



Macroeconomic and Firm-Level Determinants of Bank Stock Returns: The Role of Interest Rates, Inflation, Profitability, and Firm Size

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ABSTRACT

Keywords:

BI Rate; Inflation;
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This research examines the influence of the BI Rate, inflation, profitability (ROA), and firm size on banking stock returns. The analysis applies a quantitative approach using panel data regression with the Common Effect Model (CEM). The sample consists of 39 banking companies selected through purposive sampling, with observations covering the 2021–2024 period. Secondary data were analyzed using EViews 12 to evaluate the relationship between macroeconomic indicators and firm characteristics on stock returns. The results show that the BI Rate and inflation have a negative and significant effect on stock returns, while firm size has a positive and significant effect. In contrast, profitability (ROA) does not have a significant effect on banking stock returns. Simultaneously, all independent variables significantly influence stock returns, indicating that both macroeconomic conditions and firm characteristics jointly shape investor responses in the capital market. These findings imply that interest rate policy and inflation dynamics are important macroeconomic signals that influence investor behavior, while firm size reflects stability that can attract investment interest. Therefore, investors should consider macroeconomic trends and company scale when making investment decisions, while bank management needs to strengthen financial credibility and transparency to improve market confidence.

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INTRODUCTION

The capital market plays a strategic role in supporting national economic development by facilitating financial intermediation and allocating long-term funds for productive activities. Through the capital market, companies gain access to external financing for business expansion, while investors obtain

investment instruments that reflect corporate performance and future prospects. In Indonesia, the Indonesia Stock Exchange (IDX) functions as an important indicator of economic dynamics, which can be observed through fluctuations in stock prices and stock returns. Stock return represents one of the key indicators used by investors to evaluate investment performance because it reflects the level of profit obtained as well as market expectations regarding economic conditions and corporate fundamentals (Pham et al., 2024; Herman & Azansyah, 2024). When stock returns increase, it indicates positive investor confidence and strong corporate performance; conversely, declining returns may signal uncertainty and weaker expectations. Therefore, understanding the determinants of stock returns becomes essential for investors, policymakers, and researchers in evaluating market performance and financial stability.

Despite the important role of the capital market in supporting economic growth, the ideal functioning of the market often differs from actual market conditions. Ideally, stock prices and returns should reflect accurate information regarding macroeconomic indicators and firm fundamentals. However, in reality, market volatility, policy changes, and external economic shocks frequently create fluctuations that deviate from theoretical expectations. The banking sector, which serves as a core component of the financial system, often experiences such fluctuations in its stock performance. Banking stocks are generally expected to provide relatively stable returns due to the sector's critical role in financial intermediation and economic stability. Nevertheless, empirical observations show that banking stock performance can be significantly influenced by economic shocks and financial market dynamics (Acharya et al., 2024). This discrepancy between theoretical expectations of stability and the reality of market volatility highlights the need for deeper investigation into the factors influencing banking stock returns.

From a theoretical perspective, stock returns are influenced by both macroeconomic factors and firm-specific fundamentals. Macroeconomic indicators such as interest rates and inflation represent overall economic conditions that shape investor expectations and financial market behavior. In Indonesia, monetary policy is represented by the BI Rate or the BI 7-Day Reverse Repo Rate, which functions as the benchmark interest rate influencing borrowing costs, liquidity conditions, and investment decisions (Al Amin, 2020; Indrajaya, 2022). When interest rates increase, borrowing costs rise and the attractiveness of stock investments may decline. In addition, inflation reflects the general increase in the prices of goods and services, which can reduce purchasing power and affect economic stability (Stantcheva, 2024; Sengupta et al., 2025). Meanwhile, firm-specific factors such as profitability and firm size represent internal indicators of corporate operational efficiency and financial stability. Profitability

reflects a company's ability to generate earnings from its resources, while firm size indicates the scale of operations and a firm's capacity to manage risks and access financial markets (Singh et al., 2024; Conti et al., 2024).

Several previous studies have examined the influence of macroeconomic variables on stock returns, particularly in the banking sector. Monetary policy represented by the BI Rate has been shown to influence banking performance and capital market dynamics. Wasita et al. (2022) find that changes in the BI 7-Day Reverse Repo Rate affect banking profitability and financial stability, which can ultimately influence investor perceptions in the capital market. Similarly, Amelia and Kuswanto (2025) report that announcements related to the BI 7-Day Reverse Repo Rate generate responses in the stock market, indicating that monetary policy plays a role in shaping investor sentiment. These findings suggest that interest rate policy acts as an important macroeconomic signal influencing investment decisions and market expectations within the financial sector.

In addition to interest rates, several studies highlight the importance of inflation and firm-specific characteristics in explaining stock return fluctuations. Inflation has been identified as a macroeconomic factor that may influence financial market dynamics and stock return volatility due to its impact on economic uncertainty and purchasing power (Muhammad et al., 2024; Sopi, 2024). On the other hand, internal corporate indicators such as profitability and firm size are also important determinants of stock performance. Profitability reflects a company's ability to generate earnings and is often associated with stronger financial performance and higher investor confidence (Safitri et al., 2025; Wijono et al., 2023). Meanwhile, firm size represents the scale and resource capacity of a firm, which may influence its ability to maintain financial stability and operational efficiency (Ramadhan & Mujiyati, 2023; Conti et al., 2024). However, previous studies have reported inconsistent findings regarding the direction and magnitude of these relationships, indicating the existence of a research gap that requires further investigation.

Within the Indonesian banking sector, fluctuations in stock returns remain a critical issue that attracts the attention of investors and financial analysts. Banking companies listed on the Indonesia Stock Exchange represent institutions with large asset bases and significant roles in financial intermediation, making their stock performance highly relevant to the stability of the capital market. Nevertheless, banking stock returns often experience volatility due to changes in interest rate policy, macroeconomic uncertainty, and variations in internal financial performance. These fluctuations create challenges for investors in predicting potential returns and evaluating investment risks. As a result, understanding how macroeconomic variables and firm fundamentals interact to

influence banking stock returns becomes increasingly important. Investigating these relationships is essential to provide empirical insights that can help investors make informed investment decisions and assist policymakers in maintaining financial market stability.

Based on the background described above, this study seeks to examine the determinants of banking stock returns by analyzing the influence of the BI Rate, inflation, profitability, and firm size on stock returns of banking companies listed on the Indonesia Stock Exchange. The main problem addressed in this research concerns how macroeconomic conditions and firm-level financial performance simultaneously shape stock return behavior in the banking sector. Therefore, the objective of this study is to empirically analyze the relationships between these variables and determine their impact on banking stock returns. To achieve this objective, the research applies a quantitative approach using statistical analysis to test the influence of macroeconomic and firm-specific factors on stock returns. Through this approach, the study aims to provide empirical evidence that contributes to financial literature while offering practical insights for investors and policymakers in evaluating investment strategies and economic policy decisions.

LITERATURE REVIEW

Signaling Theory

Signaling theory explains that corporate information disclosed to the market serves as a signal for investors in evaluating a company's future prospects and performance. When companies convey credible and transparent information, investors are able to assess the firm's financial condition and operational sustainability more accurately. Positive signals, such as strong financial performance and stable operational indicators, can increase investor confidence and encourage higher demand for the company's shares. As demand for shares increases, stock prices tend to rise, which ultimately leads to higher stock returns for investors. Conversely, negative signals or unclear information may create uncertainty and reduce investor confidence in the capital market.

In the context of capital markets, signaling theory is frequently used to explain how financial information and macroeconomic conditions influence investor decision making. Investors interpret corporate and economic information as indicators of future profitability and risk. Consequently, signals related to profitability, macroeconomic stability, and firm characteristics play an important role in determining stock performance and investment outcomes in the financial market (Febriyanti & Sulistyowati, 2021).

BI Rate

The BI Rate, currently represented by the BI 7-Day Reverse Repo Rate, is the main monetary policy instrument used by Bank Indonesia to maintain monetary stability and regulate liquidity within the financial system. This policy rate influences interest rate movements in the banking sector, including lending and deposit rates, which ultimately affect investment decisions and capital market performance. Changes in the BI Rate also influence bank funding costs and financial market expectations regarding economic conditions.

Several studies highlight the importance of the BI Rate in explaining financial market dynamics. Monetary policy transmission through interest rate adjustments can influence banking profitability and investor behavior in the stock market. Increases in policy interest rates may encourage investors to shift their funds toward safer financial instruments such as deposits or bonds, potentially reducing demand for stocks in the capital market (Al Amin, 2020; Indrajaya, 2022; Wasita et al., 2022; Simatupang & Naibaho, 2025).

Inflation

Inflation refers to the general increase in the prices of goods and services within an economy and represents an important indicator of macroeconomic stability. Persistent inflation can reduce purchasing power, increase uncertainty in financial markets, and affect investment decisions. In capital market analysis, inflation is often used as a macroeconomic variable because it reflects broader economic conditions that may influence corporate performance and investor expectations.

From an investment perspective, high inflation may reduce real returns on financial assets and increase uncertainty regarding future economic conditions. As inflation rises, operational costs and interest rates may also increase, potentially affecting corporate profitability and stock market performance. Empirical studies emphasize that inflation plays a role in explaining fluctuations in financial markets and stock return volatility (Stantcheva, 2024; Muhammad et al., 2024; Sengupta et al., 2025; Hong et al., 2025).

Profitability

Profitability reflects a company's ability to generate earnings from its operational activities and assets. In corporate finance research, profitability is commonly measured using Return on Assets (ROA), which indicates how efficiently a firm utilizes its total assets to generate profits. Higher profitability signals that a company is able to manage its resources effectively and maintain strong operational performance.

From the perspective of signaling theory, profitability provides important information to investors regarding the financial strength and sustainability of a firm. Companies with higher profitability are generally perceived as having better financial prospects and stronger managerial efficiency. Consequently, information about profitability may influence investor confidence and stock price movements in the capital market (Singh et al., 2024; Son & Duong, 2024; Safitri et al., 2025; Lamothe et al., 2024).

Firm Size

Firm size reflects the scale of corporate operations and is commonly measured using the natural logarithm of total assets. Larger firms generally possess greater financial resources, broader market access, and more diversified business activities compared to smaller firms. These characteristics allow large firms to manage risks more effectively and maintain operational stability.

In the context of investment analysis, firm size often serves as an indicator of corporate strength and long-term sustainability. Large firms tend to have stronger capital structures, better access to external financing, and more established market positions. These advantages may increase investor confidence and influence stock performance in the capital market (Conti et al., 2024; Ramadhan & Mujiyati, 2023).

Bank Stock Return

Stock return represents the profit obtained by investors from their investment in shares over a certain period. Returns can arise from capital gains resulting from stock price increases as well as dividend income distributed by companies. In the banking sector, stock returns reflect market responses to both internal corporate performance and external economic conditions.

Bank stock returns are often influenced by various factors, including macroeconomic stability, monetary policy, and corporate financial performance. Investors continuously evaluate economic indicators and financial information to determine the potential risks and returns associated with their investments. As a result, fluctuations in stock returns often reflect changes in investor expectations regarding the financial system and banking sector stability (Pham et al., 2024; Acharya et al., 2024).

BI Rate and Bank Stock Return

The BI Rate plays an important role in influencing capital market dynamics because it affects interest rate structures and investment preferences. When the BI Rate increases, banks tend to raise deposit interest rates, making fixed-income financial instruments more attractive to investors compared to stocks. As a result, demand for stocks may decline, potentially reducing stock prices and returns.

Empirical studies suggest that changes in monetary policy rates influence investor behavior and capital market performance. Higher interest rates may increase the cost of capital and reduce banking profitability, which can negatively affect investor perceptions of banking stocks. Consequently, policy rate adjustments often generate responses in the stock market, particularly within the banking sector (Indrajaya, 2022; Wasita et al., 2022; Simatupang & Naibaho, 2025; Amelia & Kuswanto, 2025; Suwifania et al., 2026).

H1: BI Rate affects bank stock returns on the Indonesia Stock Exchange.

Inflation and Bank Stock Return

Inflation is an important macroeconomic variable that can influence financial market performance and investor behavior. Rising inflation generally increases economic uncertainty and reduces purchasing power, which may affect corporate operational costs and profitability. These conditions can lead to changes in investor expectations and stock market performance.

Several empirical studies highlight the relationship between inflation and stock market dynamics. Higher inflation levels may reduce the real value of investment returns and increase risk perceptions among investors. Consequently, inflation is frequently used as a macroeconomic indicator to explain variations in stock returns and market volatility (Stantcheva, 2024; Muhammad et al., 2024; Sengupta et al., 2025).

H2: Inflation affects bank stock returns on the Indonesia Stock Exchange.

Profitability and Bank Stock Return

Profitability reflects a company's ability to generate income from its assets and operational activities. In banking sector research, profitability is commonly measured using Return on Assets (ROA), which indicates how efficiently banks utilize their assets to produce profits. High profitability signals strong financial performance and effective management of banking resources.

From the perspective of signaling theory, higher profitability sends a positive signal to investors regarding a bank's financial stability and future prospects. Strong financial performance can increase investor confidence and encourage greater demand for shares in the capital market. As demand for shares increases, stock prices may rise, resulting in higher returns for investors (Singh et al., 2024; Lamothe et al., 2024; Safitri et al., 2025).

H3: Profitability affects bank stock returns on the Indonesia Stock Exchange.

Firm Size and Bank Stock Return

Firm size reflects the overall scale and financial capacity of a company. Larger banks generally have more diversified operations, broader customer

bases, and stronger financial resources compared to smaller banks. These characteristics enable large banks to better withstand economic fluctuations and financial risks.

In investment analysis, firm size is often associated with corporate stability and market credibility. Investors may perceive larger banks as more stable institutions with stronger financial resilience, which can influence investor confidence and stock performance. However, the relationship between firm size and stock returns may vary depending on market conditions and growth opportunities (Conti et al., 2024; Ramadhan & Mujiyati, 2023).

H4: Firm size affects bank stock returns on the Indonesia Stock Exchange.

BI Rate, Inflation, Profitability, Firm Size, and Bank Stock Return

Stock returns represent an important indicator of investment performance because they reflect the level of profit obtained by investors from their stock holdings. In the banking sector, stock returns are influenced by both macroeconomic conditions and internal corporate factors. Macroeconomic indicators such as interest rates and inflation can influence investment decisions and financial market dynamics, while firm characteristics such as profitability and size reflect the financial strength and operational capacity of banks.

Changes in monetary policy, inflation levels, and corporate financial performance can shape investor expectations and affect stock price movements. As investors respond to these economic and financial signals, stock returns fluctuate in accordance with changes in market perceptions and economic conditions (Indrajaya, 2022; Muhammad et al., 2024; Safitri et al., 2025; Conti et al., 2024).

H5: BI Rate, inflation, profitability, and firm size simultaneously affect bank stock returns on the Indonesia Stock Exchange.

RESEARCH METHODS

This study employs a quantitative approach with a causal associative research design to examine the influence of the BI Rate, inflation, profitability, and firm size on the stock returns of banking companies listed on the Indonesia Stock Exchange during the 2021–2024 period. The research sample consists of 39 banking companies selected based on the availability and completeness of data. The study uses secondary data obtained from several official institutions. Inflation data are sourced from Statistics Indonesia, the BI Rate from Bank Indonesia, profitability data from Financial Services Authority, and firm size as well as stock price data from the Indonesia Stock Exchange. The dataset is structured as panel data, combining time series data (2021–2024) and cross-sectional data (banking companies).

The dependent variable in this study is bank stock return, which is measured based on changes in the closing stock prices between periods. The independent variables include the BI Rate, represented by the BI 7-Day Reverse Repo Rate; inflation, measured using the Consumer Price Index (CPI); profitability, proxied by Return on Assets (ROA); and firm size, measured using the natural logarithm of total assets. The operational definitions and measurements of these variables are summarized in the operational variable table as the basis for empirical analysis.

Bank stock returns are calculated using the following formula:

$$R_{it} = \frac{P_{it} - P_{it-1}}{P_{it-1}} \times 100\%$$

where R_{it} represents the stock return of bank i in period t , P_{it} is the closing stock price in period t , and P_{it-1} is the closing stock price in the previous period.

To analyze the panel data, several regression models are considered, including the Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM). Model selection is conducted through three statistical tests: the Chow test to compare CEM and FEM, the Hausman test to determine whether FEM or REM is more appropriate, and the Lagrange Multiplier (Breusch–Pagan) test to compare CEM and REM. The results of these tests indicate that the Common Effect Model (CEM) is the most appropriate model for this study. This result suggests that differences in specific characteristics among banks are not statistically significant in explaining stock return variations during the observation period, and that macroeconomic variables and general firm characteristics play a more dominant role.

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

$$Y_{it} = \alpha_i + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + \varepsilon_{it}$$

where Y_{it} represents the stock return of bank i in period t , α_i is the constant, X_{1it} represents the BI 7-Day Reverse Repo Rate, X_{2it} represents inflation based on the CPI, X_{3it} represents profitability measured by ROA, and X_{4it} represents firm size measured by the natural logarithm of total assets. Meanwhile, β_1 to β_4 are the regression coefficients, and ε_{it} represents the error term.

Hypothesis testing is conducted at a 5% significance level using the t-test to examine the partial effect of each independent variable, the F-test to analyze the simultaneous effect of all variables, and the coefficient of determination (R^2) to measure the explanatory power of the model. All statistical analyses are performed using EViews 12 to generate empirical results and support the research conclusions for the 2021–2024 period.

RESULTS AND DISCUSSION

Results

The following results present the research findings, starting from descriptive statistics to hypothesis testing using statistical analysis to evaluate the relationship between independent and dependent variables.

Descriptive Statistics

This study uses data from 39 commercial banks that met the sampling criteria. Descriptive statistical analysis is applied to describe the distribution patterns, dispersion, and variation of the research variables. The results are presented in the table below.

Table 1. Descriptive Statistical Analysis

Variable	Mean	Median	Maximum	Minimum	Std. Dev.	Observations
Stock Return	0.4786	-0.0434	43.8664	-0.8559	3.6868	156
BI Rate	4.8575	4.9050	6.1000	3.5200	1.1189	156
Inflation	2.8900	2.2400	5.5100	1.5700	1.5643	156
Profitability	1.1488	1.0900	5.8500	-13.7100	2.5700	156
Firm Size	20.2684	19.1285	30.4395	15.2924	4.1990	156

Source: Data processed using EViews, 2026

Based on 156 observations, stock returns have an average of 0.4786 with a median of -0.0434, a maximum of 43.8664, a minimum of -0.8559, and a standard deviation of 3.6868. This indicates high fluctuations and a wide distribution of returns, reflecting the **risk-return trade-off**, where higher return variability implies higher investment risk. BI Rate has an average of 4.8575 with a median of 4.9050, a maximum of 6.10, a minimum of 3.52, and a standard deviation of 1.1189, indicating relatively stable interest rates during the study period. Inflation shows an average of 2.89 with a median of 2.24, a maximum of 5.51, a minimum of 1.57, and a standard deviation of 1.5643, suggesting moderate inflation with some yearly variation. Profitability has an average of 1.1488 with a median of 1.09, a maximum of 5.85, a minimum of -13.71, and a standard deviation of 2.5700, indicating differences in financial performance among banks. Firm size has an average of 20.2684 with a median of 19.1285, a maximum of 30.4395, a minimum of 15.2924, and a standard deviation of 4.1990, reflecting variation from medium to large-scale banks. Differences in profitability and firm size may signal performance and stability to investors, influencing stock return expectations.

Model Testing Results

Table 2. Model Testing Results

Testing	Probability	Testing	Conclusion
Chow Test Result		Common Effect vs. Fixed Effect	
F-test	0.6988		CEM
Chi-square	0.3996		
Hausman Test	0.4258	Fixed Effect vs. Random Effect	REM
Lagrange Multiplier Test (Breusch-Pagan)	0.2887	Common Effect vs. Random Effect	CEM

Source: Data processed using EViews, 2026

The Chow test shows probability values of 0.6988 (F-test) and 0.3996 (Chi-square), both greater than 0.05, indicating that the **Common Effect Model (CEM)** is more appropriate than the Fixed Effect Model (FEM). The Hausman test produces a probability of 0.4258 (>0.05), suggesting that the Random Effect Model (REM) is preferable to FEM. However, the Lagrange Multiplier test shows a probability of 0.2887 (>0.05), indicating that random effects are not significant, so the **Common Effect Model (CEM)** is the most appropriate model for this study.

Classical Assumption Tests

In the pooled OLS (Common Effect Model) approach, the main classical assumption tests required are multicollinearity and heteroscedasticity (Napitupulu et al., 2021).

Multicollinearity Test

This test examines whether correlations exist among independent variables. If the correlation value is below 0.80, multicollinearity is not present.

Table 3. Multicollinearity Test Results

	X1	X2	X3	X4
X1	1.000000	-0.400970	0.169736	-0.000525
X2	-0.400970	1.000000	-0.021780	0.007119
X3	0.169736	-0.02178	1.000000	0.318589
X4	-0.000525	0.007119	0.318589	1.000000

Source: Data processed using EViews, 2026

The correlation values among independent variables are all below 0.80. Therefore, the model does not suffer from multicollinearity.

Heteroscedasticity Test

Heteroscedasticity occurs when the variance of the residuals is not constant. Testing is conducted to ensure that the regression model meets the homoscedasticity assumption.

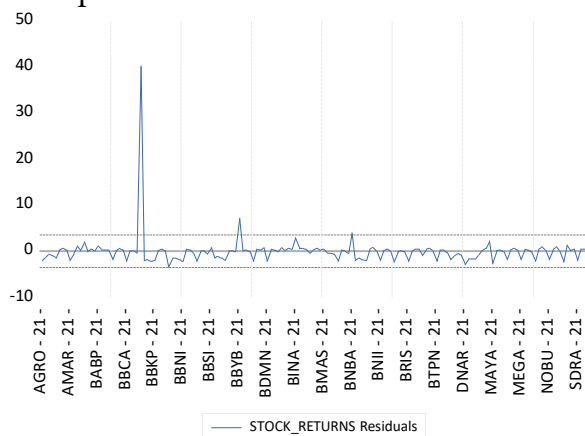


Figure 1. Heteroscedasticity Test Result

Based on the residual plot, most residual values fall within the range of -10 to +10 and are randomly distributed around the zero line without forming a clear pattern, although one extreme spike appears. Since the residual distribution does not form a systematic pattern, the model is considered free from heteroscedasticity.

T-Test

Table 4. T-Test Results

Variable	Coefficient	Std Error	t-Statistic	Prob.
C	2.898663	2.2611576	1.2819378	0.20182
BI_RATE	-0.83266	0.2830096	-2.942193	0.00377
INFLATION	-0.50895	0.1992100	-2.554871	0.01161
PROFITABILITY	0.034584	0.1191152	0.2903473	0.77194
FIRM SIZE	0.150764	0.0717526	2.1011701	0.03728

Source: Data processed using EViews, 2026

The t-test results show that the BI Rate has a negative and significant effect on stock returns ($p < 0.05$). Higher interest rates increase borrowing costs and shift investor preferences toward safer assets, reducing stock returns. Inflation also has a negative and significant effect ($p < 0.05$), indicating that rising price levels increase economic uncertainty and reduce expected real returns. Profitability (ROA) does not significantly affect stock returns ($p > 0.05$), suggesting that profitability information may already be reflected in stock prices, consistent with the efficient market hypothesis. Firm size has a positive and significant effect ($p < 0.05$). Larger firms are often perceived as more stable and

less risky, making them more attractive to investors. The constant is not statistically significant, indicating that stock return variation is mainly explained by the independent variables in the model.

F-Test

Table 5. F-Test Results

F-statistic	Prob.
4.060017	0.003726

Source: Data processed using EViews, 2026

The F-test shows a probability value of 0.003726 (<0.05), indicating that BI Rate, inflation, profitability, and firm size simultaneously have a significant effect on banking stock returns listed on the Indonesia Stock Exchange. Therefore, the simultaneous hypothesis is accepted.

R-Squared Test

Table 6. R-Squared Results

R-squared	Adjusted R-squared
0.097106	0.073188

Source: Data processed using EViews, 2026

The R-squared value of 0.097106 indicates that BI Rate, inflation, profitability, and firm size explain **9.71%** of the variation in stock returns, while the remaining **90.29%** is explained by other variables outside the model. The adjusted R-squared value of 0.073188 shows that after adjusting for the number of variables, the model explains **7.32%** of stock return variation, indicating that the explanatory power of the model is relatively limited.

Discussion

The Effect of BI Rate on Bank Stock Returns

Based on Table 4, the BI Rate variable has a t-statistic value of -2.942193 with a probability of $0.00377 < 0.05$, indicating that the BI Rate has a negative and significant effect on banking stock returns, so the hypothesis is accepted. This finding suggests that an increase in the benchmark interest rate raises the cost of funds, compresses bank interest margins, and reduces profitability, which is negatively responded to by the market through declining stock prices and returns. From a signaling perspective, an increase in the BI Rate is interpreted as a signal of tighter monetary policy that may weaken banking sector performance expectations. Higher interest rates tend to encourage investors to shift funds from risky assets such as stocks to safer financial instruments such as deposits or bonds (Indrajaya, 2022; Jannati et al., 2025). In addition, monetary policy transmission

through interest rate adjustments can increase bank funding costs and influence financial performance prospects in the banking sector (Wasita et al., 2022; Simatupang & Naibaho, 2025). Consequently, investors reduce demand for banking stocks, which ultimately leads to lower stock prices and stock returns.

The Effect of Inflation on Bank Stock Returns

Based on Table 4, inflation has a t-statistic value of -2.554871 with a probability of $0.01161 < 0.05$, indicating that inflation has a negative and significant effect on banking stock returns and the hypothesis is accepted. Rising inflation reduces purchasing power, increases operational costs, and may worsen credit quality, which can weaken bank performance and trigger negative market responses. High inflation also creates macroeconomic uncertainty that can increase investment risk and reduce investor confidence in financial markets (Stantcheva, 2024). In the banking sector, inflation can affect loan repayment capacity and the stability of financial performance, which may ultimately influence investor perceptions of banking stocks (Sopi, 2024). Empirical studies also indicate that inflation plays an important role in explaining fluctuations in stock returns and financial market volatility (Muhammad et al., 2024). As a result, investors tend to revise their expectations and reduce the valuation of banking stocks when inflation increases.

The Effect of Profitability on Bank Stock Returns

Based on the hypothesis testing results in Table 4, the profitability variable (ROA) has a t-statistic value of 0.2903473 with a probability of $0.77194 > 0.05$, indicating that profitability does not have a significant effect on banking stock returns, so the hypothesis is rejected. This finding implies that bank profitability does not necessarily lead to higher stock returns because profitability information may already be anticipated by investors and reflected in stock prices. Profitability measured by Return on Assets (ROA) reflects the efficiency of asset utilization in generating profits and is widely used as an indicator of financial performance in banking institutions (Singh et al., 2024; Son & Duong, 2024). However, investors often consider broader factors such as macroeconomic conditions, risk levels, and future growth prospects when making investment decisions. Therefore, profitability alone may not be sufficient to influence stock return movements in the banking sector. This finding is consistent with Ramadhan and Mujiyati (2023), who state that profitability is not always the primary determinant of stock returns because investors tend to evaluate multiple financial and economic factors simultaneously.

The Effect of Firm Size on Bank Stock Returns

Based on the hypothesis testing results in Table 4, the firm size variable has a t-statistic value of 2.1011701 with a probability of $0.03728 < 0.05$, indicating that firm size has a positive and significant effect on banking stock returns, so the hypothesis is accepted. This finding suggests that banks with larger asset scales tend to generate higher stock returns. Firm size reflects the scale of corporate resources and operational capacity, where larger firms generally possess stronger capital structures and greater financial stability. Companies with larger asset bases tend to have better access to funding sources and broader business diversification, which can increase investor confidence (Conti et al., 2024; Bedi & Singh, 2024). Greater investor confidence may increase demand for shares of large banking institutions, which ultimately contributes to higher stock returns. This finding is also consistent with Ramadhan and Mujiyati (2023), who found that firm size can positively influence stock returns due to stronger corporate fundamentals and greater financial stability.

The Simultaneous Effect of BI Rate, Inflation, Profitability, and Firm Size on Bank Stock Returns

Based on the simultaneous test results in Table 5, the F-statistic value is 4.060017 with a probability of $0.003726 < 0.05$, indicating that BI Rate, inflation, profitability, and firm size simultaneously have a significant effect on banking stock returns. This finding implies that banking stock returns are influenced by the interaction between macroeconomic conditions and company fundamentals rather than by a single variable. Monetary policy indicators such as interest rates and inflation represent external economic signals that influence investor expectations and financial market dynamics (Akhsan et al., 2025; Apriyana et al., 2025). At the same time, internal company characteristics such as profitability and firm size reflect the financial strength and operational stability of banking institutions. The interaction between these macroeconomic and firm-specific factors shapes investor perceptions and determines stock return movements in the capital market. These findings are also supported by Herman and Azansyah (2024), who found that macroeconomic variables and company fundamentals simultaneously influence banking stock returns.

CONCLUSION

The findings show that BI Rate and inflation have a negative and significant effect on banking stock returns, while firm size has a positive and significant effect, and profitability (ROA) does not significantly affect stock returns. Simultaneously, all variables significantly influence stock returns, indicating that banking stock performance is shaped by the interaction between

macroeconomic conditions and firm characteristics. The main insight of this study is that macroeconomic indicators—particularly interest rates and inflation—play an important role in shaping investor expectations and market responses in the banking sector, while firm size functions as a positive signal of stability and credibility. The scientific contribution of this study lies in providing empirical evidence on how monetary policy variables and firm fundamentals jointly affect banking stock returns in the post-pandemic economic context, thereby enriching the literature on capital market behavior and signaling mechanisms in emerging markets.

However, this study has several limitations. The relatively low coefficient of determination indicates that BI Rate, inflation, profitability, and firm size explain only a small portion of the variation in stock returns, suggesting that many other factors outside the model also influence banking stock performance. These may include exchange rates, credit risk, market sentiment, liquidity conditions, and other macroeconomic indicators. Therefore, future research is recommended to incorporate additional variables, extend the observation period, and broaden the research sample to improve the explanatory power of the model and provide a more comprehensive understanding of the determinants of banking stock returns.

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