

THE EFFECT OF INFLATION, INTEREST RATES, AND EXCHANGE RATES ON STOCK PRICES IN BANKING SUB-SECTOR COMPANIES LISTED ON THE INDONESIA STOCK EXCHANGE FOR THE PERIOD 2019-2024

Fadilla Putri Siregar¹, Rico Nur Ilham², Marzuki³, Zulfan⁴

^{1,2,3,4}Program Studi Manajemen, Fakultas Ekonomi dan Bisnis, Universitas Malikussaleh, Indonesia

E-mail: fadilla.210410180@mhs.unimal.ac.id

Correspondence Author: riconurilham@unimal.ac.id

Received : 01 September 2025

Revised : 15 September 2025

Accepted : 30 September 2025

Published : 15 October 2025

DOI : <https://doi.org/10.54443/jaruda.v4i2.276>

Publication Link: <https://jaruda.org/index.php/go>

Abstract

This study is to examine the influence of inflation, interest rates, and exchange rates on stock prices in banking sub-sector companies listed on the Indonesia Stock Exchange for the 2019-2024 period. The data of this research can be accessed on [the official website of www.idx.co.id](http://www.idx.co.id). The sample in this study is 41 companies. The data analysis tool in this study uses the Data Panel Regression method with the Eviews 12 application tool. The results of the study found that Inflation has a positive but insignificant effect on stock prices, interest rates have a negative and significant effect on stock prices, exchange rates have a positive and significant effect on stock prices.

Keywords: *Inflation, Interest Rates, Exchange Rates, and Stock Prices*

INTRODUCTION

The capital market has a very important role in a country's economy because it functions as a means of raising funds from the community to be redistributed in the form of investment. Through the capital market, parties who have a surplus of funds (investors) can meet with those who need funds (issuers), thus creating an efficient capital allocation mechanism (Supriatna et al., 2021). One of the main instruments traded in the capital market is stocks. Stock prices reflect the value of a company as well as investors' expectations for future performance prospects (Ependi, 2022). However, stock prices are highly volatile and sensitive to changes in macroeconomic conditions, such as inflation, interest rates, and exchange rates (Moorcy et al., 2021). The banking sector is one of the important pillars in the Indonesian economy. Banks not only function as financial intermediation institutions, but also as a pillar of the stability of the national financial system. Therefore, the performance of banking stocks is often used as a barometer for the health of financial markets and overall economic stability. The 2019–2024 period is an interesting period to study because it covers complex economic dynamics, ranging from the impact of the Covid-19 pandemic, economic recovery, to external pressures due to rising global inflation and changes in international monetary policy (Achmadi, 2023).

Inflation is one of the macroeconomic indicators that most affects the capital market. Rising inflation can increase the company's operating costs and reduce people's purchasing power, thus potentially suppressing banking profitability. On the other hand, controlled inflation provides a positive signal for investors regarding economic stability (Sa'adah, 2019). Previous research has shown mixed results: some have found that inflation has a significant positive effect on stock prices (Priyanto, 2022; Achmadi, 2023), while others have found negative influences (Tammu, 2020; Suharni & Akbar, 2021). In addition to inflation, interest rates also play a big role in influencing stock prices. The interest rate determines the cost of funds borne by banks and affects interest income from credit. Rising interest rates can reduce people's interest in borrowing, increase capital costs, and ultimately suppress company performance (Moorcy et al., 2021). The results of previous research also show varied findings: Purnasari et al. (2020) found a positive influence, while Sella & Ardini (2022) found a negative influence on stock prices. The exchange rate of the rupiah against foreign currencies also affects stock price movements. The depreciation of the rupiah can increase import costs and liquidity risks in banks, thereby reducing investor confidence (Kartikaningsih et al., 2020). Several studies have found a negative effect of exchange rates on stock prices (Dwijayanti, 2021;

Novana & Octavera, 2019), while other studies have shown insignificant results (Aeni, 2021). Based on the differences in the results of previous research, it is important to conduct further studies on the influence of inflation, interest rates, and exchange rates on stock prices, especially in the banking subsector listed on the Indonesia Stock Exchange (IDX) during the 2019-2024 period. This research is expected to contribute both theoretically and practically, especially for investors, banking managers, and policymakers in formulating strategies to deal with macroeconomic dynamics.

LITERATURE REVIEW

Efficient Market Hypothesis

Eugene Fama created an efficient market theory in 1960, which stated that beating the market is impossible because market prices are related and reflect all the important information that might affect stocks. To date, there are many different opinions on this theory. Some argue that EMH plays a role in determining stock prices and tries to predict market trends using fundamental and technical analysis. They believe that an efficient market always reflects a more accurate price, so investors never buy stocks when prices are competitive. Another opinion is that technical analysis is very contrary to the efficient market hypothesis because of the many arguments. (Safitri et al., 2019)

Stock Price

Stock prices show how well the company is making strategic financial decisions such as funding, investments, and dividends. Stock prices change due to various activities in the market and banking sector. Dynamics in the stock market are caused by continuous supply and demand. These price changes can indicate capital market conditions, both positive and negative, which ultimately have an impact on investors' desire to buy or sell stocks. (Manda & Taslim, 2021). Mathematically, the stock price can be formulated as follows:

$$\text{Stock Price} = \text{Close Price}$$

Inflation

According to (Srikandi & Syahputra, 2023), inflation is a condition in which the prices of goods and services increase significantly and last continuously for a relatively long period of time. This phenomenon is caused by an imbalance between the amount of money circulating in the economy and the amount of goods and services available. When the demand for goods and services increases while the supply decreases, the price tends to rise. Likewise, if the amount of money in circulation is more or increases, people's purchasing power will increase and ultimately lead to an increase in prices.

The formula for calculating inflation according to (Puspaningtyas et al., 2023) is as follows:

$$\text{inf} = \frac{\text{IHK}_n - \text{IHK}_0}{\text{IHK}_0} \times 100\%$$

Interest

According to (Supriatna et al., 2021), the benchmark interest rate, also known as the Bank Indonesia (BI) interest rate, is a monthly interest rate set and announced periodically by Bank Indonesia. This interest rate serves as the main benchmark for monetary policy implemented by Bank Indonesia for a certain period of time and serves as a signal for the direction of ongoing monetary policy.

The formula for calculating the percentage change in the BI Rate from the previous period (t-1) to the current period (t):

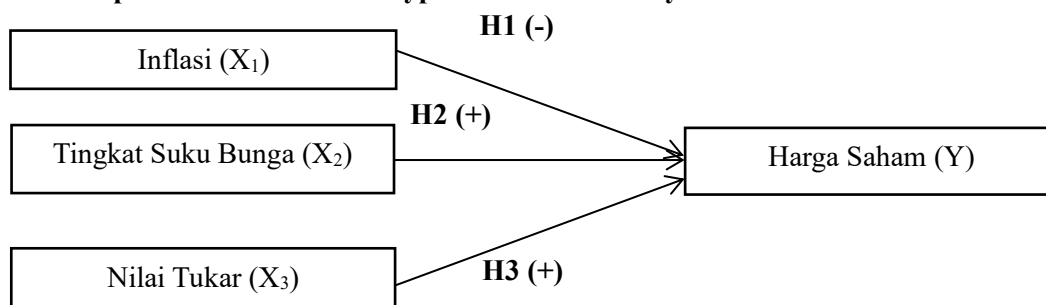
$$\text{BI Rate} = \frac{\text{BI Rate}_t - \text{BI Rate}_{t-1}}{\text{BI Rate}_{t-1}} \times 100\%$$

Exchange rate

The exchange rate or exchange rate is the price of a currency expressed in the currency of another country (Sella & Ardini, 2022). The exchange rate, as one of the macroeconomic indicators, plays a huge role in a country's economic activity and influences the business decisions of many companies. (Yuliani & Suwitho, 2020) said the exchange rate is the value of domestic currencies against foreign currencies, which can change according to demand and supply in the foreign exchange market. According to (Sella & Ardini, 2022) the most commonly used indicator to measure the exchange rate is the middle rate. The middle rate is an exchange rate calculated based on the average between the selling rate and the buying rate that applies at a given time. This indicator is often used as a reference for the official exchange rate.

$$\text{Kurs Tengah} = \frac{\text{Kurs Jual} + \text{Kurs Beli}}{2}$$

The conceptual framework and hypothesis in this study are as follows:



Based on the theory and research above, the hypotheses raised in this research are:

H1: Inflation has a negative effect on stock prices.

H2: The interest rate has a positive effect on the stock price.

H3: The exchange rate has a negative effect on the stock price.

METHOD

The object of this study is the effect of inflation, interest rates, and exchange rates on stock prices in banking subsector companies listed on the Indonesia Stock Exchange (IDX) during the 2019–2024 period. The population used in this study is banking companies listed on the Indonesian stock exchange in 2019-2024 which amounted to 47 companies. The sample used is a purposive sampling technique for collection, which is the return of samples based on certain criteria. The sample in this study was obtained as many as 41 companies that were included in the research criteria using purposive sampling techniques. Based on the sample that has been determined, there are 41 multiplied by 6 years of observation so that the number of observations in this study is 246.

The data collection method is carried out by utilizing secondary data obtained through the IDX's official website, namely www.idx.co.id. This study uses panel data regression model analysis to test the influence of independent variables, namely inflation, interest rates and exchange rates on dependent variables, namely stock prices. With the following equation model:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + e$$

RESULTS AND DISCUSSION

Results

Panel data regression analysis is a method used to process data that combines time series (data based on time period) and cross-section (data based on units or individuals). According to econometric theory, there are three main approaches that are often used in panel data regression model estimation, namely: Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM). To get the best model in this study, a chow test and a thurst test were performed. The results of the chow test, and the thurst test are as follows:

The chow test is a test used to determine whether the right panel data model is CEM or FEM. The criteria for the chow test are as follows

1. If the significance value < 0.05, then a good model is panel data regression (FEM).
2. If the significance value > 0.05, then a good model is panel data regression (CEM).
- 3.

Table 1. Chow Test Results

Effects Test	Statistic	d.f	Prob
Cross-section F	36.417612	(40.202)	0.0000
Cross-section Chi-Square	517.959016	40	0.0000

Based on table 1 above, it can be seen that the probability value on the Chi-Square line is 0.0000. This value is in the standard value of error tolerance in this study, which is 0.05. Therefore, conclusions can be drawn based on the results of the Chow test of the best model in this study is the Fixed Model Effect (FEM) model, so a Hausman test must be carried out to choose the best model between the Fixed Model Effect (FEM) and the Random Effect Model (REM).

The Hausman test was performed to choose between FEM and REM models. The criteria used in the Hausman test are:

1. If the significance value is < 0.05 , then the best model is panel data regression (FEM).
2. If the significance value is > 0.05 , then the best model is panel data regression (REM).

Table 2. Hausman Test Results

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f	Prob
Cross-section random	1.965848	3	0.5795

Based on table 2 above, it can be seen that the probability is $0.5795 > 0.05$, so it can be concluded that the Hausman test chose the random effect model (REM) as a good model, so that the hypothesis testing data estimate in this study uses panel data regression with the Random Effect Model (REM).

Panel Data Regression Estimation

Table 3. Estimation of Panel Data Regression with Random Effect Model (REM)

Variabel	Coefficient	Std. Error	t-statistic	Prob
C	-13.95191	9.290126	-1.501800	0.1345
LN_INFLASI	0.123102	0.092628	1.328995	0.1851
LN_SB	-1.093699	0.270963	-4.036341	0.0001
LN_NT	2.197097	0.957934	2.293578	0.0227

Based on table 3 above, the multiple linear regression equations in the study can be compiled as follows:

$$LN_HS = -13.9519 + 0.123102 LN_INFLASI - 1.093699 LN_SB + 2.197097 LN_NT$$

From the results of the equation above, it can be seen that the constant value in this study is -13.95191. This shows that Inflation, SB and NT have no value (value 0). Then the value of the Stock Price (HS) will remain constant with a value of -13.95191.

Discussion

Such Hypotheses

Results of Panel Data Regression Estimation

The Effect of Inflation on Stock Prices

Based on table 3 of the results of the Regression Data Panel with the Random Effect Model, it can be seen that Inflation has a positive and insignificant effect on the Stock Price (HS) in banking sub-sector companies listed on the Indonesia Stock Exchange in 2019-2024. This shows that H1 in this study is accepted. Where the results of this study contradict the hypothesis that inflation has a negative effect on Stock Prices in banking sub-sector companies listed on the Indonesia Stock Exchange in 2019-2024. The results of this study are in line with research conducted by (Achmadi, 2023), (Dwijayanti, 2021), (Efriyenty, 2020) stating that inflation has a positive effect on stock prices. This means that increased inflation can drive up stock prices because companies are able to adjust the prices of their products and services, thus maintaining good financial performance.

The Effect of Interest Rates on Stock Prices

Based on table 3 of the results of the panel data regression estimate with the Random Effect Model, it can be seen that the Interest Rate has a negative and significant effect on the Stock Price (HS) in banking sub-sector companies listed on the Indonesia Stock Exchange in 2019-2024. This shows that H2 in this study was rejected. Where the results of this study contradict the hypothesis that interest rates have a positive effect on stock prices in banking sub-sector companies listed on the Indonesia Stock Exchange in 2019-2024. The results of this study are in line with research conducted by (Achmadi, 2023), (Supriatna et al., 2021), (Agustin et al., 2023) stating that interest rates have a negative effect on stock prices. This means that when interest rates increase, stock prices tend to decrease.

This is due to rising interest rates that increase borrowing costs and reduce the attractiveness of investments in the stock market.

The Effect of Exchange Rates on Stock Prices

Based on table 3 of the results of the panel data regression estimation with the Random Effect Model, it can be seen that the Exchange Rate has a positive and significant effect on the Stock Price (HS) in banking sub-sector companies listed on the Indonesia Stock Exchange in 2019-2024. This shows that H3 in this study is accepted. Where the results of this study contradict the hypothesis that the Exchange Rate has a negative effect on the Stock Price in companies in the banking sub-sector listed on the Indonesia Stock Exchange in 2019-2024. The results of this study are in line with research conducted by (Efriyenty, 2020), (Kurniawan & Yuniati, 2019), (Sihombing Marganda, Nawir Jubaedah, 2020) stating that the Exchange Rate has a positive effect on stock prices. This means that when the rupiah exchange rate strengthens against the US dollar, the stock price tends to increase. This is caused by an increase in purchasing power and a decrease in import costs for companies, so that it has a positive impact on financial performance and attracts investor interest.

CONCLUSION

Inflation has a positive but not significant effect on the Stock Price (HS) of banking sub-sector companies listed on the Indonesia Stock Exchange in 2019-2024. The Interest Rate (SB) has a negative and significant effect on the Stock Price (HS) in banking sub-sector companies listed on the Indonesia Stock Exchange in 2019-2024. The Exchange Rate (NT) has a positive and significant effect on the Stock Price (HS) of banking sub-sector companies listed on the Indonesia Stock Exchange in 2019-2024. It is hoped that this research can be used as a consideration in making investment decisions.

REFERENCES

- Achmadi, N. (2023). Analisis Pengaruh Inflasi, Suku Bunga, Nilai Tukar Terhadap Harga Saham. *Jurnal Riset Akuntansi*, 9(2), 116–126. <https://ejurnal.mercubuana-yogya.ac.id/index.php/akuntansi/index>
- Aeni, A. M. (2021). Pengaruh Nilai Tukar terhadap Harga Saham Sektor Consumer Goods Industry yang Terdaftar di Bursa Efek Indonesia (BEI) pada Masa Pandemi Covid-19. *Jurnal Riset Akuntansi*, 1(2), 72–75. <https://doi.org/10.29313/jra.v1i2.415>
- Dwijayanti, N. M. A. (2021). Pengaruh Nilai Tukar dan Inflasi Terhadap Harga Saham Perbankan Pada Masa Pandemi COVID-19. *Jurnal Bisnis & Kewirausahaan*, 17(1), 86–93. <http://ojs.pnb.ac.id/index.php/JBK>
- Efriyenty, D. (2020). Pengaruh Inflasi Dan Kurs Terhadap Harga Saham Di Industri Dasar Dan Kimia. *Going Concern : Jurnal Riset Akuntansi*, 15(4), 570. <https://doi.org/10.32400/gc.15.4.31601.2020>
- Ependi. (2022). Pengaruh Inflansi, Suku Bunga dan Nilai Tukar Terhadap Harga Saham. *Jurnal Ekonomi Dan Bisnis*, 11(3), 2013–2015. <https://stiemuttaqien.ac.id/ojs/index.php/OJS/article/view/1325>
- IDX. (n.d.). <https://www.idx.co.id/>
- Kartikaningsih, D., Nugraha, & Sugiyanto. (2020). Pengaruh Nilai Tukar Terhadap Harga Saham Sektor Infrastruktur Pada Masa Pandemi Covid-19. *Fair Value: Jurnal Ilmiah Akuntansi Dan Keuangan*, 3(1), 53–60.
- Kurniawan, A., & Yuniati, T. (2019). Pengaruh Inflasi, Suku Bunga, Dan Nilai Tukar Terhadap Harga Saham Perusahaan Perbankan. *Jurnal Ilmu Dan Riset Manajemen*, 88(1), 1–16.
- Manda, S. G., & Taslim, A. S. (2021). Pengaruh Net Internet Margin, Non Performing Loan, dan Capital Adequacy Ratio Terhadap Harga Saham. *E-Jurnal Ekonomi Dan Bisnis Universitas Udayana*, 10(07).
- Moorey, N. H., Alwi, M., & Yusuf, T. (2021). Terhadap Indeks Harga Saham Gabungan di Bursa Efek Indonesia. *Jurnal Geo Ekonomi*, 12(2503–4790), 67–78.
- Novana, T., & Octavera, S. (2019). Pengaruh Inflasi, Suku Bunga Bi 7-Day (Reverse) Repo Rate dan Nilai Tukar Rupiah Terhadap Indeks Harga Saham Gabungan (Studi Pada Bursa Efek Indonesia Periode Agustus 2016 – Desember 2018). *Jurnal Ekonomi Dan Bisnis Andalas*, 21(1), 250–262.
- Priyanto, N. (2022). Analisis Pengaruh Inflasi, Suku Bunga, Nilai Tukar dan Jumlah Uang Beredar terhadap Indeks Harga Saham Gabungan (Ihsg) pada Perusahaan yang Terdaftar di Bursa Efek Indonesia Periode 2017-2019. *Juma*, 23(1), 14411–14464. <http://journal.stiei-kayutangi-bjm.ac.id/>
- Purnasari, N., Manurung, A. N., Br. Sitepu, S. W., Malau, T. M. R., & Putri, F. D. (2020). Pengaruh Tingkat Inflasi, Tingkat Suku Bunga dan Kurs terhadap Indeks Harga Saham Gabungan pada Sektor Industri Dasar dan Kimia

- yang Terdaftar di Bursa Efek Indonesia Periode 2015-2017. *Ekonomis: Journal of Economics and Business*, 4(2), 361. <https://doi.org/10.33087/ekonomis.v4i2.176>
- Puspaningtyas, L., Afifi, M., & Ismiwati, B. (2023). Analisis pengaruh inflasi, pengangguran, kemiskinan dan kurs Rupiah terhadap pertumbuhan ekonomi di NTB tahun 2005-2021. *Oportunitas Ekonomi Pembangunan*, 2(1), 98–107. <https://doi.org/10.29303/oportunitas.v2i1.695>
- Sa'adah, U. (2019). PENGARUH MAKROEKONOMI TERHADAP KINERJA INDEKS HARGA SAHAM GABUNGAN (IHSG) DAN GOVERNMENT BONDS (Studi pada Negara Indonesia Tahun 2015-2017). In *Jurnal Administrasi Bisnis* (Vol. 73, Issue 1). Universitas Brawijaya.
- Safitri, E., Utami, D., & Intan Sari, P. (2019). Perbandingan Keakuratan Capital Assets Pricing Model (Capm) Dan Arbitrage Pricing Theory (Apt) Dalam Menentukan Pilihan Berinvestasi Pada Saham Jakarta Islamic Index (Jii). *Jurnal Ilmu Manajemen*, 8(1), 59. <https://doi.org/10.32502/jimn.v8i1.1557>
- Sella, V. P., & Ardini, L. (2022). Pengaruh Inflasi, Suku Bunga dan Nilai Tukar Terhadap Harga Saham Pada Perusahaan Bursa Efek Indonesia di Masa Pandemi Covid-19. *Jurnal Ilmu Dan Riset Akuntansi*, 11(8), 1–17.
- Sihombing Marganda, Nawir Jubaedah, M. S. (2020). Cryptocurrency, Nilai Tuakr Dan Real Asset Terhadap Harga Saham Pada Perbankan Indonesia Yang Terdaftar Di Bursa Efek Indonesia. *Ekonomi Dan Bisnis*, 6(2), 101–120. <https://doi.org/10.35590/jeb.v6i2.1263>
- Srikandi, S. D., & Syahputra, A. (2023). Pengaruh Inflasi, Nilai Tukar Rupiah, Dan Tingkat Suku Bunga Terhadap Indeks Harga Saham (Studi Empiris Pada Perusahaan Sektor Industri Barang Konsumsi di Bursa Efek Indonesia Periode 2017 – 2021). *Jurnal Revenue*, 3(2), 727–742.
- Suharni, & Akbar, M. (2021). Analisis Pengaruh Inflasi, Suku Bunga Dan Nilai Tukar Terhadap Indeks Harga Saham Gabungan Pada Sektor Pertambangan. *Jurnal STEI Indonesia Banjarmasin*, 10(1), 14–21. <http://journal.stiei-kayutangi-bjm.ac.id/ Analisis>
- Supriatna, A., Rahman, F., & Willianta, A. (2021). Dampak Kenaikan Suku Bunga Dan Inflasi Terhadap Harga Saham Perusahaan Manufaktur. *SCIENTIFIC JOURNAL OF REFLECTION: Economic, Accounting, Management and Business*, 4(2), 261–270. <https://doi.org/10.37481/sjr.v4i2.278>
- Tammu, R. G. (2020). Pengaruh Inflasi dan Suku Bunga Bank Indonesia Terhadap Indeks Harga Saham Gabungan (IHSG) Periode 2014 – 2018. *JEMMA (Journal of Economic, Management and Accounting)*, 3(1), 62. <https://doi.org/10.35914/jemma.v3i1.343>
- Yuliani, D., & Suwitho. (2020). Pengaruh Inflasi, Current Ratio, Dan Earning Per Share Terhadap Harga Saham Pada Perusahaan Food and Beverages. *Jurnal Ilmu Dan Riset Manajemen*, 9(1), 1–17.