

**THE INFLUENCE OF MACROECONOMIC FACTORS,
INVESTMENT RISK, AND FINANCIAL PERFORMANCE ON
STOCK RETURN OF THE LQ45 INDEX 2016-2021 PERIOD
AT THE IDX**

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Abstract

Macroeconomic factors refer to broader economic indicators such as inflation, interest rates, GDP growth, and exchange rates. These factors can significantly impact stock returns as they reflect the overall health and performance of the economy. This study aims to analyze the effect of macroeconomic factors, investment risk, and financial performance on stock returns for the LQ45 index for the 2016-2021 period. The research employs quantitative methods and multiple linear regression analysis to systematically explore the relationships between these variables. Data from 27 companies were sampled based on specific criteria, and the analysis was conducted using the SPSS version 22 program. The findings reveal that inflation has a significant and positive effect on stock returns for the LQ45 index, while interest rates have a non-significant negative impact. Additionally, Beta shows a positive but non-significant effect, and ROA has a non-significant negative influence on index stock returns.

Keywords: Interest Rate, Inflation, ROA, Stock Return

1. INTRODUCTION

The capital market in Indonesia has experienced significant growth, playing a crucial role in economic development. However, accessing sufficient capital remains a challenge, particularly for developing nations. To address this, companies have the option to issue and sell securities in the capital market, allowing them to raise funds from the public. This facilitates investment opportunities for individuals with surplus funds, who can seek returns in the form of dividends. At the same time, companies can utilize these funds for investments without relying solely on their operational earnings.

Profits from investing in the capital market can be reflected through the return on selected stocks. According to Hartono (2008: 104) "Return can be said as the result of investing. Investors who invest in stocks will get a profit (capital gain) when the shares are resold and receive dividends (profit sharing) every year. But investors must also be prepared to take risks if the opposite happens." Consequently, it is essential for investors to understand the factors that influence stock returns as this knowledge can serve as a valuable benchmark when making investment decisions.

An essential aspect of studying investments revolves around the measurement of risk and return. While investing in stocks holds the promise of high returns, it also comes with inherent risks. Investors must carefully consider the interplay between these two factors. It is crucial to recognize that separating investment gains (returns) from risks is challenging. In fact, they are closely intertwined like two sides of the same coin. As stated

by Hadi (2013: 10), "There is a correlation between return and risk, as in portfolio theory that the higher the return offered by a security instrument, the higher the risk in the relevant security (high return high risk)." In other words, any anticipated future investment gains come hand-in-hand with potential risks associated with that particular investment.

Companies employ various policy instruments in their efforts to minimize and potentially eliminate market risk. Market risk arises from factors beyond a company's control, stemming from changes in market conditions and external situations. The level of market risk associated with a stock is gauged by its market beta. This market beta signifies the relationship or movement between the stock and the overall market. It is considered a measure of systematic stock risk, as stated by Hartono (2010: 376), "Market beta is a measure of the volatility (volatility) return of a security or portfolio on market returns." In this study, beta (β) serves as the variable representing investment risk.

According to Samsul (2006: 200), besides macroeconomic variables, company performance is also influenced by micro or internal factors specific to the company. Both macro and microeconomic factors hold significant importance for investors seeking profitable investments while avoiding losses. The macroeconomic factors that can impact stock performance and company performance encompass various elements, such as general domestic interest rates, inflation rates, tax regulations, specific government policies related to certain companies, foreign exchange rates, interest rates on foreign loans, international economic conditions, economic cycles, economic ideology, and money circulation.

Inflation, as defined by Sukirno (2011: 165), is the continuous rise in the prices of goods. Maintaining low and stable inflation is crucial as it reflects a stable economic growth environment. For companies, stable and low inflation brings several benefits, including increased profits resulting from higher prices of goods and expanded employment opportunities due to additional investments stemming from increased company profits. On the contrary, high inflation can lead to a sharp increase in the value of goods and services, triggering speculative actions from investors. This scenario proves detrimental to companies and can negatively impact a country's economy, leading to decreased confidence in the currency and declining values.

Ardhi et al. (2017) emphasize that the government can use interest rates as a means to control soaring inflation. Interest rates serve as a tool for a country's central bank to maintain economic stability. These rates have a direct impact on stock values. Typically, corporate profits increase during periods of economic growth, which coincide with lowered interest rates. Conversely, when the central bank aims to slow down economic growth, it will raise interest rates. As interest rates increase, company profits decrease, causing stock prices to fall. In summary, economic growth is usually associated with lower interest rates and increased corporate profits, while measures to curtail growth involve higher interest rates and reduced company profits, leading to declining stock prices.

According to Dewangga et al. (2020), apart from macro variables that can influence companies and stock returns, there are also internal factors specific to the company, such as company performance. These internal factors are influenced from within the company and include financial performance, which assesses the level of success based on the

company's financial activities. In this study, the Return On Assets (ROA) ratio is used as a measure of profitability, indicating the company's ability to generate profits. As described by Darmadji and Fakhruddin (2012: 158), Return On Assets measures the company's ability to generate returns on the assets it owns. This ratio is crucial in understanding the company's ability to obtain profits as a whole. It provides valuable information about the net profit earned from all the company's assets. A higher ROA ratio signifies a higher level of profitability achieved by the company.

The Indonesia Stock Exchange introduced the LQ45 index as an alternative to make it easier for investors to choose preferred stocks. The LQ45 index was inaugurated for the first time in February 1997 (www.idx.co.id, 10 November 2020). The Indonesia Stock Exchange always makes changes every 6 months to company shares that are included in the LQ45 index. This means that the company's shares will be automatically replaced if the shares do not meet the selection criteria based on the Indonesian Stock Exchange's provisions in determining the LQ45 index. The LQ45 index serves as an indicator of top stock market trends to determine the current state of the 45 liquid stocks whether they are active or sluggish.

This study aims to analyze the effect of macroeconomic factors, investment risk, and financial performance on stock returns for the LQ45 index for the 2016-2021 period. This study's significance lies in understanding stock market behavior, optimizing portfolio diversification, formulating effective economic policies, and developing risk management strategies based on the analysis of macroeconomic factors, investment risk, and financial performance on stock returns for the LQ45 index during the 2016-2021 period.

2. RESEARCH METHOD

The research employed a quantitative approach, utilizing numerical data to examine the relationship between variables. It falls under causal research as it aimed to determine the causal connections between two or more variables. Data collection relied on the documentation method, involving historical data from the financial statements of companies listed on the LQ45 index for the 2016-2021 period. Financial reports were obtained from the Indonesia Stock Exchange website (www.idx.co.id), while macroeconomic data and stock return data were sourced from the official websites of Bank Indonesia (www.bi.go.id) and Yahoo Finance (<https://finance.yahoo.com>), respectively.

To analyze the data, the researchers employed multiple linear regression analysis. This technique allowed them to explore the direction and magnitude of the independent variables' influence on the dependent variable. Through this approach, the study sought to draw meaningful insights into the relationship between the selected variables and their impact on stock returns.

3. RESULTS AND DISCUSSION

3.1. Research Result

3.1.1. Descriptive Statistical Analysis

Table 1. Descriptive Statistical Analysis

Descriptive Statistics					
	N	Minimum	Maximum	Means	Std. Deviation
INFLATION	162	.02	.04	.0300	.00819
BI RATE	162	.04	.06	.0500	.00819
BETA	162	-3.07	5.37	1.3923	1.11645
ROA	162	-.01	.47	.0802	.08311
STOCK RETURNS	162	-.47	2.29	.0594	.39519
Valid N (listwise)	162				

Based on the table above, it can be seen that the minimum inflation rate is 0.02, namely in 2021, while the maximum inflation rate is 0.04 in 2017. Based on the table above, the minimum BI rate is 0.04, namely in 2021. while the maximum BI Rate is 0.06 in 2016. Based on the table above, the minimum beta value is -3.07, namely ADRO companies occur in 2021, while the maximum beta value is 5.37, namely PTPP companies in 2019. Based on In the table above, the minimum ROA value is -0.01, namely the INCO company occurred in 2017, while the maximum ROA value is 0.47, namely the UNVR company in 2018. Based on the table above, the minimum stock return value is -0.47, namely PTPP company occurs in 2021, while the maximum stock return value is 2,29, namely ADRO companies in 2016.

3.1.2. Multiple Linear Regression

Table 2. Multiple Linear Regression Result

Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-.378	.190		-1,982	.049		
	INFLATION	15,981	5,577	.331	2,865	.005	.425	2,353
	BI RATE	-.424	5,590	-.009	-.076	.940	.423	2,364
	BETA	.009	.028	.026	.339	.735	.933	1,071
	ROA	-.427	.366	-.090	-1,165	.246	.956	1,046

a. Dependent Variable: SHARE RETURN

Based on the table 2, we observe the values of the multiple regression equation in this study:

$$Y = -0.378 + 15.981X_1 - 0.424X_2 + 0.009X_3 - 0.427X_4 + e$$

Here is the relevant information derived from the regression equation:

- 1) The constant term, marked as -0.378, shows a negative relationship, implying that if the independent variables remain constant, the stock return will decrease.
- 2) The regression coefficient for X1, marked as 15.981, indicates a positive relationship. This means that any increase in inflation will be followed by an increase in stock returns of 15.981, assuming the other independent variables remain constant.
- 3) The regression coefficient for X2, marked as -0.424, displays a negative relationship. This implies that each increase in the BI Rate will lead to a decrease in stock returns of 0.424, holding the other independent variables constant.
- 4) The regression coefficient for X3, marked as 0.009, signifies a positive relationship. This indicates that each increase in Beta will result in an increase in Stock Return of 0.009, assuming the other independent variables remain constant.
- 5) The regression coefficient for X4, marked as -0.427, indicates a negative relationship. This suggests that each increase in ROA will lead to a decrease in stock return of 0.427, holding the other independent variables constant.

3.1.3. Hypothesis Testing

1) Coefficient of Determination Test

Table 3. Coefficient of Determination

Summary model ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.330 ^a	.109	.086	.37784

a. Predictors: (Constant), ROA, BI RATE, BETA, INFLATION

b. Dependent Variable: SHARE RETURN

Based on the table 3, the results of the test for the coefficient of determination (R^2) obtained a correlation value of $R = 0.109$ or 10.9% Stock Return is influenced by the four independent variables Inflation, BI Rate, Beta, and ROA. While the remaining 89.1% is influenced by other factors outside the independent variables studied.

2) Partial Test (t test)

Table 4. T Test Result

Coefficients ^a				
Unstandardized Coefficients		Standardized Coefficients	t	Sig.
B	Std. Error	Beta		
-.378	.190		-1,982	.049
15,981	5,577	.331	2,865	.005
-.424	5,590	-.009	-.076	.940
.009	.028	.026	.339	.735
-.427	.366	-.090	-1,165	.246

a. Dependent Variable: SHARE RETURN

Through the t-test statistics consisting of Inflation (X1), BI Rate (X2), Beta (X3), ROA (X4) it can be partially known the effect on Stock Return (Y).

- 1) Testing the first hypothesis (H1) in the table 4 shows that the inflation variable has a significant level of 0.005, which is less than 0.05. This means that inflation has a significant effect on stock returns and a t value of 2.865 indicates a positive effect on the dependent variable.
- 2) Testing the second hypothesis (H2) in the table 4 shows that the BI Rate variable has a significant level of 0.940, which is greater than 0.05. This means that the BI Rate has no significant effect on stock returns and a t value of -0.076 indicates a negative effect on the dependent variable.
- 3) Testing the third hypothesis (H3) in the table 4 shows that the Beta variable has a significant level of 0.735, which is greater than 0.05. This means that Beta has no significant effect on Stock Return and a t value of 0.339 indicates a positive influence on the dependent variable.
- 4) Testing the fourth hypothesis (H4) in the table 4 shows that the ROA variable has a significant level of 0.246, which is greater than 0.05. This means that ROA has no significant effect on stock returns and a t value of -1.165 indicates a negative effect on the dependent variable.

3) Simultaneous Test (F Test)

Table 5. F Test Result

ANOVA ^a						
	Model	Sum of Squares	df	MeanSquare	F	Sig.
1	Regression	2,730	4	.683	4,781	.001 ^b
	Residual	22,414	157	.143		
	Total	25.144	161			

a. Dependent Variable: SHARE RETURN

b. Predictors: (Constant), ROA, BI RATE, BETA, INFLATION

Based on the table 6, the results of the F test stated that the F-statistic value was 4.781 and the F-table was 2.43. Based on this, the F-statistic value is greater than the F-table $4.781 > 2.43$ and the probability value is $0.001 < 0.05$, it can be concluded that H0 is rejected and H1 is accepted. So, Inflation, Interest Rate (BI Rate), Beta, ROA jointly (simultaneously) have a significant effect on Stock Returns.

3.2. Discussion

3.2.1. Impact of Inflation on Stock Returns

The findings of this study reveal that inflation has a positive and statistically significant effect on stock returns, as indicated by a significance value of 0.005, which is less than the set significance level of 0.05. The coefficient value of 2.865 further supports this relationship. Thus, the research results align with the hypothesis that inflation positively influences stock returns.

3.2.2. Influence of Interest Rates (BI Rate) on Stock Returns

Contrary to the initial hypothesis, the results show that interest rates have a negative and insignificant impact on stock returns. This conclusion is based on the significance

value of 0.940, which exceeds the predetermined significance level of 0.05, along with a coefficient value of -0.076. The study findings do not support the idea that interest rates significantly affect stock returns.

3.2.3. Effect of Beta on Stock Returns

The study's outcomes indicate that Beta has a positive but statistically insignificant influence on stock returns, as evidenced by a significance value of 0.735, exceeding the significance level of 0.05. The coefficient value of 0.339 supports this observation. Consequently, the results do not support the hypothesis that Beta significantly impacts stock returns.

3.2.4. Impact of ROA on Stock Returns

Similarly, the research findings indicate that ROA has a negative and statistically insignificant effect on stock returns. The significance value of 0.246 exceeds the predetermined significance level of 0.05, and the coefficient value of -1.165 reinforces this result. Therefore, the study does not support the hypothesis that ROA significantly influences stock returns.

3.2.5. Combined Impact of Inflation, Interest Rates, Beta, and ROA on Stock Returns

The study also investigated the combined impact of inflation, interest rates, Beta, and ROA on stock returns. The F-statistic value of 4.781 exceeds the F-table value of 2.43, and the probability value is 0.001, which is less than the significance level of 0.05. Consequently, the null hypothesis (H₀) is rejected, and the alternate hypothesis (H₁) is accepted. Therefore, it can be concluded that inflation, BI Rate, Beta, and ROA together significantly affect stock returns, aligning with the initial hypothesis.

4. CONCLUSION

The findings of the study reveal several key insights regarding the relationship between various economic factors and the Stock Return of the LQ45 Index during the 2016-2021 period on the IDX. Firstly, inflation exhibits a positive and noteworthy impact on the Stock Return, indicating that as inflation rises, so does the stock performance. Secondly, the interest rate (BI Rate) shows a negative influence on Stock Returns; however, this effect is deemed insignificant, implying that changes in interest rates do not strongly affect the stock market performance. Thirdly, the analysis indicates that Betas have a positive effect on the Stock Return, yet this effect is not statistically significant. This suggests that the beta coefficient might have some influence, but it is not substantial enough to be considered significant. Fourthly, Return On Assets (ROA) is found to have a negative effect on Stock Returns, but like the interest rate, it is also deemed insignificant, indicating that ROA does not have a strong impact on stock market performance during the stated period. Finally, when considering all factors together - inflation, interest rate (BI Rate), Beta, and ROA - the study finds a significant joint effect on Stock Returns for the LQ45 Index during the 2016-2021 period on the IDX. This

implies that the collective influence of these factors is more meaningful in determining the stock market performance than any individual factor alone.

Based on the study's findings, we offer the following recommendations. Investors should closely monitor inflation trends as it has a significant positive effect on stock market performance. Diversifying portfolios remains important, given the insignificant impact of interest rate changes on Stock Returns. Although Betas showed no statistical significance, evaluating individual stocks' beta coefficients can aid in understanding risk exposure. Additionally, considering Return On Assets (ROA) alongside other financial indicators will provide a more comprehensive view for investment decisions. Policymakers and investors should conduct holistic analyses, considering all relevant factors, to better predict and understand stock market performance and optimize investment strategies.

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