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Macroeconomic Determinants of Stock Returns: Evidance from Indonesian Stated-Owned Banks

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Abstract

Macroeconomic conditions are widely recognized as important determinants of stock market performance; however, empirical evidence regarding the effects of the exchange rate, the policy interest rate, and inflation on stock returns remains inconclusive, particularly for state-owned commercial banks in emerging markets such as Indonesia. This study aims to examine the effects of the exchange rate, the policy interest rate, and inflation on the stock returns of Indonesian state-owned commercial banks listed on the Indonesia Stock Exchange. A quantitative approach was employed using monthly secondary data from January 2020 to December 2024. The data were analyzed using panel data regression analysis. The findings reveal that exchange rate fluctuations do not have a significant effect on stock returns, whereas the policy interest rate and inflation significantly influence stock returns. These findings provide new empirical evidence that domestic monetary variables play a more prominent role than exchange rate movements in explaining stock return behavior among Indonesian state-owned banks, thereby contributing to the literature on macroeconomic determinants of stock returns in emerging markets.

Keywords: Exchange Rate; Policy Interest Rate; Inflation; Stock Returns; State-Owned Banks.

INTRODUCTION

Capital markets play a crucial role in promoting economic growth by facilitating the allocation of funds from investors to productive sectors, while simultaneously reflecting market expectations regarding corporate performance (Parmitasari, 2016). Indonesia's

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capital market has expanded considerably, with the number of investors rising from roughly 2.4 million in 2019 to more than 12 million in 2024 (OJK, 2024), reflecting growing public confidence in equity investment as both a financial instrument and a barometer of national economic health. Crucial to this financial landscape, state-owned commercial banks hold a highly dominant position, accounting for approximately 41.94 percent of total national banking assets as of the third quarter of 2024 (OJK, 2024).

Theoretically, exchange rates, policy interest rates, and inflation are among the principal macroeconomic variables influencing stock returns because they shape investor expectations and corporate financial performance (Mishkin, 2019). Exchange rate movements affect market confidence and firm profitability, while changes in policy interest rates alter the attractiveness of equity investment relative to fixed-income assets. Inflation also influences stock returns through its impact on purchasing power, production costs, and monetary policy responses. Consequently, fluctuations in these macroeconomic variables are expected to influence the performance of banking stocks.

Empirical evidence from Indonesia, however, indicates that the relationship between macroeconomic conditions and stock returns does not always move in line with theoretical predictions (Mawaddah et al., 2024). During the Covid-19 pandemic in 2020, the rupiah depreciated sharply against the US dollar while Bank Indonesia lowered its policy rate to a historic low of 3.5 percent to preserve economic stability, yet the stock returns of state-owned banks did not decline uniformly. In 2022, as the economy began to recover, Bank Mandiri (BMRI) and Bank Negara Indonesia (BBNI) posted returns of 48 percent and 39 percent respectively, despite rising inflation and interest rates. By 2024, amid continued monetary tightening and further rupiah depreciation, returns for the same banks fell to -10 percent and -15 percent. This asynchronous pattern between macroeconomic movements and stock performance suggests that the effects of these variables on the returns of Indonesian state-owned bank stocks remain inconsistent and merit further empirical investigation (Norhaliza & purbowati 2025).

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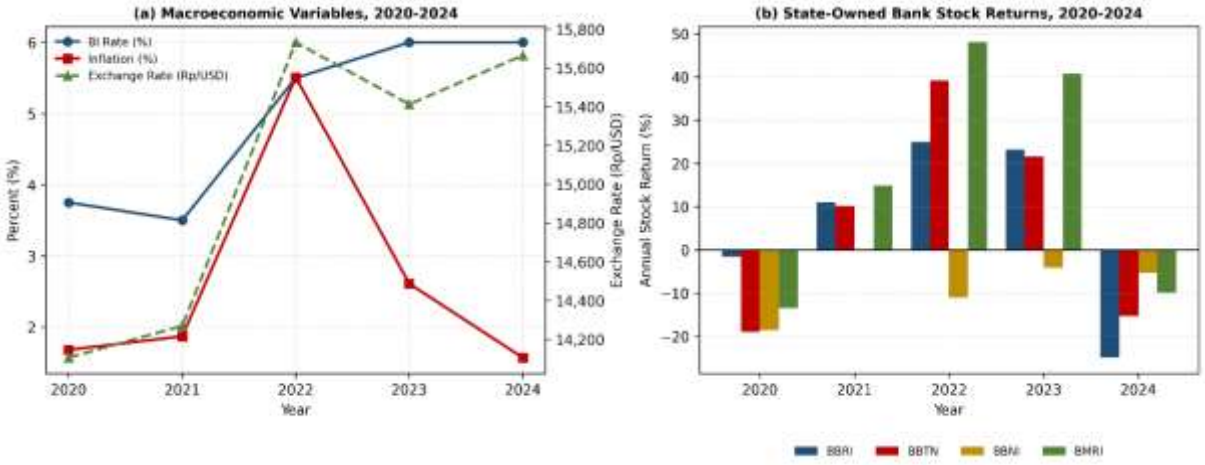


Figure 1. Macroeconomic Variables and State-Owned Bank Stock Returns in Indonesia, 2020-2024

Source: Bank Indonesia (2024); authors' calculation from monthly stock return data, 2020-2024.

This inconsistency is also reflected in previous empirical studies. Andika Triwardana et al. (2025) reported that the exchange rate and policy interest rate significantly influenced Indonesia's Composite Stock Price Index, whereas inflation had no significant effect. Similarly, Joseph et al. (2025) found that exchange rates negatively affected bank stock returns in the Indian banking sector, while interest rates and inflation had positive effects. In contrast, Mubarok & Merliana (2025) demonstrated that inflation positively affected stock returns, whereas exchange rates and interest rates had negative effects in Indonesia's banking sector. However, Norhaliza & purbowati (2025), Alya Putri Widianti (2024), and Izza et al. (2025) reported that some or all of these macroeconomic variables had no significant effect on banking stock returns.

Taken together, these conflicting findings point to a persistent gap in the literature: existing studies disagree not only on the direction but also on the statistical significance of the effects of the exchange rate, the policy interest rate, and inflation on stock returns, and much of this variation appears to stem from differences in study period, sectoral focus, and prevailing macroeconomic conditions (Tandelilin, 2017). Moreover, prior studies on Indonesian state-owned banks have generally relied on data that precede or only partially overlap with the post-pandemic monetary-tightening cycle, leaving the 2020-2024 period, which spans the pandemic shock, the recovery phase, and the subsequent global interest rate hikes, comparatively underexamined (Bappenas, 2021; Federal

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Reserve Board, 2024). Given the strategic position of state-owned banks in Indonesia's financial system and their close linkage to fiscal and monetary policy, this gap represents a meaningful opportunity for further empirical investigation (Mishkin, 2019; Tandelilin, 2017).

This study therefore examines the effects of the exchange rate, the policy interest rate, and inflation on the stock returns of Indonesian state-owned commercial banks listed on the Indonesia Stock Exchange, using monthly panel data covering January 2020 to December 2024. By focusing on a sector-specific sample across a period that captures both crisis and recovery conditions, this study offers updated empirical evidence on the behavior of macroeconomic determinants of bank stock returns in an emerging-market setting. The findings are expected to contribute to the literature on the macroeconomic determinants of stock returns while providing practical insights for investors and policymakers in formulating investment and monetary policy decisions.

RESEARCH OBJECTIVES

Building on the background and the empirical gap outlined above, this study is designed to achieve the following objectives:

1. To examine the simultaneous effect of the exchange rate, the policy interest rate, and inflation on the stock returns of Indonesian state-owned commercial banks listed on the Indonesia Stock Exchange during the 2020-2024 period.
2. To examine the partial effect of the exchange rate on the stock returns of Indonesian state-owned commercial banks listed on the Indonesia Stock Exchange.
3. To examine the partial effect of the policy interest rate on the stock returns of Indonesian state-owned commercial banks listed on the Indonesia Stock Exchange.
4. To examine the partial effect of inflation on the stock returns of Indonesian state-owned commercial banks listed on the Indonesia Stock Exchange.

LITERATURE REVIEW

Research on the macroeconomic determinants of stock returns has developed through various theoretical and empirical perspectives. This section reviews the theoretical foundations underpinning this study and examines previous empirical findings on the relationships between exchange rates, policy interest rates, inflation, and stock returns.

According to the Efficient Market Hypothesis (EMH), stock prices rapidly incorporate available information, preventing investors from consistently earning

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abnormal returns (Fama, 1970). This study adopts the semi-strong form of EMH because it assumes that publicly available macroeconomic information including exchange rates, policy interest rates, and inflation is immediately reflected in stock prices (Fama 1970; Malkiel, 2003).

The Fisher Effect states that nominal interest rates consist of the real interest rate and expected inflation. Accordingly, an increase

e in expected inflation leads to higher nominal interest rates to maintain investors' real returns (Mishkin 2019). In the capital market, higher interest rates increase the attractiveness of fixed-income investments and may reduce stock returns, while rising inflation can also weaken stock performance by increasing costs and reducing purchasing power (Tandelilin, 2017).

According to Purchasing Power Parity (PPP), exchange rates adjust over time to reflect differences in inflation between countries (Krugman et al., 2018). Exchange rate fluctuations influence investor expectations, foreign exchange risk, and the financial performance of firms with foreign-currency exposure, thereby affecting stock returns. This view is complemented by the Exchange Rate Exposure Theory, which argues that a firm's sensitivity to exchange rate movements depends on its foreign-currency exposure. Consequently, firms with relatively limited international exposure, including domestically oriented banks, may exhibit a weaker relationship between exchange rate fluctuations and stock returns (Daniar & Hakim, 2024).

Empirical findings on the exchange rate-return relationship remain divided. Several studies report a significant relationship between the exchange rate and bank stock returns (Iskandar et al., 2023; Joseph et al., 2025), while others find that the exchange rate has no significant effect on banking-sector stock returns, arguing that banks' relatively limited direct exposure to foreign currency transactions weakens the transmission of exchange rate movements to stock performance (Ningsih & Idris 2021; Norhaliza & purbowati 2025; Riskiyani & Dewi 2023). This divide suggests that the exchange rate-return relationship is highly sensitive to sectoral characteristics and the specific foreign-currency exposure of the firms studied.

A similar lack of consensus characterizes the interest rate-return literature. Qoni'ah and Syaiful (2024); Wijayanti and Margie (2024) find that a higher interest rate significantly reduces stock returns, consistent with the view that rising rates draw investors toward safer instruments and raise firms' borrowing costs. Joseph et al. (2025), studying Indian bank stocks, similarly report a significant effect of the interest rate on returns, although with a positive sign, reflecting differences in market structure and

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monetary regime. These findings suggest that although policy interest rates are generally associated with stock returns, the direction and magnitude of their effects vary across market structures, economic conditions, and study periods.

The inflation-return relationship shows the same pattern of disagreement. Mawaddah et al. (2024) and Widianti (2024) find that inflation exerts a significant negative effect on stock returns, consistent with the Fisher Effect's prediction that rising inflation erodes the real return demanded by investors. Achmadi (2023) similarly identifies inflation as a key macroeconomic determinant of stock price movements in the banking sector. In contrast, Mubarok and Merliana (2025) report a significant positive effect of inflation on stock returns, arguing that moderate inflation can reflect rising economic activity rather than eroding purchasing power. Andika Triwardana et al. (2025) find inflation to have no significant effect at all on Indonesia's composite stock price index. This inconsistency indicates that the inflation-return relationship is contingent on the inflation regime (moderate versus high) and the sector under study.

Taken together, these findings suggest that the effects of exchange rates, policy interest rates, and inflation on stock returns remain inconclusive, with results varying across sectors, study periods, and macroeconomic conditions. Moreover, most previous studies have focused on individual banks, mixed-sector samples, or periods that do not fully capture the post-pandemic monetary tightening cycle. Accordingly, this study examines Indonesian state-owned commercial banks using monthly panel data from January 2020 to December 2024 to provide updated empirical evidence on the effects of macroeconomic variables on bank stock returns during a period of significant economic transition.

METHOD

This study employs a quantitative approach with an associative research design, which is used to examine the relationship and effect between independent and dependent variables (Sugiyono, 2019). The associative approach was chosen because this study aims to analyze the effect of the exchange rate, the policy interest rate, and inflation on the stock returns of Indonesian state-owned banks, allowing the direction and strength of the relationship among variables to be identified both partially and simultaneously.

The data used in this study are secondary data of a monthly panel structure. The data consist of the monthly closing stock prices of state-owned banks, from which monthly stock returns are derived, together with the monthly exchange rate of the Indonesian rupiah against the US dollar, the Bank Indonesia policy rate (BI 7-Day Reverse Repo

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Rate), and the monthly inflation rate based on the Consumer Price Index, covering the period from January 2020 to December 2024.

The data sources used are official and publicly accessible. Monthly stock price data for the four state-owned banks were obtained from Yahoo Finance (https://finance.yahoo.com) and cross-checked against official data from the Indonesia Stock Exchange (IDX) to ensure accuracy and consistency. Data on the exchange rate and the policy interest rate were obtained from Bank Indonesia's Economic and Financial Statistics of Indonesia (SEKI) publication (https://www.bi.go.id), while inflation data, originally compiled by Statistics Indonesia (BPS) based on the Consumer Price Index, were also accessed through Bank Indonesia's publication.

The population of this study consists of all state-owned commercial banks listed on the Indonesia Stock Exchange during the 2020-2024 period, namely PT Bank Mandiri (Persero) Tbk (BMRI), PT Bank Negara Indonesia (Persero) Tbk (BBNI), PT Bank Rakyat Indonesia (Persero) Tbk (BBRI), and PT Bank Tabungan Negara (Persero) Tbk (BBTN). The sample was determined using a saturated sampling technique (sampling jenuh), in which the entire population is used as the sample because the population size is relatively small and homogeneous in character (Sugiyono, 2019). All four banks have complete and consistent monthly data throughout the study period, satisfying the balanced-panel requirement. The unit of analysis is monthly data over 60 months (January 2020-December 2024) for four banks, yielding a total of 240 panel observations.

The research instrument consists of the operational definitions and indicators used to measure each variable, summarized in Table 1.

Table 1. Research Instrument

Variable	Definition	Indicator / Formula	Source
Exchange Rate (X1)	The price of the rupiah relative to the US dollar; transformed into natural logarithm (LN) form to reduce scale differences and improve model stability.	Monthly average IDR/USD middle rate	Bank Indonesia
Policy Interest Rate (X2)	The benchmark interest rate set by Bank Indonesia as a reference for banking interest rates.	BI 7-Day Reverse Repo Rate (%) per month	Bank Indonesia

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Inflation (X3)	The general and continuous increase in the price of goods and services over a given period.	Monthly inflation rate based on the Consumer Price Index (CPI)	Bank Indonesia / BPS
Stock Return (Y)	The gain obtained by investors from stock investment, calculated from the change in stock price over a given period.	Rt = (Pt - Pt-1) / Pt-1	Yahoo Finance / IDX

Data were collected using the documentation method, which involves reviewing and recording data that are already available in the form of official reports, publications, and archives (Sugiyono, 2019). All monthly data on stock prices, the exchange rate, the policy interest rate, and inflation were downloaded from the respective official sources described above, then compiled into a monthly time-series table for each bank before being organized into panel-data format.

The theoretical framework of this study integrates the Efficient Market Hypothesis, the Fisher Effect, and Purchasing Power Parity/Exchange Rate Exposure Theory, which jointly explain how macroeconomic information is expected to be reflected in the stock returns of state-owned banks. Based on this framework, the exchange rate, the policy interest rate, and inflation are hypothesized to affect stock returns both simultaneously and partially, as illustrated in the following conceptual model: Exchange Rate (X1), Policy Interest Rate (X2), and Inflation (X3) → Stock Return (Y).

Data were analyzed using panel data regression with the aid of EViews version 12 software, combining the time-series dimension (monthly, 2020-2024) with the cross-sectional dimension (the four banks). The general panel regression model used is: Yit = alpha + beta1.X1it + beta2.X2it + beta3.X3it + epsilon it, where Yit is the stock return of bank i in period t, alpha is the constant, beta1 to beta3 are the regression coefficients, X1it to X3it are the exchange rate, the policy interest rate, and inflation in period t, and epsilon it is the error term. The most appropriate panel estimation model (Common Effect, Fixed Effect, or Random Effect) was determined through the Chow test and the Lagrange Multiplier (LM) test. Classical assumption tests, comprising the multicollinearity test and the heteroskedasticity test, were then performed to ensure the model produced a Best Linear Unbiased Estimator (BLUE). Hypotheses were tested using the F-test (simultaneous effect), the t-test (partial effect), and the coefficient of determination (R2).

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To ensure the credibility of the data, this study relies exclusively on data published by official and verifiable institutions, namely Bank Indonesia, Statistics Indonesia (BPS), the Indonesia Stock Exchange, and Yahoo Finance, with stock price data cross-validated against IDX records. The research was conducted based on the principles of honesty, objectivity, and scientific integrity; all data were processed without manipulation for academic purposes only, and every source of information, theory, and data used is clearly cited to avoid plagiarism and preserve the authenticity of the work.

RESULTS

The appropriate panel-data estimation model was determined through the Chow, Hausman, and Lagrange Multiplier (LM) tests. The results of the model selection tests are presented in Table 2.

Table 2. Chow Test Results

Redundant Fixed Effects Tests
Equation: Untitled
Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	1.829231	(3,233)	0.1425
Cross-section Chi-square	5.587021	3	0.1335

Source: Data processed with EViews 12, 2026.

The Chow test yields a cross-section probability of 0.1425, which is greater than 0.05, so the null hypothesis is not rejected and the Common Effect Model is preferred over the Fixed Effect Model. The Lagrange Multiplier test was subsequently performed to compare the Common Effect Model against the Random Effect Model.

Table 4. Lagrange Multiplier Test Results

	Test Hypothesis		
	Cross-section	Time	Both
Breusch-Pagan	0.294659	60.87595	61.17061
	(0.5873)	(0.0000)	(0.0000)

Source: Data processed with EViews 12, 2026.

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The Breusch-Pagan cross-section probability of 0.5873 is greater than 0.05, so the null hypothesis is not rejected, indicating that the Common Effect Model (CEM) is more appropriate than the Random Effect Model. Since both the Chow test and the LM test favor the Common Effect Model, the Hausman test, which is used to compare the Fixed Effect Model and the Random Effect Model, is not required. The Common Effect Model is therefore used as the final estimation model in this study.

Classical assumption testing was performed to ensure that the Common Effect Model, estimated using Ordinary Least Squares, produces a Best Linear Unbiased Estimator (BLUE). Testing was focused on the multicollinearity and heteroskedasticity assumptions, as these are the most directly relevant to the accuracy and efficiency of the estimated coefficients in this model (Ghozali, 2021).

Classical Assumption Test

Table 5. Multicollinearity Test (Correlation Matrix)

	X1	X2	X3
X1	1.000000	0.752166	0.290204
X2	0.752166	1.000000	0.316471
X3	0.290204	0.316471	1.000000

Source: Data processed with EViews 12, 2026.

All pairwise correlation coefficients among the independent variables are below the commonly used threshold of 0.85 (X1-X2 = 0.752; X1-X3 = 0.290; X2-X3 = 0.316), indicating that the model is free from multicollinearity (Gujarati & Porter, 2009).

Table 6. Heteroskedasticity Test (Glejser Test)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Y	0.517660	0.034695	14.92014	0.0000
C	0.911507	0.894792	1.018681	0.3094
X1	-0.091833	0.094857	-0.968124	0.3340
X2	-0.375894	0.456134	-0.824086	0.4107
X3	0.046997	0.225472	0.208440	0.8351

Dependent Variable: Absolute Residual. Source: Data processed with EViews 12, 2026.

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The Glejser test shows that the probability value of each independent variable exceeds the 0.05 significance level, indicating that the model is free from heteroskedasticity and that the residual variance is constant across observations.

Hypothesis testing was carried out using the F-test for the simultaneous effect, the t-test for the partial effect, and the coefficient of determination (R2) to assess the explanatory power of the model.

Table 7. F-Test (Simultaneous) and Coefficient of Determination

R-squared	0.082166
Adjusted R-squared	0.070498
S.E. of regression	0.080130
Sum squared resid	1.515330
Log likelihood	267.2554
F-statistic	7.042350
Prob(F-statistic)	0.000149

Source: Data processed with EViews 12, 2026.

The F-statistic of 7.042 exceeds the F-table value of 2.643, with a probability of 0.000149, which is below 0.05. Accordingly, the null hypothesis is rejected, indicating that the exchange rate, the policy interest rate, and inflation jointly and significantly affect the stock returns of Indonesian state-owned banks.

Table 8. t-Test (Partial)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.482794	1.676004	-0.884720	0.3772
X1	0.175667	0.177600	0.989119	0.3236
X2	-1.915218	0.846656	-2.262098	0.0246
X3	-1.264037	0.414944	-3.046283	0.0026

Dependent Variable: Y (Stock Return). Source: Data processed with EViews 12, 2026.

The t-test results in Table 8 show that the exchange rate (X1) has a t-statistic of 0.989, below the t-table value of 1.970, with a probability of 0.3236 (> 0.05); the null hypothesis is therefore not rejected, indicating that the exchange rate has a positive but statistically insignificant effect on stock returns. The policy interest rate (X2) has a t-statistic of -2.262, exceeding the t-table value in absolute terms, with a probability of

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0.0246 (< 0.05), indicating a significant negative effect on stock returns. Inflation (X3) has a t-statistic of -3.046 with a probability of 0.0026 (< 0.05), also indicating a significant negative effect on stock returns.

The Adjusted R-squared value of 0.0705 indicates that the exchange rate, the policy interest rate, and inflation jointly explain approximately 7 percent of the variation in stock returns, while the remaining 93 percent is explained by factors outside the model. This relatively low explanatory power is consistent with the highly dynamic and volatile nature of stock markets, where returns are driven not only by macroeconomic fundamentals but also by firm-specific performance, investor sentiment, and global market conditions that are difficult to quantify (Dimpfl & Jank, 2021; Widarjono, 2018). In financial and capital-market research, a modest R-squared value is common and does not by itself indicate that the model is inadequate, provided that the independent variables remain statistically significant and consistent with theoretical expectations (Hair et al., 2019).

DISCUSSION

The Simultaneous Effect of the Exchange Rate, the Policy Interest Rate, and Inflation on Stock Returns

The finding that the exchange rate, the policy interest rate, and inflation jointly and significantly affect the stock returns of Indonesian state-owned banks confirms that macroeconomic conditions, taken as a whole, play an important role in shaping stock market performance. This result is consistent with the Efficient Market Hypothesis (Fama, 1970), which holds that stock prices reflect all publicly available information, including macroeconomic indicators. As the exchange rate, policy rate, and inflation change, investors incorporate this information into their expectations, which is then reflected in the movement of stock returns. However, the significant simultaneous effect does not imply that macroeconomic variables alone explain the bulk of return variation; the low Adjusted R-squared (7 percent) indicates that firm-specific fundamentals, investor sentiment, and global conditions also play a substantial role (Hidayat et al., 2022; Suci et al., 2023), and this represents a first point of contribution beyond the individual thesis on which this study is based: it provides updated, sector-specific confirmation of joint macroeconomic significance for the 2020-2024 pandemic-to-tightening cycle, a period not covered by most prior studies on Indonesian state-owned banks.

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The Effect of the Exchange Rate on Stock Returns

The exchange rate is found to have a positive but statistically insignificant effect on the stock returns of state-owned banks. This result can be explained through the Exchange Rate Exposure Theory, which holds that a firm's sensitivity to currency movements depends on the extent of its foreign-currency exposure (as discussed in Daniar & Hakim, 2024). Unlike export-oriented manufacturing firms, state-owned banks are primarily engaged in domestic financial intermediation, so their earnings are less directly exposed to exchange rate fluctuations; in addition, banks can manage part of their foreign-currency exposure through hedging and treasury activities, and in some cases may even benefit from a stronger US dollar through the revaluation of foreign-currency assets. This finding is consistent with Norhaliza and Purbowati (2025), Riskiyani and Dewi (2023), and Ningsih and Idris (2021), who likewise found that the exchange rate is not a significant determinant of banking-sector stock returns, reinforcing the view that the exchange rate-return relationship is highly sector-dependent rather than universal.

The Effect of the Policy Interest Rate on Stock Returns

The policy interest rate is found to have a significant negative effect on stock returns, meaning that an increase in the interest rate is associated with a decline in the stock returns of state-owned banks. This finding is consistent with the Fisher Effect and the Cost of Capital Theory, which predict that a higher interest rate raises the relative attractiveness of fixed-income instruments such as deposits and bonds while increasing firms' borrowing costs, thereby reducing demand for equities (Brigham & Houston, 2019; Tandelilin, 2017). Although banks can, in principle, benefit from a wider net interest margin when rates rise, the results suggest that the market's response to monetary tightening dominates this potential offsetting effect during the study period. This result aligns with Wijayanti & Margie (2024) and Qoni'ah & Syaiful (2024), who similarly found a significant negative relationship between the interest rate and stock returns, confirming that interest rate policy is a key channel through which monetary conditions affect bank valuations in Indonesia.

The Effect of Inflation on Stock Returns

Inflation is found to have a significant negative effect on stock returns, indicating that rising inflation is associated with declining bank stock returns. This result is consistent with the Fisher Effect, which predicts that higher inflation erodes the real return expected by investors and prompts upward adjustment of nominal interest rates, both of which

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reduce the attractiveness of equities (Mishkin, 2019). The finding also aligns with Mawaddah et al. (2024), Widianti (2024), and Achmadi (2023), who similarly report a significant negative inflation effect on bank stock returns. This result diverges from Mubarok and Merliana (2025), who found a significant positive effect, arguing that moderate inflation can signal rising economic activity; the difference likely reflects the higher and more volatile inflation experienced during 2022, within the present study's sample period, compared with the calmer inflation regime examined in that earlier study. This divergence itself underscores a key contribution of the present study: it shows that the inflation-return relationship is regime-dependent, and that findings from periods of low, stable inflation should not be generalized to periods of inflationary shock such as the one experienced in 2022.

Overall, these findings extend the literature on macroeconomic determinants of stock returns by providing updated, sector-specific evidence from Indonesia's state-owned banks over a period spanning the pandemic shock, the recovery phase, and the subsequent monetary-tightening cycle. The results confirm that monetary variables, specifically the policy interest rate and inflation, are more influential in explaining bank stock returns than the exchange rate, offering a more nuanced picture than studies that treat all three macroeconomic variables as equally relevant across sectors and periods. This contributes new empirical evidence for investors, policymakers, and future researchers examining the resilience of Indonesia's state-owned banking sector to macroeconomic shocks.

REFERENCES

Achmadi, Nur. 2023. “Analisis Pengaruh Inflasi, Suku Bunga, Nilai Tukar Terhadap Harga Saham.” *(JRAMB) Jurnal Riset Akuntansi Mercu Buana* 9(2): 116–26. doi:https://doi.org/10.26486/jramb.v9i2.3560.

Alya Putri Widianti. 2024. “Pengaruh Inflasi Dan Suku Bunga (Bi) Terhadap Return Saham Pada Bank Bumn Yang Terdaftar Di Bursa Efek Indonesia Periode 2017-2021.” *Lobi* 1(1): 58–74. doi:10.15575/lobi.v1i1.683.

Andika Triwardana, Akbar Lufi Zulfikar, dan Selly Swandari. 2025. “The Influence Of Inflation and Interest Rates and The Rupiah Exchange Rate On The Composite Stock Price Index in Indonesia.” *International Journal of Economics and Management Research* 4(1): 266–74. doi:10.55606/ijemr.v4i1.311.

Bappenas. 2021. “A Year of Covid-19 : A Long Road to Recovery and Acceleration of Indonesia ’ s Development.” *Jurnal Perencanaan Pembangunan* V(1): 1–19.

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doi:10.36574/jpp.v5i1.

Board, Federal Reserve. 2024. 4 *Federal Open Market Committee (FOMC) Statement, June 11–12, 2024*. Washington, D.C.

Brigham, Eugene F, dan Joel F Houston. 2019. *Fundamentals of FINANCIAL MANAGEMENT 15e*. Cengage Learning.

Daniar, Devi, dan Astrid Dita Meirina Hakim. 2024. "Pengaruh Nilai Tukar, Tingkat Suku Bunga, Inflasi, dan Volume Perdagangan Terhadap Return Saham Pada Perusahaan Perbankan di Bursa Efek Indonesia." *EKOMA : Jurnal Ekonomi, Manajemen, Akuntansi* 3(3): 1144–51.

Dimpfl, Thomas, dan Stephan Jank. 2021. "Stock Market Volatility and Public Information Flow: A Non-linear Perspective." *Economics Letters* 204: 109905. doi:10.1016/j.econlet.2021.109905.

Eugene F. Fama. 1970. "Efficient Capital Markets: A Review of Theory and Empirical Work." *The Journal of Finance* 25(2): 383. doi:10.2307/2325486.

Gujarati, Damodar N., dan Dawn C. Porter. 2009. *Basic Econometrics*. 5th Editio. New York: McGraw-Hill.

Hair, Joseph F., William C. Black, Barry J. Babin, dan Rolph E. Anderson. 2019. *Multivariate Data Analysis*. 8th ed. Hampshire: Cengage Learning.

Hidayat, Zainal Imron, Sri Hermuningsih, dan Gendro Wiyono. 2022. "Pengaruh Nilai Tukar Rupiah, Inflasi, dan Tingkat Suku Bunga terhadap Return Saham dengan Variabel Beta Saham sebagai Variabel Intervening (Studi pada Industri Konstruksi yang Terdaftar di Bei Periode 2014-2018)." 01(02): 87–101.

Iskandar, Dini, Martalena Martalena, Casuarina Putri Benedicta Sihombing, dan Bram Hadianto. 2023. "Is the banking stock return affected by exchange, interest, and inflation rates?" *Owner* 7(3): 2762–70. doi:10.33395/owner.v7i3.1775.

Joseph, Aleena, E. Geetha, dan L. Kishore. 2025. "Impact of Macroeconomic Factors on Bank Stock Returns: Empirical Evidence From India." *Investment Management and Financial Innovations* 22(1): 416–28. doi:10.21511/imfi.22(1).2025.31.

Krugman, Paul R, Maurice Obstfeld, dan Marc J Melitz. 2018. 11 Pearson Education : Harlow., 2018 *International Economics, Theory and Policy*.

Malkiel, Burton G. 2003. "The Efficient Market Hypothesis and Its Critics." *Journal of Economic Perspectives* (91). doi:10.1257/089533003321164958.

Mawaddah, Jihan, Eko Susanto, dan Andi Amri. 2024. "Pengaruh Inflasi, Suku Bunga dan Nilai Tukar terhadap Return Saham yang Terdaftar di IDX-MES BUMN 17 Periode 2018-2022." *Jurnal Simki Economic* 7(2): 478–88.

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doi:10.29407/jse.v7i2.727.

Mishkin, Fredric S. 2019. *The Economics of Money, Banking, and Financial Markets*. 12th Editi. Pearson Education.

Nanda Iramatul Izza, RA, Novita Indriyani, Dea Ayu Prananda Chamariyah. 2025. "Pengaruh Inflasi, Suku Bunga dan Nilai Tukar Rupiah Terhadap Return Saham Pada Perusahaan Sektor Keuangan yang Terdaftar di Bursa Efek Indonesia." *Journal of Advances in Accounting, Economics, and Management* 4(1): 10. doi:https://doi.org/10.30640/inisiatif.v4i2.4143.

Ningsih, Nadia Etri, dan Idris. 2021. "Pengaruh Variabel Makroekonomi Terhadap Return Saham Sektor Keuangan di Indonesia." *JKEP Jurnal Kajian Ekonomi dan Pembangunan* 3(2): 17–24.

Norhaliza, Sinta Dewi, dan Rachyu purbowati. 2025. "Pengaruh Inflasi , Suku Bunga , Likuiditas , dan Nilai Tukar Terhadap Return Saham Sektor Perbankan yang Terdaftar di BEI Periode 2021-." 8(2): 1468–80.

OJK. 2024. "Statistik Perbankan Indonesia - Desember 2023." *ojk.go.id*. https://ojk.go.id/id/kanal/perbankan/data-dan-statistik/statistik-perbankan-indonesia/Pages/Statistik-Perbankan-Indonesia---Desember-2023.aspx (November 12, 2025).

Parmitasari, Rika Dwi Ayu. 2016. "Ownership structure , financial decisions and their impact on firm value : Jakarta Islamic index." *Man in India* 96(11).

Prof.H.Imam Ghozali, M.Com, Ph.D, CA. 2021. *Aplikasi Analaisis Multivariate Dengan Program IBM SPSS 26*. 10 ed. Semarang: Badan Penerbit Universitas Diponegoro.

Qoni'ah, Alfinantul, dan Syaiful Syaiful. 2024. "Pengaruh Inflasi, Tingkat Suku Bunga, Rasio Profitabilitas dan Rasio Solvabilitas Terhadap Return Saham." *Jurnal Riset Ekonomi dan Akuntansi* 2(4).

Riskiyani, Desi Nur, dan Eka Kusuma Dewi. 2023. "Pengaruh Struktur Modal, Inflasi, Nilai Tukar Terhadap Return Saham Perusahaan Perbankan Di Bei Tahun 2017-2021." 8(1): 8–23.

Suci, Nabilla Permata, Fifi Afiyanti Tripuspitorini, Benny Barnas, dan Destian Arshad Darulmalshah Tamara. 2023. "Implikasi Faktor Internal dan Eksternal terhadap Return Saham pada Perusahaan yang Terdaftar di Jakarta Islamic Index." 4(1): 10–19.

Sugiyono. 2019. *Metodologi Penelitian Kuantitatif, Kualitatif dan R & D*. Alfabeta.

Syifa Khusni Mubarok, Vina Merliana. 2025. "Pengaruh Inflasi, Suku Bunga dan Nilai

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Tukar Rupiah Terhadap Return Saham (Pada Perbankan yang Terdaftar di Bursa Efek Indonesia Tahun 2016-2023)." *Journal of Advances in Accounting, Economics, and Management* 11(4). doi:https://doi.org/10.35870/jemsi.v11i4.4801.

Tandelilin, Eduardus. 2017. *Portofolio dan Investasi: Teori dan Aplikasi*. Yogyakarta: Kanisius.

Widarjono, Agus. 2018. *Pengantar dan Aplikasinya Disertai Panduan EViews*. UPP STIM YKPN.

Wijayanti, Siska, dan Lyandra Aisyah Margie. 2024. "Pengaruh Inflasi, Tingkat Suku Bunga, dan Kinerja Keuangan Terhadap Return Saham (Studi Empiris pada Perusahaan Consumer non-cyclicalss Yang Terdaftar di Bursa Efek Indonesia Periode 2017 – 2022)." *Jurnal Ekonomi dan Manajemen Teknologi (EMT) KITA* 8(1): 486–91.

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