

# **An Analysis The Effect Of Inflation, Interest and Exchange Rate On Stock Return in Indonesia Manufacturing Exchange Companies**

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**ABSTRACT:** *The purpose of this study is to analyze inflation, interest rates and exchange rates influence the stock returns on manufacturing companies listed on the Indonesia Stock Exchange partially and simultaneously. The type of the research that has been conducted is descriptive research. The population in this study is all data about the value of inflation, the rate of interest, the exchange rate and stock returns of manufacturing companies on the IDX. The study was conducted for 10 years from January 2008 to December 2018, while the number of companies sampled and met the criteria in taking the sample above; we obtained the total sample for ten years, namely 132 observations. The results of this study indicate that the low inflation rate will cause a decrease in the company's production costs with a significant value of 0.007, interest rates have a significant effect on stock returns, interest rates have a significant effect on stock returns, the exchange rate has no significant effect on stock returns because the level is significant at 0.126. From the calculation of the F test obtained F(count) of 24.760 greater than F(table) 2.68. So that it can be concluded that together the inflation variable, interest rates and exchange rates affect stock returns.*

**KEYWORDS:** *inflation, Bank Indonesia certificates, exchange rate, stock return*

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## **I. INTRODUCTION**

Factors that influence stock returns are interest rates, Bank Indonesia interest rates, supply and exchange rate of the rupiah against the dollar, is one of the interesting economic devices to be observed. Stock Returns are current income, which are the profits obtained through periodic payments, for example the payment of interest on deposits, dividends, interest on bonds, and so on. Current income is called current income because the profits received are usually in the form of cash or cash equivalents such as interest, demand deposits and cash dividends. While; profits in the form of cash equivalents such as bonus shares and stock dividends (Ang, 1997). Investment in the capital market is an investment in the field of financial assets which basically expects an outcome for the securities purchased.

In investment activities, there is a principle that the higher the level of profit expected then the higher the risk that might be faced and vice versa the lower the expected profit, the lower the risk that might be faced (high risk high return and low risk low return). The purpose of the Investor to invest the funds is to get a return. The high return will attract investors to buy the shares. Investors who carry out stock activities cannot know for certain the maximum return that can be achieved by an investor who knows the factors that affect stock returns.

Another factor that affects stock returns is interest rates, Bank Indonesia interest rates are one of the interesting economic instruments to be observed. This is because interest rates are used as appropriate policy tools to be applied flexibly by monetary authorities, depending on the economic situation prevailing at that time. Exchange rate is the price of a currency.

## **II. LITERATURE REVIEW**

Stock return is the difference between the selling price or the current price and the purchase price or the beginning of the period. Whereas, according to Brigham and Houston (2012: 215) states that return is the difference between the amount received and the amount invested. Based on some of the definitions above, it can be concluded that stock returns are the returns on investment in the form of the benefits obtained from buying and selling shares in the capital market.

According to Carlo (2014) Stock Returns consist of two main components, namely: Capital Gain, which is an advantage for investors obtained from excess selling prices above the purchase price, both of which occur in the secondary market. Thus the return or profit obtained by shareholders comes from dividend payments and the increase in stock prices there are several factors that can affect the stock return alone, several factors that affect the price or stock return, both macro and micro, namely inflation, interest rates, foreign

exchange rates, economic growth rates, the price of fuel oil in the international market, index of regional share prices. While non-economic macro factors are namely domestic political events, social events, international political events.

Micro factor is a factor originating from within the company. Information obtained from the company's internal conditions in the form of financial information, non-financial information. Several factors that influence Stock Returns according to Official (2002), which are quoted from (Bramantyo, 2006: 2), (Tho'in & Irawati, 2018), (Nuryanto, et.al, 2014) state that there are 2 (two) types of analysis to determine Stock Returns outline, namely fundamental information and technical information. Fundamental information obtained from internal companies includes dividends and growth rates of company sales, financial characteristics, and company size while technical information is obtained outside the company such as economics, politics and finance.

Barnes et., Al. (2003), returns are the results obtained from investments by calculating the difference in stock prices of the current period with the previous period by ignoring dividends. In this case, the stock return in question is capital gain or capital loss which is defined as the difference between the investment price now relative to the past period.

Andes, et., Al. (2017), inflation is defined as an increase in the amount of money in circulation or an increase in liquidity in an economy. This definition refers to general practice which is caused by an increase in the money supply which is thought to have led to an increase in prices in general both goods and services. Inflation is an increase in the price of goods in general which is caused by the increase in the value of a currency in a given period.

Inflation as a process of increasing general prices, goods continuously. Inflation is a continuous process of increasing general prices. Whereas the opposite of inflation is deflation, which is a continuous decline in prices, As a result, people's purchasing power is increasing, so that in the initial stages items become scarce, but in the next stage the amount of goods will increase because of the reduced purchasing power of the people (Medyawati, 2009), (Tho'in et.al, 2019), (Suprihati et.al, 2018).

Interest is the price of borrowed funds (Reilly and Brown, 2006). When a company plans to fulfill its capital requirements is strongly influenced by the current interest rate, whether to issue equity or debt securities. Because the issuance of bonds or the addition of debt is only justified if the interest rate is lower than earning power from the additional capital (Tho'in, 2019), (Riyanto, 1990). So the low interest rates will cause the lower borrowing costs, and low interest rates will stimulate investment and economic activity which will cause stock prices to increase.

The interest rate is the amount of interest paid per unit of time. In other words, people must pay the opportunity to borrow money. The cost of borrowing money is measured in rupiah or dollars per year for every rupiah or the borrowed dollar is the Interest Rate. The interest rate is the cost of the loan or the price paid for the loan fund is usually expressed in percentage (Mishkin, 2008). Bank Indonesia Certificates interest rate is one of the important factors that need to be considered in making investment decisions. A high interest rate is a negative signal to the stock price, because the increased interest rate will cause an increase in interest rates which are implied by investments in a stock. Besides that, rising interest rates can also cause investors to withdraw their investments in shares and move it to investment in the form of savings or deposits (Tandelilin, 2011).

According to Bank Indonesia the interest rate is a cost of expenses which is expressed in a certain percentage in the context of borrowing money for a certain period of time. Bank Indonesia Certificates (SBI) is securities issued by Bank Indonesia in recognition of short-term debt (1-3 months) with a discount / interest system. SBI is one of the mechanisms used by Bank Indonesia to control the stability of the rupiah. By selling SBIs, Bank Indonesia can absorb the outstanding surplus money. The interest rate that applies to each SBI sale is determined by the market mechanism based on the auction system ([www.bi.go.id](http://www.bi.go.id)).

An exchange rate is the price of a currency against another currency or the value of a currency against the value of another currency (Salvatore 1997). An increase in domestic currency exchange rates is called an appreciation of foreign currencies. The decline in the domestic exchange rate is called depreciation of foreign currencies. Exchange rates are prices in exchange and in exchanges between 2 (two) different types of currencies, there will be a comparison of the value or price between the two currencies. This comparison of values is called the exchange rate / exchange rate (Nopirin, 2009: 163).

### **III. RESEARCH METHOD**

The type of research that has been conducted is quantitative descriptive research. The population in this study is the populations in this study are all data about the value of inflation, the rate of interest, the exchange rate and stock returns of manufacturing companies on the IDX. The study was conducted for 10 years from January 2008 to December 2018 by using a purposive sampling technique. The research data is in the form of secondary data about the inflation value, interest rate, exchange rate and stock returns of manufacturing

companies on the IDX from January 2008 to December 2018 published by Bank Indonesia and the Indonesia Stock Exchange. The research analysis tool uses multiple linear regression tests.

#### IV. RESULTS AND DISCUSSION

The test results with partial tests that have been carried out with inflation values, interest rates, exchange rates on stock returns are presented in the table whose data has been processed below.

Table 1  
Results of Multiple Linear Regression

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-2,002	0,313		-6,394	0,000
Inflation	0,260	0,095	0,195	2,728	0,007
Interest rate	0,257	0,057	0,434	4,549	0,000
Exchange rate	5,260E-5	0,000	0,145	1,541	0,126

The results of multiple linear regression analysis obtained the equation  $Y = -2.002 + 0.195 \text{ inflation} + 0.434 \text{ interest rate} + 0.145 \text{ exchange rate} + e$ . From the calculation results, it is obtained by significance t for the interest rate variable of  $0.000 < \alpha (0.05)$ . This means that the interest rate has a positive and significant effect on return shares in manufacturing companies. The significant level t for the exchange rate variable is  $0.126 > \alpha (0.05)$ , this means that the exchange rate does not have a significant effect on stock returns on manufacturing companies and for the inflation variable of  $0.007 < \alpha (0.05)$ , this means that inflation has a positive effect and significant to return shares in manufacturing companies.

Based on the data generated from the calculation of table 4.8 obtained F(count) of 24.760 greater than F(table) 2.69 with a significant 0,000 smaller than the significant value of 0.05 so that it can be concluded that simultaneously or jointly the inflation variable, interest rates and exchange rates influence the stock return variable in manufacturing companies, for (R2) the coefficient of determination is obtained with the adjusted R2 of 0.352.

#### V. CONCLUSION

Based on the results of the first test partially indicate that the inflation influential and significant on Stock Returns in manufacturing companies listed on the Indonesia Stock Exchange in the period 2008 - 2018. This is indicated by the distribution of t(arithmetic) of 2.728 greater t(table) 1.979 with a significance value of 0.007 smaller than the significance level of 0.05.

The results of the second test partially that the interest rate has a significant positive effect towards stock returns in manufacturing companies listed on the Indonesia Stock Exchange 2008-2017. This is indicated by the distribution of t(arithmetic) of 4.549 greater than t(table) 1.979 with a significance value of 0.000 smaller than the significance level of 0.05.

The results of the third test partially obtained that the exchange rate had no significant effect towards stock returns in manufacturing companies listed on the Indonesia Stock Exchange 2008-2018. This is indicated by the distribution of t(arithmetic) of 1.541 smaller than t(table) 1.979 with a significance value of 0.126.

The fourth test results simultaneously. The inflation, interest rates and exchange rates simultaneously have a significant effect on Stock Returns on manufacturing companies listed on the Indonesia Stock Exchange for the period 2008-2018. This is indicated by the distribution of F(arithmetic) of 24.760 greater than F(table) of 2.68 and a significance value of 0.000 smaller than the significance level of 0.05.

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