

MACROECONOMIC FACTORS AFFECTING THE RETURN OF MANUFACTURING SHARES

Muthia Siti Khoirunnisa¹, Erna Garnia², Tahmat³, Deden Rizal⁴
^{1,2,3,4} Universitas Sangga Buana

¹Correspondence: muthiakhoirunnisa1@gmail.com

ABSTRACT

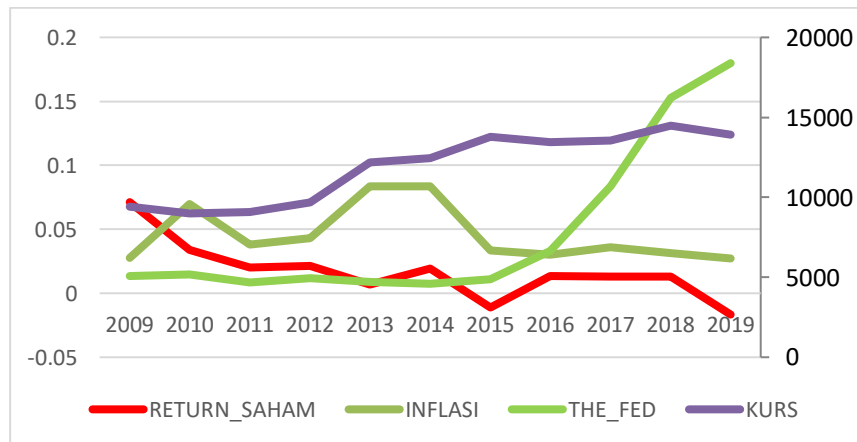
This study aims to determine that inflation, exchange rate, and the fed influenced on stock returns. The research method used is descriptive verification. The population of this research is all sectors of manufacturing companies listed on the Indonesia Stock Exchange and the sampling technique uses purposive sampling. The data analysis technique used is multiple linear regression using monthly data for the 2009-2019 period. The results showed that inflation, exchange rate, the fed had a significant effect on stock returns.

Keywords: inflation, exchange rates, the fed, stock return

INTRODUCTION

The main objective of investors in investing in stocks is to get a high rate of return and maximize wealth. Because stock returns are volatile, investors need to pay attention to what macro factors can affect (return) stocks

in order to maximize the rate of return obtained. Macroeconomic variables that have influence on stock returns including inflation, exchange rates, and interest rates [1]. The phenomenon of inflation, exchange rates, the fed, to stock returns can be seen in Figure 1.



Source: processed secondary data, 2020

Figure 1 : The Growth of Inflation, Exchange Rates, The Fed and Manufacturing Stock Returns 2009-2019

Figure 1 describes the fluctuation of inflation, exchange rates, the fed, and returns from 2009 to 2019. It can be seen that there is a gap

between theory and facts. For example in 2010 when inflation decreased, at that time stock returns also decreased. In 2010, all

industries were affected by the global crisis which resulted in a decrease in stock returns of 0.29% from the previous year (2010) of 0.63%. The global crisis in the manufacturing industry has resulted in a decline in stock prices as a result of which stock returns have fallen. In contrast to inflation, whose value fluctuates from year to year, the exchange rate has always increased from 2009 to 2010 [2]. Exchange rates affect firm competitiveness because changes in exchange rates are followed by changes in the exchange rate of earnings and company operating costs so that changes in exchange rates directly affect stock prices and returns. So that it triggers other investments which of course can affect stock prices, namely investment in foreign currency (USD). In addition, there are also macroeconomic factors that affect stock returns, namely the fed [3]. When the fed rate rises, banks in America will increase their interest rates. When there is an increase in interest rates, investors will be interested in investing their funds in savings or time deposits because they are considered more profitable than saving them in stocks. [4]

LITERATURE REVIEW

Inflation

Inflation is a tendency for prices to increase in general and continuously, besides that it can also increase the price of domestic goods. [5]

Exchange rate

Exchange rate is a comparison of currency values when there is an exchange involving two different currencies. This transaction will generate demand and supply for certain currencies. [5]

The Fed

The Fed Rate is the interest rate set by the central bank of the United States (Federal Reserve) as a reference for loan and deposit interest rates for banks and financial institutions in the United States. The Federal Reserve, founded in 1914, is recognized as an institution for maintaining the health of the banking system in the United States. [6]

Stock returns

Stock return is a service fee or return on stock investment activities, whether that is what has happened (Realized return) or what will happen (Expected return). [7]

Hypothesis

H1: Inflation, exchange rates, and the Fed partially affect the stock returns of manufacturing sector companies listed on the IDX 2009-2019 period.

H2: Inflation, the exchange rate, and the Fed affect the stock returns of manufacturing sector companies listed on the IDX for the 2009-2019 period simultaneously.

RESEARCH METHODS

The research method used in this research is descriptive verification. The population of this research is all sectors of manufacturing companies listed on the Indonesia Stock Exchange, namely 245 companies. The data used in this study is secondary data obtained from the official website of the Indonesia Stock Exchange, namely <https://idx.co.id>. And data on the growth of inflation, exchange rates, and the Fed from the official website of the Central Statistics Agency, namely <https://bps.go.id>. The sampling technique used purposive sampling in order to obtain 14 companies that met the criteria to be sampled with a research period of 11 years, namely the years 2009-2019. The object of this research is inflation, exchange rates and the Fed on 15 manufacturing companies listed on the Indonesia Stock Exchange (IDX). To analyze the problems in this research, the writer uses descriptive verification method.

The data analysis method used in this study is to use panel data regression, because it is a combination of cross section data and time series. Panel data estimation technique is by using 3 regression models including Common Effect, Fixed Effect and Random Effect which previously tested with 3 regression model tests namely Chow test, Hausman test and Lagrange Multiplier test. Then to determine whether or not there are deviations from the classical assumptions, the Classical Assumption Test is used. Classical

assumption testing includes normality test, multicollinearity test, and heteroscedasticity test. Hypothesis testing in this study uses several analytical techniques, namely the t test and F test. To find out how much variable X explains the change or movement of variable Y, the coefficient of determination (R^2) is tested.

RESULTS AND DISCUSSION

Descriptive Analysis

Based on the results of descriptive analysis within 10 years of the 2009-2019 period, it shows that the average inflation rate is 0.371 or 37.1%, then the average exchange rate is 0.002 or 0.2% while the average of the Fed is 0.048 or 4.8%. The average value for stock returns is 0.074 or 7.4%.

Statistic test

Best Model Selection

Based on the results of the Chow test, the model chosen is a common effect, but based on the Hausman test and the Lagrange Multiplier (LM) test, the model chosen is random effect. Then the regression model chosen is the random effect model.

Classic Assumption Test

Based on the calculation, the Jarque-bera value is 9.247300 with a probability value of 0.187099. So it can be concluded that the model in this study is normally distributed, because the probability value is greater than

0.05. The correlation value of each independent variable <0.9 means that in this regression model multicollinearity does not occur or in this model there is no correlation between inflation, exchange rates, and the fed. A probability value of 0.1000 is greater than 0.05. So it can be concluded that in this model there is no heteroscedasticity. The chi-square probability value of 0.1581 is greater than 0.05. This means that the regression model used does not occur autocorrelation.

Hypothesis Test

Partial Test (T-Test)

The results of the regression value in the t test that the inflation variable obtained the results of the t-value of $-3.890 > t\text{-table} (2.200)$ with a probability value of $<0.05 (0.0001 < 0.05)$. This means that partially inflation has a significant effect on stock returns in manufacturing companies listed on the IDX 2009-2019.

The results of the regression value in the t test that the inflation variable obtained the results of the t-value of $-9.7915 > t\text{-table} (2.200)$ with a probability value of $<0.05 (0.000 < 0.05)$. This means that the exchange rate partially has a significant effect on stock returns in manufacturing companies listed on the IDX in 2009-2019.

The results of the regression value in the t test that the inflation variable obtained the results of the t-count value of $-4.7106 > t\text{-table} (2.200)$ with a probability value $<0.05 (0.000 < 0.05)$. This means that the fed partially has a

significant effect on stock returns in manufacturing companies listed on the IDX in 2009-2019.

Simultaneous Test (F-Test)

Based on the F-count value of $44,11784 > 3.59$ with a significance of $0.000 < 0.05$. It means that inflation, exchange rate and the fed have a significant effect simultaneously on stock returns in manufacturing companies listed on the IDX in 2009-2019.

Coefficient of Determination (F-Test)

The coefficient of determination for the regression model between inflation, exchange rates and the fed on stock returns is 0.065484. This value means that 0.065484 or 6.54% of stock returns are influenced by inflation, exchange rates and the fed. While the remaining 93.46% is influenced by other variables which are not included in this research model.

CONCLUSION

The conclusion of the study shows that the regression model is meaningful so that it can be used to explain the effect of inflation, exchange rate, the fed on stock returns. Then the hypothesis results show that inflation, exchange rate, and the fed have a significant effect on stock returns.

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