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The Effect of Inflation and Interest Rates on Study Stock Prices at Kompas 100 Companies Index in the Covid-19 Period.

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Abstract: This study aims to examine the effect of inflation and interest rates on stock prices in companies that are members of the Kompas100 index during the Covid-19 pandemic period. This research is a type of quantitative research using regression with the help of SPSS 25.0. The sample for this research is a company that is part of the Kompas 100 Index. This research finds that inflation and interest rates simultaneously have an effect on the price of one share. Based on the partial test, inflation has a positive effect on the Kompas100 company's stock price, while interest rates have a significant negative effect on the Kompas100 company's stock price during the Covid-19 pandemic. The results of this study can be used as a reference for investors to consider inflation and interest rates in making investment decisions and in making regulations.

Keywords: Inflation, Interest Rates, Covid-19, Stock Prince, Kompas 100 Indexs.

INTRODUCTION

The capital market plays an important role in the economic context of a country (Fitriaty & Saputra, 2022). As a sector that has a major influence on the economy, the capital market is the main indicator for evaluating the condition of companies in the country (Fauzan & Suhendro, 2018). The stock market has an important role in the economy of a country, because it is a place for buying and selling shares of registered companies. Stock prices reflect company value and economic factors that influence stock price movements are an important concern for investors and capital market participants (Aulia, et al, 2020).

The representation of almost all industries in the capital market allows investors to choose various investment options according to their preferences. Information also has a crucial role for investors and business people, because complete, accurate and timely information forms the basis for evaluating company conditions and understanding market movements. Investors also often use fundamental factors, such as financial ratios and market ratios, and take into account macroeconomic environmental factors to predict stock prices and stock returns (Yani, 2021). Understanding and forecasting macroeconomic conditions in the future are important skills for investors in making profitable investment decisions. Several macroeconomic indicators that are often associated with the capital market include

fluctuations in interest rates, inflation, currency exchange rates, and GDP growth (Tambunan & Aminda, 2021). Interest rates and stock prices theoretically have an opposite relationship, where high interest rates can affect the present value of the company's cash flows and increase the company's cost of capital, which ultimately affects investors' investment decisions (Noermaidah & Siskawati, 2020).

Inflation is a general increase in prices and a decrease in the purchasing power of money (Pujadi, 2022). Information on inflation is measured through the consumer price index or cost of living index, which reflects the tendency for prices to increase in general and continuously. Temporary price increases, such as seasonal price increases, are not included in the inflation category (Arumningtyas & Muliati, 2019). Interest rates play an important role in company activities, because high interest rates can reduce company profits and affect portfolio investment. In addition, interest rates also affect economic growth, the flow of bank funds, costs incurred by the business world, and investment decisions of investors. Under conditions of low interest rates, economic growth tends to increase due to greater flow of funds. Therefore, interest rates and expected returns are important factors that influence investors' investment decisions.

During the Covid-19 pandemic, financial markets experienced high volatility and uncertainty (Halisa & Annisa, 2020). The economic implications of the pandemic have had a broad impact on various sectors including the stock market (Fitriaty & Saputra, 2022). In Indonesia, the companies listed in the Kompas 100 index were also not spared from this impact. This study aims to examine the effect of inflation and interest rates on stock prices in companies that are members of the Kompas 100 index during the Covid-19 pandemic. This allows the generalization of research results to be applied on a wider scale in the Indonesian stock market.

This research is expected to provide better insight in making investment decisions for investors and provide an overview of stock market conditions amidst a situation full of uncertainty. In addition, this research can also be a reference for regulators and capital market authorities in formulating appropriate policies to maintain stock market stability during crises such as the Covid-19 pandemic. By understanding the relationship between inflation, interest rates and stock prices, it is hoped that appropriate steps can be taken to minimize risk and optimize growth potential in the capital market.

LITERATURE REVIEW

Signaling Theory

Signaling theory refers to the efforts made by an industry to send information to investors regarding management's view of the industry's prospects (Spence, 1973). Signal Theory implies sending signals from industrial management to investors to show good industry prospects (Brigham, 2016: 184). Signaling theory examines fluctuations in market costs that impact investor behavior (Fahmi, 2014: 338). There is a relationship between signal theory and inflation, where the assumption is that high inflation will cause a decrease in stock prices, which can be used as a signal for investors not to contribute significantly when stock prices fall. Signal theory is also related to interest rates, where an increase in interest rates will attract investors to invest in banks,

Interest rate

The interest rate is the value that must be paid by the customer to the bank or that must be paid by the borrower to the lender (Kasmir, 2012: 114). According to Bank Indonesia (www.bi.go.id), interest rates reflect the disposition or position of approach related to money determined by Bank Indonesia and reported to the general public. In conclusion, inflation can be interpreted as an overall increase in prices that occurs consistently due to the

incompatibility of the product acquisition framework program with the level of individual payments in a country. Meanwhile, the interest rate is defined as the value that must be paid by the borrower to the lender in exchange or cash credit on the capital market or currency market.

Inflation

Inflation is an increase in product costs caused by a mismatch between the framework program for the acquisition of goods and the level of wages owned by individuals in a country (Putong, 2013: 276). When the cost of producing goods increases, this can lead to an increase in the selling price of goods. However, if individual wage rates remain unchanged, this can trigger financial problems when inflation persists for a sufficiently long period of time. Inflation in general is a condition in which there is a continuous increase in overall prices (Murni, 2013: 202).

Stock price

According to Jogianto (2017) The stock price is the present value of income that will be received by investors in the future. The share price can also be defined as the price of a share that occurs at a certain time determined by demand and supply in the capital market.

Kompas Stock Index 100

Kompas100 is an index designed to measure the price performance of 100 stocks that have good liquidity and large market capitalization. The Kompas100 Index was initiated and managed through a collaboration between Kompas Gramedia Group, a media company that also publishes the Kompas daily newspaper. The process of determining which stocks to include in the Kompas100 index involves several considerations, one of which is that the issuer must have been listed on the Jakarta Stock Exchange (BEJ) for at least 3 months. In addition, another consideration taken is whether the company's shares are included in the calculation of the Jakarta Composite Index (IHSG).

METHODS

Types of research

This research is included in the type of quantitative research to test the research hypothesis. This study applies a positive way of thinking, intended to determine certain populations and samples. The data in this study used secondary data in the form of inflation and interest rate data obtained from <https://www.bi.go.id/id> and stock price reports in <https://id.investing.com/>

Population and Sample

The population in this study were all companies registered on the IDX from 2020 to 2023. The sampling technique used the purposive sampling method with the criteria for companies listed on the Kompas 100 index. So that the sample in this study totaled 100 companies.

Data analysis technique

This research uses multiple linear regression analysis techniques. This analysis serves to see how the influence of each model is used. This regression has the following equation formula:

$$Y_1 = \alpha + b_1X_1 + b_2X_2 + e_i$$

Information:

$Y = \text{IHSG}_i$

X1=Inflation
 X2=Interest Rate
 α =Constant
 b1–b2= “Regression Coefficient”
 e = "Intruder Error"

RESULT AND DISCUSSION

Descriptive Analysis

Table 1 shows that the average stock price during the study period was 1,149.7 IDR, the inflation variable had an average of 2.88% and the average interest rate during the study was 4.15%.

Table 1. Descriptive Research Data

Descriptive Statistics			
	Means	std. Deviation	N
Stock price	1149.70	98.06	40
Inflation	2.88	1,578	40
Interest rate	4.15	.83	40

Source: Processed data

Classic assumption test

Normality test

The normality test is used to determine whether the data to be analyzed is normally distributed or not. This study used the One-Sample Kolmogorov-Smirnov Test. The test results are shown in the following table:

Table 2. Normality Test

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		40
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	74.65155730
Most Extreme Differences	Absolute	.076
	Positive	.047
	Negative	-.076
Kolmogorov-Smirnov Z		.483
Asymp. Sig. (2-tailed)		.974

a. Test distribution is Normal.

b. Calculated from data.

Source: Processed data, 2023

The basis for making decisions on the Normality Test using the one sample Kinglomorov test are:

1. If the value (sig.) > 0.05, the research data is normally distributed
2. If the value (sig.) < 0.05 then the research data is not normally distributed

Based on the results of the one to Kolmogorov-Smirnov test, the sig. 0.974 which indicates that the data in this study are normally distributed.

Multicollinearity Test

The multicollinearity test aims to test whether the independent variables have a perfect direct (correlated) relationship. If there is a correlation, the independent variables cannot be used together as independent variables.

Table 3 Multicollinearity Test

Collinearity Statistics	
Tolerance	VIF
.578	1.730
.578	1.730

Source: Processed data, 2023

Research can not experience multicollinearity problems if the Colinearity Statistics column shows Tolerance results above 0.1 and the Variation Inflation Factor (VIF) value is not more than ten. The Tolerance results produced are all above 0.1 and the VIF results are not all more than 10. This means that the research data is free from multicollinearity problems.

Autocorrelation Test

Because this research is included in time series research, it is necessary to test the autocorrelation test. This study uses the Durbin Watson test.

Table 4. Autokeralsi Test

Durbin-Watson
.406

Source: Processed data, 2023

Based on the results, the value of d (durbin Watson) is 0.406 so that the data in this study are free from autocorrelation problems, in accordance with the opinion of Ghozali (2018: 112), if $0 < d < dl$ means there is no autocorrelation.

Determination Coefficient Test

The coefficient of determination is the ability of all independent variables to explain the dependent variable.

Table 5. Test of the Coefficient of Determination

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.648 ^a	.420	.389	76.64261

a. Predictors: (Constant), Suku Bunga, Inflasi

b. Dependent Variable: Harga Saham

Data Source: Processed data, 2023

Based on the test results, the Adjustend R Square Coefficient of Determination is 0.389 or 38.9%, which means that the ability of the Interest Rate and Inflation Variables to explain

the Stock Price Variable is 38.9%. While the remaining 61.1% is explained by other variables outside of this research variable.

Simultaneous Test

Table 6. ANOVA test

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	157678.858	2	78839.429	13.422	.000 ^b
	Residual	217341.345	37	5874.090		
	Total	375020.203	39			

a. Dependent Variable: Harga Saham

b. Predictors: (Constant), Suku Bunga, Inflasi

Source: Processed data, 2023

Based on the results of the ANOVA test, the sig. 0.000 it can be concluded that simultaneously or together the same variable interest rates and inflation have an influence on the company's stock price.

Partial Test

The results of testing the hypothesis of each independent variable partially on the dependent variable can be analyzed as follows:

Table 7. Test hypothesis

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1328.083	65.778		20.190	.000
	Inflasi	51.812	10.223	.834	5.068	.000
	Suku Bunga	-79.041	19.231	-.677	-4.110	.000

a. Dependent Variable: Harga Saham

Source: Processed data, 2023

Effect of Inflation on Stock Prices

Based on partial statistical tests, it shows a significant value of inflation of $0.00 < 0.05$, which means that inflation has a significant effect on stock prices. The variable coefficient of the inflation rate of 0.834 shows a positive effect, meaning that the inflation rate has a positive relationship to the stock prices of Kompas 100 indexed companies during the pandemic.

The Effect of Interest Rates on Stock Prices

Based on statistical tests partially, the significant value of interest rates is $0.000 < 0.05$, which means that interest rates have a significant effect on stock prices. The exchange rate variable coefficient of -0.677 shows a negative number, which means that the interest rate is negatively related to the Kompas 100 indexed stock price during the pandemic.

Discussion

Inflation Has a Positive Effect on Stock Prices

Based on the hypothesis testing that has been done, it is found that inflation has a significant positive impact on the price of the Kompas 100 index stock. This is because the inflation that occurred during the study period was not that high. The market can still tolerate if the inflation rate is still below 10%, namely 2.8%, but if the inflation rate is above 10% then the capital market will be disrupted. Indonesia's inflation can also be seen from the limited amount of money circulating in society. This is the impact of a decrease in demand and circulation of money originating from a decrease in economic activity due to the increase in the number of layoffs during the COVID-19 pandemic. In the midst of increasing pressure on the rupiah exchange rate, 2020 inflation remained low and under control at 1.68 percent (Central Statistics Agency (BPS)).

The results of this study are in line with the results of research found by Dalimunte's research (2018) which found that inflation has a significant positive effect on stock prices. In the world of investment, inflation is very influential because each increase or decrease in the inflation rate will affect the policies made by the monetary authority which will ultimately affect the placement of investors' funds in their investments.

Interest Rates Have a Positive Effect on Stock Prices

Based on the hypothesis testing that has been done, it is found that interest rates have a negative impact on the price of the Kompas 100 index shares. An increased interest rate will lead to an increase in the required interest rate on investment in a stock and besides that it can also cause investors to withdraw their investment in shares. and transfer it to investments in the form of savings or time deposits. In theory, it states that changes in interest rates will affect stock prices in reverse, *ceteris paribus*. This means that if interest rates increase, stock prices will decrease, and vice versa.

Movements in interest rates that are unstable and tend to increase have an impact on movements in the real sector, which is reflected in movements in stock returns. An increase in interest rates will encourage capital owners to prefer investing in banks rather than investing in stocks. Conversely, when the BI interest rate decreases, deposit rates will also decrease. This encourages investors to look for investment alternatives that can provide higher returns and are more profitable compared to deposits, such as investing in stocks. As a result, there is an increase in demand for shares which results in an increase in share prices. This increase in stock prices also increases the amount of return received by investors in the form of capital gains, which is attractive to investors.

CONCLUSION

The results of the study found that inflation has a significant positive effect on the company's stock price Kompas100. This shows that when inflation increases, stock prices will be 100 in the same direction or will also increase following inflation. Interest rates have a significant negative effect on stock prices. That is, when interest rates rise, stock prices tend to fall.

This research contributes to the understanding of the factors that influence the stock price of Kompas 100 during the Covid-19 pandemic. This research can be used as a reference for investors to consider inflation and interest rates in making investment decisions as well as for regulators regarding the importance of stabilizing inflation and interest rates in supporting capital market growth amidst the unstable conditions due to the Covid-19 pandemic.

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