# Factors Affecting Stock Prices through the Level of Capital Adequacy in Conventional Commercial Banks Listed on the Indonesia Stock Exchange in 2011-2020

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#### Abstract

This study aims to examine whether there is an effect of Loan to Deposit ratio (LDR), Non Performing Loan (NPL), Return on Assets (ROA), Net Interest Margin (NIM), Operating Expenses on Operating Income (BOPO) and Good Corporate Governance (GCG) either directly or indirectly through the Capital Adequacy Level (CAR) on the Price of Stock.

The population of this study is all conventional commercial bank companies listed on the Indonesia Stock Exchange in 2011-2020. The sampling method of this research used purposive sampling method and obtained 29 companies. The data used is secondary data in the form of company financial statements downloaded from www.idx.co.id. The data analysis technique used is path analysis with the help of the STATA statistical tool version 16.

The results of this study indicate that LDR, NPL, ROA, NIM, BOPO, GCG simultaneously or jointly affect CAR by 12.94%, the remaining 87.06% is influenced by other factors. LDR, NPL, ROA, NIM, BOPO, GCG, CAR simultaneously or jointly affect the Price of Stock by 9.71%, the remaining 90.29% is influenced by other factors.

Keywords: LDR, NPL, ROA, NIM, BOPO, GCG, Capital Adequacy Level, Price of Stock

### 1. Introduction

The existence of banking services as a subsystem in the economy of a country is reflected in the lives of many everyday people. He said the rupiah was expected to strengthen to Rp9,100 per dollar in the Jakarta interbank spot market on Tuesday.

Small amounts of capital greatly affect the bank's ability to carry out its operations. According to (Hermina & Wufron, 2018) "Banks with low capital will experience a near-vent if credit goes bad. Bank Indonesia bi governor burhanuddin abdullah said here on Tuesday it was expected to raise its benchmark interest rate by 25 basis points to 8.25 percent. As a result, the bank will be unable to fulfill its obligations and become bankrupt because of failing to pay its mortgage and creditors."

Banking business activities cannot be separated from investors or capital providers, investors who are needed to provide operational funds for companies that are useful for company activities. The main objective of the trading activities of investors in the capital market is to make a profit. Investors invest their funds in the capital market not only for short-term investment but also for long-term income.

The assessment of the capital ratio that is commonly used is the Capital Adequacy Ratio (CAR), which is based on the ratio of capital to Risk Weighted Assets (RWA). A ratio that shows how far all bank assets that contain risk (credit, investment, securities, claims on other banks) are also financed from the bank's own capital funds in addition to obtaining funds from sources outside the bank, such as funds from the public, loans, and etc.

In relation to the level of bank capital adequacy and stock prices, there are several factors that influence the two things above, including the Loan to Deposit Ratio (LDR). The LDR ratio is a measure of liquidity that measures the

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ratio of funds placed in the form of credit, originating from third party funds. The higher the LDR ratio, the higher the disbursed funds compared to third party funds in the bank. It can be concluded that the higher the LDR ratio, the better LDR will be in the range of 78%-92% (Peraturan Bank Indonesia Nomor 15/7/PBI/2013, n.d.).

Non Performing Loan (NPL), this ratio is used to measure bank risk related to lending. One of the main activities of banks as financial institutions is providing credit. In carrying out these activities, banks cannot be separated from risks, one of which is non-performing loans. This means that there will be a possibility of non-performing loans from all loans disbursed by banks to customers caused by debtors who fail to pay off due to external factors.

Return On Assets (ROA) is a ratio used to measure the ability of the Bank's management in obtaining profitability and managing the overall level of efficiency of the bank's business. In the framework of bank soundness assessment, BI will give a maximum score of 100 (healthy) if the bank has an ROA > 1.5%. The greater the Return On Assets (ROA) of a bank, the greater the level of profit achieved by the bank and the better the position of the bank in terms of asset use (Parenrengi & Hendratni, 2018).

Net Interest Margin (NIM) is the ratio between net interest income to the amount of loans. The NIM of a bank is said to be good if it has a NIM above 2%. The higher the bank's net interest income obtained from the bank's ability to manage its credit, the higher the bank's net profit obtained, thus it is expected that the CAR value will also increase.

BOPO (Operating Expenses to Operating Income), is a ratio to assess the efficiency of a bank in running its main business, especially credit, based on the amount of funds that have been collected. Efficiency is a comparison between the results obtained with the management elements used or the comparison between outputs and inputs (Boulanouar et al., 2021). The smaller the bank's income, the less the company's profit which will impact on the least profit to be obtained by investors which will certainly have an impact on the decline in stock prices.

Based on this phenomenon as well as the results of research that has been carried out previously, it shows the results that are not the same (research gap) on each variable that affects the Banking Capital Adequacy Level Ratio described above. So the authors are interested in conducting research again with the title "Factors Affecting Stock Prices Through Capital Adequacy Levels in Conventional Commercial Bank Companies Listed on the Indonesia Stock Exchange in 2011-2020."

# 2. Methods

# 2.1. Profitability

According to the (Undang-Undang Republik Indonesia Nomor 10 Tahun 1998, n.d.), "a bank is defined as a business entity that collects funds from the public in the form of savings and distributes these funds back to the public in the form of credit or other forms in order to improve the standard of living of the people at large, which is called the intermediation function."

From the above definition, it can be concluded that banks have two main functions, namely social functions and economic functions. In terms of economic functions, namely: First, banks collect funds from the public in the form of savings. Second, after the funds have been collected, the bank then distributes the funds to the public in the form of credit.

# 2.2. Signalling Theory

Signaling theory emphasizes the importance of information issued by the company on the investment decisions of parties outside the company. Information is an important element for investors and business people because information essentially presents information, notes or descriptions for past, current and future conditions for the survival of a company and how the securities market will be. This signal is in the form of information about what management has done to realize the owner's wishes. Signals can be in the form of promotions or other information stating that the company is better than other companies.

# 2.3. Bank Modal

According to (Peraturan Bank Indonesia Nomor 15/7/PBI/2013, n.d.) point A concerning the minimum capital adequacy requirement for commercial banks, it states that "in order to create a sound banking system capable of developing and competing both nationally and internationally, banks need to increase their ability to absorb risks arising from caused by crisis conditions and/or excessive bank credit growth".

# 2.4. Bank Capital Adequacy

Capital Adequacy Level is a measurement level that shows a bank's ability to meet or meet its capital requirements in accordance with the provisions of the regulator (BI). The reasons for banks to meet their capital adequacy include:

- a) Avoid the bank against the possibility of bank failure.
- b) The amount of capital owned by the bank affects the income of the bank owner.
- c) Meet the minimum bank capital limit set by the regulator.

$$CAR = \frac{\text{Bank Capital}}{\text{Risk Weighted Assets}} \times 100\%$$

# 2.5. Stock

Stocks are one of the most popular financial market instruments. According to (Samsul, 2006) "the stock is an evidence sign of a company whose owner is also referred to as a stockholder. Evidence that a person ora party may be regarded as shareholders is when they have been listed as shareholders in the book called DPS)."

# 2.6. Loan to Deposit Ratio (LDR)

According to (Peraturan Bank Indonesia Nomor 15/7/PBI/2013, n.d.), The lower limit of the LDR Target is 78% (seventy eight percent). Target LDR upper limit; 1) in the amount of 100% (one hundred percent) up to December 1, 2013; and 2) 92% (ninety two percent) since December 2, 2013.

The formula used to find the Liquidity Ratio (LDR) according to the circular letter of (Surat Edaran Bank Indonesia Nomor 3/30/DPNP Tanggal 14 Desember 2001, n.d.) is as follows:

$$LDR = \frac{Disbursed\ Credit}{Third-part\ funds} x 100\%$$

# 2.7. Non Performing Loan (NPL)

Non-performing loan was a ratio to measure the cost to credit distributed by comparing credit to the amount of credits distributed. Non-performing loan is a credit that exceeds 90 days. According to (Ismail, 2010) NPL is divided into three less-standard credits (91 s/d 180 days), credit is questionable (181 s/d 270 days) and bad credit (>270 days).

According to (Surat Edaran Bank Indonesia Nomor 3/30/DPNP Tanggal 14 Desember 2001, n.d.), the NPL is formulated as follows:

$$NPL = \frac{\text{Number of Non Performing Loans}}{\text{Amount of Credits Granted}} \times 100\%$$

#### 2.8. Return on Asset (ROA)

Return on Assets (ROA) is a ratio used to assess a company's ability to generate profits by optimizing its assets. This ratio is used to measure the level of business efficiency and profitability achieved by the bank concerned.

ROA is calculated based on the comparison of profit before tax and average total assets. The formula for ROA according to the circular letter of (Surat Edaran Bank Indonesia Nomor 3/30/DPNP Tanggal 14 Desember 2001, n.d.) can be described as follows:

$$ROA = \frac{\text{Profit before tax}}{\text{Total Assets}} \times 100\%$$

# 2.9. Net Interest Margin (NIM)

Net Interest Margin (NIM) is a ratio used to determine the ability of bank management in terms of managing productive assets so that they can generate net interest. The NIM of a bank is said to be healthy if it has a NIM above 2% (Fahmi, 2016). According to the circular letter of (Surat Edaran Bank Indonesia Nomor 3/30/DPNP Tanggal 14 Desember 2001, n.d.), the formula used to measure the NPL ratio is as follows:

$$NIM = \frac{Net\ Interest\ Income}{Average\ Earning\ Assets} \times 100\%$$

#### 2.10. Operational Burden on Operational Income (BOPO)

The BOPO ratio is a comparison between operational costs and bank operating income. The BOPO ratio shows the efficiency of a bank in carrying out its main business, especially credit, based on the amount of funds that have been collected.

According to the circular letter of (Surat Edaran Bank Indonesia Nomor 3/30/DPNP Tanggal 14 Desember 2001, n.d.), in calculating the BOPO ratio, the following formula can be used:

$$BOPO = \frac{Operating\ Expenses}{Operating\ Income} \times 100\%$$

# 2.11. Good Corporate Governance (GCG)

The external and internal environment of banking is experiencing rapid development, followed by the increasing complexity of the risks of banking business activities, thereby increasing the need for good corporate governance practices and the application of risk management. (Surat Edaran Bank Indonesia No. 15/15/DPNP Tanggal 29 April 2013, n.d.), regarding the implementation of Good Corporate Governance was issued regarding the assessment of the soundness of Commercial Banks based on risk (Risk Based Bank Rating).

The measurement of Good Corporate Governance used in this research is to use the composite value of the self-assessment system. This composite value is an assessment category for the implementation of GCG principles which contains eleven assessment factors for GCG implementation (Suhita, 2016). This indicator is obtained from the annual reports of banking companies. The following is a self-assessment system composite assessment table from GCG.

Composite ValueComposite PredicateComposite Value < 1.5</td>Very good1.5 < Composite Value < 2.5Well2.5 < Composite Value < 3.5Pretty good3.5 < Composite Value < 4.5Not good4.5 < Composite Value < 5Not good

Table 1. Composite Value of GCG Self Assessment According to Bank Indonesia

# 2.12. Effect of Capital Adequacy Level (CAR) on Stock Price

Capital Adequacy Ratio (CAR) is a capital adequacy ratio that serves to accommodate the risk of loss that may be faced by banks (Wismaryanto, 2013). Meanwhile, according to (Sambul et al., 2016) explains that the level of capital adequacy is a ratio that shows how large the total bank assets that contain elements of risk (credit, investment, securities, etc.) are also financed from the bank's own capital. The higher the capital adequacy ratio (CAR), the better the bank's ability to bear the risk of any risky credit or productive assets so that the bank can maintain its liquidity and stability and efficiency of bank operations. Thus, it will affect the bank's profitability as well as its share price.

# 3. Methods

# 3.1. Loan to Deposit Ratio (LDR)to Stock Price

The higher this ratio, the lower the level of bank liquidity, because the amount of funds used to finance credit is getting smaller, and vice versa.

The effect of the Loan to Deposit Ratio (LDR) on the level of capital adequacy is, the higher the LDR ratio indicates the riskier the bank's liquidity conditions, and vice versa, the lower the LDR ratio indicates the bank's lack of effectiveness in lending.

H1A: Loan to Deposit Ratio (LDR) has an effect on stock prices

# 3.2. Loan to Deposit Ratio (LDR) to the Capital Adequacy Level

The higher the LDR, the lower the CAR so that liquidity conditions are threatened (Nazaf, 2014). The higher this ratio, the lower the level of bank liquidity, because the amount of funds used to finance credit is getting smaller, and vice versa:

H1B: Loan to Deposit Ratio (LDR) affects the Capital Adequacy Level

# 3.3. Loan to Deposit Ratio (LDR)to Share Prices through Capital Adequacy Level

The bank's LDR value will be higher if the growth in the number of loans extended is greater than the growth in the amount of funds raised. The higher the LDR, the lower the liquidity of a bank.

H1C: Loan to Deposit Ratio (LDR) has an effect on stock prices through the level of capital adequacy

# 3.4. Non-Performing Loans (NPL)to Stock Price

(Sudirman, 2013) explains Credit Risk is the risk of the inability of the borrower or debtor to fulfill their obligations in the form of installments or repayment of loans to the bank in accordance with the existing agreement so that the funds planned to enter by the bank from the debtor are not appropriate. Banks that have poor credit quality or high NPLs indicate that the income to be received is small so that the profit received is less than optimal so that it will affect the decline in stock prices.

H2A: Non-Performing Loans (NPL) affect stock prices

# 3.5. Non-Performing Loans (NPL)to the Capital Adequacy Level

The greater the number of non-performing loans, the lower the amount of income that will be received by the bank, so that the bank will use the existing capital to finance its operational activities. The higher the credit risk, the lower the CAR value.

H2B: Non-Performing Loans (NPL) affect the Capital Adequacy Level

# 3.6. Non-Performing Loans (NPL)to Share Prices through Capital Adequacy Level

The NPL value can be calculated by comparing the number of non-performing loans and the number of loans granted. The high value of NPL is caused by the high value of non-performing loans and indicates a high credit risk. Banks that have poor credit quality or high NPLs indicate that the income to be received is small so that the profit received is less than optimal so that it will affect the decline in stock prices.

H2C: Non-Performing Loans (NPL) affect stock prices through the level of capital adequacy

# 3.7. Return On Assets (ROA)to Stock Price

Return On Assets (ROA)is a ratio used to assess the company's ability to generate profits by optimizing its assets. This ratio is used to measure the level of business efficiency and profitability achieved by the bank concerned. With the achievement of high profits, investors can expect profits from dividends because essentially in conventional economics, the investment motive is to earn high profits, so if a stock produces high dividends, investor interest will also increase, so that this condition will have an impact on increasing profits. stock prices (Sanjaya, 2014).

H3A: Return on Assets (ROA) has an effect on stock prices

# 3.8. Return On Assets (ROA) to the Capital Adequacy Level

The higher the profit generated, the higher the ROA, which means that the company is more effective in using assets to generate profits. On the other hand, if the bank suffers a loss, its capital will decrease. So, the higher the ROA, the higher the CAR.

H3B: Return on Assets (ROA) affects the Capital Adequacy Level

# 3.9. Return On Assets (ROA) to Share Prices through Capital Adequacy Level

The higher the profit generated, the higher the ROA, which means that the company is more effective in using assets to generate profits. So if a stock produces high dividends, investor interest will also increase, so that this condition will have an impact on increasing stock prices.

H3C: Return on Assets (ROA) has an effect on stock prices through the level of capital adequacy

# 3.10. Net Interest Margin (NIM) to Stock Price

The NIM ratio is one of the measuring tools to see the level of bank profitability through the management of productive assets to generate interest, so according to (Fahmi, 2016) the higher the NIM ratio means the higher the bank's profitability, which will also affect the increase in stock prices.

# H4A: Net Interest Margin (NIM) has an effect on stock prices

# 3.11. Net Interest Margin (NIM)to the Capital Adequacy Level

The higher the NIM, the more effective the bank is in placing earning assets in the form of credit. This will show that the higher the NIM achieved by the bank, the better the bank's performance, so that the CAR will increase (Krisna Yansen, 2008).

H4B: Net Interest Margin (NIM) affects the Capital Adequacy Level

#### 3.12. Net Interest Margin (NIM) to Share Prices through Capital Adequacy Level

The higher the NIM, the more effective the bank is in placing earning assets in the form of credit. The higher the NIM achieved by the bank, the better the bank's performance, so that the CAR is increasing, the higher the NIM ratio means the higher the bank's profitability, which will also affect the increase in stock prices.

H4C: Net Interest Margin (NIM) has an effect on stock prices through the level of capital adequacy

# 3.13. Operating Expenses to Operating Income to Share Price

The higher the BOPO, the less efficient a bank is in carrying out its operations. This inefficiency leads to higher cost allocations which can reduce bank revenues. Conversely, the smaller this ratio means the more efficient the operational costs incurred by the financial institution concerned so that the possibility of a financial institution in a problematic condition is getting smaller. The more efficient bank management is in controlling operational costs against operating income, the bank's profit will increase which in turn will increase shareholder profits (Wismaryanto, 2013). High profits will certainly increase investor interest and will ultimately increase the company's stock price.

H5A: Operating Expenses on Operating Income have an effect on Stock Prices

# 3.14. Operating Expenses to Operating Income to Capital Adequacy Level

A small BOPO means that the company uses low operational costs in carrying out its business activities, thus the bank's capital adequacy level (CAR) will decrease.

H5B: Operational Expenses on Operating Income affect the Capital Adequacy Level

# 3.15. Operating Expenses to Operating Income to Share Prices through Capital Adequacy Level

The more efficient bank management is in controlling operational costs against operating income, the bank's profit will increase which in turn will increase shareholder profits (Wismaryanto, 2013). High profits will certainly increase investor interest and will ultimately increase the company's stock price. High profits will certainly increase investor interest and will ultimately increase the company's stock price.

H5C: Operational Expenses on Operating Income affect the Stock Price through Capital Adequacy Level

# 3.16. Good Corporate Governance (GCG)to Stock Price

The smaller the value of GCG indicates the better the performance of banking management. Good or bad banking performance can be seen through the fulfillment of the level of capital adequacy that has been set by the regulator. According to (Setyawan, 2012) the implementation of good corporate governance in accordance with applicable regulations will make investors give a positive response to the company's performance, that the funds invested in the company concerned will be managed properly and the interests of investors will be safe. Investor confidence in the company's management gives influence to the company through stock prices in the capital market.

H6A: Good Corporate Governance (GCG) has an effect on stock prices

# 3.17. Good Corporate Governance (GCG)to the Capital Adequacy Level

The implementation of good corporate governance certainly has a positive effect on the performance of a bank which will certainly affect the effectiveness of the use of capital used by banks.

H6B: Good Corporate Governance (GCG) affects the Capital Adequacy Level

# 3.18. Good Corporate Governance (GCG)to Share Prices through Capital Adequacy Level

The implementation of good corporate governance in accordance with applicable regulations will make investors respond positively to the company's performance, that the funds invested in the company concerned will be managed

properly and the interests of investors will be safe. Investor confidence in the company's management gives influence to the company through stock prices in the capital market.

H6B: Good Corporate Governance (GCG) affects stock prices through the level of capital adequacy

# 3.19. Capital Adequacy Level of Stock Price

Capital Adequacy Ratio (CAR) is a capital adequacy ratio that serves to accommodate the risk of loss that may be faced by banks (Wismaryanto, 2013). Meanwhile, according to (Sambul et al., 2016) explains that the level of capital adequacy is a ratio that shows how large the total bank assets that contain elements of risk (credit, investment, securities, etc.) are also financed from the bank's own capital. The higher the capital adequacy ratio (CAR), the better the bank's ability to bear the risk of any risky credit or productive assets so that the bank can maintain its liquidity and stability and efficiency of bank operations. Thus, it will affect the bank's profitability as well as its share price.

H7: The level of capital adequacy affects the stock price

H8: LDR, NPL, ROA, NIM, BOPO, GCG simultaneously or jointly affect the Capital Adequacy Level

H9: LDR, NPL, ROA, NIM, BOPO, GCG simultaneously or jointly affect the Stock Price

# 4. Research Methodology

This research will be carried out on companies listed on the Indonesia Stock Exchange (IDX) in 2011-2020, namely companies engaged in manufacturing. This research took place starting from January 2021 until its completion.

# 4.1. Population and Sample

According to (Sanusi, 2011) population is all elements that have certain characteristics and show the characteristics set by researchers to study and then draw conclusions. The population in this study are Conventional Commercial Bank companies listed on the Indonesia Stock Exchange in 2011-2020.

While the sample is the selected population elements (Sanusi, 2011). The sampling technique in this study was carried out by purposive sampling method, namely the company sample was selected based on certain criteria. The criteria for selecting the sample in this study are as follows:

- 1) Conventional Commercial Bank Companies listed on the Indonesia Stock Exchange in 2011-2020.
- Companies that issue financial reports for 2011-2020 with complete information and data needed in this
  research.
- 3) Companies that include the results of the good corporate governance self-assessment in their 2011-2020 annual financial statements.

The following describes the list of population and research samples in Table 2:

 Table 2. Research Population

No.	Bank Code	Bank Name
1	AGRO	PT. Bank Rakyat Indonesia Agroniaga, Tbk
2	AGRS	PT. Bank Agris, Tbk
3	AMAR	PT. Bank Amar Indonesia, Tbk
4	ARTOS	PT. Bank Artos Indonesia, Tbk
5	BABP	PT. Bank MNC International, Tbk
6	BACA	PT. Bank Capital Indonesia, Tbk
7	BBCA	PT. Bank Central Asia, Tbk
8	BBKP	PT. Bank Bukopin, Tbk
9	BBMD	PT. Bank Mestika Dharma
10	BBNI	PT. Bank Negara Indonesia (Persero), Tbk
11	BBNP	PT. Bank Nusantara Parahyangan, Tbk
12	BBRI	PT. Bank Rakyat Indonesia (Persero), Tbk
13	BBTN	PT. Bank Tabungan Negara (Persero), Tbk
14	BCIC	PT. Bank J Trust Indonesia, Tbk

No.	Bank Code	Bank Name
15	BDMN	PT. Bank Danamon Indonesia, Tbk
16	BEKS	PT. Bank Pembangunan Daerah Banten, Tbk
17	BINA	PT. Bank Ina Perdana, Tbk
18	BJBR	PT. Bank Jabar Banten, Tbk
19	BJTM	PT. Bank Pembangunan Daerah Jawa Timur, Tbk
20	BKSW	PT. Bank QNB Indonesia, Tbk
21	BMAS	PT. Bank Maspion Indonesia, Tbk
22	BMRI	PT. Bank Mandiri (Persero), Tbk
23	BNBA	PT. Bank Bumi Arta, Tbk
24	BNGA	PT. Bank CIMB Niaga, Tbk
25	BNII	PT. Bank Maybank Indonesia, Tbk
26	BNLI	PT. Bank Permata, Tbk
27	BSIM	PT. Bank Sinar Mas, Tbk
28	BSWD	PT. Bank of India Indonesia, Tbk
29	BTPN	PT. Bank Tabungan Pensiunan Nasional, Tbk
30	BVIC	PT. Bank Victoria International, Tbk
31	INPC	PT. Bank Artha Graha International, Tbk
32	MAYA	PT. Bank Mayapada International, Tbk
33	MCOR	PT. Bank China Construction Bank Ind. Tbk
34	MEGA	PT. Bank Mega, Tbk
35	NAGA	PT. Bank Mitraniaga, Tbk
36	NISP	PT. Bank OCBC NISP, Tbk
37	NOBU	PT. Bank Nationalnobu, Tbk
38	PNBN	PT. Bank Panin Indonesia, Tbk
39	SDRA	PT. Bank Woori Saudara Indonesia, Tbk

 Table 3. Research Sample

No.	Bank Code	Bank Name
1	AGRO	PT. Bank Rakyat Indonesia Agroniaga, Tbk
2	BABP	PT. Bank MNC International, Tbk
3	BACA	PT. Bank Capital Indonesia, Tbk
4	BBCA	PT. Bank Central Asia, Tbk
5	BBKP	PT. Bank Bukopin, Tbk
6	BBNI	PT. Bank Negara Indonesia (Persero), Tbk
7	BBRI	PT. Bank Rakyat Indonesia (Persero), Tbk
8	BBTN	PT. Bank Tabungan Negara (Persero), Tbk
9	BCIC	PT. Bank J Trust Indonesia, Tbk
10	BDMN	PT. Bank Danamon Indonesia, Tbk
11	BEKS	PT. Bank Pembangunan Daerah Banten, Tbk
12	BJBR	PT. Bank Jabar Banten, Tbk
13	BKSW	PT. Bank QNB Indonesia, Tbk
14	BMRI	PT. Bank Mandiri (Persero), Tbk
15	BNBA	PT. Bank Bumi Arta, Tbk

No.	Bank Code	Bank Name
16	BNGA	PT. Bank CIMB Niaga, Tbk
17	BNII	PT. Bank Maybank Indonesia, Tbk
18	BNLI	PT. Bank Permata, Tbk
19	BSIM	PT. Bank Sinar Mas, Tbk
20	BSWD	PT. Bank of India Indonesia, Tbk
21	BTPN	PT. Bank Tabungan Pensiunan Nasional, Tbk
22	BVIC	PT. Bank Victoria International, Tbk
23	INPC	PT. Bank Artha Graha International, Tbk
24	MAYA	PT. Bank Mayapada International, Tbk
25	MCOR	PT. Bank China Construction Bank Ind. Tbk
26	MEGA	PT. Bank Mega, Tbk
27	NISP	PT. Bank OCBC NISP, Tbk
28	PNBN	PT. Bank Panin Indonesia, Tbk
29	SDRA	PT. Bank Woori Saudara Indonesia, Tbk

# 5. Results and Discussion

# 5.1. Descriptive Statistical Analysis

Descriptive statistical analysis is used to determine the description of a data seen from the maximum value, minimum value, average value (mean), and standard deviation value, from the variables LDR, NPL, ROA, NIM, BOPO, GCG, Capital Adequacy Level and Price Share.

Table 4. Descriptive Statistical Analysis

Variable	Minimum	Maximum	Mean	<b>Standard Deviation</b>
LDR	0.3933	1.8389	0.866	0.183
NPL	0.000	0.0637	0.017	0.013
ROA	-0.1115	0.1942	0.014	0.027
NIM	0.0022	0.1664	0.05	0.025
ВОРО	0.221	2.352	0.883	0.222
GCG	1	4	1,959	0.61
CAR	0.02385	0.475	0.188	0.062
Stock price	36	9900	1721.075	2064.426

# 5.2. Classic assumption test

# 5.2.1. Normality test

In this study, the normality test of the residuals used the Shapiro Wilk (SW) test. If the probability value is 0.05, then the assumption of normality is met. If the probability < 0.05, then the assumption of normality is not met.

Table 5. Normality Test

Variable	Obs	W	V	Z	Prob > z
data_resid~1	290	0.99563	0.904	-0.236	0.59347

# 5.2.2. Multicollinearity Test

In this study, the symptoms of multicollinearity can be seen from the VIF value. (Ghozali, 2013) states that if the VIF value is > 10 then this is an indication of multicollinearity. The results of the multicollinearity test are presented in Table 6.

Table 6. Multicollinearity Test

Variable	VIF	1/VIF
X5	3.61	0.277169
X3	2.94	0.339982
X2	1.66	0.603891
X6	1.45	0.688732
X4	1.23	0.813897
X1	1.02	0.978104
Mean VIF	1.98	

#### 5.2.3. Autocorrelation Test

Assumptions regarding the independence of the residuals (non-autocorrelation) can be tested using the Runs test. If the probability value of the Runs test > 0.05, it is concluded that there is no autocorrelation.

**Table 7.** Autocorrelation Test

N(data_resid~1 <= 0.0195884760469198) = 145						
N(	$data_resid \sim 1 > 0.0195884760469198) = 145$					
Obs	=	290				
N(runs)	=	152				
Z	=	0.71				
Prob>  z	=	0.48				

# 5.2.4. Heteroscedasticity Test

To test whether there is heteroscedasticity or not, the Breusch-Pagan test can be used. Table 8 presents the results of heteroscedasticity testing using the Breusch-Pagan test.

Table 8. Heteroscedasticity Test

H0	:	Constant variance
Variables	:	fitted values of ny2
chi2(1)	=	0.41
Prob > chi2	=	0.5227

Detection of the presence or absence of heteroscedasticity can be done by looking at the presence or absence of certain patterns on the scatter plot graph between residuals on the Y axis, and fitted values on the X axis (Ghozali, 2013). (Ghozali, 2013) states that the basis of the analysis is that if there is a certain pattern, such as the points that form a certain regular pattern, it indicates that heteroscedasticity has occurred. If there is no clear pattern, and the points spread above and below the number 0 on the Y axis, then there is no heteroscedasticity.

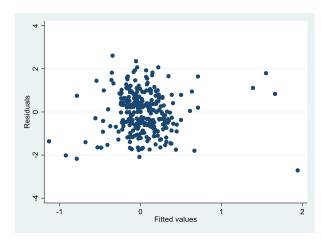


Figure 2. Heteroscedasticity Test

# 5.3. Hypothesis test

In testing the hypothesis, the coefficient of determination analysis will be carried out, simultaneous effect testing (F test), and partial effect testing (t test).

Table 9. Simultaneous Effect Test (F test)

Effect of LDR, NPL, ROA, NIM, BOPO, GCG on CAR

Source	SS	df	MS	Number of obs	=	290
Model	.145420565	6	.024236761	F(6, 283)	=	7.01
Residual	.978454556	283	.003457437	Prob > F	=	0.0000
Total	112.387.512	289	.003888841	R-squared	=	0.1294
				Adj R-squared	=	0.1109
				Root MSE	=	.0588
Y1	Coef.	Std. Err.	t	P> t	[95% Con	f. Interval]
X1	.0318643	.0190641	1.67	0.096	005661	.0693897
X2	762515	.3435938	-2.22	0.027	-1.438.839	0861912
X3	120.242	.222221	5.41	0.000	.7650045	1.639.836
X4	.0764779	.1559865	0.49	0.624	2305631	.3835189
X5	.1087441	.0295531	3.68	0.000	.0505723	.166916
X6	.0093562	.0068335	1.37	0.172	0040946	.0228071
cons	.0378062	.0353839	1.07	0.286	0318427	.1074552

# Based on Table 9, the results obtained are:

- a) 1.LDR has a positive effect on CAR, with a coefficient value of 0.0318, but not significant, with a probability value = 0.096 > 0.05.
- b) 2.NPL has a negative effect on CAR, with a coefficient value of -0.762, and significant, with a probability value = 0.027 < 0.05.
- c) ROA has a positive effect on CAR, with a coefficient value of 1.202, and is significant, with a probability value = 0.000 < 0.05.
- d) NIM has a positive effect on CAR, with a coefficient value of 0.076, but not significant, with a probability value = 0.624 > 0.05.
- e) BOPO has a positive effect on CAR, with a coefficient value of 0.108, and significant, with a probability value = 0.000 < 0.05.

f) GCG has a positive effect on CAR, with a coefficient value of 0.009, but not significant, with a probability value = 0.172 > 0.05.

Table 10. Simultaneous Effect Test (T test)

Effect of LDR, NPL, ROA, NIM, BOPO, GCG, CAR to Stock Price

Source	SS	df	MS	Number of obs	=	290
Model	27.95334	7	3.993335	F(7, 282)	=	4.33
Residual	259.9512	282	.9218127	Prob > F	=	0.0001
Total	287,9045	289	.9962095	R-squared	=	0.0971
				Adj R-squared	=	0.0747
				MSE root	=	.96011
ny2	coef.	Std. Err.	t	P> t	[95% Con	f. intervals]
<b>X</b> 1	8113559	.312819	-2.59	0.010	-1.427.1	1955991
X2	6,787,867	5.658.95	1.20	0.231	-4.351.2	1,792.70
X3	9,394,093	3,811.59	2.46	0.014	1,891.30	1,689.68
X4	3,805,312	2,548.09	1.49	0.136	-1,210.4	8.821.01
X5	1,011,393	.493964	2.05	0.042	.039067	1,983.71
X6	1621868	.111948	-1.45	0.149	382547	.0581741
Y1	2.263.80	.970624	2.33	0.020	.353215	4,174,392
_cons	703654	.578927	-1.22	0.225	-1,843.2	.4359129

## Based on Table 10, the results obtained are:

- a) LDR has a negative effect on stock prices, with a coefficient value of -0.811, and is significant, with a probability value = 0.010 < 0.05.
- b) NPL has a positive effect on stock prices, with a coefficient value of 0.787, but not significant, with a probability value = 0.231 > 0.05.
- c) ROA has a positive effect on stock prices, with a coefficient value of 9.394, and is significant, with a probability value = 0.014 < 0.05.
- d) NIM has a positive effect on stock prices, with a coefficient value of 3.805, but not significant, with a probability value = 0.136 > 0.05.
- e) BOPO has a positive effect on stock prices, with a coefficient value of 1.011, and is significant, with a probability value = 0.042 < 0.05.
- f) GCG has a negative effect on stock prices, with a coefficient value of -0.162, but not significant, with a probability value = 0.149 > 0.05.
- g) CAR has a positive effect on stock prices, with a coefficient value of 2.263, and is significant, with a probability value = 0.020 < 0.05.

# 5.4. Mediation Test

Furthermore, a mediation test was conducted, namely to test whether CAR significantly mediates the effect of LDR, NPL, ROA, NIM, BOPO, GCG on stock prices. The results in Table 9 and Table 10, are presented in the path diagram (Figure 3).

Based on the test results in Figure 3 and Table 11:

a) The indirect effect of LDR on Share Prices through CAR is 0.072. It is known that LDR has no significant effect on CAR, while CAR has a significant effect on stock prices. So it can be concluded that CAR does not significantly mediate the effect of LDR on stock prices.

- b) The indirect effect of NPL on Share Price, through CAR is -1.726. It is known that NPL has a significant effect on CAR, while CAR has a significant effect on stock prices. So it can be concluded that CAR significantly mediates the effect of NPL on stock prices.
- c) The indirect effect of ROA on Share Prices through CAR is 2,722. It is known that ROA has a significant effect on CAR, while CAR has a significant effect on stock prices. So it can be concluded that CAR significantly mediates the effect of ROA on stock prices.
- d) The indirect effect of NIM on Share Prices through CAR is 0.173. It is known that NIM has no significant effect on CAR, while CAR has a significant effect on stock prices. So it can be concluded that CAR does not significantly mediate the effect of NIM on stock prices.
- e) The indirect effect of BOPO on Share Prices through CAR is 0.246. It is known that BOPO has a significant effect on CAR, while CAR has a significant effect on stock prices. So it can be concluded that CAR significantly mediates the effect of BOPO on stock prices.

The indirect effect of GCG on Share Prices through CAR is 0.021. It is known that GCG has a significant effect on CAR, while CAR has a significant effect on stock prices. So it can be concluded that CAR significantly mediates the effect of GCG on stock prices.

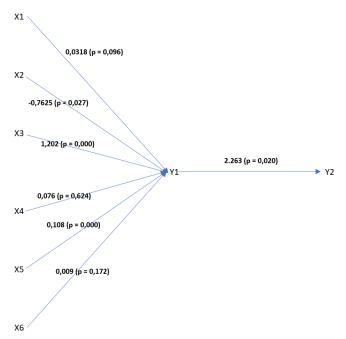


Figure 3. Mediation Test

Table 11. Indirect Effect

Track	Direct Influence	Track	Indirect Influence	Total Influence = Direct Influence + Indirect Influence
X1 -> Y1 (Not Significant)	0.0318643	X1 -> Y1 -> Y2	$0.0318 \times 2.263 = 0.072$	0.104
X2 -> Y1 (Significant)	-0.762515	X2 -> Y1 -> Y2	$-0.7625 \times 2.263 = -1.726$	-2,489
X3 -> Y1 (Significant)	1.20242	X3 -> Y1 -> Y2	$1.20242 \times 2.263 = 2.722$	3,924
X4 -> Y1 (Not Significant)	0.0764779	X4 -> Y1 -> Y2	$0.0764 \times 2.263 = 0.173$	0.250
X5 -> Y1 (Significant)	0.1087441	X5 -> Y1 -> Y2	$0.1087 \times 2.263 = 0.246$	0.355
X6 -> Y1 (Significant)	0.0093562	X6 -> Y1 -> Y2	$0.0093 \times 2.263 = 0.021$	0.031
Y1 -> Y2 (Significant)	2.263804			

#### 6. Conclusion

#### 6.1. Conclusion

Based on the results of the study, it can be concluded that:

LDR has a negative effect on stock prices, with a coefficient value of -0.811, and is significant, with a probability value = 0.010 < 0.05. LDR has a positive effect on CAR, with a coefficient value of 0.0318, but not significant, with a probability value = 0.096 > 0.05. The indirect effect of LDR on stock prices through CAR is 0.072. It is known that LDR has no significant effect on CAR, while CAR has a significant effect on stock prices. So it can be concluded that CAR does not significantly mediate the effect of LDR on stock prices. NPL has a positive effect on stock prices, with a coefficient value of 0.787, but not significant, with a probability value = 0.231 > 0.05. NPL has a negative effect on CAR, with a coefficient value of -0.762, and significant, with a probability value = 0.027 < 0.05. The indirect effect of NPL on stock prices through CAR is -1.726. It is known that NPL has a significant effect on CAR, while CAR has a significant effect on stock prices. So it can be concluded that CAR significantly mediates the effect of NPL on stock prices. ROA has a positive effect on stock prices, with a coefficient value of 9.394, and is significant, with a probability value = 0.014 < 0.05. ROA has a positive effect on CAR, with a coefficient value of 1.202, and is significant, with a probability value = 0.000 < 0.05. The indirect effect of ROA on stock prices through CAR is 2.722. It is known that ROA has a significant effect on CAR, while CAR has a significant effect on stock prices. So it can be concluded that CAR significantly mediates the effect of ROA on stock prices. NIM has a positive effect on stock prices, with a coefficient value of 3.805, but not significant, with a probability value = 0.136 > 0.05. NIM has a positive effect on CAR, with a coefficient value of 0.076, but not significant, with a probability value = 0.624 > 0.05.

The indirect effect of NIM on stock prices through CAR is 0.173. It is known that NIM has no significant effect on CAR, while CAR has a significant effect on stock prices. So it can be concluded that CAR does not significantly mediate the effect of NIM on stock prices. BOPO has a positive effect on stock prices, with a coefficient value of 1.011, and is significant, with a probability value = 0.042 < 0.05. BOPO has a positive effect on CAR, with a coefficient value of 0.108, and is significant, with a probability value = 0.000 < 0.05. The indirect effect of BOPO on stock prices through CAR is 0.246. It is known that BOPO has a significant effect on CAR, while CAR has a significant effect on stock prices. So it can be concluded that CAR significantly mediates the effect of BOPO on stock prices. GCG has a negative effect on stock prices, with a coefficient value of -0.162, but not significant, with a probability value = 0.149 > 0.05. GCG has a positive effect on CAR, with a coefficient value of 0.009, but not significant, with a probability value = 0.172 > 0.05. The indirect effect of GCG on stock prices through CAR is 0.021. It is known that GCG has a significant effect on CAR, while CAR has a significant effect on stock prices. So it can be concluded that CAR significantly mediates the effect of GCG on stock prices. CAR has a positive effect on stock prices, with a coefficient value of 2.263, and is significant, with a probability value = 0.020 < 0.05. LDR, NPL, ROA, NIM, BOPO, GCG simultaneously or jointly affect CAR by 12.94%, the remaining 87.06% is influenced by other factors. LDR, NPL, ROA, NIM, BOPO, GCG, CAR simultaneously or jointly affect the Share Price by 9.71%, the remaining 90.29% is influenced by other factors.

# 6.2. Suggestion

With all the limitations that have been stated previously, the researcher provides some suggestions for the future as follows:

Further researchers can find other factors that can have a significant impact on the level of capital adequacy and bank stock prices, so that they can provide more varied information that is useful for companies and investors. For companies, researchers suggest companies to pay attention to corporate profits, liquidity and net interest income, because the results of the study show that banking capital can be met through the use of assets to generate profits, as well as monitoring the liquidity ratio by maintaining the rate of credit distributed with the funds raised. Thus the company can meet the standards set by Bank Indonesia and be able to maintain public trust in banking services. In addition, companies must also pay attention to the level of non-performing loans and net interest income, because the level of non-performing loans, liquidity, profits and utilization of operating expenses to generate operating income and high net interest income play a role in determining investors to buy shares.

For investors, in making investment decisions in the banking capital market, researchers advise investors to pay attention to the level of non-performing loans and net interest income so that they can minimize the risks that will be experienced when investing.

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