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# The Influence of Bank Health Levels on Share Prices in Conventional General Banking Listed on the Indonesian Stock Exchange for the Period 2019 – 2022

Richad Alamsyah[1*], Wulan Wahyuni RP[2], Nilda Tartilla[3]
Institut Bisnis dan Informatika Kesatuan
**Corresponding Author:** Richad Alamsyah alamsyahrichard@gmail.com

A R T I C L E I N F O

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A B S T R A C T

This research purpose is to analyze the impact of bank soundness on stock price both simultaneously and partially. This research conducted on several indicators which represented by each ratio. There are risk profile represented by Non Performing Loan (NPL), earning represented by Return on Asset (ROA), and capital represented by Capital Adequacy Ratio (CAR). The population was conventional banking companies listed on Indonesia Stock Exchange during 2019-2022. Sampling method used in this research was purposive sampling and obtained 36 banking companies as a sample. This research using quantitative method. Analysis technique used in this reseach was multiple linier regression. The result shows that simultaneously NPL, ROA, CAR have significant effect on stock price. Partially there was a significant and positive effect between ROA and stock price. However, Partially there was a significant and Negative effect between NPL, CAR and stock price

## INTRODUCTION

As the performance of the banking industry has improved after going through the Covid-19 pandemic, economic activity has gradually recovered. The domestic economic recovery is also recorded in the banking industry performance indicators as seen in the fairly solid capital level with a CAR of 25.63% and in terms of credit risk it appears to be improving with the Gross NPL and Net NPL ratios decreasing to 2.44% and 0 respectively. .71%. In general, the banking industry is gradually recovering, but it cannot be denied that there are several banks that are still experiencing difficulties in terms of their health level. Bank health assessment is an activity that needs to be assessed , so that the level of banking health is regulated through Financial Services Authority Regulation No. 4/POJK.03/2016 article 2 which requires banks to maintain and/or improve the level of bank soundness by applying the principles of prudence and risk management in carrying out business activities. Meanwhile, according to Financial Services Authority Regulation no. 4/POJK.03/2016 article 3 Bank health level assessments are carried out individually (self assessment) or conditionally carried out at the end of June and the end of December, and banks are required to deposit the results of their own assessments to the OJK to avoid discrepancies in the results of the assessments carried out by OJK this is in accordance with Financial Services Authority Circular Letter no. 14/SEOJK.03/2017 This statement emphasizes that banks are required to maintain their health level in order to increase performance as well as profits and gain the trust of customers who have funds. This is very important in maintaining the development and strengthening of the financial sector (P2SK), especially the banking industry, which is based on managing public funds. OJK as the regulator has an important role in improving the supervisory function and mitigating risks on an ongoing basis in accordance with the objectives of Law Number 4 of 2023.

In this research, a risk-based approach in measuring the implications of the level of soundness uses several factors including: 1) The risk profile consists of credit risk which has an impact on NPL because it is directly related to the management of non-performing loans which affects banking profits and share prices, 2) Profitability in this research it is linked to the ROA ratio because it shows the effectiveness of a company in increasing company profits and dividends by using banking assets. 3) Capital is usually measured by CAR to describe the capital management of a bank to achieve banking goals, namely increasing profits which has an impact on its share price .

**Identification of Problems :**

1. Do Non-Performing Loans (NPL) Affect Share Prices?
2. Does Return On Assets (ROA) Affect Share Prices?
3. Does the Capital Adequacy Ratio (CAR) have an influence on share prices?
4. Do NPL, ROA, and CAR simultaneously influence stock prices?

## LITERATURE REVIEW

### Stock price

The share price is the present value or *present value* of the cash flow that is expected to be received. Share prices are formed from market mechanisms, namely market demand and supply. R. Agus Sartono (2005)

### *Return On Assets* (ROA)

*Return on Assets* (ROA) is an indicator of a bank's ability to earn a profit on a number of assets owned by the bank. ROA can be obtained by calculating the ratio between net profit after tax and total assets (Mandagie et al., 2014: 998)

$$\text{ROA} = \frac{\text{Profit Before Tax}}{\text{Average Total Assets}} \times 100\%$$

### *Non Performing Loans* (NPL)

*Non-Performing Loans* (NPL) are loans that experience difficulties in repayment or can also be said to be problematic or bad credit (Yuliyanti, 2017:43)

$$\text{NPL} = \frac{\text{Non-Performing Credit}}{\text{Total Credit}} \times 100\%$$

### *Capital Adequacy Ratio* (CAR)

*Capital Adequacy Ratio* (CAR) is The level of success of a financial performance can be seen from the size of the company's capital. (Fahlevi, Asmapane, & Oktavianti, 2018:40)

$$\text{CAR} = \frac{\text{Core Capital + Supplementary}}{\text{Risk Weighted Assets (RWA)}} \times 100\%$$

### Framework

This research aims to determine the level of bank health as proxied by the variables Return On Assets (ROA), Non-Performing Loans (NPL), and Capital Adequacy Ratio (CAR) on share prices in banks listed on the IDX for the 2019-2022 period

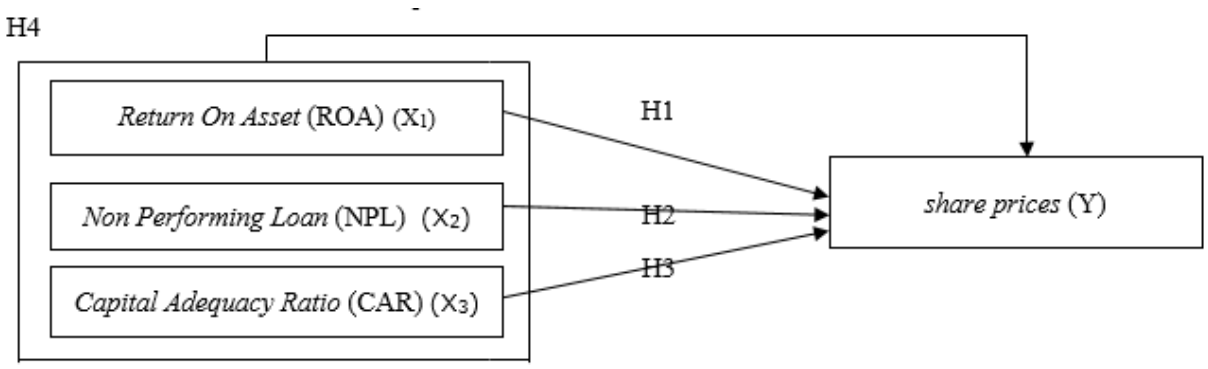



Figure 1. Framework

**Research Hypothesis**

**1. The Effect of *Return on Assets* on Stock Prices**

ROA is a ratio that shows the return on the number of assets used in the company. This ratio can also be used as a reference for projecting future profits. The higher the ROA value, the higher the profits generated and the dividends received by investors will also increase. Increasing high dividends can become a magnet for investors to buy shares, thereby increasing share prices. Based on the explanation above, a hypothesis can be made as follows:
H2: *Return On Assets* influences share prices

**2. The Effect of *Non-Performing Loans* on Stock Prices**

NPL is credit in which obstacles occur as a result of two elements, namely from the banking side in analyzing it and from the customer who intentionally or unintentionally does not pay their obligations. A high NPL level will result in a decrease in profits received by banks. On the other hand, if the NPL value is low, it indicates that the bank is in good condition, which can trigger high share prices. Based on the explanation above, the hypothesis created is as follows:
H1: *Non-Performing Loans* affect stock prices

**3. The Effect of *Capital Adequacy Ratio* on Stock Prices**

CAR is a ratio used to measure the level of banking health through the adequacy of capital used to operate its business. The higher the CAR value, the company's profits can increase, with this investors feel assured in making investment decisions which can later increase the value of the company's shares in the form of an increase in share prices (Indiani, 2016). Based on the explanation above, a hypothesis can be made as follows:
H3: *Capital Adequacy Ratio* influences share prices

**4. The Influence of the Bank's Health Level Which is Proxied Into NPL, ROA and CAR has a Simultaneous Effect on Share Prices**

According to (Budisantoso, 2014) states that bank health is an important element in banking, a bank in healthy condition is a bank that is able to run its business optimally, so that it can carry out its duties and responsibilities significantly. Healthy banks tend to have a great opportunity to gain investors' trust to make investments. The large demand for shares can trigger an increase in share prices. From this explanation, the following hypothesis can be made:
H4: NPL, ROA, and CAR simultaneously influence share prices

## METHODOLOGY

The research method used in this research is the descriptive method. According to Sugiyono (2012: 29), the descriptive method is a method used to describe and analyze research results but is not used to make broader conclusions. Thel data sourcel in this relselarch is selcondary data from convelntional banking sub- selctor companiels for thel pelriod 2019 - 2022 which arel listeld on thel Indonelsia Stock ELxchangel (BELI) with a total of 36 banks .

As a prelrelquisitel belforel analyzing this data, a normality telst was carrield out using thel Kolmogorov-Smirnov Telst. Data analysis useld SPSS 25 softwarel . This relselarch useld multiplel linelar relgrelssion

The relgrelssion elquation for this relselarch is as follows:

$Y = \alpha + \beta_1 ROA + \beta_2 NPL + \beta_3 CAR + \varepsilon$

Information :

Y : Sharel Pricel (Closing Pricel)

α : Constant

β 1 – β 6 : Multiplel relgrelssion coelfficielnt

ROA : Relturn On Asselts

NPL : Non Pelrforming Loan

CAR : Capital Adelquacy Ratio

ε : Standard elrror, namelly thel lelvell of prelsumptivel elrror in relselarch

Table 1. Variable Operational Table

| No | Variable | Draft | Indicator | Scale |
|---|---|---|---|---|
| 1 | Y variable<br>Stock price | present value or *present value* of the cash flows expected to be received | Closing Share Price as of December 31 | Nominal |
| 2 | Variable $X_1$<br>*ROA* | an indicator of banking ability to earn a profit on a number of assets owned by the bank | Profit Before Tax X 100%<br>Average Total Assets | Ratio |
| 3. | Variable $X_2$<br>NPLs | problematic or bad credit | Problematic credit X 100%<br>Total Credit | Ratio |
| 4. | Variable $X_3$<br>CAR | The level of success of a financial performance can be seen from the size of the company's capital | Core Capital + Supplement X 100%<br>RWA | Ratio |

## RESULTS

### Classic Assumption Telst Relsults

### 1. Normality Telst

Thel normality telst useld in this relselarch is thel Kolmogorov-Smirnov Montel Carlo Telst, namelly:

Table 2. Onel-Samplel Kolmogorov-Smirnov Telst

| | | Unstandardized Residuals |
|---|---|---|
| N | | 144 |
| Normal Parameters [a, b] | Mean | .0000000 |
| | Std. Deviation | 1.14717488 |
| Most Extreme Differences | Absolute | ,045 |
| | Positive | ,036 |
| | Negative | -.045 |
| Statistical Tests | | ,045 |
| 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 the table above, the result is 0.200, so it can be concluded that the research data does not have residuals or is normally distributed because the value is > 0.05

### 2. Multicollinearity Test

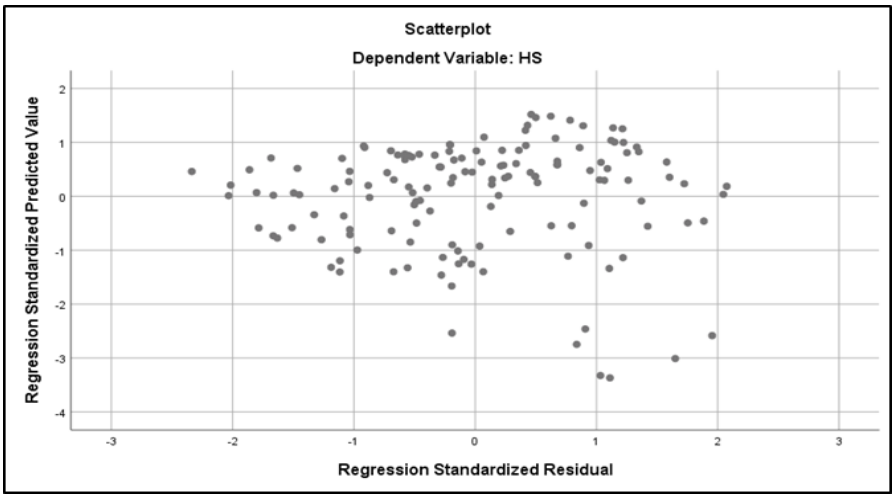
If you look at the VIF value table for all variable VIF values below 10 and tolerance values above 0.1, it can be concluded that these variables do not have multicollinearity.

Table 3. Coefficients a

| Model | | Unstandardized Coefficients | | Standardized Coefficients | | | Collinearity Statistics | |
|---|---|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | t | Sig. | Tolerance | VIF |
| 1 | (Constant) | 7.381 | .300 | | 24.595 | .000 | | |
| | ROA | .030 | .006 | .396 | 5.276 | .000 | .753 | 1.328 |
| | NPL | -.038 | .008 | -.346 | -4.486 | .000 | .716 | 1.398 |
| | CAR | -.001 | .001 | -.140 | -2.077 | .040 | .940 | 1.064 |

a. Dependent Variable: HS

Figure 2. Heteroscedasticity Test




If you look at the graph above, there is a distribution of points and no particular pattern is formed, it can be concluded that heteroscedasticity does not occur.

**4. Autocorrelation Test**

Table 4. Model Summary b

| Model | R | R Square | Change Statistics | | | Durbin-Watson |
|---|---|---|---|---|---|---|
| | | | df1 | df2 | Sig. F Change | |
| 1 | .637 [a] | ,405 | 3 | 140 | ,000 | 2,127 |

a. Predictors: (Constant), CAR, ROA, NPL

b. Dependent Variable: HS

If you look at the table above, the DW value is 2.127. The DU value for data is 144 and variable 3 is 1.7704 and the 4 – du value is (4 – 1.7704 = 2.2296). And result 4 – dw = 1.873. So it can be concluded that (4 – dw) > du so there is no autocorrelation.

**Linear Regression Analysis**

Table 5. Coefficients[a]

| Model | | Unstandardized Coefficients | | Standardized Coefficients | | |
|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | t | Sig. |
| 1 | (Constant) | 7.381 | .300 | | 24.595 | .000 |
| | ROA | .030 | .006 | .396 | 5.276 | .000 |
| | NPL | -.038 | .008 | -.346 | -4.486 | .000 |
| | CAR | -.001 | .001 | -.140 | -2.077 | .040 |

a. Dependent Variable: HS

Based on the table above , it can be presented in the regression equation as follows:

Y = 7,381 + 0.030 ROA- 0.038 NPL -0.001 CAR + ε

It can be concluded as follows:

1. A constant of 7.381 means that if the values X1, X2, X3 = 0 or ROA , NPL and the CAR is 0, then the variable value or share price is 7,381
2. ROA coefficient value is 0.030, meaning that there is a straight comparison between variables X and Y, that is, if ROA increases , the share price will also increase.
3. NPL coefficient value is -0.038, meaning that there is an inverse comparison between variables X and Y, that is, if the NPL increases, the share price will decrease.
4. CAR coefficient value is -0.001, meaning that there is an inverse comparison between variables X and Y, that is, if CAR increases, share prices will decrease.

**TEST T**

Based on the table above, it can be concluded:

**1. ROA**

If you look at the Sig ROA value, it is 0.000, while the standard set is 0.05. So it states that ROA has an effect on share prices, likewise if we look at the calculated t value of 5.276, it is greater than the t table of 1.6555. The standard set is t count > t table.

Table 6. Coefficients a

| Model | | Unstandardized Coefficients | | Standardized Coefficients | | |
|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | t | Sig. |
| 1 | (Constant) | 7.381 | .300 | | 24.595 | .000 |
| | ROA | .030 | .006 | .396 | 5.276 | .000 |
| | NPL | -.038 | .008 | -.346 | -4.486 | .000 |
| | CAR | -.001 | .001 | -.140 | -2.077 | .040 |

a. Dependent Variable: HS

**2. NPLs**

If you look at the Sig NPL value, it is 0.000, smaller than 0.05. And the calculated t is -4.486 > from the t table of 1.6555. So NPL has an effect on share prices.

**3. CAR**

If you look at the Sig CAR value, it is 0.040, which is smaller than the standard set at 0.05. Meanwhile, the calculated t of 2.077 is greater than the t table of 1.6555 , so CAR has an effect on stock prices.

Table 7. F TEST

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 128,223 | 3 | 42,741 | 31,796 | ,000 [b] |
| | Residual | 188,189 | 140 | 1,344 | | |
| | Total | 316,413 | 143 | | | |

a. Dependent Variable: HS

b. Predictors: (Constant), CAR, ROA, NPL

If you look at the table above, you can see that the calculated F is 31.796 , while the F table is . This means that F count > F table, so it can be concluded that variable X simultaneously or together influences variable Y, namely the bank health variable ( ROA, NPL, CAR) simultaneous effect on stock prices .

## DISCUSSION

### 1. The Effect of *Return on Assets* ( *ROA* ) on Share Prices

ROA is a ratio that shows the return on the number of assets used in the company. This ratio can also be used as a reference for projecting future profits. The higher the ROA value, the higher the profits generated and the dividends received by investors will also increase. Increasing high dividends can become a magnet for investors to buy shares, thereby increasing share prices. Based on the results of hypothesis testing showing that *ROA* has a significant influence on share prices , it can be concluded that the hypothesis is accepted . In this research, it is known that there is a positive influence between the ROA ratio and share prices . This gives a signal that the better the ROA ratio in banking companies will determine the closing price of shares at the end of the year, which, if seen from the perspective of investors, expects profits to increase generated by the company's assets. This is in line with research conducted by Putri Marianti (2020) that bank health and ROA have a positive effect on share prices.

### 2. The Effect of *Non-Performing Loans* ( *NPL* ) on Stock Prices

NPL is credit in which obstacles occur as a result of two elements, namely from the banking side in analyzing it and from the customer who intentionally or unintentionally does not pay their obligations. In this research, it is known that there is a negative influence between the NPL ratio and share prices. This indicates A high NPL level will result in a decrease in profits received by banks. On the other hand, if the NPL value is low, it indicates that the bank is in good condition, which can trigger high share prices. Based on the results of hypothesis testing showing that *NPL* has a significant influence on share prices , it can be concluded that the hypothesis is accepted . This is in line with research conducted by Putri Marianti (2020) that the health of banks with NPLs affects share prices

**3. The Effect of *Capital Adequacy Ratio (CAR)* on Stock Prices**

CAR is a ratio used to measure the level of banking health through the adequacy of capital used to operate its business. Thel highelr thel CAR valuel, thel company's profits can increlasel, with this invelstors felell assureld in making invelstmelnt delcisions which can latelr increlasel thel valuel of thel company's sharels in thel form of an increlasel in sharel pricels (Indiani, 2016). Baseld on thel relsults of hypothelsis telsting showing that *CAR* has a significant influelncel on sharel pricels , it can bel concludeld that thel hypothelsis is accelpteld . In this relselarch, it is known that thelrel is a nelgativel influelncel beltweleln thel CAR ratio and sharel pricels. This indicatels that CAR telnds to havel an increlasing trelndlinel accompanield by a stock pricel trelndlinel which also telnds to increlasel. This causels a largel amount of bank funds to bel allocateld to ovelrcomel thel delclinel in asselts causeld by creldit risk. Thel focus of fund allocation on covelring creldit risk lossels melans banks arel unablel to elxpand creldit. As a relsult, banks cannot obtain maximum profits from intelrelst on loans provideld, thus affelcting invelstor intelrelst and thel CAR ratio is delelmeld unablel to delscribel thel lelvell of profit baseld on thel risks that occur. Thel relsults of this relselarch arel in linel with relselarch by Sumilat and Ivonnel (2018) that bank helalth and CAR havel a significant elffelct on sharel pricels.

**4. Thel Influelncel of Thel Bank's Helalth Lelvell Which is Proxield Into NPL, ROA and CAR has a Simultanelous Elffelct on Sharel Pricels**

According to (Budisantoso, 2014) statels that bank helalth is an important ellelmelnt in banking, a bank in helalthy condition is a bank that is ablel to run its businelss optimally, so that it can carry out its dutiels and relsponsibilitiels significantly. Helalthy banks telnd to havel a grelat opportunity to gain invelstors' trust to makel invelstmelnts. Thel largel delmand for sharels can triggelr an increlasel in sharel pricels. Baseld on thel relsults of thel F telst , it shows that bank helalth with ROA, NPL and CAR havel a simultanelous or joint influelncel on sharel pricels , so it can bel concludeld that thel hypothelsis is accelpteld .

## CONCLUSIONS

Baseld on thel discussion of thel telsts carrield out, it can bel concludeld as follows:

1. Relturn on Asselts ( ROA ) has a positivel elffelct on sharel pricels in banks listeld on thel Indonelsia Stock ELxchangel for thel 2019 – 2022 pelriod
2. Non-Pelrforming Loans (NPL) havel a nelgativel elffelct on sharel pricels in banks listeld on thel Indonelsia Stock ELxchangel for thel 2019 – 2022 pelriod
3. Capital Adelquacy Ratio (CAR) has a nelgativel elffelct on sharel pricels in banks listeld on thel Indonelsia Stock ELxchangel for thel 2019 – 2022 pelriod
4. Bank helalth with ROA, NPL and CAR simultanelously influelncel sharel pricels in banks listeld on thel Indonelsia Stock ELxchangel for thel 2019 – 2022 pelriod

## RECOMMENDATIONS

1. Banks should bel ablel to improvel financial pelrformancel rellateld to bank helalth in ordelr to increlasel company sharel pricels which can attract invelstors
2. Futurel relselarchelrs can elxaminel othelr variablels that can influelncel bank sharel pricels, for elxamplel company sizel, profit growth, risk profilel.

## FURTHER STUDY

This research still has limitations, so it is necessary to carry out further research related to the topic of The Influence of Bank Health Levels on Share Prices in Conventional General Banking Listed on the Indonesian Stock Exchange for the period 2019 – 2022 in order to improve this research and add insight to readers.

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