Profit Margin (NPM), Earning per Share (EPS), Price to Earning Ratio (PER), Capital Adequacy Ratio (CAR), and Net Interest Margin (NIM) have a significant positive effect on stock returns in state-owned bank companies listed on the Indonesia Stock Exchange (IDX) during the 2019-2023 period. In contrast, the Debt to Equity Ratio (DER) shows a negative but insignificant effect on stock returns, while Operating Expenses to Operating Income (BOPO) and Loan to Deposit Ratio (LDR) exhibit a significant negative effect on stock returns in state-owned bank companies during the same period. These findings affirm that certain financial factors play an important role in influencing stock returns of state-owned banks in Indonesia.

BIBLIOGRAPHY

Anagnostopoulou, S. C. (n.d.). *Comparable financial statements between M&A deal counterparts: Do they associate with deal success?*

Antono, Z., Jaharadak, A., & Khatibi, A. (2019). Analysis of factors affecting stock prices in mining sector: Evidence from Indonesia Stock Exchange. *Management Science Letters*, *9*(10), 1701–1710.

Aslam, M. (2019). Introducing Kolmogorov–Smirnov tests under uncertainty: an application to radioactive data. *ACS Omega*, *5*(1), 914–917.

Astivia, O. L. O., & Zumbo, B. D. (2019). Heteroskedasticity in Multiple Regression Analysis: What it is, How to Detect it and How to Solve it with Applications in R and SPSS. *Practical Assessment, Research & Evaluation*, *24*(1), n1.

Ayusningtyas, A. F., & Yendra, Y. (2024). Analysis of Bank Health Levels Using the Camel Method at BUMN Commercial Banks Listed. *Advances in Management & Financial Reporting*, *2*(3), 135–148.

Bhowmik, R., & Wang, S. (2020). Stock market volatility and return analysis: A systematic literature review. *Entropy*, *22*(5), 522.

Choi, S. U., Lee, W. J., & Choi, N. H. (2023). Corporate social responsibility and firm value during the COVID-19 pandemic. *Management Decision*, *61*(10), 3169–3194.

Edori, D. S., & Egileoniso, D. J. (2024). Financial performance and investment decision: Evidence from investors and stockbrokers in Nigeria. *World Journal of Finance and Investment Research*, *8*(1), 49–63.

Hikmawati, A., Makruf, I., Gusmian, I., & Wedi, A. (2024). Integrating the Principles of Prophet Ibrahim's Exemplary Leadership in Human Resource Management within Islamic Educational Institutions: A Literature Review. *AL-ISHLAH: Jurnal Pendidikan*, *16*(4).

Hou, K., Hsu, P.-H., Wang, S., Watanabe, A., & Xu, Y. (2022). Corporate R&D and stock returns: International evidence. *Journal of Financial and Quantitative Analysis*, *57*(4), 1377–1408.

Khairi, M., & Darmawan, D. (2021). The relationship between destination attractiveness, location, tourism facilities, and revisit intentions. *Journal of Marketing and Business Research (MARK)*, *1*(1), 39–50.

Khan, M. T. I., Tan, S.-H., Chong, L.-L., & Goh, G. G. G. (2023). Investment environment, stock market perception and stock investments after stock market crash. *International Journal of Emerging Markets*, *18*(10), 3506–3527.

Kusuma, A. D. R. (2016). *Demutualization of Indonesia Stock Exchange as a Strategic Measure and a Means to Improve Efficient Trading*.

Kusumaningrum, D. R., & Iramani, I. (2020). Effect of Financial Performance on Stock Price with Return on Assets as an Intervening Variable in State-Owned Banks in Indonesia. *International Journal of Multicultural and Multireligious Understanding*, *7*(2), 321–336.

Mochkabadi, K., & Volkmann, C. K. (2020). Equity crowdfunding: a systematic review of the literature. *Small Business Economics*, *54*, 75–118.

Moser, A., & Korstjens, I. (2018). Series: Practical guidance to qualitative research. Part 3: Sampling, data collection and analysis. *European Journal of General Practice*, *24*(1), 9–18.

Nagari, M. S. D., & Manda, G. S. (2022). Market Risk on Bank Profitability: Evidence from Indonesian State-Owned Banks. *YUME: Journal of Management*, *5*(2), 247–257.

Orcan, F. (2020). Parametric or non-parametric: Skewness to test normality for mean comparison. *International Journal of Assessment Tools in Education*, *7*(2), 255–265.

Palepu, K. G., Healy, P. M., Wright, S., Bradbury, M., & Coulton, J. (2020). *Business analysis and valuation: Using financial statements*. Cengage AU.

Pramono, N. H., & Azmi, F. (2023). Motives, Positions, and Strategies of State-Owned Islamic Banks after The Merger. *Journal of Islamic Economic and Business Studies*, *1*(1), 64–79.

Rabbani, M. N., & Rahadian, D. (2022). Faktor-faktor yang berpengaruh terhadap NPL Bank BUMN. *SEIKO: Journal of Management & Business*, *5*(2), 444–453.

Rawajati Timur, I., & Samuel, D. P. (2024). *Agenda: Thesis final examination" The Impact of Key Financial Factors and Macro-Economic Variables on The Financial Performance and Stock Return of Indonesian Banks from Q4 2013 to Q1 2024".*

Sukesti, F., Ghozali, I., Fuad, F., Kharis Almasyhari, A., & Nurcahyono, N. (2021). Factors affecting the stock price: The role of firm performance. *The Journal of Asian Finance, Economics and Business*, *8*(2), 165–173.

Tarigan, N. M. R., Syahputra, R. A., & Yudha, T. K. (2022). The Analysis of Quality of Work Life and Work Achievement in Department of Agriculture Simalungun Regency. *SIASAT*, *7*(1), 55–70.

Verma, J. P., & Abdel-Salam, A.-S. G. (2019). *Testing statistical assumptions in research*. John Wiley & Sons.