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INVESTIGATION OF THE LQ _45 STOCK PRICE INDEX BASED ON INFLUENTIAL MACROECONOMIC FACTORS IN THE PERIOD 2013 – 2018

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ABSTRAK

Tujuan penelitian ini untuk menginvestigasi dan menganalisis seberapa besar pengaruh faktor makro ekonomi terhadap indek harga saham LQ45. Metode yang digunakan dalam penelitian ini adalah regresi linier berganda. Variabel yang digunakakan dalam penelitian ini adalah indeks harga saham (Y), inflasi (X1), jumlah uang yang beredar atau M2 (X2), dan Suku bunga BI_rate (X3). Teknik pengambilan sample menggunakan purposive sampling. Hasil penelitian menunjukkan bahwa inflasi dengan arah positif tetapi tidak berpengaruh dengan indeks harga saham, Jumlah uang beredar berpengaruh negative dengan indeks harga saham tetapi tidak sesuai hipotesis. Suku bunga BI_rate berpengaruh negative dengan indeks harga saham dan sesuai hipotesis.

Kata kunci : "indeks harga saham, Inflasi, jumlah uang beredar, BI_rate"

ABSTRACT

The purpose of this study is to investigate and analyze the influence of macroeconomic factors on the index of LQ45 stock prices. The method used in this study is multiple linear regression. The variables used in this study are stock price index (Y), inflation (X1), money on circulation or M2 (X2), and BI_rate (X3) interest rates. The sampling technique uses purposive sampling. The results showed inflation in a positive direction but did not affect the stock price index, the money on circulation has a negative effect on the stock price index but does not match the hypothesis. BI interest rate has a negative effect on the stock price index and matching to the hypothesis. Paper type was research paper.

Keywords : *"Stock Price Index, Inflation, Money In Circulation, BI_Rate Introduction"*

INTRODUCTION

One of the driving forces of the economy of each country is the capital market. Capital markets have an important role in the economy because of the circulation of funding for those who have excess funds and those who need funds. The excess funds are in the form of individuals and companies with the aim of investing. On the other hand, there are parties who need funds that are likely to be used for corporate reinvestment. According to (Tandelilin, 2010), Investors to make profitable investment decisions must be able to understand and be able to predict macroeconomic conditions in the future.

The existence of capital markets in Indonesia and other countries is a driving force for the economy, because it is used as a facility and infrastructure for funding transactions. The capital market is a place of funding transactions, because the capital market is a meeting place for those who need funds and those with excess funds to purchase securities. The party who purchases securities is called an investor who will make a securities investment decision. One of the securities traded on the capital market is shares. Many macroeconomic factors determine a company's stock price such as inflation, interest rates, real GDP, the exchange rate of the US dollar, the amount of money in circulation and others. This is shown from various previous studies. (Ifionu & Ibe, 2015) research states that stock prices in Nigerian exchanges are determined by inflation, interest rates and real GDP. (Kurniawati, 2015) also conducted research on the American dollar exchange rate, inflation, BI rate and the amount of money circulating against the price of banking shares in the Indonesia Stock Exchange in the period of 2013.

Every investor in making an investment decision will try to find information. One such information is the company's stock price. Formed stock prices are influenced by many factors both fundamental and non fundamental, internal and external (Yuniningsih Yuniningsih, Widodo, & Wajdi, 2017), (Hasna, Nizarudin, & Sugeng, 2018), (Yuniningsih Yuniningsih, Lestari, Nurmawati, & Wajdi, 2018), (Yuniningsih Yuniningsih, Taufiq, Wuryani, & Hidayat, 2019), (Y Yuniningsih, Pertiwi, & Purwanto, 2019). The stock price according to (Jogiyanto, 2010) is the price per share that applies in the capital market. While the formation of stock prices is formed through demand and supply in the capital market (Sartono, 2008). According to the author, stock prices indicate a company value where prices are formed because demand and supply will be a price. Stock supply can be viewed from those who need funds by issuing shares from certain companies. While, While the demand for shares is reviewed from parties who want to purchase shares of companies that make stock issuance. The agreement between the demand and supply of stock will affect the fluctuation of stock prices. If there are many demand because of the positive signal from the company, the stock price will be higher. Conversely, if there is a negative signal from a particular company, it will affect the number of demand, which causes the stock price to go down.

Many factors also influence stock prices. (Ifionu & Ibe, 2015) suggested that stock prices are influenced by inflation, interest rates and real GDP on the Nigerian stock exchange (NSE). (Kurniawati, 2015) also states that stock prices are influenced by American exchange rates, inflation, the BI rate, and the amount of money in circulation. (Khan, Ghauri, & Majeed, 2012), his research on stock prices is influenced by exchange rate interest rates and inflation. According to Parmawati (2010) there are many factors that influence the movement of the LQ

45 index, namely SBI interest rates, risk tolerance levels, index drive stocks. This study uses the LQ45 Index for the period 2013-2018. LQ45 is an index of 45 shares of public companies that have a market capitalization rate with high liquidity and are adjusted every six months, beginning in February and August. The explanation above underlies the purpose of this research, which is to analyze how much the stock price is influenced by inflation, the amount of money in circulation and the interest rate.

LITERATURE REVIEW AND HYPOTHESIS

Inflation according to (Rimsky, 2005) is basically a monetary event about the tendency of prices of goods and services in general and continues over time. The occurrence of rising prices of goods and services when inflation shows a decline in the value of money. But inflation is part of the macroeconomic variable on the one hand it is profitable but at the same time it can be detrimental (Novianto, SBM, & Nugroho, 2011). Inflation in a country will signal whether or not the prosperity of the community and the prospects of the company. Inflation is said to have a detrimental effect on society because inflation often results in a loss of public confidence in the value of money. As a result, this distrust will cause people to prefer to save money in the form of assets such as gold or property. Purchases of assets, especially gold and other fixed assets in the form of land and buildings are considered more profitable in the long term. Inflation can be detrimental to the company if it influences production costs which are greater than the increase in product prices. This condition will result in loss of the company. While inflation brings the benefits of some export companies, especially if the production material is fulfilled from within the country and purchased with rupiah. Products that have been produced will be exported with foreign currency purchases, especially dollars.

The difference between the production costs and the selling price for these exported goods will benefit the company. This condition will be different if raw materials are obtained by importing raw materials. This is due to the profits from the export of final products with the import of raw materials are not as large. The company can even suffer a loss compared to if the raw material can be fulfilled domestically. This is because inflation greatly influences the value of money and the value of money related to the interest rate and interest rate related to return.

The rate of return can come from financial assets in the form of securities or shares or from real assets (Hasna et al., 2018). Especially for financial assets, inflation will affect stock prices. When inflation occurs investors will make investments by looking at how much return or dividend the company will give. Moveover, inflation will determine how the company survives in running a company to make a profit. The above statement is in accordance with the results of (Ifionu & Ibe, 2015), (Kurniawati, 2015) that inflation has a significant effect on stock prices. But the results of (Khan et al., 2012) show that inflation does not have a significant effect on stock prices. (Kusuma & Badjra, 2016) show inflation does not affect the IDX.

Other macroeconomic variables in this study that affect stock prices are the money in Circulation (JuB). According to (Parkin, 2000) to measure the amount of money in circulation there are two of the most common measures, namely M1 and M2. M1 is money that is directly used for transactions while M2 is M1 plus savings accounts, money market accounts and near money (Parkin, 2000). The greater the demand for goods and services from the community, the more money is needed and the more money is circulating. The more money in circulation will push prices and interest rates higher which causes higher inflation too. Higher inflation is due to the excess amount of money in circulation (Ozbay, 2009). According to (Samsul, 2006) if the money supply increases, the interest rate will rise and the index of the joint stock price will decrease and vice versa. The amount of money in circulation in a country influences many other factors. (Novianto et al., 2011) states that the money supply (M2) has a positive and significant influence on the ICI. (Kewal, 2012); (Pramod Kumar & Puja, 2012) research show that the money supply has a positive effect on stock prices. The amount of money in circulation has a positive effect on the IDX LQ45 index for the period 2002-2007 (Nugroho, 2008). While the results of the research of (Kusuma & Badjra, 2016) show that the money supply does not affect the ICI.

Another important macro variable is the Bank Indonesia interest rate. The interest rate is the price that must be paid by the borrower for borrowing funds with an agreed period of time. According to Bank Indonesia, the BI interest rate is the interest rate with a one-month tenor announced periodically by bank Indonesia and serves as a signal of monetary policy made. According to (Sukirno, 2002) investment decisions are influenced by many factors and one of them is interest rates. Interest rates determine investment decisions. From the Investor's side, an investor in making an investment requires an assessment of the expected rate of return that can be obtained from the invested funds. The amount of return is based on how much interest is earned from the company. Whereas from the company side the amount of interest is the cost that must be spent and the fees paid to investors. As a result of the issuance of monetary policy, it can be in the form of an increase, a decrease or a fixed rate of BI. state that interest rates are the price of borrowed funds. The higher deposit rates will cause stock prices to tend to fall and will ultimately affect the decline in the ICI. The results of the study of (Krisna, 2013)) SBI interest rates did not significantly influence the ICI on the IDX.

Based on the explanation above, this study proposes the following three hypotheses:

H1. Inflation has a negative effect on the LQ45 stock price index

H2. The amount of money in circulation has a positive effect on the LQ45 stock price
indeks

H3. The BI rate interest rate has a negative effect on the LQ45 stock price index

RESEARCH METHODOLOGY

Types of research

This research is a type of quantitative research using secondary data. Secondary data was obtained from financial statements on the Indonesia Stock Exchange (IDX), Bank Indonesia and other sources. The population of this study used companies incorporated in the 2013-2018 LQ45 index as many as 45 companies. Sampling uses purposive sampling. The sample selection criteria were recorded consecutively during the 2013-2018 study period. The research sample amounts to companies with the amount of data

The method of data analysis in this study used multiple linear regression analysis. The analysis technique is used to find a regression equation between the independent variables namely inflation (X1), the money supply (X2) and the interest rate (X3) the stock price index (Y) of the company incorporated in LQ45.

RESULTS

Before partial hypothesis testing is carried out, it is necessary to test the classical assumptions. Classic assumption tests include Normality, multicollierity, heteroscedasticity and autocorrelation. The classic assumption test results are presented in the following table 1:

Table 1

Information	Result	Criteria
Normality		>0.05
(Kolmogorov_Smirnov)	0.200	
Asymp Sig (2 tailed)		
Multicollinearity (VIF)		<10
- Constant	_	
- Inflation (X1)	2.220	
- JUB (X2)	2.667	
- BI_Rate (X3)	2.206	
Heteroscedasticity		>0.05
(Glejser)	0.069	
- Contant	0.191	
- Inflation (X1)	0.083	
- JUB (X2)	0.052	
- BI_Rate (X3)		
Autocorrelation	0.358	<-2 sampai >2
(Durbin Watson)		

The Results Of The Classic Assumption Test

Source : processed data

The normality test is used to determine whether the data is normally distributed or not. This research is in the normality test using the Kolmogorov_smirnov test. Based on table 1, the normality value is 0.200 and is greater than the specified criteria> 0.05, so the data of this study are normally distributed. Requirements Another classic assumption is Mulicollinearity which is tested using VIF. Multicollinearity test was used to find out whether the regression model found a correlation between the independent variables used in this study. Good research if multicollinearity does not occur. If the VIF value of the variable used is <10 then this study is free from multicollinearity and vice versa. Based on table 1 shows the value of multicollinearity of each independent variable both X1, X2 and X3 is still below 10, it is concluded that multicollinearity does not occur. Heteroscedasticity test is used to find out whether the regression model in this study occurs similarity in the variance of residual values from one observation to another observation. The heteroscedasticity test in this study used the Glejser test and the model was said to be good if heteroscedasticity did not occur and values greater than 0.05. Based on Table 1, the heteroscedasticity value with the Glejser test of each variable shows a value greater than 0.05. These results indicate the regression model of this study did not occur heteroscedasticity. After performing heteroscedasticity test, an autiocorrelation test is performed using Durbin Watson or DW. This test is used to determine whether the regression model in the study there is a correlation between confounding errors between periods t and period t-1. Based on Table 1, the Durbin Watson (DW) value is 0.358 (zero point three five eight) between the criteria <-2 to> 2, concluding that there is no autocorrelation. Based on the results of the classic assumption test, this study meets the requirements to carry out hypothesis testing. Hypothesis tested by using multiple linear regression tests presented in table 2.

Table 2
Result of multiple Linier Regression test

Information	Result		
	R Square	B (Unstandardized Coefficients)	Significance
R Square	0.611	-	-
Coefficent			
- Constant	-	2.491	0.078
- Inflation (X1)	-	0.304	0.550
- JUB (X2)	-	-0.024	0.001
- BI_Rate (X3)	-	-0.182	0.002

Source: processed data

Based on table 2, R Square in this study is 0.611 (zero point six one one) which shows that the independent variables used in this study can explain the stock price index of 62.1% and the remaining 37.9% is explained by other variables. The inflation variable (X1) shows that it does not affect the stock price index variable (Y) because the significance is 0.550 and greater than the level of significance used in the study, which is 0.05. This shows that the inflation outcome is not in accordance with the hypothesis. Variable money supply / M2 (X2) has a negative significant effect of 0.001 with a stock price index (Y) and the significance of this result is smaller when compared with the level of significance 0.05 used in this study. Although there is a significant effect but the money supply (M2) does not support the research hypothesis. It is hypothesized to have a positive effect but the results have a different direction. While the BI_rate variable has a significant negative effect of 0.002 and this result is smaller than the level of significance of 0.05 used in this study. The statistical test results from BI_rate are in accordance with the hypothesis in this study.

DISCUSSION

The results of this study indicate that inflation does not affect the stock price index. The results of this study indicate that inflation has a positive direction towards the LQ45 stock price index, although it is not significant. The results of this study are not in accordance with the results of previous studies such as the research of (Krisna, 2013) where inflation has a significant effect on the ICI on the IDX. But the results of this study are consistent with the research of Khan Z, et al (2012) where inflation does not significantly influence stock prices. The results of this study are also in accordance with the research of (Kusuma & Badjra, 2016) where the ICI on the IDX was significantly affected by inflation. This is also said by (Novianto et al., 2011) where inflation on the one hand can bring profit but on the other hand it can be detrimentalThe results of this study indicate that rising inflation has nothing to do with the increase in the stock price index which clearly brings benefits to the holders of the LQ45 securities. The existence of inflation causes companies to produce export products with domestic local raw materials which will bring such huge profits. Export companies with domestic raw materials will have a large capitalization with very high liquidity. Most companies that are in such conditions will be incorporated in LQ45 resulting in the stock price index rising. As for companies outside the categories described previously, the presence of inflation causes a decrease in the level of capitalization and low liquidity. Companies outside of this category will not be included in LQ 45 even though they were previously included in LQ45. This is the reason, the export company incorporated from LQ45 has a positive signal for investors in investing, causing the stock price index to rise. Raising the stock price index in an inflationary state does not occur generally in other companies. Although on the other hand, inflation will determine how strong and long the company can survive in carrying out operations and generating profits.

The money in circulation or M2 in this study has a significant negative effect but does not support a hypothesis. Research results show that if the amount of money is increasing, the index of the stock price will be lower. This is probably due to the perspective of prospective investors in investing. The results of this study indicate that the more amount of money in circulation is likely to encourage most investors to invest their funds not in financial assets but in real assets. Financial assets in the form of securities while real assets such as buildings, land, machinery and others. Investing in real assets, especially on land, machinery, buildings may be used for investment expansion from existing ones. Besides being used for investment expansion, real asset purchases aim to get definite profits. This is because investment in real assets will not be detrimental especially investments in land or buildings. Conversely, if the amount of money in circulation (M2) is low, the index of the stock price will be high. At that time, investors will be competing to buy shares in the hope that prices will rise again. When the amount of money in circulation returns to normal, the Investor gains profit. Moreover, shares can now be reached by the general public and purchased without having to pay dearly. The results of this study are not in accordance with the results of research by (Novianto et al., 2011), (Kewal, 2012), (Buyuksalvarci, 2010)).

(Pramod Kumar & Puja, 2012), which shows that the amount of money in circulation has a positive influence on stock prices. But this research is in accordance with the research of (Kusuma & Badjra, 2016) where the amount of money in circulation does not affect HSG.

The results of the study support the hypothesis that interest rates are negatively related to stock prices. The higher the bank interest rate the lower the stock price and vice versa. At the end, everything will take effect on the stock index. The high interest rate of Bank Indonesia will cause investors to be more interested in saving money in banks in the form of savings or time deposits. The high interest rate of the bank tends to provide certainty on the interest that will be received as a form of profit. Interest received from savings or deposits when high

BI_rate will be obtained is greater if compared with income from shares. The large number of investors who are interested in bank products when BI_Rate rises has resulted in few investors doing stock transactions, especially in buying shares. Few investors who buy shares result in lower demand. The decline in demand for shares has resulted in stock prices and stock price indices being low. Conversely, when BI_Rate is low it will encourage investors to invest their funds into stock transactions rather than bank interest that will be accepted if they invest in bank products.

CONCLUSION

Inflation shows a general increase in prices which will positively affect the stock price index. This study shows that rising inflation in a positive direction and no significant effect on the stock price index. This happened because the increase in inflation caused the price of export products to rise. Companies that produce export products with domestically produced materials will produce high profits. The high profit will encourage investors to buy shares in companies incorporated in LQ45 especially in export companies. However, the increase in inflation has nothing to do with the increase in stock prices in general because there are still many macro factors that affect such as BI_rate. The money in circulation on this study shows significant negative results. the large amount of money in circulation will encourage people to tend to invest in real assets compared to financial assets, especially stocks. The amount of money in circulation also encourages investors to invest in bank products that offer higher interest rates than returns offered by stocks. This statement is supported by the results of this study, namely BI_rate has a negative effect on the stock price index.

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