

Analysis of The Effect of Bank Performance and Sensitivity on Share Prices in Banking Sector Companies Listed On The Indonesia Stock Exchange (BEI) For The Period 2019-2023

Raudatul Jannah¹ and H.Burhanudin¹

¹Department of Management, Faculty of Economics and Business, University of Mataram, Indonesia

*Corresponding author. Email: raudahj67@gmail.com

ABSTRACT

This study aims to test and analyze the effect of bank performance using the RGEC method on stock prices in banking sector companies for the 2019-2023 period. This type of research is associative research with data collection methods, namely survey samples. The population in this study were 47 banking companies listed on the Indonesia Stock Exchange during 2019-2023 with a sampling method, namely purposive sampling, based on the criteria set, 15 sample companies were obtained. The data analysis method used is multiple linear regression. The results of this study indicate that Risk Profile with the proxy Non Performing Loan (NPL), has a negative and significant effect on stock prices, Good Corporate Governance (GCG) with the proxy self-assessment has a positive and insignificant effect on stock prices, Earning with the proxy Return On Assets (ROA) has a negative and significant effect on stock prices, Capital with the proxy Capital Adequacy Ratio (CAR) has a positive and insignificant effect on stock prices, Sensitivity has a positive and insignificant effect on stock prices.

Keywords: *Risk Profile, Good Corporate Governance, Profitability, Capitalization, Sensitivity, Share Price*

1. INTRODUCTION

The capital market is a meeting place between parties who have funds and parties who need funds. Those who have funds invest their funds in the hope of benefiting from the increase in the price of the shares concerned, while those who need funds hope that the funds obtained will be invested in real investments in order to grow large. The Indonesia Stock Exchange (IDX) functions as an institution that organizes the capital market, providing opportunities for companies to offer shares to the public to finance investment or business development.

In the capital market, the most important thing that investors should know is the share price. Shares are one of the most popular financial instruments for people or investors to invest in the capital market. Investing with stocks is an effective way for long-term investment. Investing in stocks means that investors have ownership rights over the company. Before buying shares, investors will usually take into account the share price offered by the capital market.

The banking crisis occurred in 1997-1998 which was characterized by the decline in the rupiah exchange rate against the US dollar, this crisis led to the revocation of the business of sixteen private banks and the takeover of bank management because the liquidity assistance of Bank Indonesia (BI) had exceeded 200% by the Minister of Finance. Based on data from Indonesian banking statistics sourced from OJK, the financial performance of commercial banks deteriorated and decreased in 2008. The CAR ratio decreased by 2.54%. ROA ratio which is a measure of profit earned by the company decreased by 0.45%, besides that the banking performance is also increasingly inefficient where the BOPO ratio has increased quite high by 4.54%.

In an effort to deal with the banking crisis, every bank is required to assess the health level of the bank. The results of the assessment of the health level of the bank affect people's decisions to save their funds, and also investors to invest their funds. Bank performance or health can be assessed by several assessment indicators. Bank health assessment that has been using the CAMEL method, which stands for the assessment factors Capital, Asset quality, Management, Earnings, and Liquidity. This method is a bank health assessment method based on BI regulation no. 6/10/PBI/2004 issued on April 12, 2004. However, along with the development of business and the complexity of the bank's business makes the use of the CAMEL method less effective in assessing bank performance because the CAMEL method does

not provide a conclusion that leads to one assessment, between factors provide different assessments Bayu Aji Permana (2012) in (Weli, 2018) . For this reason, on October 25, 2011 Bank Indonesia issued a new regulation regarding the assessment of the health level of banks using a risk approach (Risk-Based Bank Rating).

RGEC is a bank health assessment method that refers to Bank Indonesia regulation no. 13/1/PBI/2011 concerning health assessment of commercial banks. The RGEC method is a bank assessment procedure that replaces the previous bank assessment procedure, namely CAMEL. The RGEC method has several ratios consisting of Risk Profile, Good Corporate Governance, Earnings, and Capital.

The investment world is known for the strong relationship between risk and return. An investor must observe the expected level of profit and the risk obtained. Beta describes the risk value of a stock (Azhari et al., 2020).

Sensitivity is a statistical measure used in financial analysis to measure the level of volatility or relative risk of a stock compared to the overall market. Sensitivity is used to estimate how sensitive the price of a stock is to market changes.

2. RESEARCH METHODS

In this study using multiple linear regression data analysis techniques and using analytical tools, namely Eviews 12 software. In this study there are five independent variables, namely Non Performing Loan, Good Corporate Governance, Return On Assets, Capital Adequacy Ratio and Beta, so researchers used multiple linear regression data analysis techniques.

3. RESULTS AND DISCUSSIONS

3.1. Results

3.1.1. Outer Model (Measurement Model)

Normality test is a test conducted to assess whether the distribution of data in a group of data or variables is normally distributed or not. Data is normally distributed if the probability value > 0.05 . the probability value is 0.675955. The probability value is greater than 0.05, namely $(0.675955 > 0.05)$ so it can be concluded that the residuals are normally distributed.

3.1.1.1 Chow Test

The chow test is a test to determine what model to choose between Common Effect Models or Fixed Effect Models. The chow test hypothesis is:

H0 : Common Effect Model (> 0.05)

H1 : Fixed Effect Model (< 0.05)

Effects Test	Statistic	d.f.	Prob.
Cross-section F	11.793681	(14,54)	0.0000
Cross-section Chi-square	103.644164	14	0.0000

Based on table shows that the probability value (cross section chi-square) is smaller than 0.05, namely $0.0000 < 0.05$ so it can be concluded that the chow test results are to reject H0 and accept H1. This means that the better model to use in this study is the Fixed Effect Model (FEM).

3.1.1.2 Hausman Test

Hausman test is a statistical test as a basis for consideration in choosing the best model between fixed effect or random effect. This test is carried out with the following hypothesis:

H0 : Random Effect Model (> 0.05)

H1 : Fixed Effect Model (< 0.05)

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	19.542446	5	0.0015

Based on table shows that the probability value (coss section random) is smaller than 0.05, namely $0.0015 < 0.05$ so it can be concluded that the Hausman test results are striking H0 and accepting H1. This means that the better model to use in this study is the Fixed Effect Model (FEM).

3.1.1.3 Lagrange Multiplier Test

The Lagrange Multiplier test is a test conducted to select the model used between common effect and random effect whose multiplier is based on Breusch-Pagan probability. This test is carried out with the following hypothesis:

H0 : Common Effect Model (> 0.05)

H1 : Random Effect Model (< 0.05)

	Test Hypothesis		
	Cross-section	Time	Both
Breusch-Pagan	32.79847 (0.0000)	0.537446 (0.4635)	33.33591 (0.0000)
Honda	5.726995 (0.0000)	-0.733107 (0.7683)	3.531212 (0.0002)
King-Wu	5.726995 (0.0000)	-0.733107 (0.7683)	2.053192 (0.0200)
Standardized Honda	6.748749 (0.0000)	-0.488685 (0.6875)	0.850582 (0.1975)
Standardized King-Wu	6.748749 (0.0000)	-0.488685 (0.6875)	-0.416160 (0.6614)
Gourieroux, et al.	--	--	32.79847 (0.0000)

Based on table, it shows that the probability value (coss section random) is greater than 0.05, namely $0.0000 > 0.05$ so it can be concluded that the Lagrange Multiplier test results are to reject H0 and accept H1. This means that the better model to use in this study is the Random Effect Model (REM).

Based on the results of the chow test, hausman test and lagrange multiplier test, it can be concluded that the panel data regression model used is the Fixed Effect Model (FAM).

3.1.2. Inner Model (Structural Model)

Table 3. Fixed Effect Model Panel Data Regression Results)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	6.076399	1.274137	4.769031	0.0000
NPL	-0.201360	0.047343	-4.253180	0.0001
GCG	0.961053	0.626815	1.533234	0.1311
ROA	-0.084684	0.023614	-3.586114	0.0007
CAR	0.003255	0.001678	1.940175	0.0576
BS	0.259566	0.186077	1.394944	0.1687

Based on Table 3. the panel data regression model equation in this study is as follows:

$$HS = 12.021943901 - 0.393748403672 \text{ NPL} - 1.44404887054 \text{ GCG} - 0.0971695218669 \text{ ROA} + 0.00172493390246 \text{ CAR} - 0.201570802372 \text{ Beta}$$

Table 4. F-statistic Test

F-statistic	20.39944
Prob(F-statistic)	0.000000

Based on the table data, the Prob (F-statistic) value is 0.000000, this result is smaller than 0.05. Thus it can be concluded that the regression model is declared feasible to use.

Table 5. Coefficient of Determination (R²)

R-Squared	0.877714
Adjusted R-Squared	0.834688

Based on the table data, it can be seen that the coefficient of determination (R^2) in the Adjusted R-squared section is 0.834688, which shows that Non Performing Loan, Good Corporate Governance, Return On Assets, Capital Adequacy Ratio and Beta Shares have an effect of 0.8346 (83.46 percent) on stock prices, the remaining 87.77 percent is influenced by other variables or factors outside the study.

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Based On the test results in this study show that NPL has a negative and significant effect.

Based on the test results in this study that GCG has a positive and insignificant effect.

Based on the test results in this study that ROA has a negative and significant effect on stock prices.

Based on the test results in this study that CAR has a positive and insignificant effect.

Based on the test results in this study that beta stocks have a positive and insignificant effect.

3.2. Discussions

3.2.1. The Effect of Non-Performing Loan (NPL) on Stock Price

Based on the test results through the t test, the regression coefficient for the Non Performing Loan variable is - 0.201360 with a significant value of 0.0001, where the significant value meets the significant requirement of 0.05 because the value is less than 0.05 ($0.0001 < 0.05$). So it can be concluded that Non Performing Loan has a negative and significant effect on stock prices. Thus, the first hypothesis is accepted. The test results show that NPL has an unidirectional or negative relationship to the Stock Price. This negative result indicates that when NPL increases, the Stock Price of banking companies listed on the Indonesia Stock Exchange will decrease. This is in accordance with Bank Indonesia regulation No. 13/1 / PBI of 2011 that if NPLs increase, banking companies are increasingly unhealthy. The effect of NPL is significant, meaning that a high level of NPL has a significant effect on reducing the share price of a bank. Based on the test results in this study that NPL has a negative and significant effect.

3.2.2. The Effect of Good Corporate Governance (GCG) on Share Price

Based on the test results through the t test, the regression coefficient for the Good Corporate Governance variable is 0.961053 with a significant value of 0.1311, where the significant value does not meet the significant requirement of 0.05 because the value is greater than 0.05 ($0.1311 > 0.05$). So it can be concluded that Good Corporate Governance has a positive and insignificant effect on stock prices. Thus, the second hypothesis is accepted.

Good Corporate Governance in its measurement uses the Self-Assessment method. Self assessment is a self-assessment carried out on each bank with the approval of the board of directors by referring to the composite rating set out in the Bank Indonesia circular letter.

GCG has a positive effect, meaning that there is a positive relationship between GCG and stock price, an increase in GCG will increase stock prices. The effect of GCG on stock price is significant, meaning that changes in GCG have a significant impact on stock prices. Based on the test results in this study that GCG has a positive and insignificant effect.

3.2.3 The Effect of Return On Assets (ROA) on Stock Price

Based on the test results through the t test, the regression coefficient for the Return On Assets variable is -0.084684 with a significant value of 0.0007, where the significant value meets the significant requirement of 0.05 because the value is smaller than 0.05 ($0.0007 < 0.05$). So it can be concluded that Return On Assets has a negative and significant effect on stock prices. Thus, the third hypothesis is rejected.

Return on Assets (ROA) is used to measure the company's capability in generating profits using the company's assets, where a company that has a high ROA percentage symbolizes that the company can generate high profits. ROA has a negative effect on stock prices, meaning that an increase in ROA will reduce stock prices. The effect of ROA on stock price is significant, meaning that changes in ROA have a significant impact on stock prices. Based on the test results in this study that ROA has a negative and significant effect on stock prices.

3.2.4 The Effect of Capital Adequacy Ratio (CAR) on Stock Price

Based on the results of the t value test, the regression coefficient for the Capital Adequacy Ratio variable is 0.003255 with a significant value of 0.0576, where the significant value does not meet the significance requirement of 0.05 because the value is greater than 0.05 ($0.0576 > 0.05$). So it can be concluded that the Capital Adequacy Ratio has a positive and insignificant effect on stock prices. Thus, this fourth hypothesis is accepted.

Based on Bank Indonesia Circular Letter No.13/1/PBI/2011, the minimum CAR value is 8% and is said to be very good if it has a CAR value of 12%. This shows that the higher the CAR value, it can indicate that the financial performance of banking companies will be healthier, so that it can attract investors to invest their funds so as to increase the company's share price. However, the relationship does not fully illustrate the unidirectional or positive relationship between CAR and Stock Price, because the greater the CAR value, the greater the risk that will be faced by the company. In the test results, it is found that CAR has a unidirectional or positive relationship to Stock Price. This positive result shows that when the higher the CAR value, the higher the share price, this means that investors believe that the bank or company has strong and stable financial capabilities, so that the share price increases. The effect of CAR is not significant, meaning that changes in Stock Price are not fully influenced by changes in CAR. This is because CAR is used by companies to accommodate the risk of losses that may be faced by banking companies, so that the company will be able to absorb losses that will arise so that it is less likely to experience liquidation. Based on the test results in this study that CAR has a positive and insignificant effect.

3.2.5 Effect of Sensitivity on Stock Price

Based on the results of testing the t value, the regression coefficient is 354.4093 with a significant value of 0.7660, where the significant value does not meet the significant requirement of 0.05 because the value is greater than 0.05 ($0.7660 > 0.05$). So it can be concluded that sensitivity with beta proxy has a positive and insignificant effect on stock prices. Thus, this fifth hypothesis is rejected.

Beta is a measure of the volatility or risk of a stock compared to the overall stock market. Beta measures how much the stock price changes compared to the stock market changes. Positive results indicate that changes in stock prices have a positive relationship with changes in the overall stock market. The insignificant effect of beta stocks means that changes in beta stocks do not significantly affect changes in stock prices. Based on the test results in this study that beta stocks have a positive and insignificant effect.

4. CONCLUSION

Based on the results of the research and discussion, the following conclusions are obtained:

- Non Performing Loan (NPL) has a negative and significant effect on Stock Prices in the Banking sector listed on the Indonesia Stock Exchange for the 2019-2023 period. This is because Non Performing Loan (NPL) has more influence on the interest income of banking companies, so it is not the main benchmark for investors in making investment decisions.
- Good Corporate Governance (GCG) has a positive and insignificant effect on Stock Prices in the Banking sector listed on the Indonesia Stock Exchange for the 2019-2023 period. This happens because the higher the GCG composite value of a banking company is an indication that the management of the company's management is not healthy, so it will be the main benchmark for investors in making investment decisions.
- Return On Assets (ROA) has a negative and significant effect on Stock Prices in the Banking sector listed on the Indonesia Stock Exchange for the 2019-2023 period. Companies with negative ROA values indicate that the company is experiencing losses from its total assets. This means that the assets used by the company are unable to generate profits, or even cause losses.
- Capital Adequacy Ratio (CAR) has a positive and insignificant effect on Stock Prices in the Banking sector listed on the Indonesia Stock Exchange for the 2019-2023 period. This is because if a bank has too much capital adequacy, it will increase the risks it faces, so it will not attract investors to invest their funds in the company.
- Sensitivity has a positive and insignificant effect on Share Price in the Banking sector listed on the Indonesia Stock Exchange for the 2019-2023 period. The company has a higher risk, but investors see it as an opportunity to get greater returns.

REFERENCES

- Anam, H., Sl, H., & Anhar, B. (2022). Bank Health Level with RGEC Method. *Journal of GeoEconomics*,13 (1), 116-127. <https://doi.org/10.36277/geoekonomi.v13i1.150>
- Andikaningtyas, M. P. (2019). *The Influence of Internal and External Factors on Credit Risk of Conventional Commercial Banks Listed on the Indonesia Stock Exchange*.
- Arifah Tara, N. A., Wardani, L., & Jamal, udin. (2023). Analysis of Bank Health Level with RGEC Method to Stock Price. *Journal.Unram.Ac.Id, vol.1.No 3 September 2023*.
- Asrori, E. (2017). *The Effect of RGEC Components on Banking Stock Prices on the Indonesia Stock Exchange (Empirical Study of Go Public Banking Sector Companies Listed on the IDX in 2014 - 2015)*.
- Atiningsih, S., & Royham, A. N. (2012). *The Effect of Bank Health Assessment Indicators with the RGEC Method and Asset Quality on the Share Price of PEErbankans Listed on the IDX for the 2012-2016 Period*. 12.
- Azhari, F., Suharti, T., & Nurhayati, I. (2020). The Effect of Beta on Stock Returns in Trading, Service and Investment Sector Companies. *Manager: Journal of Management Science*,3 (4), 509. <https://doi.org/10.32832/manager.v3i4.3925>
- Budisantoso, T., & Nuritomo. (2017). *Banks and Other Financial Institutions*.
- Effendy, M., & Pamungkas, A. D. (2018). Analysis of Daily Stock Beta on Daily Stock Returns A Case Study of LQ45 Stocks in the February - July 2015 Period. *Scientific Journal of Unity Management*,6 (1), 33-42. <https://doi.org/10.37641/jimkes.v6i1.34>
- Ekawarti, Y. (2018). Analysis of the Effect of Beta on Banking Stock Prices (Study on Banking Sector Companies on the Indonesia Stock Exchange for the period 2010-2013). *Current Scientific Journal of Global Economics*,8 (1), 30-36. <https://doi.org/10.36982/jiegm.v8i1.296>
- Fauzan Dianta, A., & Aisjah (2019). *Analysis of Bank Health Level Using the RGEC Method (RISK PROFILE, GOOD CORPORATE GOVERNANCE, EARNING, CAPITAL) (Study at PT. BANK RAKYAT INDONESIA (PERSERO), Tbk 2013-2015 Period)*.
- Fitriano, Y., & Sofyan, R. M. (2019). Analysis of Bank Health Level with the Application of the RGEC Method (RISK PROFILE, GOOD CORPORATE GOVERNANCE, EARNINGS AND CAPITAL) at PT.BANK BENGKULU. *Managament Insight: Scientific Journal of Management*,13 (1), 73-91. <https://doi.org/10.33369/insight.14.1.73-91>
- Ghozali. (2018). *Quantitative & Qualitative*.
- cashmere, dr. (2015). *Banking management*.
- Lampung, U. (2018). Analysis of Stock Trading Performance and Its Effect on the Stock Price of the Property Industry Sector Listed on the Indonesia Stock Exchange BEI. *Feb.Unila.Ac.Id*, 13.

- Limanto, N. S., & Yunita, E. A. (2023). Analysis of the Health Level of Conventional Commercial Banks with the RGEC Method. *JABKO: Journal of Contemporary Accounting and Business*, 4 (1), 46-73. <https://doi.org/10.24905/jabko.v4i1.52>
- Muhyiddin. (2019). *Definition and Concept of Risk*.
- Multismart, S., & Rambe, J. P. (2021). *Analysis of Beta Shares in Measuring Systematic Risk in the Manufacturing Sector on the Indonesia Stock Exchange for the 2015-2019 Period*.
- Naftali, S. C., Saerang, I. S., & Tulung, J. E. (2018). *The Influence Of Rate Bank Health To Stock Price Banking Listed On Indonesia Stock Exchange Period 2012-2016*.
- Nuraeni. (2021). *Data Analysis Using Eviews*.
- Oktavia, I. (2018). *Factors that affect stock prices*.
- Pandia, F. (2012). *Fund Management and Bank Health*.
- Pangestari, E., Hamdani, M., & Kristanto, R. S. (2019). *The Effect of Bank Health Level Based on the RGEC Method on Stock Returns in Banking Companies Go Public on the Indonesia Stock Exchange (BEI) in 2011-2014*.
- Politeknik Negeri Bali, Prabawati, N. P. S., Pradnyani, N. D. A., Politeknik Negeri Bali, Suciwati, D. P., & Politeknik Negeri Bali. (2021). The Effect of RGEC (Risk Profile, Good Corporate Governance, Earnings, and Capital) on Firm Value (Case Study of Banking Companies on the IDX 2016-2018). *Journal of Business and Entrepreneurship*, 17 (1), 78-85. <https://doi.org/10.31940/jbk.v17i1.2257>
- Pratama, R., Kusnandar, D., & Rizki, S. W. (2018). *Spatial Panel Econometrics Approach for Modeling Gross Regional Domestic Product in West Kalimantan*.
- Rachmawati, T. (2009). The Effect of Return On Assets (ROA), Return On Equity (ROE), Net Interest Margin (NIM) and Operating Cost-Operating Income Ratio (BOPO), on Bank Stock Prices on the Indonesia Stock Exchange. *DiE: Journal of Economics and Management*, 6 (1). <https://doi.org/10.30996/die.v6i1.91>
- Rusnaini, S., Hamirul, H., & M, A. (2019). NON-PERFORMING LOANS (NPL) AND RETURN ON ASSETS (ROA) IN THE MUARA BUNGO ARCHIPELAGO COOPERATIVE. *Scientific Journal of Management, Economics, & Accounting (MEA)*, 3 (1), 1-18. <https://doi.org/10.31955/mea.vol3.iss1.pp1-18>
- Sambuaga, C. M., Tulung, J. E., & Untu, V. N. (2023a). The Effect of Bank Health Level on Go Public Banking Stock Prices Listed on the Indonesia Stock Exchange for the 2014-2019 Period. *EMBA Journal: Journal of Economic Research, Management, Business and Accounting*, 11 (3), 1281-1292. <https://doi.org/10.35794/emba.v11i3.50814>
- Sanjaya, A. S., & Solihin, D. (2020). *The Effect of Beta Shares and SBI Interest Rates on LQ 45 Stock Returns for the 2019-2020 Period*.
- Sita Prabawati, N. P., Abdi Pradnyani, N. D., & Putu Suciwati, D. (2021). *The Effect of RGEC (Risk Profile, Good Corporate Governance, Earnings, and Capital) on Firm Value (Case Study of Banking Companies on the IDX 2016-2018)*. 17 Issue 1, 2021.
- Sugiyono, Prof. D. (2017). *Quantitative Qualitative and R&D Research Methods*. ALFABETA, CV.
- Sukartaatmadja, I., Khim, S., & Lestari, M. N. (2023). Factors Affecting the Company's Stock Price: Case Study on the Plantation Sub-Sector Listed on the Indonesia Stock Exchange for the 2016-2020 Period. *Scientific Journal of Unity Management*, 11 (1), 21-40. <https://doi.org/10.37641/jimkes.v11i1.1627>
- Susilawati, D. (2024). *Relationship between Current Ratio and Earnings Per Share on Beta Shares in Banking Companies Listed on the IDX 2018-2022*. 4.
- Weli, H. (2018). *Analysis of the RGEC Method to Assess the Health Level of Banks in Conventional BPRs in Riau Islands Province*.