The Effect of Return on Equity, Loan to Deposit Ratio, Non-Performing Loan, and Capital Adequacy Ratio on the Price of Banking Stocks Listed on the Indonesia Stock Exchange in the Period 2011-2020

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ABSTRACT

This research aims to study the effect of Return on Equity, Loan to Deposit Ratio, Non-Performing Loan and Capital Adequacy Ratio on banking stock prices listed on the Indonesia Stock Exchange during the period 2011-2020. This study uses banking companies listed on the Indonesia Stock Exchange which always report their financial statements every year and their shares are always traded on the stock exchange during the study period. The research method used is descriptive analysis using multiple linear regression. From this study it was found that Return on Equity, Loan to Deposit Ratio and Capital Adequacy Ratio have a significant influence on banking stock prices. Meanwhile, only the Non-Performing Loan variable has no significant effect on stock prices.

***Keywords**: ROE, LDR, NPL, CAR, Price Stock*

1. Introduction

After the global financial crisis that occurred in 2008, companies in the global financial sector, especially in America and Europe, took a long time to improve their financial condition. The Asian region is also not spared from this problem, but there is an anomaly where financial sector companies in Indonesia, in fact, enjoyed a fairly good increase where the Indonesian banking sector in 2012 experienced an increase in profit of 21.58% or Rp. 95.30 trillion. According to Bank Indonesia, bank lending in Indonesia grew by 23.1% in 2012.

The profit growth felt by the banking industry in Indonesia did not continue in the following years. For example, in the 2014-2015 period, Indonesian banking experienced a decline in profit growth of only 5.37% in 2014 or Rp 94.14 trillion (Kontan.co.id). However, profit growth in the banking industry improved in 2017 when Indonesian banks were able to record profit growth of 23% or Rp 131.1 trillion but experienced a significant decline in 2019 where profit growth only reached 6.9%.

This fluctuation in profit growth experienced by the banking sector illustrates how an industry always has its own challenges in running its business. Financial institutions such as banks have a special character compared to other business sectors. Bank is an intermediary institution that connects parties who have excess funds with those who lack funds. The existence of financial intermediary institutions such as banks is very important in a modern economic system, therefore banks need to maintain their best performance so that they can maintain public trust. In accordance with one of the banking functions as an Agent of Trust.

In assessing the company's performance, stakeholders can use the value of shares as a benchmark. With the potential for large credit growth, the potential for bank income also has the same potential. These factors make banking stocks of choice for investors in the capital market. For investors or shareholders, the profits from investing in shares consist of capital gains and dividend gains. Through capital gains, shareholders have a greater opportunity to earn profits than dividend gains. Thus, the attention of investors is more focused on companies that have good stock price performance.

In principle, the stock price formed in the capital market is a representation of the intrinsic value of these shares. The intrinsic value of the stock can be obtained from the analysis of the company's fundamental factors [1]. However, according to [2], the performance of a company which is characterized by an increase in profitability, means that the level of wealth of the company also increases, and the impact is that there is an increase in profitability. Conversely, if the company's performance is bad, then the company's profitability will decrease and the return that will be received by shareholders will also decrease

In assessing the company's performance, shareholders can use the annual report published regularly by the company. In this annual report there are financial reports containing various kinds of information related to the company's financial performance such as financial ratios such as profitability ratios, solvency ratios, liquidity ratios and others. Therefore, [3] states that financial statements issued by companies can be the basis for making decisions for investors in monitoring, evaluating and planning in the future.

Based on Bank Indonesia Regulation Number 13/1/PBI/2011 concerning Assessment of the Soundness of Commercial Banks, the performance of banking companies can be carried out through the RGEC (Risk Profile, Good Corporate Governance, Earnings, Capital) approach. In using this approach there are several indicators of banking performance assessment that can be used, namely: 1) Risk Profile: Non-Performing Loan, Loan to Deposit Ratio (LDR); 2) Earnings: Return on Equity (ROE); 3) Capital: Capital Adequacy Ratio (CAR). Therefore, based on this background, the researcher conducted a study entitled "The Effect of ROE, LDR, NPL, and CAR on the Price of Banking Stocks Listed on the Indonesia Stock Exchange in the Period 2011-2020".

2. Literature Review

2.1 Stocks

Shares can be defined as a sign of capital participation of a person or party (business entity) in a company or limited liability company. Stock is one of the investment instruments in the capital market. Stocks have the highest reputation and popularity compared to other investment instruments such as bonds and mutual funds. Shares are one of the investment instruments that have special characteristics. Stocks have high profit potential, but are always accompanied by high risk. Stocks can provide two kinds of benefits, namely capital gains and dividend gains.

2.*2 Return on Equity*

Return on Equity (ROE) is one of the financial ratios included in the profitability ratio. ROE measures the company's profitability by revealing how much profit the company generates in managing shareholder equity. Return on equity shows the company's ability to generate profits from its own capital [4]. This ratio can be calculated using the formula:

$$Return\ on\ Equity = \frac{Earning\ after\ Tax}{Equity}\ x\ 100\%$$

2.3 Loan to Deposit Ratio

Loan to Deposit Ratio (LDR) is the ratio between the amount of credit granted by the bank and the funds received by the bank [5]. Bank Indonesia regulations state that in assessing the liquidity performance of Indonesian banks, the LDR ratio can be used as the main indicator. LDR indicates a bank's ability to rely on credit as a source of liquidity to pay for withdrawals from customers and depositors. The higher the ratio, the lower the liquidity of the bank concerned. This ratio can be calculated using the formula:

$$Loan\ to\ Deposit\ Ratio = \frac{Total\ Loans}{Total\ Deposits}$$

2.4 Non Performing Loan

Non-Performing Loan (NPL) is the percentage of non-performing loans to total loans extended by banks to third parties [6]). Non-performing loans are loans that are classified as substandard, doubtful, and bad. This ratio can be calculated using the formula:

$$Non\ Performing\ Loan = \frac{Bad\ Debt}{Total\ Credit}$$

2.5 Capital Adequacy Ratio

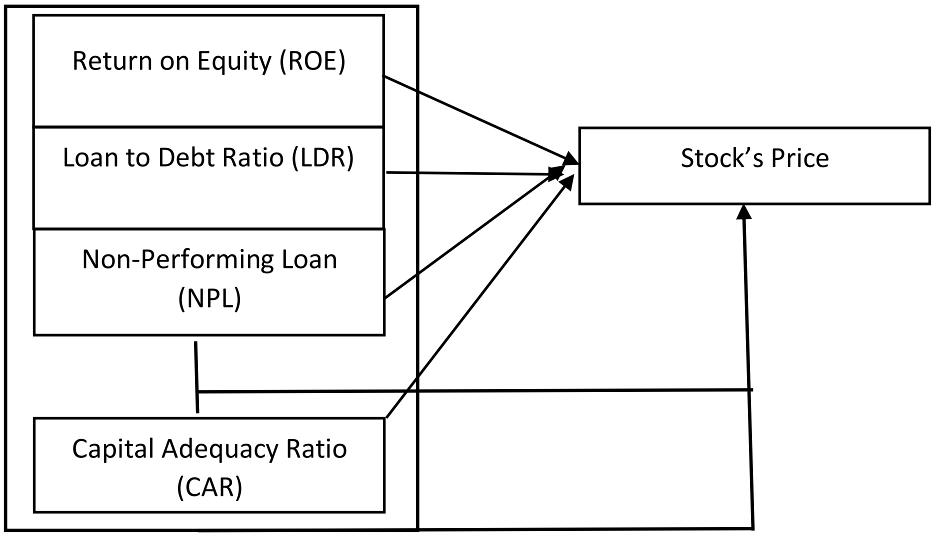
According to [7] Capital Adequacy Ratio (CAR) is a variable that measures the unweighted capital adequacy ratio (leverage) as the ratio of capital and reserves relative to total balance sheet assets. CAR is a capital adequacy ratio that serves to accommodate the risk of loss that may be faced by banks. The higher the CAR, the better the ability of the bank to bear the risk of any credit or risky productive assets so that the bank can maintain its liquidity and stability and efficiency of bank operations. This ratio can be calculated using the formula:

$$\text{Capital Adequacy Ratio} = \frac{\text{Tier 1 Capital} + \text{Tier 2 Capital}}{\text{Risk Weighted Assets}}$$

2.6 Past Research

Many studies have been conducted in order to study the variables that can affect the stock price of banking. One of them is done by [8]who examines the effect of NPL, LDR, ROA, ROE, NIM, BOPO and CAR on banking stock prices in the period 2008-2012. The results of this study are LDR, NIM and ROA have a significant influence on banking stock prices in the study period. In addition, similar research was also conducted by [9] which examined the effect of ROA, ROE, LDR, CAR, and NPL on stock prices of banking sector companies included in the LQ-45 index in the 2015-2019 period. The research was conducted using panel data regression analysis method which resulted in the finding that ROA, ROE, CAR and NPL had a significant effect on stock prices of banking sector companies included in the LQ-45 index in the 2015-2019 period.

2.7 Research Framework



So, the hypotheses formed from the framework above are:
H1: There is a significant influence between ROE on Stock's Price
H2: There is a significant influence between LDR on Stock's Price
H3: There is a significant influence between NPL on Stock's Price
H4: There is a significant influence between CAR on Stock's Price
H5: There is a significant influence between ROE, LDR, NPL, CAR on Stock's Price

3. Research Methodology

3.1 Research Characteristic

This study uses quantitative research methods. This research is included in the category of verification descriptive research. This research is also causal because it studies the influence and relationship of X to Y. The data of this study were obtained from 21 banking sector companies listed on the Indonesia Stock Exchange during the period 2011-2020. This research data is in the form of secondary data obtained from annual reports published by the company every year.

3.2 Research Variable

The dependent variable used in this study is stock price. Meanwhile, the independent variables are Return on Equity (X1), Loan to Debt Ratio (X2), Non-Performing Loan (X3) and Capital Adequacy Ratio (X4).

3.3 Sample and Population

The main requirement in the population of this study is the banking sector companies listed on the Indonesia Stock Exchange. Then, the sampling technique used is purposive sampling technique. The conditions used in this sampling include:
The company is listed on the Indonesia Stock Exchange from 2011-2020.
The company's shares are actively traded during the period 2011-2020
The company regularly publishes annual reports for the period 2011-2020

3.4 Data Analysis Technique

The data analysis technique in this study uses Panel Data Regression Analysis. Panel data is used in this study because the data used consists of two types of data, namely time series data and cross section data. In panel data regression analysis, there are three estimation models that can be used, including the Common Effect Model, Fixed Effect Model and Random Effect Model.

4. Results and Discussion

Multiple Linear Regression Analysis is a statistical method used to test the effect of two or more independent variables on the dependent variable with interval or ratio measurement scales in linear equations. In this study, the type of regression used is panel data regression analysis, where the model used is the Fixed Effect Model. Based on the calculation of the regression equation between ROE (X1), LDR (X2), NPL (X3) and CAR (X4) on Stock's Price (Y) using Eviews 10, the following results are obtained:

Table 1

Regression

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3368.431	2331.189	1.444941	0.1500
ROE	6508.257	2205.761	2.950572	0.0035
LDR	-4768.753	2395.261	-1.990912	0.0478
NPL	-13566.34	14424.60	-0.940501	0.3481
CAR	15289.21	6173.187	2.476713	0.0141
R-squared	0.119448	Mean dependent var		2565.775
Adjusted R-squared	0.102183	S.D. dependent var		4666.229
S.E. of regression	4421.403	Akaike info criterion		19.64993
Sum squared resid	3.99E+09	Schwarz criterion		19.72989
Log likelihood	-2048.418	Hannan-Quinn criter.		19.68226
F-statistic	6.918240	Durbin-Watson stat		0.120669
Prob(F-statistic)	0.000031			

From the results of the panel data regression above, the regression equation can be determined as follows:

$Y = 3368.431 + 6508.257X1 – 4768.753X2 – 13566.34X3 + 15289.21X4$

Hypothesis testing is carried out to determine the effect of X on Y:

1) The Effect of ROE towards Stock's Price

From the results of the analysis that has been carried out, it is found that the P-value of the ROE is 0.0035, where this value is smaller than the alpha (α) value of 5%. This means that the Return on Equity (ROE) variable has a significant influence on the stock prices of banking companies in Indonesia.

2) The Effect of LDR towards Stock's Price

From the results of the analysis that has been carried out, it is found that the P-value of the LDR is 0.0478, where this value is lower than the alpha (α) value of 5%. This means that the Loan to Deposit Ratio (LDR) variable has a significant influence on the stock prices of banking companies in Indonesia.

3) The Effect of NPL towards Stock's Price

From the results of the analysis that has been carried out, it is found that the P-value of the LDR is 0.0478, where this value is lower than the alpha (α) value of 5%.

This means that the Loan to Deposit Ratio (LDR) variable has a significant influence on the stock prices of banking companies in Indonesia.

4) The Effect of CAR towards Stock's Price

From the results of the analysis that has been carried out, it is found that the P-value of the CAR is 0.0141, where this value is lower than the alpha (α) value of 5%. This means that the variable Capital Adequacy Ratio (CAR) has a significant influence on stock prices of banking companies in Indonesia.

5) The Effect of ROE, LDR, NPL, CAR towards Stock's Price

From the results of the analysis that has been carried out, it is found that the P-value of the F-Statistic is 0.000031, where this value is lower than the alpha (α) value of 5%. This means that the variables Return on Equity (ROE), Loan to Deposit Ratio (LDR), Non-Performing Loan (NPL) and Capital Adequacy Ratio (CAR) simultaneously have a significant influence on stock prices of banking companies in Indonesia.

5. *Conclusion*

Based on the results of research that has been carried out in order to analyse the effect of independent variables including Return on Equity (ROE), Loan to Deposit Ratio (LDR), Non-Performing Loan (NPL), and Capital Adequacy Ratio (CAR) on stock prices in banking companies listed on the Indonesia Stock Exchange during the 2011-2020 period, the researchers made the following decisions:

1) Return on Equity (ROE) has a significant effect on banking stock prices in Indonesia. These results are in line with the findings of the research conducted by [9], but these results are not in line with the research conducted by [10] and [8]

2) Loan to Deposit Ratio (LDR) has a significant influence on banking stock prices in Indonesia. These results are in line with the findings of the research conducted by [8].

3) Non-Performing Loans (NPL) do not have a significant effect on the stock price of banking in Indonesia. These results are in line with the findings of the research conducted by Wismaryanto (2013) but differ from the results of research conducted by [11].

4) Capital Adequacy Ratio (CAR) has a significant influence on banking stock prices in Indonesia. These results are in line with the findings of research conducted by [11]but differ from the results of research conducted by [8].

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