



The Influence of Interest Rate, Inflation, and Exchange Rate on Stock Price Return of Companies Listed in the KOMPAS 100 Index

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Abstract. This research was conducted based on the fluctuation of the KOMPAS100 index from 2015 to 2021. The research was done to know the influence of interest rate, inflation, and the Indonesian Rupiah exchange rate against the US Dollar on the stock price return of companies listed in the KOMPAS100 index within the research period. This research used a quantitative approach and data panel regression analysis. The study results show that interest rate has a negative and significant impact on stock price return, inflation has a positive and non-significant impact on stock price return, and the exchange rate has a negative and significant impact on stock price return.

Keywords: Interest Rate · Inflation · Exchange Rate · Stock Price Return

1 Introduction

Stock price return always becomes controversial in the stock market and is one of the complicated and exciting phenomena for investors and financial analysts. Return is the reward investors get for their actions from bearing their investment risk [1]. Return is the motivation, an essential investment principle, and a key that enables investors to decide on an investment opportunity [2]. Return can be in the form of capital gain/loss and yield from the dividend. One of the indices investors use to gauge market sentiment is the KOMPAS100 index. This index has 100 companies listed with the highest capitalization and liquidity in the index. With these 100 companies, the index can give a good picture of the Indonesian stock market so that investors can look at the companies listed in the index for their investment options.

A company's stock price could move because of the buying and selling action of the individual stock. The money flowing in and out of the market can come from domestic or foreign investors. A stock will move higher if the demand for a particular stock is higher than the supply. Price will move lower if supply is higher than demand. Buying and selling will occur, and the price will move to equate and create an equilibrium between the demand and supply of a particular stock. The factors that could influence the inflow and outflow of money from the capital market include macroeconomic variables like gross domestic product (GDP), inflation, exchange rate, interest rate, etc. KOMPAS100

Table 1. t-statistic numbers.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.375265	1.304103	2.588189	0.0101
X1 (interest rate)	-7.150722	2.860725	-2.499618	0.0129
X2 (inflation)	4.626855	6.062667	0.763172	0.4459
X3 (exchange rate)	-0.000223	9.02E-05	-2.475031	0.0139

had an extreme fluctuation from 2015 until 2021. From the lowest point in 2015 to the highest point in 2018, the index experienced a growth of 71.11%. From its highest in 2018, the index experienced a decline of -48.93%, which wiped out almost half of the index value.

This research tries to find the influence of the Indonesian Rupiah's interest rate, inflation, and exchange rate on the US Dollar of companies listed in KOMPAS100. Interest rate becomes a strong factor in price movement because investors are more interested in lower-risk investments like a bond if the interest rate is high. Inflation affects return, and investors will be more cautious in investing their assets during high inflation. The exchange rate could affect return when investors are more willing to invest their assets in other currencies when the exchange rate is high.

2 Research Method

Research on the stock market has been done many times; some research focused more on macroeconomic variable toward stock price [3]. Other research focused on the return on the LQ45 index [4], the mining sector [5], the manufacturing sector [6], and real estate [7]. This present research focuses on the stock price return of the companies listed in the KOMPAS100 index, and the influencing variables are interest rate, inflation, and exchange rate.

Fisher's [8] quantity theory of money and Keynes' [9] economic theory are used as the reference for this research. Fisher's quantity theory of money explains how money circulates and people's psychological response to money; these things could affect the money flowing in and out of the stock market. Keynesian economics is about how the equilibrium of supply and demand in the money market dictates interest rates. The data used in this research were quantitative data gathered about the stock price return from the companies listed consecutively for 7 years from 2015 until 2021 in the KOMPAS100 index. 45 companies are consecutively listed in the index throughout the research period. The data in this research were analyzed using data panel regression because the data combine cross-section and time series, processed with EViews 12 to get the most comprehensive results.

3 Results and Discussion

The regression analysis results show that the probability value for interest rates is $0.0129 < 0.05$. This means that the interest rate has a negative and significant impact, where the negative t-statistic value indicates that an increase in interest rates is associated with a decrease in stock return. As for inflation, the probability value is $0.4459 > 0.05$. This means that inflation has a positive but insignificant influence on stock return. The positive t-statistic value indicates that an increase in the inflation rate is associated with an increase in stock return. The exchange rate has a probability value of $0.0139 < 0.05$. This means that the exchange rate has a negative and significant impact on the dependent variable of stock return. A negative t-statistic indicates that an increase in the exchange rate will decrease the stock price return (Table 1).

The data analysis shows that the interest rate has a regression coefficient of -7.150722 , which means that it has a negative course. The negative coefficient indicates that the interest rate has a negative impact on stock return with a probability value of $0.0129 < 0.05$. This probability value indicates that the interest rate has a significant influence on stock returns. The negative impact of the interest rate on stocks arises from the tendency of investors to move their capital into other investment instruments with lower risk when there is an interest rate hike, such as a government bond.

Inflation has a regression coefficient of 4.626855 , which has a positive course. The positive coefficient indicates that inflation has a positive impact on stock return, with a probability value of $0.4459 > 0.05$. This probability value indicates that inflation has an insignificant influence on stock return. This positive and insignificant influence may be because inflation does not directly affect investors' decisions to invest or withdraw their money from the stock market. Instead, inflation affects the performance of companies whose sectors are affected by inflation. So, investors will make decisions based on how these companies handle the impact of inflation.

The result of the exchange rate shows a regression coefficient of -0.000223 , which means it has a negative course. This negative coefficient indicates that the exchange rate has a negative influence on stock return, with a probability value of $0.0139 < 0.05$. This probability value indicates that the exchange rate has a significant influence on stock return. This negative and significant influence may be due to investors who move their money from the stock market to other instruments, such as foreign currencies.

4 Conclusion

The Macroeconomic variables strongly influence the fluctuation of KOMPAS100. As shown in this research, interest rate and currency exchange rate have a significant effect on the stock return of companies listed in KOMPAS100. This research implies that macroeconomic indicators affect the stock return of companies listed in the KOMPAS100, which investors can consider in making investment decisions to minimize investment risk.

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