

The Effect of Interest Rate, Inflation, EPS, DER, and DPR on LQ45 Stock Prices

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Abstract

This research was motivated by fluctuations in stock prices on the LQ45 index, which are influenced by macroeconomic factors and corporate fundamentals. The objective of this study is to analyze the effects of interest rates, inflation, Earnings Per Share (EPS), Debt-to-Equity Ratio (DER), and Dividend Payout Ratio (DPR) on the stock prices of LQ45 companies for the period 2020-2024. The research method employs a quantitative approach using panel data regression analysis with the EViews software on 120 data observations. The partial results indicate that interest rates and the DER have a negative and significant effect on stock prices, while EPS has a positive and significant effect. Conversely, inflation and the DPR do not have a significant effect. In conclusion, the market value of LQ45-listed companies is highly sensitive to the direction of monetary policy and is determined by internal fundamentals related to real profitability and leverage risk management. These findings highlight the importance of optimizing a company's internal performance to maintain stock price stability.

Keywords: Stock Price, EPS, DPR, DER, LQ45

Introduction

The stock market functions as a barometer of a country's economic health, where stock price movements are influenced by corporate fundamental performance and macroeconomic conditions. Macroeconomic factors such as interest rates and inflation, which often fluctuate within the dynamics of the economy, can affect a company's cost of capital and consumer purchasing power, thereby having implications for profitability and stock attractiveness (Pratama et al., 2022). On the other hand, corporate financial indicators such as Earnings Per Share (EPS), Debt to Equity Ratio (DER), and Dividend Payout Ratio (DPR) are key considerations for investors in assessing a stock's intrinsic value (Sulistiyani, 2022).

The LQ45 index, comprising 45 blue-chip stocks on the Indonesia Stock Exchange (IDX), serves as an important benchmark for investors. However, the index's performance has fluctuated significantly in recent years. In 2023, LQ45 underperformed relative to the Composite Stock Price Index (IHSG), driven by weakness in commodity-sector stocks, particularly coal and gold (Puspita et al., 2024; Setiawan, 2023). This negative trend continued into 2024, when ten LQ45 constituents, including PT Bukalapak.com Tbk (BUKA) and PT Unilever Indonesia Tbk (UNVR), recorded year-to-date (YTD) share-price declines of more than 30% (Fadli, 2024), reaching their lowest point in March 2025 (Laoli, 2024).



Figure 1. LQ45 Chart (2020-2024)
Source: Bloomberg.com

Despite this performance pressure, LQ45 remains a core portfolio for investors for several reasons. First, its high quality and liquidity are reflected in the strict selection of constituents with the largest market capitalization and highest trading volume. Second, it offers comprehensive sector diversification covering the fundamental sectors of the Indonesian economy. The composition of the LQ45 index is presented below:

Table 1. LQ45 Index Composition

No	Sector	Weight (%)	Issuers (Stock Code)
1	Financials	35%	Bank Central Asia (BBCA), Bank Rakyat Indonesia (BBRI), Bank Mandiri (BMRI), Bank Negara Indonesia (BBNI), Astra International (ASII)
2	Primary Consumer Goods	12%	Indofood CBP Sukses Makmur (ICBP), Charoen Pokphand Indonesia (CPIN), Mayora Indah (MYOR)
3	Non-Primary Consumer Goods	10%	Unilever Indonesia (UNVR), Astra International (ASII), Mitra Adiperkasa (MAPI)
4	Mining	9%	Adaro Energy Indonesia (ADRO), Indo Tambangraya Megah (ITMG), Bukit Asam (PTBA)
5	Infrastructure	8%	Wijaya Karya (WIKA), PP (Persero) (PTPP)
6	Property & Real Estate	7%	Bumi Serpong Damai (BSDE), Ciputra Development (CTRA)
7	Basic Industry & Chemicals	6%	Semen Indonesia (SMGR), Chandra Asri Petrochemical (TPIA), Kalbe Farma (KLBF)
8	Technology	5%	GoTo Gojek Tokopedia (GOTO), Bukalapak.com (BUKA)
9	Others	8%	Pertamina Geothermal Energy (PGEO), Kimia Farma (KAEF)
	Total	100%	

Source: Indonesia Stock Exchange

This composition explains why LQ45's performance is heavily influenced by the dynamics of the financial and commodity sectors, as seen in the underperformance phenomenon during 2023-2024 through 2025, caused by the dual pressure of weakening coal prices and high interest rate policies burdening the financial sector (Nur Alfriani Handayani et al., 2025). Sector diversification within LQ45 benefits investors in managing portfolio risk, while also reflecting the structure of the Indonesian economy, which still relies on the financial sector, domestic consumption, and commodities. Third, transparency and good corporate governance provide an additional attraction for both institutional and retail investors (Aristiya & Lukita, 2022).

Overall, the dominance of the financial sector, accounting for around 35% of the LQ45 index, directly reflects its vital role as the backbone of the Indonesian economy. Its large weighting logically stems from the very high market capitalization and trading liquidity of blue-chip banking issuers, supported by a relatively stable business model and protected by strict regulatory barriers to entry. Therefore, the performance of the financial sector not only drives the majority of the LQ45 index's movement but also serves as the primary barometer for the health and growth of the national economy as a whole, given that the activities of all real sectors ultimately depend on the financing and services provided by the financial industry.

The relationship between interest rates, inflation, EPS, DER, and DPR on stock prices forms a complex network of influence, in which macroeconomic variables and corporate fundamentals interact with one another (Pratama et al., 2022). Fundamentally, Earnings Per Share (EPS) stands as the primary determinant of stock price, with a positive relationship. Signaling Theory explains that high or growing EPS signals management's confidence in the company's future prospects, so investors are willing to pay a higher price - a phenomenon empirically proven by Ball & Brown, as cited in Abdillah & Zakaria (2021). However, EPS performance itself is not free from external influences.

This external environment is shaped by macroeconomic variables, namely interest rates and inflation. The relationship between interest rates and stock prices is theoretically negative, as explained by the Dividend Discount Model. An increase in interest rates by the central bank raises the discount rate,

which lowers the present value of a company's future cash flows while also making fixed-income investment instruments such as bonds more competitive (Ferilli et al., 2024).

Meanwhile, the influence of inflation is more ambiguous. According to the Fisher Hypothesis, high and uncontrolled inflation drives interest rates up and erodes corporate profit margins, resulting in a negative impact, as found by Nur Alfriani Handayani et al. (2025) on LQ45 stocks. However, low and stable inflation may instead reflect strong domestic demand.

Amid these macroeconomic pressures, companies respond through corporate policies reflected in the Debt to Equity Ratio (DER) and Dividend Payout Ratio (DPR). DER describes a company's capital structure, and its relationship with stock price is not linear but follows Trade-Off Theory. At an optimal level, debt can increase firm value through a tax shield, as argued by Modigliani & Miller. However, an excessively high DER instead increases financial risk and is perceived negatively by the market. Meanwhile, DPR serves as a communication tool from management to investors. Based on the Bird-in-Hand Theory, an increase in DPR that signals a commitment to dividend distribution is often perceived as a positive signal, particularly for well-established companies, as it provides income certainty for investors.

Overall, it can be concluded that stock prices are the result of dynamic interactions between external forces and a company's internal conditions. Macroeconomic variables (interest rates and inflation) create the "weather" that affects the entire market, while fundamental variables (EPS, DER, DPR) reflect the "health" of each "ship" (company) navigating that weather. Prudent investors will analyze how interest rate and inflation conditions may burden EPS, limit the room to take on additional debt (DER), and affect a company's ability to distribute dividends (DPR), before making sound investment decisions.

Previous empirical findings regarding the effect of macroeconomic variables and financial ratios on stock prices remain inconsistent. Some studies have found that interest rates and inflation do not significantly affect stock prices, particularly under certain market conditions and stable economic periods (Aristiya & Lukita, 2022; Puspita et al., 2024). However, other studies show that rising interest rates and inflation can have a significant negative effect on stock prices because they increase the cost of capital and reduce public purchasing power (Pratama et al., 2022).

On the corporate fundamental side, Earnings Per Share (EPS) and Dividend Payout Ratio (DPR) have generally been shown to have a positive effect on stock prices, as they reflect profitability and a company's ability to provide returns to investors. In contrast, the effect of Debt to Equity Ratio (DER) on stock prices still shows mixed results. Some studies have found a negative effect of DER due to increased corporate financial risk, while others show that a certain level of leverage remains acceptable to investors as long as it is able to increase company profitability.

The inconsistency of previous research results indicates that the relationship between macroeconomic variables, financial ratios, and stock prices still requires further testing, particularly for companies in the LQ45 index during the current period, which reflects post-pandemic market dynamics and global economic pressures.

Literature Review

Based on Signaling Theory, as proposed by Michael Spence in Herfi Sutanto et al. (2024), this study is grounded in the premise that information asymmetry exists between management as insiders and investors as outsiders in the capital market. To reduce this information gap, companies use various financial indicators as signals to investors. In this study's context, Earnings Per Share (EPS) functions as a profitability signal reflecting the company's growth prospects. An increase in EPS is generally perceived as a positive signal that can boost investor interest and drive up stock prices (Nur Alfriani Handayani et al., 2025). Dividend Payout Ratio (DPR) acts as a cash flow signal indicating management's confidence in the sustainability of the company's future cash flow. A high DPR is often perceived as an indicator of stability and the company's ability to provide returns to shareholders. Conversely, Debt to Equity Ratio (DER) is a risk signal reflecting the level of leverage and financial risk of a company. An excessively high DER can increase investors' perception of risk due to the company's heavy reliance on debt (Puspita et al., 2024). Macroeconomic variables such as interest rates can also be seen as a policy signal influenced by central bank monetary policy; an interest rate increase is generally perceived negatively by the capital market because it raises the company's cost of capital. Meanwhile, inflation acts as an economic condition signal indicating economic pressure and

the potential decline in corporate profitability (El-Diftar, 2023). Overall, these various financial and macroeconomic signals form an information transmission mechanism that influences the movement of stock prices, including those of companies included in the LQ45 Index.

Theoretically, stock price represents the present value of a company's expected future cash flows, in which the interest rate acts as the primary discount factor. When the monetary authority raises the policy rate, this discount rate increases. Consequently, the present value of future cash flows becomes lower, which directly puts downward pressure on stock prices. From the perspective of Signaling Theory, a rise in interest rates serves as a strong policy signal to all market participants. Investors perceive this signal as a monetary tightening step that can slow economic activity and increase the financial burden on companies, particularly those reliant on debt financing. Empirical support from studies by Budyastuti & Supriatiningsih (2023) and Putri et al. (2025) in the Indonesian market reinforces this negative relationship.

H1: Interest rate has a negative effect on the stock prices of LQ45 companies.

High inflation acts as an economic condition signal indicating instability in the macroeconomy. This signal raises investor concerns about declining consumer purchasing power and uncertainty in business costs. At the firm level, uncontrolled inflation can erode profit margins through rising costs of inputs, raw materials, and labor. The subsequent impact is a decline in expected future profitability and cash flow. When these profit prospects deteriorate, the company's fundamental value is also pushed down, which is subsequently reflected in the stock price. Findings from Puspita et al. (2024) and Putri et al. (2025) show that inflation has a negative effect on capital market performance, although the effect may vary depending on conditions. This contrasts with the study by Halimah et al. (2025), which explains that inflation does not have much effect on blue-chip issuers.

H2: Inflation has a negative effect on the stock prices of LQ45 companies.

EPS is a fundamental indicator that reflects a company's profitability. Based on Signaling Theory, an increase in EPS is a positive signal regarding the company's growth prospects. Several studies published in Emerald, such as Nur Alfriani Handayani et al. (2025), show that profitability metrics such as EPS, ROE, and ROA are key determinants of stock prices in emerging markets, including Indonesia. An increase in EPS boosts investor interest, as it is considered an indicator of a company's ability to generate profits consistently. Amid market volatility caused by macroeconomic dynamics, EPS has become an increasingly important fundamental indicator for investors.

H3: Earnings Per Share (EPS) has a positive effect on the stock prices of LQ45 companies.

DER functions as a risk signal that reveals a company's funding structure and financial risk. A high ratio indicates heavy reliance on debt financing. According to Trade-Off Theory, although debt provides the benefit of a tax shield, excessive leverage instead increases agency costs and the risk of financial distress or bankruptcy. Investors, being risk-averse, will perceive a high leverage condition as a negative signal. This perception arises because a large interest burden can weigh on cash flow and reduce the profit available to shareholders. This negative effect of DER, as shown by Sulistyani (2022), is even stronger during periods of economic uncertainty.

H4: Debt to Equity Ratio (DER) has a negative effect on the stock prices of LQ45 companies.

DPR is a cash flow signal that reflects a company's policy in distributing profits to shareholders. A high or stable dividend payout ratio conveys management's confidence that the company has strong cash flow and sustainable financial prospects to consistently distribute dividends.

Bird-in-Hand Theory explains that investors often place a higher value on actual dividends received today compared with the promise of future capital gains, which carry uncertainty. Therefore, a favorable dividend policy, as represented by a good DPR, can attract income-oriented investors, thereby creating positive demand pressure that drives stock prices up, as supported by research from Nur Alfriani Handayani et al. (2025).

H5: Dividend Payout Ratio (DPR) has a positive effect on the stock prices of LQ45 companies.

Based on financial theory and empirical findings, a comprehensive conceptual framework is formed that explains the mechanism through which macroeconomic factors and corporate fundamentals influence stock prices. This framework integrates key variables through a multidimensional approach covering both external and internal aspects of the company. On the macroeconomic dimension, inflation and interest rates are assumed to have a negative effect on stock prices through a complex

transmission mechanism. High inflation not only erodes public purchasing power, thereby suppressing demand for company products and services, but also triggers a contractionary response from the monetary authority in the form of higher policy interest rates. This condition creates a compounding effect in which the company's cost of capital rises along with higher lending rates, while capital simultaneously flows out of the stock market toward more attractive fixed-income instruments. This mechanism forms a negative cycle that places multiple pressures on stock prices.

On the corporate fundamental dimension, Earnings Per Share (EPS) and Dividend Payout Ratio (DPR) act as indicators of performance and corporate commitment, which are assumed to have a positive effect on stock price. High EPS represents operational efficiency and profitability while also serving as a positive signal to investors regarding future growth prospects. Meanwhile, a large DPR reflects management's commitment to consistent dividend distribution, making the stock attractive to investors who prioritize regular income. An optimal combination of EPS and DPR creates added value through a balance between company growth and returns to shareholders. Conversely, a high Debt to Equity Ratio (DER) indicates financial burden and vulnerability to interest rate fluctuations, and is therefore assumed to have a negative effect on stock price through an increase in the risk premium demanded by investors.

In the specific context of LQ45, the interaction of these five variables forms a more complex dynamic given the multisectoral characteristics of its constituents, which have differing sensitivities to economic conditions. Financial-sector issuers show a stronger response to interest rate movements, while consumer-sector issuers are more affected by inflationary pressure. Similarly, stock price responses to fundamental variables vary across sectors, where growth-sector issuers tend to be valued based on EPS prospects, while mature-sector issuers are valued more based on DPR stability. Thus, fluctuations in LQ45 stock prices can be explained through the dynamic interaction between macroeconomic factors that shape the investment climate and fundamental factors that reflect a company's intrinsic strength, creating a holistic analytical framework for understanding stock price behavior within a dynamic economic context.

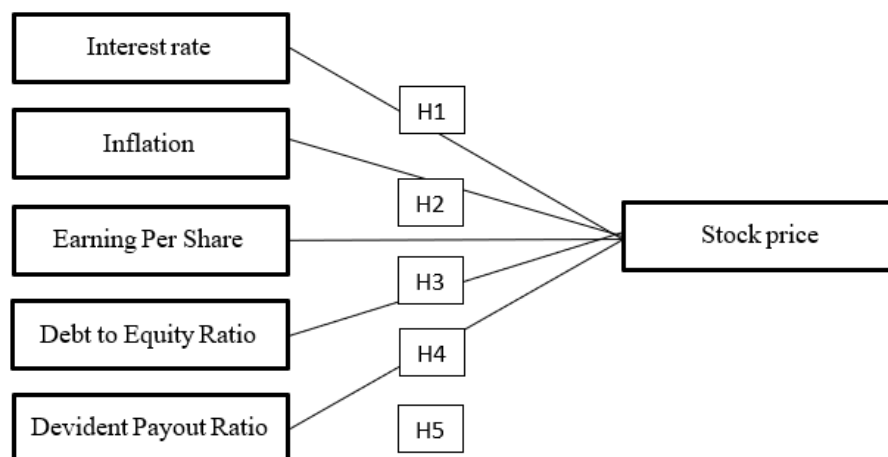


Figure 2. Conceptual Framework

Source: Researcher

Method

This study uses panel data and secondary quantitative data sources obtained from several reliable sources:

1. Stock price, EPS, DER, and DPR data for companies constituting the LQ45 Index were obtained from the annual financial reports and publications of the Indonesia Stock Exchange (IDX) for the period 2020-2024 (www.idx.co.id).
2. Interest rate data uses the BI 7-Day Reverse Repo Rate obtained from the Bank Indonesia website.
3. Inflation data uses annual (year-on-year) inflation data published by the Central Statistics Agency (BPS).

The population in this study consists of all companies listed as constituents of the LQ45 Index during the study period of 5 years (2020-2024). The sample was determined using a purposive sampling method with the following criteria:

1. Companies consistently listed as members of the LQ45 Index for 5 years during the study period.
2. Companies that published complete annual financial reports for the 2020-2024 period.
3. Companies with complete data available for all research variables.

Operational Definition of Variables

1. Dependent Variable (Y): Stock Price. Measured by the closing price of the stock at the end of the annual period.
2. Independent Variables (X):
 - a. Interest Rate (X1): Measured by the BI 7-Day Reverse Repo Rate at year-end (% per year).
 - b. Inflation (X2): Measured by Indonesia's annual inflation rate at year-end (%).
 - c. Earnings Per Share - EPS (X3): Calculated as net income after tax divided by the number of shares outstanding.
 - d. Debt to Equity Ratio - DER (X4): Calculated as total debt divided by total equity.
 - e. Dividend Payout Ratio - DPR (X5): Calculated as dividend per share divided by earnings per share.

The analytical model used in this study is multiple linear regression analysis with a panel data approach. To test the lag effect of macroeconomic and corporate fundamental variables on stock price, the independent variables are measured using data from the previous period (t-1). The regression model specification in this study is formulated as follows:

$$Y_t = a + b_1X_{1(t-1)} + b_2X_{2(t-1)} + b_3X_{3(t-1)} + b_4X_{4(t-1)} + b_5X_{5(t-1)} + e$$

Where: Y_t = Stock Price in the current period (t); a = Constant; b1-5 = Regression coefficients; $X_{1-5,(t-1)}$ = Independent variables in the previous period (t-1); e = Error term.

EViews software was used for the data analysis in this study. The analytical stages carried out are as follows:

In panel data research using EViews, there are three approaches to estimate panel data regression, namely: (a) Common Effect Model (CEM); (b) Fixed Effect Model (FEM); (c) Random Effect Model (REM).

To determine the most appropriate model among the three approaches above, the following tests were conducted in EViews: (a) Chow Test (Likelihood Ratio): selects between CEM and FEM. If the Prob. Cross-section F value < 0.05, then FEM is selected. (b) Hausman Test: selects between FEM and REM. If the Prob. Cross-section value < 0.05, then FEM is selected. (c) Lagrange Multiplier (LM) Test: used to select between CEM and REM.

For panel data, the classical assumption tests typically required are the Heteroscedasticity Test and the Multicollinearity Test. According to Basuki (2015), normality and autocorrelation tests are not mandatory, as panel data has a cross-sectional nature, whereas autocorrelation only occurs in time-series data.

The t-test (partial test) is conducted at a 0.05 significance level to test the effect of each independent variable individually. The F-test (simultaneous test) is conducted at a 0.05 significance level to test the effect of all independent variables together. The Coefficient of Determination (R^2) is used to measure how much variation in the dependent variable can be explained by the independent variables.

Results and Discussion

Descriptive statistical analysis is used to provide a general overview of the characteristics of the research data, including the mean, median, maximum, minimum, and standard deviation values of each variable. This study uses a balanced panel dataset with a total of 120 observations, sourced from 24 cross-section units over a 5-year period (2020-2024).

Table 2. Descriptive Statistical Analysis Results

Statistic	Stock Price (Y)	Interest Rate (X1)	Inflation (X2)	EPS (X3)	DER (X4)	DPR (X5)
Mean	5507.092	5.200000	2.648000	1027.213	2.482130	0.609859
Median	3580.500	5.500000	1.870000	731.2988	1.449654	0.501704
Max	36200.00	6.000000	5.510000	10305.67	16.04192	5.527349
Min	525.0000	3.500000	1.570000	0.606063	0.015746	-0.267124
Std. Dev.	6540.335	0.931250	1.482461	1294.023	2.772358	0.613814

Skewness	2.611404	-0.970495	1.293738	3.986330	2.399694	4.695494
Kurtosis	9.584899	2.482693	2.934431	25.12116	9.879060	36.29248

Source: Processed Data, 2026

Based on the data presented in table 2, an overall picture of the data distribution characteristics for each research variable is obtained. The dependent variable (Y) in this study recorded a mean value of 5,507.092 with a very wide range, where the minimum value was 525 and the maximum value reached 36,200. The standard deviation of variable Y, at 6,540.335, reflects a fairly high level of data dispersion as well as significant fluctuation in the dependent variable during the observation period.

A different distribution pattern is shown by the independent variables X1 and X2. Variable X1 has a mean value of 5.20, with a minimum value of 3.5 and a maximum of 6. The low standard deviation of X1, at only 0.931 compared to its mean, indicates that the data for this variable is homogeneous or relatively stable. In line with this, variable X2 shows a mean value of 2.64, with a minimum value of 1.57 and a maximum of 5.51. Its standard deviation of 1.48 is also below the mean value, proving that the distribution of X2 data tends to be stable and normal without extreme spikes between observations.

Conversely, high variability is again seen in the independent variables X3, X4, and X5, where the standard deviation exceeds the mean value for each. Variable X3 recorded a mean value of 1,027.213, with a minimum value reaching as low as 0.606 and a maximum value of 10,305.67. The high standard deviation of X3, at 1,294.023, indicates that this variable has very wide variation with a fairly high data dispersion.

Furthermore, variable X4 has a mean value of 2.482, with the lowest data point at 0.0157 and the highest reaching 16.041. The standard deviation of variable X4, at 2.772, which is higher than its mean, reflects high data variation throughout the study period. Lastly, variable X5 shows a relatively small mean value of 0.609, with a minimum value of -0.267 and a maximum value of 5.52. The standard deviation of variable X5, recorded at 0.6138, is concluded to be larger than its mean, indicating that the spread between data points for this variable is quite significant.

To determine the best estimation model among the Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM), a series of model specification tests were conducted, including the Chow Test, Hausman Test, and Lagrange Multiplier Test.

The Chow Test is used to select the more appropriate model between the Common Effect Model (CEM) and the Fixed Effect Model (FEM). The decision criterion is based on the Cross-section Chi-square probability value. If the value is < 0.05, FEM is selected; if > 0.05, CEM is selected.

Table 3. Chow Test Results

Description	Statistic	d.f.	Prob.
Cross-section F	121.562607	(23,91)	0.000
Cross-section Chi-Square	414.851145	23	0.000

Source: Processed Data, 2026

Based on table 3, the Cross-section Chi-square probability value is 0.000 (< 0.05), meaning the selected model is FEM. The Hausman Test was then conducted next.

The Hausman Test is conducted to select the best model between the Fixed Effect Model (FEM) and the Random Effect Model (REM). If the Cross-section random probability value is > 0.05, then REM is selected; otherwise, FEM is selected.

Table 4. Hausman Test Results

est Summary	Chi-Square Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	0.000	5	1.000

Source: Processed Data

The results in table 4 show that the Cross-section probability value is 1.000 (> 0.05), meaning the selected model is REM. The Lagrange Multiplier Test was then conducted next.

The Lagrange Multiplier Test is used to confirm the best choice between the Common Effect Model (CEM) and the Random Effect Model (REM). The decision criterion refers to the Both Breusch-Pagan probability value.

Table 5. Lagrange Multiplier Test Results

Description	Cross-Section	Test Hypothesis Time	Both
Breusch-Pagan	214.2209 (0.000)	2.589605 (0.1076)	216.8105 (0.0000)

Source: Processed Data, 2026

According to table 5, the estimation results show a Breusch-Pagan (Both) statistic value of 216.8105 with a probability value of 0.0000 (< 0.05). Since the probability value is far below the 5% significance level, the selected model is the Random Effect Model (REM). Based on the series of three tests above, in which REM was selected in both the Hausman Test and the Lagrange Multiplier Test, it can be concluded that the best estimation model used for the panel data regression analysis in this study is the Random Effect Model (REM).

The classical assumption tests generally consist of normality, autocorrelation, heteroscedasticity, and multicollinearity tests. However, since the research data is panel data and the selected model is the Random Effect Model, the normality, autocorrelation, and heteroscedasticity tests are not required, as the Random Effect Model already uses the Generalized Least Squares (GLS) method (Awaludin et al., 2023). Therefore, the classical assumption test conducted in this study is the multicollinearity test.

Table 6. Multicollinearity Test Results

Description	Stock Price (Y)	Interest Rate (X1)	Inflation (X2)	EPS (X3)	DER (X4)	DPR (X5)
Stock Price (Y)	1.000000	-0.062796	0.002230	0.332264	-0.157552	-0.025575
Interest Rate (X1)	-0.062796	1.000000	0.216502	0.060734	-0.008346	0.044019
Inflation (X2)	0.002230	0.216502	1.000000	0.068600	-0.033561	0.137257
EPS (X3)	0.332264	0.060734	0.068600	1.000000	-0.102895	-0.022527
DER (X4)	-0.157552	-0.008346	-0.033561	-0.102895	1.000000	-0.088811
DPR (X5)	-0.025575	0.044019	0.137257	-0.022527	-0.088811	1.000000

Source: Processed Data

The multicollinearity test results in Table 6 show that the correlation coefficients among the independent variables are all below 0.9, indicating that there is no multicollinearity problem in the regression model. It can therefore be concluded that this model is suitable for use in the subsequent hypothesis testing.

Based on the data processing results using the EViews program, the selected estimation model is the Random Effect Model, with the following panel data regression equation:

$$Y = 8423.976 - 520.9562X_1 + 29.96326X_2 + 0.861343X_3 - 368.5212X_4 - 421.9328X_5$$

Table 7. Summary of t-test, F-test, and Coefficient of Determination Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Constant	8423.976	1528.983	5.509530	0.0000
Interest Rate (X1)	-520.9562	124.9950	-4.167817	0.0001
Inflation (X2)	29.96326	80.20582	0.373580	0.7094
EPS (X3)	0.861343	0.136586	6.306236	0.0000
DER (X4)	-368.5212	162.3633	-2.269732	0.0251
DPR (X5)	-421.9328	227.3001	-1.856280	0.0660

Source: Processed Data, 2026

Based on table 7, the partial hypothesis test results (at a 5% significance level) can be described as follows:

1. The constant value of 8,423.976 indicates that the stock price would increase by 8,423.976 when each independent variable is zero.
2. Interest rate, with a coefficient value of -520.9562, a t-value of -4.167817, and a significance of 0.0001 (< 0.05), shows that interest rate has a significant (negative) effect on the stock price of LQ45 issuers. Thus, the first hypothesis (H1) is accepted.
3. The inflation variable has a regression coefficient of 29.96326, a t-value of 0.373580, and a significance of 0.7094 (> 0.05). These results indicate that inflation does not have a significant effect on the stock price of LQ45 issuers. Thus, the second hypothesis (H2) is rejected.

4. Earnings Per Share (EPS), with a coefficient value of 0.861343, a t-value of 6.306236, and a significance of 0.000 (< 0.05), shows that EPS has a significant (positive) effect on the stock price of LQ45 issuers. This means that for every 1-unit increase in EPS, the stock price will increase, assuming other variables remain constant, so the third hypothesis (H3) is accepted.
5. Debt to Equity Ratio (DER), with a coefficient value of -368.5212, a t-value of -2.269732, and a significance of 0.0251 (< 0.05), shows that DER has a significant (negative) effect on the stock price of LQ45 issuers. This means that for every 1-unit increase in DER, the stock price will decrease by 368.512, assuming other variables remain constant. Thus, the fourth hypothesis (H4) is accepted.
6. Dividend Payout Ratio (DPR), with a coefficient value of -421.9328, a t-statistic of -1.856280, and a significance of 0.0660 (> 0.05), shows that DPR does not have a significant (negative) effect on the stock price of LQ45 issuers. Thus, the fifth hypothesis (H5) is rejected.

Based on the REM model estimation results in Table 7, the F-statistic is 11.57695 with a Prob(F-statistic) value of 0.000. This value is smaller than the 0.05 significance level, indicating that simultaneously, interest rate, inflation, EPS, DER, and DPR have a significant effect on the stock prices of issuers in the LQ45 index. This model is deemed suitable for explaining the phenomenon under study.

The coefficient of determination is used to measure how much the independent variables are able to explain the variation in the dependent variable. According to the data obtained from the REM model, the R-square value is 0.3076, indicating that the variation in LQ45 companies' stock prices can be explained by the five independent variables in the model by 30.76%. The remaining 69.24% is explained by other variables outside this research model.

Discussion

The regression test results show that the interest rate variable has a significance value of 0.0001 (< 0.05) with a negative regression coefficient direction. Based on these statistical results, the First Hypothesis (H1) is accepted. This finding empirically proves that interest rate has a negative and significant effect on the stock prices of LQ45 index companies during the 2020-2024 period. Theoretically, this result is highly consistent with investment concepts and the Dividend Discount Model. The monetary policy interest rate (such as the BI 7-Day Reverse Repo Rate) acts as a strong policy signal in the financial market.

When the central bank raises interest rates, the discount rate used in valuing financial instruments increases, which automatically reduces the present value of future cash flows and dividends expected by investors, thereby suppressing stock prices on the exchange. In addition, an interest rate increase triggers a shifting phenomenon, in which investors move funds from the riskier stock market toward money market or fixed-income instruments (such as bonds and deposits) offering more certain and higher returns. This decline in buying interest causes selling pressure on LQ45 blue-chip stocks.

From the corporate side, high interest rates also have the potential to increase issuers' loan interest expenses, which can erode net profit margins. This significant negative finding is in line with conventional financial macroeconomic theory and reinforces the urgency for blue-chip stock investors to continuously monitor shifts in monetary policy direction when formulating their portfolio strategies. This research result is in line with studies by Budyastuti & Supriatiningsih (2023) and Putri et al. (2025), which affirm that Bank Indonesia's monetary policy through the interest rate instrument remains a highly sensitive macroeconomic anchor that receives a negative response from LQ45 stock price movements on the Indonesia Stock Exchange.

The regression test results show that the inflation variable has a significance value of 0.7094 (> 0.05) with a positive regression coefficient of 29.96326. Based on these statistical results, the Second Hypothesis (H2) is rejected. This finding proves that the inflation rate does not have a significant positive effect on the stock prices of companies in the LQ45 index during the 2020-2024 period. The rejection of this hypothesis confirms that fluctuations in the domestic inflation rate are not a primary determinant of stock price fluctuations among leading issuers on the Indonesia Stock Exchange during the observation period.

Theoretically, the absence of a significant inflation effect indicates that inflation movement in Indonesia during 2020-2024 tended to remain within a stable, controlled range and was well anticipated by market participants (fully priced-in). Within the Signaling Theory framework, inflation data within a reasonable range is no longer captured as an economic condition signal threatening macro stability, but rather as part of the normal economic cycle.

As blue-chip issuers with solid fundamental capacity and large market capitalization, companies in the LQ45 index generally have high resilience and strong pricing power. When mild inflationary pressure occurs, these issuers are able to achieve operational cost efficiency or adjust product selling prices proportionally without having to sacrifice market share or drastically erode their net profit margins. As a result, investors act rationally and do not engage in panic selling, so stock prices remain stable.

This finding is consistent with the empirical study by Halimah et al. (2025), which found that for large-scale companies (market leaders), controlled annual inflation fluctuations do not have a significant shock impact on equity instrument valuation in the capital market. This confirms that in the context of LQ45 stocks, investors focus much more attention on internal performance recovery and real profitability indicators than on secondary macroeconomic sentiment indicators such as inflation.

Based on the test results, the EPS variable has a significance value of 0.000 (< 0.05) with a positive coefficient of 0.861, so H3 is accepted. This proves that EPS is the primary pillar determining stock price with a positive and significant effect. Theoretically, this finding reinforces Signaling Theory, in which an increase in EPS functions as a profitability signal reflecting the company's future growth prospects. Earnings per share is the most crucial financial information component and acts as the primary profitability signal sent by company management to the public. Investors perceive high EPS as an indicator of a company's ability to consistently generate profits, financial health, and promising future business growth prospects.

Furthermore, the strong influence of EPS in this study also proves that for large-scale companies, real performance (the ability to generate profit) is valued far more by long-term investors than mere market speculation. Strong net profit provides assurance that the company has the internal resilience to face global economic uncertainty. This research result is highly consistent with various finance literature that places EPS as a primary determinant of stock price movement, particularly in semi-strong emerging capital markets. Specifically, this empirical finding reinforces and updates a previous study conducted by Nur Alfriani Handayani et al. (2025), which also found that individual stock-based profitability indicators have a strong positive linear correlation with firm market value in Indonesia.

The regression test results show that the DER variable (X4) has a significance value of 0.0251 (< 0.05) with a negative regression coefficient direction. Based on these statistical results, H4 is accepted, proving that Debt to Equity Ratio (DER) has a negative and significant effect on the stock prices of companies listed in the LQ45 index during the 2020-2024 period. Theoretically, this empirical finding is highly aligned with Trade-Off Theory and the concept of a risk signal in the capital market. A capital structure policy reflecting an excessively high level of debt sends a strong financial distress risk signal to investors.

Based on Trade-Off Theory, an increase in debt beyond the optimal point will raise agency costs and drastically increase the probability of company bankruptcy. Investors in the capital market, particularly in large-capitalization stocks such as those in the LQ45 index, perceive a high DER value as a threat to the issuer's long-term stability. A large interest burden resulting from high debt has the potential to erode the portion of net profit that should be allocated as dividends to shareholders. Therefore, this risk signal drives investors to reduce demand for the stock, ultimately triggering a decline in the stock price on the exchange. This research result is consistent with the theoretical review in the research background and the study by Sulistyani (2022), thereby providing strong evidence that poor capital risk management is viewed negatively by the market.

The regression test results show that the DPR variable (X5) has a significance value of 0.0660 (> 0.05) with a negative regression coefficient direction of -421.932. Based on these statistical results, the Fifth Hypothesis (H5) is rejected. This finding provides empirical evidence that Dividend Payout Ratio (DPR) does not have a significant negative effect on the stock prices of LQ45 index companies during the 2020-2024 period. Although some literature, such as Bird-in-Hand Theory, states that a high dividend distribution will be directly responded to positively by the market, this differs in the

present study. This significant negative finding can be explained through an alternative financial theory, namely Growth Opportunity, and its relation to Signaling Theory. For companies in a growth phase or facing macroeconomic uncertainty during the observation period, a very large dividend payout ratio (high DPR) can be captured as a negative signal by market participants. Investors will tend to perceive that the issuer no longer has profitable investment opportunities or future projects (growth opportunities), and therefore chooses to distribute most of its profits to shareholders.

Within the Signaling Theory framework, investors in the LQ45 stock group tend to be more rational and long-term oriented. They understand that when a company retains more earnings (low DPR), those funds are allocated to finance growth opportunities and internal expansion, which have the potential to generate higher capital gains in the future. Conversely, a large dividend distribution (high DPR) is considered a reasonable form of periodic appreciation, so both conditions are viewed neutrally by the market. Investors do not see a change in DPR value as a crucial piece of new information content as long as the company's core profitability fundamentals (such as EPS) continue to show solid performance.

This research finding is supported by the study of Nur Alfriani Handayani et al. (2025), which explains that during the economic recovery phase and contemporary capital market dynamics, annual dividend distribution policy is no longer the main stimulus dictating the stock price movement of first-tier issuers. Both institutional and retail investors in Indonesia focus their investment decisions much more on a company's real capacity to generate consistent net profit growth than merely on its dividend payout ratio percentage.

Conclusion

This study aims to analyze the effect of macroeconomic factors and corporate fundamentals on stock prices of LQ45 index companies on the Indonesia Stock Exchange during the 2020-2024 period. Based on the results of the data analysis and discussion, this study concludes that simultaneously, all independent variables contribute 30.76% to stock price movement. It can also be concluded that, partially, interest rate has a negative and significant effect on stock price, so the First Hypothesis (H1) is accepted, meaning that monetary policy remains a sensitive anchor for the capital market.

Conversely, the inflation rate is proven to have no significant effect on the stock price movement of LQ45 issuers, so the Second Hypothesis (H2) is rejected, reflecting that the domestic inflation rate during the observation period remained at a controlled level that had already been well anticipated by market participants. Meanwhile, internal fundamental indicators show strong dynamics, in which Earnings Per Share (EPS) has a positive and significant effect, so the Third Hypothesis (H3) is accepted, further confirming its role as the primary pillar determining blue-chip stock market value. On the other hand, Debt to Equity Ratio (DER) is proven to have a negative and significant effect on stock price, so the Fourth Hypothesis (H4) is accepted, confirming that an excessively high debt level triggers a financial risk signal avoided by investors.

Finally, the Dividend Payout Ratio (DPR) variable was found to have no significant effect on stock price, so the Fifth Hypothesis (H5) is rejected, proving that the size of the dividend distribution percentage is not the main stimulus dictating the stock price movement of leading issuers during the observation period. These findings carry profound strategic implications for corporate management and investors.

For company management, the primary focus of financial management should be placed on optimizing internal fundamentals by maintaining consistent growth in net profit per share and controlling the debt ratio so that it does not exceed the optimal limit that could trigger financial risk sentiment in the market. Dividend distribution policy should also be managed proportionally to maintain a balance between shareholder appreciation and the availability of retained earnings to fund future growth opportunities.

For investors, these results provide strategic direction that, in selecting blue-chip stock instruments, in-depth analysis of real internal profitability capacity and corporate leverage risk management is far more crucial as a basis for decision-making than secondary macroeconomic indicators such as annual inflation fluctuations.

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