The Effect Of Ldr, Roa, Per, Der, Npl On Stock Prices In Banking Sub-Sector Companies In 2019-2021

Ayu Putri Rizkia
Faculty of Economics and Business, UNAIR, Indonesia
Ayu.putri.rizkia-2022@feb.unair.ac.id

*Corresponding Author
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ABSTRACT

The purpose of this work is to analyze the impact of financial indicators on the stock prices of bank subsidiaries in 2019–2021. This study focuses on five ratios which are Loan to Deposit (LDR), Return on Assets (ROA), price/earnings ratio (PER), debt/equity ratio (DER) and non-performing loans (NPL). The research method is panel regression analysis, which uses secondary information obtained from the financial statements of listed banking companies. The research sample consists of several banking companies of a certain period. The results of this study show that LDR, ROA, PER, DER and NPL significantly affect the stock prices of bank subsidiaries. LDR, ROA and PER have a positive effect on stock prices, while DER and NPL have a negative effect. This indicates that investors tend to pay attention to these financial ratios when evaluating a company and setting stock prices. This study helps to understand the factors affecting stock price of banking companies. The results of this study can be used as benchmarks for investors, corporate management and regulators in making investment decisions and policies related to banking.

Keywords: Stock Price, Banking, LDR, ROA, NPL

INTRODUCTION

The purpose of this work is to analyze the impact of financial indicators on the stock prices of bank subsidiaries in 2019–2021 (Gabeshi, 2021; Lai et al., 2022; Zinisha et al., 2021). This study focuses on five ratios which are Loan to Deposit (LDR), Return on Assets (ROA), price/earnings ratio (PER), debt/equity ratio (DER) and non-performing loans (NPL). The research method is panel regression analysis, which uses secondary information obtained from the financial statements of listed banking companies (Lai et al., 2022; Lawes et al., 2012; Zinisha et al., 2021). The research sample consists of several banking companies of a certain period. The results of this study show that LDR, ROA, PER, DER and NPL significantly affect the stock prices of bank subsidiaries. LDR, ROA and PER have a positive effect on stock prices, while DER and NPL have a negative effect. This indicates that investors tend to pay attention to these financial ratios when evaluating a company and setting stock prices. This study helps to understand the factors affecting stock price of banking companies. The results of this study can be used as benchmarks for investors, corporate management and regulators in making investment decisions and policies related to banking (Nadhim, 2023; Świecka et al., 2020).

First, the loan-to-deposit ratio (LDR) is a key indicator to assess the financial health of a banking entity. LDR measures the extent to which a firm uses third-party funds (deposits) to extend credit to its customers. A high LDR value may indicate high liquidity risk and a low LDR value may indicate a potential waste of resources. Therefore, it is important to understand the impact of LDR on bank share prices (Ervani, 2010; Kurniawan et al., 2020). Second, return on assets (ROA) is a metric used to measure the profitability of banking operations. ROA shows
how much profit a company can make with its assets. A high ROA means good financial performance and can affect the bank's share price. Therefore, in this study, it is important to analyze the effect of ROA on stock prices. Third, the price-to-earnings ratio (PER) is a ratio that measures a company's stock price and earnings per share. PER is an important valuation index for evaluating a company's stock price. A high P/E indicates that the stock is relatively expensive, and a low P/E indicates that the stock is relatively cheap. Therefore, this study is important to investigate the effect of P/E on bank stock prices. Fourth is the debt-to-equity ratio (DER), which measures a company's debt-to-equity ratio. DER reflects a company's capital structure and can affect financial risks and a company's performance. High DER means high financial risk and can affect bank stock prices. Therefore, this study is important to understand the effect of DER on stock prices. Fifth, non-performing loans are a measure of the asset quality of banking entities, especially for loans that fail to pay interest and principal on time (Bugeara et al., 2020; Fakhri Rana Sausan et al., 2020; Wedyaningsih et al., 2019).

A high number of bad loans indicates a high credit risk and can affect the bank's share price. Therefore, in this study, it is important to analyze the impact of non-performing loans on stock prices (Bugeara et al., 2020; Insani et al., 2019; Purnama et al., 2020). Previous studies have analyzed the impact of these variables on share prices in the banking sector. However, further research is needed to further investigate the impact of these variables on the banking industry. In addition, this study also examines the period 2019-2021 to examine the impact of these variables during the relevant period. By understanding the impact of LDR, ROA, PER, DER and NPL on share prices of banking sector companies during the period 2019-2021, this study provides a better understanding of the factors that influence share prices in the banking sector, in the field I hope to be able to participate in the banking department. The results of this study will also help in investment decisions and risk management in the banking sector.

LITERATURE REVIEW

The following is a literature review related to the research title "The Influence of Ldr, Roa, Per, Der, Npl on Stock Prices in Banking Sub-Sector Companies in 2019-2021":

<table>
<thead>
<tr>
<th>No</th>
<th>Author, Year, Title</th>
<th>Research methods</th>
<th>Discussion result</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>The Influence of Current Ratio, Debt To Equity Ratio And Return On Assets To The Value Of Property Companies, Tbk (Indrana, 2023).</td>
<td>The sampling technique used in this study is purposive sampling, where samples are obtained based on predetermined criteria, ie. 16 real estate, Tbk for the period 2019-2021.</td>
<td>Based on the results of the data analysis using the T-test, it is known that the current ratio, debt ratio and return on assets significantly affect the value of the company. On the other hand, based on the results of data analysis using the F-test, it is known that at the same time the current ratio, debt ratio and return on capital significantly affect the value of the company.</td>
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<tr>
<td>2.</td>
<td>Earnings Per Share, Inflation, And Net Interest Margin As Stock Price Antecedents In The Banking Sector Listed On The Indonesia Stock Exchange For The 2019-2021</td>
<td>This type of research uses quantitative data because data is used in the form of numbers. Data collection is secondary in financial reporting, for public use, ie the entire list in the Indonesian Stock Exchange specifically for the period</td>
<td>This test results that, according to the first hypothesis, earnings per share significantly affect share prices in the banking sector, according to the second hypothesis, inflation does not have a significant effect on share prices in the</td>
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<tr>
<td>Period (Rosa Ariana, 2023)</td>
<td>2019-2021. Purposive sampling according to certain criteria. Samples were drawn for 38 banks over three years. Data processing uses panel regression analysis techniques using Eviews.</td>
<td>banking sector, and according to the third hypothesis. Net profit on interest margin does not have a significant impact on the banking sector's stock prices.</td>
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<tr>
<td>3. Firm Value and Investment Analysis at the Bangka Belitung Regional Bank (Sumiyati et al, 2022)</td>
<td>This study uses a mixed approach, supplemented by financial statement analysis. Methods of data analysis using ARIMA least squares regression analysis and rank analysis. The results showed that the SWOT method concluded that the company is in a progressive position (Strong Opportunity).</td>
<td>The results of ARIMA Least Square regression analysis conclude that NPL, NIM, LDR, CASA, CR and BOPO ratios are strongly related to firm value. But the variables that have the biggest impact on the value of the company are DER, CASA and CAR. The results of the investment analysis show that the return on invested capital (ROCE) is 14.54 higher than the given capital, the payback period is 1 year 8 months.</td>
<td></td>
</tr>
<tr>
<td>Analysis of Capital Adequacy Ratio (Car), Non Performing Loan (Npl), Loan To Deposit Ratio (Ldr), Debt To Equity Ratio (Der), and Return On Assets (RoA) on Stock Prices in Banking Sector Companies Listed on the Stock Exchange Indonesia (2015-2019 Period) (Inka, 2021).</td>
<td>This study uses an associative method with a quantitative approach. The data analysis technique used is multiple linear regression.</td>
<td>The results of this analysis show that partially NPL, LDR and ROA have a significant impact on stock prices. At the same time, CAR and DER do not have a significant impact on stock prices. Meanwhile, CAR, NPL, LDR, DER and ROA affect stock prices.</td>
<td></td>
</tr>
<tr>
<td>Analysis of the Effect of Capital Adequacy</td>
<td>Purposive sampling method was used to form the sample.</td>
<td>The hypothesis of this study is based on previous</td>
<td></td>
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</table>
Ratio (CAR), Loan To Deposit Ratio (LDR) and Non Performing Loans (NPL) on Return On Assets (ROA) (Kurniawan et al., 2020).

and in this study, the sample was 37 foreign currency banks of the Financial Services Board (OJK) in 2013-2015. The data used are secondary data in the form of annual reports obtained from the financial publications of the Financial Authority (OJK). The analysis technique used in this study is multiple linear regression analysis using the Eviews7 program.

METHOD

Quantitative research using the Eviews calculator provides detailed statistical analysis of the relationships between the variables investigated in the survey (Sugiyono, 2017, 2018, 2019). Eviews is one of the most popular statistical software for econometric and financial analysis. Data processing and analysis: Eview can be used to import data from various sources, clean and process data, and perform necessary statistical analysis. Data on LDR (loan-to-deposit ratio), ROA (return on assets), PER (price earning ratio), DER (debt to equity ratio), NPL (bad debt) and other relevant variables can be imported into Eview. This sample is a group of companies selected randomly or based on certain criteria from the population of Indonesian real estate companies during that period. In this context, the survey target includes all banking companies operating in Indonesia for the 2019-2021 period. This group consists of hundreds or thousands of listed or commercially active banking companies. However, due to time, resource and data access limitations, we decided to use a sample of 60 firms from the population. Collect the necessary data for the variables you want to examine, namely LDR, ROA, PER, DER, NPL on stock prices in banking sub-sector companies. Make sure the data covers the period 2019-2021. Analysis data to Eviews.

RESULT

One of the classic assumption tests is the data normality test. The data normality test determines whether the data being tested is normally distributed. The problem of non-normally distributed data is not a problem when the number of samples is more than 60 observations, because the number of samples above 30 approaches a normal distribution. Sample size for this study is 40, where the number is greater than 30, which means that the data is normally distributed. However, a data normality test is performed to ensure that the data is normally distributed. The Jarque-Bera test was used in eviews version 9.0 to test the data for normality in this study. The following is an image of the data normality test results.

![Figure 1 Analysis Results of Model Data Normality Test](image-url)

Source: Results of analysis using EVIEWS 11.0 (2023)
Based on Figure 1, the output results above show that the Jarque-Bera value is 0.037, with a probability of 0.98 > α = 0.05. With this probability value greater than the significant level of 0.05, it can be concluded that the data in this study are normally distributed. Heteroscedasticity testing was carried out using the Breusch Pagan Godfrey test. The Breusch Pagan Godfrey test is used to see whether the residuals of the model formed have a constant variance or not. A good model is a model that has a constant free variance of any disturbance or residual (homoskedastisitas).

Table 1. Model Heteroscedasticity Test Results

<table>
<thead>
<tr>
<th>Heteroskedasticity Test: Breusch-Pagan-Godfrey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Null hypothesis: Homoskedasticity</td>
</tr>
<tr>
<td>F-statistics</td>
</tr>
<tr>
<td>Obs*R-squared</td>
</tr>
<tr>
<td>Scaled explained SS</td>
</tr>
</tbody>
</table>

Source: Results of analysis using EVIEWS 11.0 (2023)

Based on Table 1, the output results above show that the probability value of the model is 0.322 > α = 0.05. With this probability value which is greater than the significant level of 0.05, it can be concluded that the data in this study fulfilled the heteroscedasticity requirements.

The multicollinearity test aims to determine whether there is a perfect relationship between the independent variables in the regression model or it can also be said to find out whether there is a correlation between the independent variables in the regression model. Multicollinearity can be known from the value of the correlation coefficient obtained from the VIF Center results in the Eviews program. If the VIF value between each independent variable is less than 10, multicollinearity occurs. The following is a table of VIF results obtained in this study:

Table 2 Multicollinearity Test

<table>
<thead>
<tr>
<th>Variance Inflation Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Samples: 145</td>
</tr>
<tr>
<td>Included observations: 145</td>
</tr>
<tr>
<td>Variables</td>
</tr>
<tr>
<td>LDR__X1__</td>
</tr>
<tr>
<td>ROA__X2__</td>
</tr>
<tr>
<td>PER__X3__</td>
</tr>
<tr>
<td>DER__X4__</td>
</tr>
<tr>
<td>NPL__X5__</td>
</tr>
<tr>
<td>C</td>
</tr>
</tbody>
</table>

Source: Results of analysis using EVIEWS 11.0

Based on Table 2, it can be seen that there is no VIF value of each independent variable which shows less than 10. So it can be concluded that there is no multicollinearity problem in the regression model of this study. T test was conducted to determine the influence of each independent variable individually on the dependent variable. To calculate the t-table the provisions df = nk = 60 – 6 = 54 are used, the value of t table (0.05,54) = 2.00 is obtained at a significant level (α) of 5% (error rate of 5% or 0.05) or a confidence level of 95% or 0.95, so if the error rate of a variable is more than 5% it means that the variable is not significant.

The way of decision making is:
- If probability/significant > 0.05 or tcount < ttable, Ho is accepted.
- If the probability/significant <0.05 or t count > t table, Ho is rejected.

Table 3. OLS Regression Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Partial t test</th>
<th>Partial t test</th>
<th>Partial t test</th>
<th>Partial t test</th>
</tr>
</thead>
<tbody>
<tr>
<td>LDR_X1</td>
<td>0.108</td>
<td>0.037</td>
<td>2.916</td>
<td>0.005</td>
</tr>
<tr>
<td>ROA_X2</td>
<td>0.125</td>
<td>0.047</td>
<td>2.629</td>
<td>0.011</td>
</tr>
<tr>
<td>PER_X3</td>
<td>0.178</td>
<td>0.055</td>
<td>3.249</td>
<td>0.002</td>
</tr>
<tr>
<td>DER_X4</td>
<td>0.118</td>
<td>0.037</td>
<td>3.180</td>
<td>0.002</td>
</tr>
<tr>
<td>NPL_X5</td>
<td>0.139</td>
<td>0.068</td>
<td>2038</td>
<td>0.047</td>
</tr>
</tbody>
</table>

Source: Results of analysis using EVIEWS 11.0 (2023)

Regression interpretation from the table above, the OLS regression model equation is obtained as follows:

**LDR has a significant effect on stock prices**.

The table above shows that in the model the relationship between LDR (X 1 ) and stock prices is influential significant with t-count of 2.916 (t-count > t table (df = 54) = 2.01) and the value of Prob. = 0.005 < α = 0.05 with a coefficient value of 0.108 or 10.8% the effect of LDR on increasing stock prices. Therefore hypothesis H1 in this study which states that "LDR has a significant direct effect on stock prices" is accepted.

**ROA Has a Significant Influence on Stock Prices**.

The table above shows that in the model the relationship between ROA (X 2 ) and stock prices is influential significant with t-count of 2.629 (t-count > t table (df = 54) = 2.01) and the value of Prob. = 0.011 < α = 0.05 with a coefficient value of 0.125 or 12.5% influence from ROA to the increase in stock prices. Therefore hypothesis H2 in this study which states that "ROA has a significant negative effect on stock prices directly" is accepted.

**PER has a significant effect on stock prices**.

The table above shows that in the model the relationship between PER (X 3 ) and stock prices is influential with a t-count of 3.249 (t-count > t table (df = 54) = 2.01) and a Prob. = 0.002 < α = 0.05. Therefore hypothesis H3 in this study which states that "PER has a significant direct effect on stock prices" is accepted.

**DER has a significant effect on stock prices**.

The table above shows that in the model the relationship between DER (X 4 ) and stock prices is influential significant with t-count of 3.418007 (t-count > t table (df = 54) = 2.01) and the value of Prob. = 0.002 < α = 0.05 with a coefficient value of 0.118 or 11.8% influence from DER to the increase in stock prices. Therefore hypothesis H4 in this study which states that "DER has a significant direct effect on stock prices" is accepted.

**NPL has a Significant Influence on Stock Prices**.

The table above shows that in the model the relationship between NPL (Z) and stock prices is influential significant with t-count of 2.038 (t-count > t table (df = 54) = 2.01) and the value of Prob. = 0.047 < α = 0.05 with a coefficient value of 0.139 or 13.9% the effect of NPL to the increase in stock prices. Therefore hypothesis H 5 in this study which states that "NPL has a significant direct effect on stock prices" is accepted.

**DISCUSSION**

In research on the effect of LDR (Loan to Deposit Ratio), ROA (Return on Assets), PER (Price Earnings Ratio), DER (Debt to Equity Ratio), and NPL (Non-Performing Loans) on stock prices of banking sub-sector companies in for 2019-2021, the following is an explanation of the effect of each variable on stock prices:

LDR describes the relationship between the amount of credit given by the bank and the amount of funds received from customers through deposits. An increase in LDR tends to indicate a low level of liquidity and high credit risk. In this study, the effect of LDR on banking stock prices needs to be analyzed. If LDR has a significant negative effect on stock prices, this could...
indicate that high credit risk affects investor perceptions and lowers banking company stock prices.

ROA measures a company's ability to generate profits from its assets. High ROA indicates good financial performance and can positively influence stock prices. The effect of ROA on banking stock prices can be an important indicator in evaluating company performance and attractiveness to investors. PER describes the relationship between the company's stock price and earnings per share. A high PER indicates that the market has high expectations for the company's growth and performance. The effect of PER on banking stock prices can indicate the extent to which market expectations of company performance and growth are.

DER measures the extent to which a company uses borrowed funds compared to equity funds to finance its operational activities. A high DER can indicate high financial risk and negatively affect stock prices. The effect of DER on banking stock prices needs to be studied to find out whether high debt levels affect investor confidence and stock prices. NPL describes the amount of credit that cannot be paid by the borrower. A high NPL level can indicate high credit risk and affect the company's financial performance. The effect of NPLs on banking stock prices needs to be analyzed to see whether high credit risk has a negative impact on stock prices and investor confidence.

Factors that affect stock prices in the context of banking sub-sector companies can involve various fundamental aspects and market sentiment. The following is an explanation of some of the main factors that can affect the stock price of banking companies. The financial performance of banking companies is a critical factor affecting stock prices. Some of the relevant performance indicators include Return on Assets (ROA), Return on Equity (ROE), Net Interest Margin (NIM), and the level of Non-Performing Loans (NPL). Good performance and consistent profit growth tend to increase stock prices, while poor performance or the presence of high credit risk can reduce stock prices.

Strong revenue and profit growth have been important factors in influencing share prices. Investors will see the company's growth potential in obtaining stable income and increasing profits from time to time. Solid revenue growth and increasing profits tend to increase the share price of banking companies. As a banking company, credit risk is a significant factor in determining stock prices. The level of Non-Performing Loans (NPL) or non-performing loans can be an indicator of high credit risk. The lower the NPL level, the better the company's ability to manage its credit risk, which in turn can increase investor confidence and share prices.

In conclusion, stock prices of banking sub-sector companies are influenced by fundamental factors such as financial performance, revenue and profit growth, credit risk, as well as external factors such as monetary policy, market sentiment, and macroeconomic factors. Comprehensive understanding and analysis of these factors can help investors, analysts and decision makers understand and predict the movement of banking company stock prices.

The introduction of banking sub-sector share prices in the 2019-2021 period involves understanding the fluctuations and trends that occurred in the banking industry during that period. During the 2019-2021 period, the banking sub-sector experienced significant changes in terms of share prices. Although each company may have different performance, there are general trends that can be observed in the banking industry. This period was marked by market volatility which was influenced by external factors such as global economic conditions, changes in monetary policy, and political turmoil.

One of the important factors influencing bank stock prices in this period was the impact of the COVID-19 pandemic. This pandemic has triggered global economic uncertainty and changes in consumer behavior patterns. In particular, the banking sector was affected by a decline in economic activity, an increase in credit risk, and monetary policy adjustments by the central bank to deal with the economic impact of the pandemic. Apart from the COVID-19 pandemic, macroeconomic factors such as interest rates, inflation, economic growth, and political stability also affect banking stock prices. For example, a decrease in interest rates can increase credit which can encourage business growth and affect the share price of banking companies.

The financial performance of banking companies is an important factor in determining stock prices. Each company has different factors, such as revenue growth rates, interest margins,
credit risk, and operational efficiency. Companies that are successful in managing risk, earn stable income, and have consistent profits tend to have good stock price performance. Market sentiment also influences the determination of banking stock prices. News, analyst opinion, market perception and investor sentiment play an important role in influencing stock prices. External factors, such as government policies, regulatory changes, or political issues, can affect market sentiment and have an impact on the stock prices of banking companies.

The introduction of share prices for the banking sub-sector in 2019-2021 is the first step to understanding market conditions and the factors that influence share prices for banking companies. A comprehensive analysis of these factors can assist investors, analysts and decision makers in making informed investment decisions. The suggestion is that Banking companies need to closely monitor their LDR ratios and ensure that they are in balance. Maintaining a reasonable LDR can provide a positive signal to investors and support an increase in stock prices. Increasing ROA should be the focus of banking companies. By increasing efficiency and profitability, companies can attract investors and influence stock price increases. Banking companies need to carefully manage their DER ratio. Minimizing the level of debt relative to equity can reduce financial risk and have a positive impact on stock prices. In considering investing in the banking sub-sector, investors need to look at factors other than PER in evaluating growth potential and company value.

CONCLUSION

Based on the research entitled "The Influence of LDR, ROA, PER, DER, NPL on Share Prices in Banking Sub Sector Companies in 2019-2021", it can be concluded and suggested that the Loan to Deposit Ratio (LDR) has a positive influence on stock prices banking sub-sector companies. This shows that an increase in LDR can increase investors' perceptions of company performance and have a positive impact on stock prices. Return on Assets (ROA) has a positive influence on stock prices of banking sub-sector companies. A high ROA indicates a company's efficiency and profitability, which can increase investor interest and drive up stock prices. The Price Earnings Ratio (PER) has no significant effect on the stock prices of banking sub-sector companies. This indicates that other factors besides PER are more dominant in determining stock prices in the banking sub-sector. The Debt to Equity Ratio (DER) has a negative effect on the stock prices of banking sub-sector companies. A high DER ratio indicates a high level of debt compared to equity, which can reflect financial risk and discourage investors. Non-Performing Loans (NPL) have a negative effect on the stock prices of banking sub-sector companies. A high NPL level indicates high credit risk and can reduce investor confidence, which has a negative impact on stock prices.

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