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The Effect of Exchange Rate and Rupiah Inflation Rate on the Composite Index

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ABSTRACT. Every country's economy cannot be separated from various problems such as unemployment, rising prices, and unstable economic growth. Changes in rising interest rates, rising inflation, and declining rupiah exchange rates require time to be able to change production costs, company profits, and more importantly, the company's share price on the stock market. IHSG movement is an important indicator for investors to determine whether investors will sell, buy or hold their shares. IHSG movement is influenced by various factors such as inflation and the exchange rate against the IHSG.
The effect of exchange rates and inflation is based on efficient market theory and signal theory wherein inflation and exchange rates provide signals to investors' decisions respectively, resulting in changes to the Composite Index. The purpose of this study is to determine the effect of Exchange Rates and Inflation Rates on the Composite Index. In this study using a quantitative approach and the type of data used is secondary data. There is one independent variable in this study is the Composite Index and two dependent variables are the Exchange Rate and Inflation Rate.
This research was conducted using a purposive sampling method and the research sample was the closing price of shares in banking companies that met certain criteria that were listed on the Indonesia Stock Exchange for the 2020-2022 period. The data taken is the monthly closing price of each dependent and independent variable. The sample used in this study is 36 months of closing price data. Based on the results of the tests that have been carried out, it can be concluded that the first hypothesis of the Exchange Rate on the Composite Index is negative. While the results of the second hypothesis of inflation on the Composite Index are negative. Based on the results of testing the third hypothesis, the Exchange Rate and Inflation on the Composite Index are positive and simultaneous.

KEYWORDS: exchange rate, inflation rate, composite index

INTRODUCTION

Background

The economic performance of each country is not always stable but can change as a result of various economic problems that occur. Every country's economy cannot be separated from various problems such as unemployment, rising prices, and unstable economic growth . Each country has a policy for the economy to keep the country's domestic currency exchange rate stable against foreign currency exchange rates. The country's economic stability is reflected in controlled inflation conditions, or controlled levels of changes in the price level of goods and services. Changes in rising interest rates, rising inflation, and declining rupiah exchange rates require time to be able to change production costs, company profits, and more importantly, the company's share price on the stock market. The stable exchange rate has an important role in achieving monetary stability and supporting the country's economic activities.

The development of the Indonesian capital market attracted many investors to invest. Investment plays an important role in efforts to recover the economy in Indonesia in the midst of a pandemic. With so many businesses that have sprung up, it will open up more jobs. Investors need sufficient information to base their investment decisions on a particular company. In companies, sources of financing can be utilized through the sale of shares to the public (public) or investors in the capital market.

Declining stock prices cause huge losses for investors. In the current process of globalization, most countries pay great attention to the capital market because it has an important and strategic role in the financial resilience of developing countries (emerging markets) which are very vulnerable to macroeconomic conditions.

Identification of problems

1. Does the Exchange Rate have a positive effect on the Composite Index?
2. Does Inflation have a positive effect on the Composite Index?
3. Do Exchange Rates and Inflation have a simultaneous relationship to the Composite Index in the banking sub-sector?

Research purposes

The purpose of this study is to determine the effect of the variables Exchange Rate and Inflation on the Composite Stock Price Index in the banking subsector whether it is positive or negative and the relationship between variables.

Conceptual framework

The conceptual framework in this study can be seen in Figure 1.

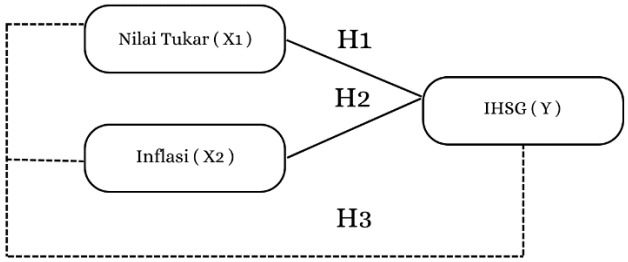

Figure 1.

Hypothesis

Based on the conceptual framework, the hypotheses in this study are:

1. H1: The Exchange Rate affects the Composite Index
2. H2: Inflation has an effect on the Composite Index
3. H3: Exchange Rate and Inflation simultaneously affect the Composite Index.

LITERATURE REVIEW

Capital market

According to Nugroho & Aji (2019) the capital market is a place to provide long-term funds where these places are used by companies to seek large amounts of funds and are used by investors to invest their funds. Financial instruments traded on the capital market are long-term instruments (terms of more than 1 year) such as stocks, bonds, warrants, rights, mutual funds and various derivative instruments such as options, futures, and others.

Stock price

According to Zuliarni (2012), "stock price is one indicator of successful company management. If a company's stock price continues to increase, investors or potential investors will judge that the company is successful in managing its business. Darmadji and Fakhruddin (2012) state that stock prices can change up or down in a matter of very fast time depending on the number of requests and offers between buyers and sellers of shares.

Composite Index

According to Octavia (2007), the Composite Index (IHSG) is a price index used by the Indonesia Stock Exchange as a benchmark for investors to observe an indicator that shows stock price movements and

market movements and measures profits. Index movement is an important indicator for investors in making investment decisions. IHSG is a stock price index number that has been compiled and calculated so that it can be used to compare events which can be in the form of changes in stock prices from time to time. In calculating this index, it is used for the base period and the given/parent period (Jogiyanto, 2010).

IHSG describes a series of historical information regarding the movement of joint stock prices, up to a certain date. Usually, stock price movements are presented every day based on the closing price on the stock exchange that day. The index is presented for a certain period. IHSG reflects a value that serves as a measurement of the performance of a joint stock on the stock exchange. The purpose of the combination itself is the performance of shares that are included in the calculation of more than one, even all shares listed on the stock exchange (Sunariyah, 2004).

Exchange rate

The exchange rate is an indicator that influences activity on the stock market and money market because investors tend to be cautious about making portfolio investments. The depreciation of the rupiah exchange rate against foreign currencies, especially the US dollar, has a negative effect on the economy and capital markets (Sintak & Kurniasari, 2003).

The exchange rate is divided into real exchange rates and nominal exchange rates. Real value is the value used to exchange goods and services from one country for goods and services from other countries. Meanwhile, the nominal exchange rate is the value used to exchange one country's currency for another country's currency (Mankiw, 2003).

Changes in one macroeconomic variable have a different impact on stock prices, namely a stock can be positively affected while other stocks are negatively affected. For example, in an import-oriented company, a sharp depreciation of the rupiah against the US dollar will have a negative impact on the company's stock price. Meanwhile, export-oriented companies will receive a positive impact from the depreciation of the rupiah exchange rate against the US dollar. This means that the share price that is negatively affected will experience an increase in share price. Furthermore, the CSPI will also have a negative or positive impact depending on the group with the dominant impact (Samsul, 2006).

Currency rates show the price of a currency when exchanged for another currency. Determination of the exchange rate of a country's currency against another country's currency is determined as is the case with goods, namely by the demand and supply of the currency in question. This law also applies to the rupiah exchange rate, if the demand for rupiah is greater than the supply, the rupiah exchange rate will appreciate, and vice versa. Appreciation or depression will occur if the country adheres to a free floating exchange rate policy so that the exchange rate will be determined by market mechanisms (Kuncoro, 2001).

Inflation

In economics, inflation is a process of increasing prices in general and continuously related to market mechanisms which can be caused by various factors, including increased public consumption, excess liquidity in the market which triggers consumption or even speculation. , even including the result of irregular distribution of goods (Suparmoko, 2000). This price increase can be measured using a price index. Several price indices that are often used to measure inflation include: the cost of living index/Consumer Price Index, wholesale price index (*GNP*), GNP *depllator* (Sadono Sukirno, 2002).

PREVIOUS RESEARCH

In a study (Muhlis & Nugroho, 2022) conducted on pharmaceutical sub-sector companies, it was concluded that inflation had no effect while the exchange rate had a significant effect on the stock price index. While simultaneously inflation and exchange rates have a significant effect on the stock price index . So that these two variables can be used as a benchmark for investors in investing in the stock market.

RESEARCH METHOD

The object of this study uses quantitative data. According to Sugiyono (2018; 13) quantitative data is a research method that is based on positivistic (concrete data), research data is in the form of numbers that will be measured using statistics as a counting test tool, related to the problem being studied

to produce a conclusion. This study uses quantitative research methods of observation techniques on secondary data. Secondary data is data from the collection of other people or other parties with a specific purpose and has a certain categorization or classification (Soeranto and Arsyad, 2003).

In this study, the population is all the Bank Sub Sector companies listed on the Indonesia Stock Exchange (IDX). For sampling, carried out by using purposive sampling technique. The samples obtained in this study were 45 bank sub-sector companies that met the specified criteria .

Secondary data obtained indirectly from other people, offices in the form of reports, profiles, manuals. (Hardani, et al., 2020) . Information taken from the website and economic reports from Bank Indonesia (BI) , PT Bursa Efek Indonesia and the Central Bureau of Statistics (BPS) on stock prices. Information on inflation and the exchange rate of the rupiah against the dollar comes from the Bank Indonesia website. The data used are the Inflation Rate, Exchange Rate and the Indonesian Composite Index (IHSG) during the period January 2020 - December 2022.

Research variables can differentiate or bring variations to a certain value. There are two types of variables tested in this study, namely the dependent variable and the independent variable.

Independent Variable

The independent variable is the variable that is the cause of the occurrence or influence of the dependent variable (Umar, 2003:50). The independent variables used in this research are the Exchange Rate (X1) and Inflation (X2).

Dependent Variable

The dependent variable is the dependent variable which is influenced by the independent variables (Umar, 2003:50). The dependent variable in this study is the Composite Index (Y).

RESULT AND DISCUSSION

Hypothesis testing

T test

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	6308.126	1412.106		4.467	.000
	Nilai Tukar	-.276	.101	-.477	-2.742	.010
	Inflasi	-4475.307	3780.003	-.206	-1.184	.245

a. Dependent Variable: IHSG

Source: SPSS test results

t table = t (α / 2 ; nk-1) = t (0.05 ; 36 – 2 – 1) = t (0.025 ; 33) = 2.035

Based on the SPSS "Coefficients" output table above, it is known that the Significance value (Sig) of the Exchange Rate variable (X1) is 0.010. Because the value of Sig. 0.010 > 0.05, and the calculated value is 2.742 > from the t table value of 2.035 , it can be concluded that H1 or the first hypothesis is accepted. This means that there is an effect of the Exchange Rate (X1) on the Composite Index (Y).

Based on the SPSS "Coefficients" output table above, it is known that the Significance (Sig) value of the Inflation variable (X2) is 0.245. Because the value of Sig. 0.245 > 0.05, the calculated value is 1.184 < from the t table value of 2.035, it can be concluded that H1 or the first hypothesis is rejected. This means that there is no effect of inflation (X2) on the Composite Index (Y).

F test

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1374295.190	2	687147.595	10.734	.000[b]
	Residual	2112437.032	33	64013.243		
	Total	3486732.222	35			

a. Dependent Variable: IHSG

b. Predictors: (Constant), Inflasi, Nilai Tukar

Source: SPSS test results

F table = F (k; n – k) = F (2 ; 34) = 3.28

Based on the SPSS output table above, it is known that the Sig. is equal to 0.000. Because the value of Sig. 0.000 < 0.05 , and the calculated F value is 10.734 > F table 3.28. So according to the basis of decision making in the F test it can be concluded that the hypothesis is accepted or in other words the Exchange Rate (X1) and Inflation (X2) simultaneously have an effect on the Composite Index (Y).

Determination Coefficient Test (R^2)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.628[a]	.394	.357	253.008

a. Predictors: (Constant), Inflasi, Nilai Tukar

Source: SPSS test results

Based on the SPSS "Model Summary" output table above, it is known that the coefficient of determination or R Square is 0.357. The R Square value of 0.357 comes from squaring the value of the correlation coefficient or "R", which is 0.628 x 0.628 = 0.357. The magnitude of the coefficient of determination (R Square) is 0.357 or equal to 35.7%. This figure means that the variable Exchange Rate (X1) and Inflation (X2) simultaneously (together) affect the Composite Index (Y) variable by 35.7%. While the rest (100% -35.7% = 64.3%) is influenced by other variables outside the regression equation or variables not examined.

DISCUSSION

First Hypothesis

In the first hypothesis, testing is carried out to see whether or not there is a relationship between the independent variable Exchange Rate (X1) and the dependent variable Composite Index (Y). Based on the results of tests conducted at SPSS, it is known that the Significance (Sig) of the Exchange Rate variable (X1) is 0.010. Because the value of Sig. 0.010 > 0.05, and the calculated value is 2.742 > from the t table value of 2.035 , it can be concluded that H1 or the first hypothesis is rejected. This means that there is no effect of the Exchange Rate (X1) on the Composite Index (Y).

Second Hypothesis

In the second hypothesis a test is carried out to see whether or not there is a relationship between the independent variable inflation (X2) and the dependent variable Composite Index (Y). Based on the results of tests conducted on SPSS, it is known that the Significance (Sig) value of the Inflation variable (X2) is 0.245. Because the value of Sig. 0.245 > 0.05, the calculated value is 1.184 < from the t table value of 2.035, it can be concluded that H2 or the first hypothesis is rejected. This means that there is no effect of inflation (X2) on the Composite Index (Y). This is the same as the results of the previous test, the results of the test carried out by Muhlis and Nugroho (2022) if the test results show negative results.

Third Hypothesis

In the third hypothesis, testing is carried out to see whether or not there is a relationship between the independent variables Exchange Rate (X1) and Inflation (X2) on the dependent variable Composite Index (Y). Based on the SPSS output table above, it is known that the Sig. is equal to 0.000. Because the value of Sig. 0.000 < 0.05 , and the calculated F value is 10.734 > F table 3.28. So according to the basis of decision making in the F test it can be concluded that the hypothesis is accepted or in other words the Exchange Rate (X1) and Inflation (X2) simultaneously have an effect on the Composite Index (Y). Based on the SPSS "Model Summary" output table above, it is known that the coefficient of determination or R Square is 0.357. The magnitude of the coefficient of determination (R Square) is 0.357 or equal to 35.7%. This figure means that the variable Exchange Rate (X1) and Inflation (X2) simultaneously (together) affect the Composite Index (Y) variable by 35.7%. While the rest (100% -35.7% = 64.3%) is influenced by other variables outside the regression equation or variables not examined.

CONCLUSION

IHSG is a marker of market movements and interest in investing in stocks. The need for forecasting changes in the capital market to produce the right investment decisions. This can be seen when the exchange rate weakens and the inflation rate is low, so that it will make investors hold their shares to be traded. Based on the results of the research and discussion on the effect of Exchange Rates and Inflation on the Stock Price Index that has been described previously, it can be concluded as follows:

1. This means that there is no effect of the Exchange Rate (X1) on the Composite Index (Y). This means that the Exchange Rate has no effect on the Composite Stock Price Index of banking sub-sector companies indicating that the Exchange Rate cannot be used as a benchmark for investors to invest in the stock market.
2. This means that there is no effect of inflation (X2) on the Composite Index (Y). This means that inflation has no effect on the Composite Stock Price Index of banking sub-sector companies. This shows that inflation cannot be used as a benchmark for investors to invest in the stock market.
3. The Exchange Rate and Inflation jointly affect the Composite Stock Price Index of companies in the banking sub-sector. This shows that the Exchange Rate and Inflation together can be a benchmark for investors to invest in the stock market.

RECOMMENDATIONS

Based on the results of the study, it can be concluded that the rupiah exchange rate and inflation variables simultaneously affect the composite index on the Indonesian Stock Exchange (IDX) for the period January 2020 - December 2022, and it is recommended for investors who wish to invest in the Indonesian Stock Exchange (IDX) to be more selective and always pay attention to changes in the rupiah exchange rate (exchange rate) and the inflation rate so that it can assist in making investment decisions.

Based on the R square value of 0.357 (35.7%), variations in changes (fluctuations) in the Composite Index on the IDX were simultaneously influenced by the rupiah exchange rate and inflation rate and the remainder (3.47%) was influenced by other variables not included. So it is not recommended to only use one of these variables as a benchmark or consideration in buying a stock.

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