



Determining the Stock Price of Bank KBMI 3 in Indonesia: A Financial Ratio Analysis Using a Panel Data Approach for the Period 2017–2024

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ABSTRACT

This study aims to analyze the influence of financial ratios on the stock price of KBMI 3 banks in Indonesia for the period 2017–2024. The variables used include: *Return on Equity (ROE)*, *Capital Adequacy Ratio (CAR)*, *Price to Book Value (PBV)*, and *Non-Performing Loan (NPL)*, with a Covid-19 dummy control variable. The study used a quantitative approach with quarterly panel data on nine banks listed on the Indonesia Stock Exchange, and was analyzed using a fixed effects model with robust standard errors. The results show that CAR and PBV significantly influence stock prices, while ROE and NPL are insignificant. Simultaneously, all variables have a significant effect. These findings suggest that investors respond more to capital strength and valuation than to profitability and credit risk.

INTRODUCTION

The capital market plays a strategic role in the economy as a means of raising funds and efficiently allocating resources. In Indonesia, the banking sector is a major contributor to market capitalization and the movement of the Jakarta Composite Index (JCI). with a share of 32.9% of the total market capitalization, so that banking stock prices are an important indicator of financial market conditions (Indonesia Stock Exchange, 2025). Stock prices reflect investors' perceptions of a company's performance, risks, and prospects (Dahlquist & Knight, 2022). In the national banking structure, the Financial Services Authority (OJK) through POJK No. 12/POJK.03/2021 groups banks into four categories based on core capital, namely KBMI 1 to KBMI 4 (Financial Services Authority, 2021). This research focuses on KBMI 3 Bank, a group of medium-sized banks that are relatively more sensitive to changes in economic conditions and fundamental performance compared to large banks, making them interesting to study.

The 2017–2024 period saw significant dynamics in the banking stock market due to global pressures such as the trade war and the Covid-19 pandemic. The pandemic caused a global economic contraction and increased financial market volatility, resulting in declining stock prices and increased credit risk in the banking sector (Beirne et al., 2021; ElFayoumi & Hengge, 2021). Fundamentally, financial ratios such as Return on Equity (ROE), Capital Adequacy Ratio (CAR), Price to Book Value (PBV), and Non-Performing Loans (NPL) are key indicators in assessing bank performance and health. Based on Signaling Theory, financial reports serve as signals used by investors to reduce information asymmetry and shape investment decisions (Connelly et al., 2011). Therefore, changes in financial ratios can influence market perception and be reflected in stock price movements.

Several previous studies have shown that the influence of financial ratios on banking stock prices is still variable. For the Return on Equity (ROE) variable, some studies found a positive effect on stock prices (Almustafa, 2025; Arifin et al., 2024; Astawa & Utama, 2025; Sharma et al., 2023). While other studies show negative or insignificant results (Siagian et al., 2020; Suryadi & Dana, 2023; Widayakto et al., 2023; Zuhroh & Veronika, 2021). Inconsistency is also seen in the Capital Adequacy Ratio (CAR), where several studies found a significant positive effect (Astawa & Utama, 2025; Purwati & Mareta, 2024; Sharma et al., 2023). While other studies show a significant negative influence (Alamsyah et al., 2023; Rossela et al., 2024; Sandora & Saleh, 2023).

In contrast to these two variables, Price to Book Value (PBV) tends to show a more consistent positive influence on stock prices (Arifin et al., 2024; Muktiadji & Pamungkas, 2022; Rossela et al., 2024; Sandora & Saleh, 2023; Siagian et al., 2020; Suryadi & Dana, 2023). Meanwhile, Non-Performing Loans (NPL) generally have a negative impact (Alamsyah et al., 2023; Aryanti et al., 2022), although there is research that shows insignificant results (Sandora & Saleh, 2023). Based on this background, this study aims to analyze the influence of financial ratios consisting of ROE, CAR, PBV, and NPL on the stock price of KBMI 3 banks in Indonesia using a panel data regression approach. This study is

expected to provide empirical contributions in enriching the financial literature and serve as a reference for investors and policymakers in understanding the factors that influence banking stock prices.

LITERATURE REVIEW

Signaling Theory

Signaling Theory explains that companies convey information to investors to reduce information asymmetry through signals reflected in financial reports (Connelly et al., 2011). In the context of capital markets, financial ratios are important signals investors use to assess a company's performance and prospects. Positive signals will boost investor confidence and drive share prices higher, while negative signals can dampen investor interest and depress share prices. Elwisam et al. (2024) emphasizes that financial reports are a credible signal reflecting a company's transparency and ability to create value. Ratios such as ROE, CAR, PBV, and NPL represent profitability, capital strength, valuation, and asset quality. Consequently, Muntakim M & Choudhury (2024) shows that signal credibility remains a key factor in shaping investor confidence amidst market complexity.

Return on Equity (ROE) and Stock Price

Return on Equity (ROE) is a profitability ratio that measures a company's ability to generate profits from the capital it owns (Ross et al., 2003). A high ROE indicates management efficiency in managing equity, thus sending a positive signal to investors. Empirically, ROE is often associated with stock price movements. Several studies have found that ROE has a positive effect on stock prices (Arifin et al., 2024; Astawa & Utama, 2025; Sharma et al., 2023). However, there are also studies that show mixed results, both in the form of negative and insignificant influences (Siagian et al., 2020a; Suryadi & Dana, 2023; Widyakto et al., 2023).

H1: Return on Equity (ROE) has an effect on the stock price of KBMI Bank 3

Capital Adequacy Ratio (CAR) and Stock Price

Capital Adequacy Ratio (CAR) reflects the bank's ability to bear the risk of loss through capital adequacy (Febriana et al., 2023). A high CAR indicates strong capital conditions and increases bank stability, thus being a positive signal for investors. Several studies have shown that CAR has a significant positive effect (Astawa & Utama, 2025; Purwati & Mareta, 2024; Sharma et al., 2023). While other studies show different results, including a significant negative effect (Alamsyah et al., 2023; Sandora & Saleh, 2023).

H2: Capital Adequacy Ratio (CAR) has an effect on the share price of KBMI Bank 3

Price to Book Value (PBV) and Stock Price

Price to Book Value (PBV) is a valuation ratio that reflects how the market values a company relative to its book value (Dahlquist & Knight, 2022). PBV is used to assess whether a stock is undervalued or overvalued. Empirically, PBV consistently shows a positive effect on stock prices because it reflects the market's

perception of a company's value (Arifin et al., 2024; Muktiadji & Pamungkas, 2022).

H3: Price to Book Value (PBV) has an effect on the stock price of KBMI Bank 3

Non-Performing Loan (NPL) and Stock Prices

Non-Performing Loan (NPL) is a credit risk indicator that reflects the quality of bank assets (Van Greuning & Brajovic-Bratanovic, 2020). A high NPL indicates an increased risk of default, which can reduce investor confidence. Most studies show that NPLs affect stock prices, particularly negatively (Alamsyah et al., 2023; Aryanti et al., 2022). However, there is also research that shows that NPL does not have a significant effect under certain conditions (Sandora & Saleh, 2023).

H4: Non-Performing Loan (NPL) has an effect on the share price of KBMI Bank 3

The conceptual framework that describes the relationship between variables in this study is shown in the following figure.

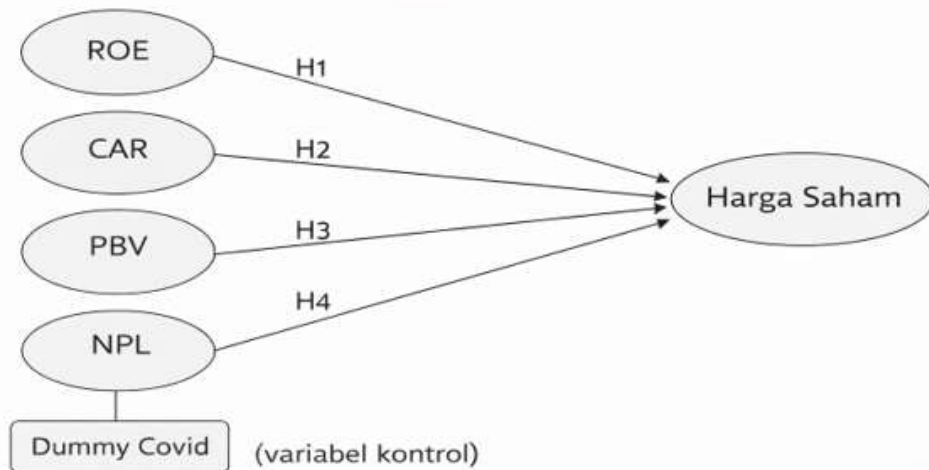


Figure 1. Conceptual Framework

METHODOLOGY

This study uses a quantitative approach to analyze the effect of financial ratios on the stock price of KBMI 3 Bank in Indonesia. The quantitative approach was chosen because this study aims to empirically test the relationship between the independent and dependent variables through statistical analysis. The data used are secondary data obtained from the bank's published financial reports, the Indonesian Banking Statistics published by the Financial Services Authority (OJK), and stock price data accessed through Yahoo Finance.

The population in this study includes all KBMI 3 banks listed on the Indonesia Stock Exchange. The sampling technique used a purposive sampling method, with the criteria being banks consistently listed throughout the study period and having complete data. Based on these criteria, nine banks were selected as the research sample. The data used is panel data, combining cross-sectional (bank) and time series data, with an observation period of 2017–2024 and a quarterly frequency.

In panel data analysis, model selection is a crucial step in determining the most appropriate estimation method. Therefore, the Chow and Hausman tests were performed to select the best model among Pooled Ordinary Least Squares (OLS), Fixed Effects Model (FEM), and Random Effects Model (REM). (Gujarati & Porter, 2009) After the best model was determined, classical assumption tests, including multicollinearity and heteroscedasticity tests, were conducted to ensure the validity of the estimation results. To address heteroscedasticity, this study used a robust standard errors approach.

Hypothesis testing was conducted using the t-test (partial) and F-test (simultaneous) within a panel data regression framework. In addition, the coefficient of determination (R^2) was used to measure the ability of the independent variable to explain the variation in the dependent variable (Gujarati & Porter, 2009).

The dependent variable in this study is stock price, proxied by the natural logarithm of stock price (Lnshm). The independent variables consist of Return on Equity (ROE), Capital Adequacy Ratio (CAR), Price to Book Value (PBV), and Non-Performing Loan (NPL), with a dummy variable for Covid-19 as a control variable.

The panel data regression model used in this study is formulated as follows:

$$Lnshm_{it} = \beta_0 + \beta_1 ROE_{it} + \beta_2 CAR_{it} + \beta_3 PBV_{it} + \beta_4 NPL_{it} + \beta_5 Covid + \epsilon_{it}$$

where i denotes the cross section unit (bank), t denotes the time period, β_0 is a constant, $\beta_1 - \beta_5$ are the regression coefficients, and ϵ_{it} is the error term.

RESEARCH RESULT

Chow Test

Table 1. Chow Test Results

	Significance Level	Prob
ln_shm	Prob > F	0,000

Based on Table 1, the probability value is $0.000 < 0.05$, so it can be concluded that the more appropriate model to use is the Fixed Effect Model.

Hausman test

Table 2. Hausman Test Results

	Significance Level	Prob
ln_shm	Prob > Chi2	0.0001

The results of the Hausman test show a probability value of $0.0001 (< 0.05)$, which indicates that the model *Fixed Effect Model* (FEM) is more suitable than *Random Effect Model*. Thus, the model used in this study is *Fixed Effect Model* (FEM), in line with the model selection approach in panel data analysis.

Multicollinearity Test

Table 3. Multicollinearity Test Results

	VIF	1/VIF
ROE	1.69	0.504878
CAR	1.72	0.575463
PBV	1.98	0.583090
NPL	1.74	0.593065
COVID	1.02	0.980303

The results of the multicollinearity test show that all variables have a value $VIF < 10$, so it can be concluded that there are no multicollinearity problems in the research model. Thus, the independent variables used are suitable for further analysis in a regression model.

Heteroscedasticity Test

Table 4. Results of Heteroscedasticity Test

	Significance Level	Prob
ln_shm	Prob > Chi2	0.0000

Based on the results of the heteroscedasticity test, it was found that the model experienced heteroscedasticity problems, indicated by probability values below the 0.05 significance level. This condition indicates that the error variance is not constant, which can affect the validity of the estimation results.

To address these issues, this study employed a robust standard errors approach. This method does not alter the regression coefficient values, but rather adjusts the standard error values, thereby increasing the reliability of statistical test results. Thus, the corrected regression model can be used for further analysis.

Panel Data Regression Results

Table 5. Panel Data Regression Results

Variable	Coefficient	Std.Error	t-Statistic	Prob.
C	5.854826	0.1206105	48.54	0.000
ROE	0.0093963	0.0070873	1.33	0.222
CAR	0.0225600	0.0038042	5.93	0.000
PBV	0.7095101	0.1045064	6.79	0.000
NPL	0.0365795	0.0372681	0.98	0.355
COVID	-0.1005413	0.0395929	-2.54	0.035

The results of the regression estimation using the Fixed Effect Model (FEM) with robust standard errors produce the following equation:

$$\lnshm_{it} = 5.8548 + 0.0094ROE_{it} + 0.0226CAR_{it} + 0.7095PBV_{it} + 0.0366NPL_{it} - 0.1005Covid + \epsilon_{it}$$

The constant of 5.8548 indicates the baseline value of the stock price when all independent variables are assumed constant. The ROE coefficient of 0.0094 indicates that an increase in ROE tends to be followed by an increase in the stock price, although this effect is not statistically significant.

The CAR coefficient of 0.0226 indicates that increased capital adequacy positively impacts stock prices. Meanwhile, PBV has a coefficient of 0.7095, indicating its greatest influence compared to other variables.

On the other hand, the NPL variable has a positive coefficient of 0.0366, but it is not statistically significant. The Covid-19 variable shows a negative coefficient of -0.1005, indicating that the pandemic has had a negative impact on stock prices.

Partial Test (t-Test)

Table 6. T-Test Results

Significance Level	Variables	P Value
$P > t $	ROE	0.222
$P > t $	CAR	0,000
$P > t $	NPL	0.355
$P > t $	PBV	0,000
$P > t $	COVID	0.035

A partial test was used to determine the effect of each independent variable on stock prices. The test results showed that CAR and PBV had a positive and significant effect on stock prices, with a probability value below 0.05.

Conversely, ROE and NPL do not significantly influence stock prices, as they have probability values above 0.05. Meanwhile, the Covid-19 dummy variable has a negative and significant effect on stock prices.

Simultaneous Test (F Test)

Table 7. F Test Results

F-statistic	148.24
Prob (F-statistic)	0.000000

The F-test results show a probability value of 0.000 (<0.05), indicating that all independent variables simultaneously have a significant effect on stock prices. Therefore, the regression model used in this study can explain the relationship between the independent variables and stock prices as a whole.

Coefficient of Determination

Table 8. Results of the Determination Coefficient

R Square	Mark
Within	0.7408
Between	0.2474
Overall	0.3130

The within (R^2) value of 0.7408 indicates that approximately 74.08% of stock price variation can be explained by ROE, CAR, PBV, NPL, and Covid-19. The remaining 25.92% is influenced by factors outside the research model.

DISCUSSION

The Effect of Return on Equity on Stock Prices

The results of the study indicate that Return on Equity (ROE) does not significantly influence the stock price of KBMI 3 Bank in Indonesia. This finding indicates that a company's profitability level is not always a primary factor considered by investors in making investment decisions, particularly in the banking sector. Conceptually, ROE is an indicator that reflects a company's ability to generate profits based on shareholder capital. Within the Efficient Market Hypothesis (EMH) framework, stock prices reflect all available information in the market (Fama, 1970). Thus, information about profitability, such as ROE, should be reflected in the stock price. Accordingly, financial theory states that firm value and stock prices are influenced by investors' expectations of the company's future performance and risk (Brigham & Ehrhardt, 2017). However, in practice, historical accounting information is often anticipated by the market before it is published, so it does not always trigger a significant reaction when it is announced (Scott, 2015).

In the banking context, particularly Bank KBMI 3, investors tend to focus not only on profitability but also consider other aspects such as financial stability, risk, and performance sustainability. The characteristics of Bank KBMI 3 as a mid-sized bank make investors more sensitive to resilience and risk management factors than short-term profit fluctuations. As a result, ROE becomes less dominant in influencing stock prices compared to other indicators considered more reflective of sustainable fundamental conditions. Furthermore, the study period, which encompasses the Covid-19 pandemic, also influences investor behavior. In conditions of economic uncertainty, investors tend to shift their attention from profitability indicators to indicators reflecting the company's stability and ability to deal with risks. This makes profit information less relevant in influencing investment decisions.

This finding is in line with research Suryadi & Dana (2023), Widyakto et al. (2023), as well as Zuhroh & Veronika (2021) which indicates that ROE has no significant effect on banking stock prices. This finding suggests that the influence of ROE on stock prices is contextual, influenced by market conditions, the level of information efficiency, and investor perceptions of company performance. Therefore, the results of this study confirm that in the context of KBMI 3 bank, ROE has not been the primary indicator used by investors in assessing company value. Investors tend to be more responsive to information that has direct implications for the company's stability and risk. This suggests that the relevance of financial information in influencing stock prices is highly dependent on the industry context and surrounding market conditions.

The Influence of Capital Adequacy Ratio on Stock Prices

The Capital Adequacy Ratio (CAR) variable was shown to have a significant effect on the share price of KBMI 3 banks. This finding indicates that capital adequacy is one of the main factors investors consider when assessing banking stocks, particularly in the KBMI 3 bank group during the study period. This result is in line with research conducted by Prayoga et al. (2025) as well as Astawa & Utama (2025) which shows that CAR has a positive and significant effect on bank share prices. Similar findings were also expressed by Sharma et al. (2023)

as well as Purwati & Mareta (2024) which confirms that capital adequacy is a key determinant in investors' assessment of banking performance. The significant influence of CAR indicates that the market actively responds to information regarding the strength of a bank's capital. A high CAR reflects a bank's ability to absorb potential losses arising from various types of risks, including credit risk and market risk. In this study, KBMI 3 Bank generally had a relatively high CAR level, well above the regulatory minimum. The average CAR of approximately 23.60% indicates that the bank has an adequate capital buffer to withstand economic pressures, both internal and external.

This situation reinforces the perception that Bank KBMI 3 has a good level of resilience in maintaining its operational stability. In stock price formation, CAR is an indicator that is relatively easy for investors to interpret as a measure of safety in banking sector investments. When CAR is at a high level, the bank's solvency risk is perceived as lower, thereby increasing the attractiveness of the stock in the eyes of investors. This explains why CAR has a significant influence on stock prices, as this ratio directly represents a bank's ability to manage risk and maintain business continuity. Within the framework of signaling theory, CAR serves as a credible signal regarding the financial health and quality of a bank's risk management (Connelly et al., 2011). Given that the banking industry is under strict regulatory oversight, information regarding capital adequacy carries a high level of credibility in the eyes of investors. Therefore, an increase in CAR is perceived as a positive signal reflecting management's prudence in maintaining financial stability, leading to a market response through increased demand for bank shares.

Furthermore, for Bank KBMI 3, which is in the medium category, capital strength is a crucial differentiating factor in attracting investor confidence. Banks with higher CAR levels tend to be perceived as having a lower risk of bankruptcy and a better ability to weather potential economic shocks. Under conditions of uncertainty, investors tend to prioritize indicators reflecting investment stability and security over potential returns alone. Therefore, the results of this study confirm that CAR serves not only as an indicator of regulatory compliance but also as a proxy for risk, a key consideration for investors. This suggests that, in the context of Bank KBMI 3, capital strength plays a key role in shaping market perceptions and determining stock price movements.

The Effect of Price to Book Value on Stock Prices

Banking stock price movements are essentially determined not only by fundamental performance but also by how the market values the company. In this context, research results show that Price to Book Value (PBV) significantly influences the stock price of Bank KBMI 3, indicating that market perception of company value plays a dominant role in stock price formation. PBV directly reflects how investors value a company's equity compared to its book value. Unlike other financial ratios that require further interpretation, PBV provides a simpler and more direct signal regarding whether a stock is undervalued or overvalued by the market. This makes PBV one of the most responsive indicators in influencing investment decisions.

The average PBV of KBMI 3 banks, which is in the range of 1–2 times book value, indicates that banking stocks in this group tend to trade around their fair value. However, fluctuations in PBV between periods reflect changes in investor expectations regarding the bank's prospects, creating undervalued or overvalued conditions. When PBV is at a low level, investors tend to see an opportunity for price appreciation, while a high PBV reflects market optimism about future growth. This phenomenon aligns with the concept of value investing introduced by Benjamin Graham, where investment decisions are based on a comparison between market price and a company's intrinsic value. Stocks trading below their intrinsic value are considered to have a margin of safety and are more attractive to investors (Zweig, 2003). Thus, PBV not only serves as a valuation tool, but also as a basis for identifying investment opportunities.

On the other hand, within the framework of the Efficient Market Hypothesis, the information contained in the PBV will be immediately responded to by the market and reflected in the share price (Fama, 1970). This explains why changes in PBV have a significant impact, as this ratio directly reflects the aggregation of information and investor expectations about the company. This finding is supported by research. Arifin et al (2024), Sandora & Saleh (2023), Siagian et al (2020), Muktiadji & Pamungkas (2022), as well as Suryadi & Dana (2023) which shows that PBV has a significant effect on banking stock prices. The consistency of these results confirms that, compared to other financial ratios, PBV is the indicator closest to market perception, thus having a stronger influence on stock prices. Therefore, the results of this study indicate that, in the context of KBMI 3 Bank, PBV serves as a direct representation of how the market values the company. This confirms that stock prices are determined not only by internal fundamentals but also by how investors interpret the company's overall value.

The Effect of Non-Performing Loans on Stock Prices

The regression results show that Non-Performing Loans (NPLs) do not significantly affect the stock price of KBMI 3 banks. This finding indicates that the level of non-performing loans has not been a strong enough signal to directly influence investors' decisions in assessing banking stocks in the KBMI 3 group during the study period. Empirically, this condition can be explained by the relatively controlled NPL level of KBMI 3 banks throughout the 2017–2024 period and does not show a continuous extreme increase. This stability prevents NPLs from forming a new, sufficiently strong risk perception in the eyes of investors. In practice, investors tend to assess that credit risk in the KBMI 3 group of banks is still within reasonable limits and can be managed through the bank's risk management mechanisms.

This situation was further exacerbated during the Covid-19 pandemic. Although pressure on credit quality increased, its impact on NPLs was not fully interpreted as a negative signal by the market. This was due to credit restructuring policies and various forms of regulatory intervention that played a role in mitigating the surge in credit risk. As a result, the increase in NPLs was not directly perceived as a threat to bank performance, thus not having a significant impact on stock prices. From a theoretical perspective, this finding can be explained using the

irrelevance proposition approach proposed by Miller (1958), which states that under certain conditions, changes in risk do not necessarily impact a company's value if other mechanisms are in place to offset the impact. Credit risk reflected in NPLs can be absorbed through capital buffers, loss provisions, and credit portfolio diversification. As long as these mechanisms are effective, increased risk does not directly reduce a company's value (Pagano, 2005).

Furthermore, the positive coefficient on NPLs in this model indicates that an increase in NPLs is not always interpreted as a decline in bank quality. Under some circumstances, an increase in NPLs may be related to credit expansion or increased intermediation activities, which contribute to interest income. In other words, a certain level of increased credit risk can be viewed as a consequence of business growth, not as a signal of crisis. This is particularly true for banks with strong capitalization, where increased risk can still be tolerated without disrupting financial stability.

This finding is in line with research Iswandi et al. (2020) who found that NPLs had no significant effect on banking stock returns in Malaysia. Similar results were also shown by Anggraini (2022), Ancient (2023), as well as Natalia & Pernamasari (2025) which concluded that NPLs had no significant effect on bank stock prices. The consistency of these results suggests that under certain conditions, credit risk is not always a primary factor in stock price formation. Therefore, the results of this study indicate that in the context of KBMI 3 bank, investors consider not only the level of credit risk but also the bank's ability to manage that risk. As long as credit risk remains within manageable limits and does not disrupt capital stability, NPLs are not a primary determinant of stock price formation. This confirms that investor perceptions of risk are relative and highly dependent on the context of industry stability and the effectiveness of the bank's risk management.

Covid-19 Dummy Control Variable

The Covid-19 dummy variable in the regression model serves as a control variable to capture the impact of the pandemic crisis on the stock price movements of KBMI 3 Bank. The estimation results show a negative and significant effect, indicating that the Covid-19 pandemic was an external shock that depressed bank stock prices during the study period. From a capital market perspective, price pressure is influenced not only by fundamental conditions but also by changes in investor sentiment and increased market volatility. In the early phase of the pandemic, high uncertainty encouraged investors to adopt risk-off behavior, namely reducing exposure to risky assets, including bank stocks. This condition was exacerbated by potential foreign outflows, given that bank stocks are generally a major component of institutional investors' portfolios. As a result, selling pressure increased and impacted aggregate stock prices.

This finding is in line with Demirgüç-Kunt et al. (2021) which shows that the Covid-19 pandemic has had a negative impact on the performance of banking stocks globally. In the Indonesian context, Khabibah & Waharini (2022) found a significant market reaction to banking stocks post-pandemic. Similar results were also shown by Ulyah et al. (2024)) as well as Permatasari & Nugroho (2023), which

confirms that the pandemic has affected the dynamics and returns of banking stocks in Indonesia. Market pressures during the pandemic were also reflected in various stabilization policies implemented by the Indonesia Stock Exchange (IDX). When the JCI experienced a sharp decline, the IDX implemented a 30-minute trading halt for declines of more than 5% and 10%, and suspended trading for declines exceeding 15% in a single trading day. Furthermore, the IDX adjusted the Lower Auto Rejection (ARB) limit from 10% to 7% in March 2020 to mitigate excessive selling pressure (Indonesia Stock Exchange, 2020). This policy demonstrates that the pandemic has created significant systemic pressure on capital markets.

Entering 2021, market volatility remains relatively high, so stabilization policies are being maintained, including a ban on short selling, the implementation of asymmetric auto-rejection, and adjustments to trading hours (Indonesia Stock Exchange, 2021). This reflects that the impact of the pandemic is not temporary, but rather occurs in several phases that continuously influence market behavior. However, over time, the market has begun to enter a recovery phase. After experiencing pressure at the start of the pandemic, some banking stocks are perceived as undervalued, creating buying opportunities. This situation has encouraged a return of investor interest, including potential foreign inflows, which have contributed to the stabilization of Bank KBMI 3's share price.

Thus, the negative and significant effect of the Covid-19 dummy variable indicates that the pandemic acted as an external factor increasing market uncertainty and volatility, thus depressing banking stock prices. Furthermore, the existence of stabilization policies and the market recovery phase also explain how these pressures were gradually mitigated. The use of the Covid-19 dummy variable as a control variable in the model also ensures that the estimated effect of financial ratios on stock prices is not distorted by systemic and temporary external factors, thus enhancing the accuracy and reliability of the research results.

CONCLUSION AND RECOMMENDATIONS

The results of the study indicate that the influence of financial ratios on the stock price of Bank KBMI 3 is not uniform. The Capital Adequacy Ratio (CAR) and Price to Book Value (PBV) are proven to have a significant effect on stock prices, indicating that investors are more responsive to capital aspects and market valuation. Conversely, Return on Equity (ROE) and Non-Performing Loans (NPL) do not show a significant effect, indicating that profitability and credit risk are not yet primary considerations during relatively stable and controlled conditions. Furthermore, the Covid-19 dummy variable has a negative and significant effect, confirming that the pandemic is an external shock that increases uncertainty and depresses banking stock prices.

Based on these findings, bank management is advised to maintain strong capital and manage market perceptions through increased transparency and fundamental performance, given that CAR and PBV have been shown to be key determinants of stock prices. Although ROE and NPL do not have a significant impact, both indicators still need to be managed consistently to maintain long-term stability. For investors, investment decisions should not only focus on profitability

but also consider the company's risk and valuation aspects. Meanwhile, regulators are expected to continue strengthening banking sector stability and transparency policies to improve market efficiency. Future research is recommended to expand the object and add other variables, both internal and macroeconomic, to provide a more comprehensive picture of the factors influencing bank stock prices.

ADVANCED RESEARCH

Further research is recommended to include macroeconomic variables such as interest rates, inflation, and economic growth, as well as internal banking variables such as Net Interest Margin (NIM), Loan to Deposit Ratio (LDR), BOPO, and CASA to gain a more comprehensive understanding. Furthermore, the study can be expanded to include other bank groups (KBMI 1, KBMI 2, and KBMI 4) for a more comparative analysis.

From a methodological perspective, more complex approaches such as dynamic panel or volatility-based models may be considered. The use of longer time periods or higher-frequency data is also recommended to more accurately capture market dynamics.

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REFERENCES

- Alamsyah, R., Rp, W. W., & Tartilla, N. (2023). The Influence of Bank Health Levels on Share Prices in Conventional General Banking Listed on the Indonesian Stock Exchange for the Period 2019 - 2022. *International Journal of Advanced Technology and Social Sciences (IJATSS)*, 1(3), 173-183.
- Almustafa, E. (2025). Profitability Indicators and Stock Price Dynamics : Insights from the Saudi Islamic Banking Sector [2014 - 2023]. *WSEAS TRANSACTIONS on BUSINESS and ECONOMICS*, 22, 1491-1505. <https://doi.org/10.37394/23207.2025.22.120>
- Anggraini, D. (2022). Analysis of the Effect of Financial Ratios on Banking Stock Prices. *Indonesia Accounting Research Journal*, 09(03), 83-91. <https://journals.iarn.or.id/index.php/IARJ/index%0AAanalysis>
- Arifin, C. B., Zulbetti, R., & Perwito. (2024). Financial Ratios' Effect on Stock Prices in Banking Subsector Companies. *Jurnal Ilmu Keuangan Dan Perbankan (JIKA)*, 14(1), 131-142.
- Aryanti, A. N., Rahmi, P. P., & Herlina, L. (2022). Pengaruh ROA, ROE, LDR, CAR, Dan NPL Terhadap Harga Saham Perbankan Yang Terdaftar di BEI. *ARBITRASE: Journal of Economics and Accounting*, 3(1), 156-163. <https://doi.org/10.47065/arbitrase.v3i1.479>
- Astawa, I. K. Y., & Utama, I. M. K. (2025). Analysis of the Effect of Return on Equity, Capital Adequacy Ratio, and Loan to Deposit Ratio on Stock Prices.

- Jayapangus Press Ganaya : Jurnal Ilmu Sosial Dan Humaniora*, 8(3), 35–48.
- Beirne, J., Renzhi, N., Sugandi, E., & Volz, U. (2021). COVID-19, asset markets and capital flows. *Pacific Economic Review*, 26(4), 498–538. <https://doi.org/10.1111/1468-0106.12368>
- Brigham, E. F., & Ehrhardt, M. C. (2017). *Financial Management - Theory and Practice*. In *Cengage Learning* (15e ed.). Cengage Learning.
- Bursa Efek Indonesia. (2020). Laporan Tahunan Bursa Efek Indonesia 2020 - Digital Capabilities to Advance Further. In *IDX Official Website*. <https://www.idx.co.id/id/perusahaan-tercatat/laporan-keuangan-dan-tahunan>
- Bursa Efek Indonesia. (2021). *Laporan Tahunan 2021 - Outperforming Expectations amidst Uncertainties*. <https://www.idx.co.id/id/tentang-bei/laporan-tahunan/>
- Bursa Efek Indonesia. (2025). *Idx Fact Sheet Composite.pdf*.
- Connelly, B. L., Certo, S. T., Ireland, R. D., & Reutzel, C. R. (2011). Signaling theory: A review and assessment. *Journal of Management*, 37(1), 39–67. <https://doi.org/10.1177/0149206310388419>
- Dahlquist, J., & Knight, R. (2022). *Principles of Finance*. Openstax.
- Demirgüç-Kunt, A., Pedraza, A., & Ruiz-Ortega, C. (2021). Banking sector performance during the COVID-19 crisis. *Journal of Banking and Finance*, 133. <https://doi.org/10.1016/j.jbankfin.2021.106305>
- ElFayoumi, K., & Hengge, M. (2021). Capital Markets, COVID-19 and Policy Measures. In *IMF Working Papers* (Vol. 21, Issue 33). <https://doi.org/10.5089/9781513569413.001>
- Elwisam, Muhani, Ria, Digidowiseiso, K., Kartini, Juliandi, D., & Saputra, D. (2024). Implementation of Signaling Theory in Financial Management: a Bibliometric Analysis. *Revista de Gestao Social e Ambiental*, 18(3), 1–13. <https://doi.org/10.24857/rgsa.v18n3-092>
- Fama, E. F. (1970). Efficient Capital Markets: A Review of Theory and Empirical Work. *The Journal of Finance*.
- Febriana, H., Rismanty, V. A., Bertuah, E., Permata, S. U., Anismadiyah, V., Sembiring, L. D., Dewi, N. S., Jamaludin, Jatmiko, N. S., Inrawan, A., Astuti, W., & Dewi, I. K. (2023). Dasar-Dasar Analisis Laporan Keuangan. In *Jurnal Bisnis dan Keuangan* (Vol. 4, Issue 1).
- Gujarati, D. N., & Porter, D. C. (2009). *Basic Econometrics*. The McGraw-Hill Companies, Inc.
- Iswandi, Syahrial, D., & Susilo, W. H. (2020). The Predict Of Stock Return On The Commercial Banks: Insight The Signaling Theory Perspective. *International Journal of Recent Scientific Research*, 11(02), 37639–37646. <https://doi.org/10.24327/IJRSR>
- Khabibah, N. A., & Waharini, F. M. (2022). Covid-19: The Newest Black Swan Crisis and Its Effect toward Banking Stocks. *Jurnal Riset Akuntansi Dan Keuangan*, 10(2), 231–242. <https://doi.org/10.17509/jrak.v10i2.45091>
- Miller, F. M. and M. H. (1958). *The Cost of Capital, Corporation Finance and the Theory of Investment* (Vol. 48, Issue 3). American Economic Association. <https://doi.org/10.1136/bmj.2.3594.952>

- Muktiadji, N., & Pamungkas, B. (2022). The Effect of Financial Ratio on Stock Price of Banks Listed on the Indonesia Stock Exchange (IDX). *Asian Journal of Economics, Business and Accounting*, 22(24), 232–240. <https://doi.org/10.9734/ajeba/2022/v22i24910>
- Muntakim M & Choudhury. (2024). Signaling Theory: An Approach to Organizational Behavior Research. *Journal of Accounting, Business and Management (JABM)*, 31(2 october), 97–120.
- Natalia, P. S., & Pernamasari, R. (2025). Post-Pandemic Banking Resilience: Examining the Influence of Risk Profile, Earnings, and Capital on Stock Prices in Indonesia. *Jurnal Riset Akuntansi Terpadu*, 18(1), 41–52. <https://doi.org/10.35448/jrat.v18i1.31411>
- Otoritas Jasa Keuangan. (2021). *Peraturan Otoritas Jasa Keuangan Nomor 12/POJK.03/2021 tentang Bank Umum* (Issue 163).
- Pagano, M. (2005). *The Modigliani-Miller Theorems: A Cornerstone of Finance* (139; Issue May).
- Permatasari, D., & Nugroho, V. (2023). Analysis of the Effect of the COVID-19 Pandemic on Stock Return of Banking Company. *International Journal of Application on Economics and Business*, 1(1), 382–392. <https://doi.org/10.24912/ijaeb.v1i1.382-392>
- Prayoga, L., Sari, E., & Febriani, E. (2025). Pengaruh Rasio Keuangan Terhadap Harga Saham Perbankan Periode 2020-2022. *Journal of Innovation, Finance, Management, and Accounting*, 1(1), 55–70.
- Purba, Y. S. (2023). Pengaruh Capital Adequacy Ratio (CAR) Dan Non Performing Loan (NPL) Terhadap Harga Saham Pada Perusahaan Perbankan Yang Terdaftar Di Bursa Efek Indonesia (BEI) Periode 2017-2021. *Media Informasi Penelitian Kabupaten Semarang*, 5(1). <https://doi.org/https://doi.org/10.55606/sinov.v5i1.566>
- Purwati, A., & Mareta, S. (2024). The Effect of Return on Risk Assets (RORA), Loan To Deposit Ratio (LDR) and Capital Adequacy Ratio (CAR) on Stock Prices (Empirical Study on Banking Sector Companies on the Indonesia Stock Exchange in 2020-2023). *Journal of Accounting and Finance Management*, 5(5), 1100–1108. <https://doi.org/10.38035/jafm.v5i5.1045>
- Ross, S. A., Westerfield, R. W., & Jordan, B. D. (2003). *Fundamental of Corporate Finance*. The McGraw-Hill Companies, Inc.
- Rossela, E., Ginting, B., & Sussanto, H. (2024). *The Impact of Return on Asset (ROA), Capital Adequacy Ratio (CAR), Price-Earnings Ratio (PER), and Price-To-Book Value (PBV) on Stock Prices of Banking Companies Listed on the LQ45 Index during 2019-2023*. 07(10), 6199–6206. <https://doi.org/10.47191/jefms/v7>
- Sandora, R., & Saleh, M. (2023). Examining the Effect of Bank Health Level towards Stock Return of Commercial Banks in Three-Selected ASEAN Countries. *International Journal of Finance, Economics and Business*, 2(4), 258–268. <https://doi.org/10.56225/ijfeb.v2i4.184>
- Scott, W. R. (2015). *Financial Accounting Theory*. In M. Farrell (Ed.), *Pearson* (7th ed.). Pearson. <https://doi.org/10.1201/b16379>
- Sharma, S., Bhardwaj, I., & Kishore, K. (2023). Capturing the impact of accounting and regulatory variables on stock prices of banks – an empirical study of Indian banks in panel data modeling. *Asian Journal of Accounting Research*,

- 8(2), 184–193. <https://doi.org/10.1108/AJAR-11-2020-0110>
- Siagian, Y. W. O., Sinaga, R., Sinaga, E., & Br.Sinaga, J. B. L. A. (2020a). Pengaruh Earning Per Share (EPS), Return On Equity (ROE), dan Price Book Value (PBV) Terhadap Harga Saham pada perusahaan Perbankan Yang Terdaftar di Bursa Efek Indonesia Tahun 2015-2017. *Owner (Riset Dan Jurnal Akuntansi)*, 4(2), 387. <https://doi.org/10.33395/owner.v4i2.270>
- Siagian, Y. W. O., Sinaga, R., Sinaga, E., & Br.Sinaga, J. B. L. A. (2020b). Pengaruh EPS, ROE, PBV terhadap Harga Saham pada Perusahaan Perbankan yang Terdaftar di BEI. *Owner (Riset Dan Jurnal Akuntansi)*, 4. <https://doi.org/https://doi.org/10.33395/owner.v4i2.270>
- Suryadi, G. K. D. S., & Dana, I. M. (2023). Pengaruh Profitabilitas, Price to Book Value, Book Value Per Share Terhadap Harga Saham Perusahaan Perbankan. *E-Jurnal Manajemen*, 12(1), 69–91.
- Ulyah, S. M., Susanti, R., Andreas, C., Rahmayanti, I. A., Rifada, M., Fitriyani, N. L., & Ana, E. (2024). A Multivariate Regression with Time Series Error in Forecasting Jakarta Composite Index and Stock Prices of Banking Industry in Indonesia by Considering COVID-19 Effect. *International Journal of Technology*, 15(6), 1839–1850. <https://doi.org/10.14716/ijtech.v15i6.5469>
- Van Greuning, H., & Brajovic-Bratanovic, S. (2020). Analyzing banking risk : A Framework for Assessing Corporate Governance and Risk Management. In K. Dennison (Ed.), *Analyzing banking risk* (4th ed.). The Word Bank. <https://doi.org/10.1596/978-1-4648-1446-4>
- Widyakto, A., Rinawati, T., & Widyarti, E. T. (2023). The effect of return on assets , return on equity and net interest margin on stock prices in banking companies listed on the Indonesia Stock Exchange for the 2017-2021 period. *Jurnal Bisnis Strategi*, 32(1), 79–91.
- Zuhroh, I., & Veronika, A. (2021). Fundamental Factor Analysis On Banking Stock Price In LQ45. *Jurnal Reviu Akuntansi Dan Keuangan*, 11(1), 118–137. <https://doi.org/10.22219/jrak.v11i1.16115>
- Zweig, J. (2003). *The Intelligent Investor* (4th ed.). HarperCollins Publishers (Australia) Pty. Ltd. <https://doi.org/10.1017/9781108655620.045>