The Effect of Inflation, Exchange Rates, and Interest Rates on Stock Returns in Mining Sector Companies Listed on the Indonesia Stock Exchange for the 2022-2024 Period

Susi Nofitasari Universitas Indonesia Mandiri, Lampung

Article Info	ABSTRACT
Article history:	This study aims to analyze the effect of inflation, exchange rates, and
Received January, 2025 Revised January, 2025 Accepted February, 2025	 interest rates on stock returns in the mining sector companies listed on the Indonesia Stock Exchange for the 2022-2024 period. The data used in this research is secondary data, including financial reports, inflation rates, exchange rates, and interest rates obtained from official sources such as the Indonesia Stock Exchange and Bank Indonesia. The analysis
Keywords:	method employed is multiple linear regression using SPSS software.
Inflation, Exchange Rates, Interest Rates, Stock Returns, Mining Sector.	The results indicate that, partially, inflation and exchange rates have a negative and significant effect on stock returns, while interest rates have a negative but not significant effect. Simultaneously, inflation, exchange rates, and interest rates significantly influence stock returns. The Adjusted R-Square value of 0.211 suggests that the independent variables in this study explain 21.1% of the variation in stock returns, with the remaining percentage influenced by other factors outside the research model. This study implies that investors should consider inflation, exchange rate fluctuations, and interest rate movements

when making investment decisions. Furthermore, the findings serve as a reference for future research on the impact of macroeconomic factors on stock market performance.

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Corresponding Author:

Name: Susi Nofitasari Institution: Universitas Indonesia Mandiri, Lampung e-mail: <u>susinofitasari@uimandiri.ac.id</u>

1. INTRODUCTION

The capital market plays a crucial role in a country's economy by providing a platform for a range of financial products, including derivatives, equities, bonds, and mutual funds. Investors are faced with a choice of instruments with various levels of risk and potential returns, in line with the principle of "high risk, high return". Return itself is defined as the level of profit enjoyed by investors for their investments [1]. Macroeconomic analysis is an important tool for investors to understand general economic conditions and their impact on future stock returns. Factors such as inflation, exchange rates, and interest rates have a significant influence on stock price movements and will ultimately affect the returns that investors receive.

Inflation, which is a continuous increase in the price of goods over a period of time, can affect a company's purchasing power and profitability. The latest data from

the Central Statistics Agency shows that in December 2024, Indonesia's year-on-year (yon-y) inflation reached 1.57% with a Consumer Price Index (CPI) of 106.80 [2]. Rising inflation generally has a negative impact on stock prices, including in the mining sector. According to research, the mining industry's stock price index on the Indonesia Stock Exchange is significantly impacted negatively by inflation (Merdeka, 2023).

The exchange rate, as a comparison between a country's currency and another country's currency, also affects investor interest. Fluctuations in the rupiah exchange rate can affect investment decisions, especially for foreign investors. Research shows that the exchange rate does not have a significant effect on stock returns in coal mining companies listed on the Indonesia Stock Exchange for the 2016-2022 period [3].

Interest rates affect a company's cost of capital and the attractiveness of investment in the capital market. Data from Bank Indonesia shows that in December 2024, the benchmark interest rate will be at 5.75% (Bank Indonesia, 2024). An increase in interest rates can lead to a decrease in investment interest in the capital markets, as investors may prefer lower-risk instruments such as bank deposits. Research shows that interest rates have a negative and significant effect on stock returns in coal mining companies listed on the Indonesia Stock Exchange [3].

The mining sector in Indonesia remains one of the attractive sectors for investors. According to data from the Indonesia Stock Exchange, this sector has shown significant performance in recent years fluctuations [4]. However, in global prices commodity and domestic macroeconomic factors remain important considerations for investors in assessing the potential return of stocks in this sector.

The impact of interest rates, inflation, and currency rates on stock returns in the mining industry has been the subject of numerous studies, with varying degrees of success. According to research, the mining industry's stock price index on the Indonesia Stock Exchange is significantly impacted negatively by inflation [5]. Other studies, however, indicate that throughout the 2016– 2022 timeframe, inflation had no discernible impact on stock returns for coal mining companies listed on the Indonesia Stock Exchange [3]. This difference in results indicates the need for further research to obtain further clarity on the influence of macroeconomic factors on stock returns in the mining sector.

Interest rates have a positive and negligible impact on stock returns, currency rates have a negative and large impact, and inflation has a negative and negligible impact, according to research by Suriyani & Sudiartha [6] that used a partial test (t). Research conducted by Suharni [7] obtained the results that inflation does not have a significant effect on stock returns, exchange rates have a significant positive effect on stock returns, and interest rates have a negative and significant effect on stock returns.

Research conducted by Annisa & Darmawan [8] obtained the results that inflation partially does not have a significant effect on stock returns, exchange rates partially do not have a significant effect on stock returns, interest rates partially have a significant effect on returns stock. In addition, research conducted by According to the findings of Nugroho & Hermuningsih [9], interest rates have a negative and large impact on stock returns, currency rates have a positive and negligible impact, and inflation has a negative and significant impact.

2. LITERATURE REVIEW

2.1 Return Saham

The return on investment is known as the return. Returns can take the form of predicted returns, which have not yet materialized but are anticipated to do so in the future, or realized returns, which have already happened. A realized return is one that has already taken place. Historical data is used to determine the realization return. Since return realization is one of the metrics used to assess the performance of the business, it is significant. Total returns are used to calculate realized returns. The whole return of an investment over a specific time period is known as the total return. Capital gains (losses) and yields make up the total return. The difference between the present investment price and the price from a previous time is known as a capital gain or loss. Conversely, yield is the proportion of recurring cash inflows to the investment price over a specific time period. Yield in the context of stocks is the ratio of dividends to the preceding period's stock price [10].

2.2 Inflation

Because the increase in the amount of money in circulation is not offset by an increase in the supply of products, inflation is characterized by rising prices generally or a persistent decline in the value of money. Inflation is defined as a situation in which prices of general, continuous goods rise over a certain length of time. Two factors can contribute to inflation in general: increased production costs and excessive public demand.

2.3 Exchange rate

One of the macroeconomic indicators that have an influence on the economy is the exchange rate or exchange rate. The exchange rate is the price of a domestic currency against a foreign currency. According to Ekananda [11], the exchange rate is the price of a currency relative to the currency of another country. Changes in the exchange rate between currencies of another country are influenced by various factors that occur in the country concerned, namely the inflation rate, discount interest rate, output rate. government intervention in the foreign exchange market, market expectations for the future value of the currency, or the interaction of these various factors [12]. The exchange rate plays an important role in the economy of a country because the foreign exchange rate can affect inflation, export and import activities, output and several other economicrelated purposes [13].

2.4 Interest

According to (Bank Indonesia, 2019), "the interest rate or BI Rate is a policy interest rate that reflects the monetary policy stance set by Bank Indonesia and announced to the public". The Indonesia Stock Exchange's stock price fluctuations are influenced by interest rates. Bank interest rates are used to control a country's economy. Interest rates are important to take into account because the average investor expects a greater return on investment. Changes in interest rates affect investors' interest in investing.

Interest rates are one of the attractions for investors to invest in the form of deposits or SBI so that investments in the form of stocks will be competitive. There are two explanations for interest rate hikes that can push stock prices down. First, interest rate hikes change the map of investment returns. Second, rising interest rates will cut corporate profits. An increase in interest rates will result in higher interest costs for the issuer, which will reduce its earnings. Customers will also put off purchases and keep their money in the bank when interest rates are high since increased production expenses and product prices will result. The company's sales will consequently decline, which would lower profits and ultimately reduce the stock price. Lower borrowing costs will result from low interest rates. Stock prices will rise as a result of increased economic activity and investment brought about by low interest rates [14]. Three avenues exist for interest rates to impact stock prices, according to Ross, Westerfield, and Jordan [15]:

- Changes in interest rates can affect the company's condition, business conditions in general and the company's profitability level, which will certainly affect the stock price in the capital market.
- Changes in interest rates will also affect the relationship between earnings from bonds and stock dividends, therefore a relatively strong attraction between stocks and bonds.
- Changes in interest rates will also affect the psychology of investors with respect to wealth investments, thus affecting stock prices.

4) Thus, it can be concluded that when the stock price is affected by interest rates, the returns that investors will receive will also be affected.

3. METHODS

3.1 Population and Sample3.1.1 Population

The population is the entire subject of the study. Sugiyono [16] defines a population as a generic area made up of items or individuals with certain attributes and characteristics chosen by the researcher to be examined and from which conclusions are then made. All mining businesses listed on the Indonesia Stock Exchange (IDX) during the 2022–2024 timeframe make up the study's population.

3.1.2 Sample

The sample in quantitative research is a subset of the population's size and attributes [16]. When a population is too big for researchers to examine all of, for whatever reason—for lack of resources, time, or energy, for instance—they can employ samples drawn from the population. The percentage of the population that can afford it is used to determine how many research samples are needed.

In this study, the research sample was taken by *purposive sampling*, namely with the following criteria:

- 1) Mining sector companies listed on the Indonesia Stock Exchange in the 2022-2024 period.
- The company actively trades its shares on the Indonesia Stock Exchange in the 2022-2024 period.
- 3) Mining sector companies that publish financial statements for the 2022-2024 period.
- 4) Mining companies that have stock price data on the Indonesia Stock Exchange in the 2022-2024 period.
- 3.1 Analysis Tools
- 3.2.1 Classical Assumption Test

a. Multicollinearity Test

According to Ghozali [17], the approach of multicollinearity in the Ha

loreriama model so that regression can be used in three ways, namely:

- 1) Analyze the Square R value. Multicolinierity occurs when the R Square value generated by an empirical regression model estimation is very high but individually independent many variables do not significantly affect the dependent variables.
- 2) Analyzing the correlation matrix of independent variables If there is a fairly high correlation between independent variables (generally above 0.90), then this is an indication of multicollinearity.
- 3) Analyze tolerance and variance inflation factor (VIF) values. A low tolerance value equals a high VIF value, indicating the presence of multicollinearity. The generally used cutoff value is a tolerance value of more than 0.10 or a VIF value below 10 to show the absence of multicollinearity.
- b. Heteroscedacity Test

This study uses the *park test* to detect the presence or absence of heteroscedasticity. The Park test method was carried out by regressing the residual absolute value to the independent variable. Gujarati [18] and Ghozali [17] stated that if the independent variable statistically significantly affects the dependent variable, then there is an indication of heteroscedasticity in the regression model.

c. Uji Autokorelasi

To detect the presence of autocorrelation, in this study a statistical test can be used through the Durbin-Watson Test (DW test) Ghozali [17]. The basis for decisionmaking to find out the existence of autocorrelation is:

- If the DW value is between the upper bound (du) and (4-du) then the autocorrelation coefficient = 0, meaning there is no autocorrelation
- 2) If the DW value is lower than the lower bound (dl), then the

autocorrelation coefficient is > 0. Indicates a positive autocorrelation.

- If the DW value is greater than (4-dl), the autocorrelation coefficient is < 0, indicating a negative autocorrelation.
- 4) When the value of DW is located between du and dl or DW is located between (4-du) and (4-di). So, the results cannot be concluded or there is no decision.
- d. Normality Test

The normality test in the study can use graph analysis, namely histograms and normal probability plots. Normal probability plots compare the cumulative distribution of real data with the cumulative distribution of normal distributions. A normal distribution will form a diagonal straight line and the data plotting will be compared to a diagonal line. If the distribution of the data is normal, then the line describing the actual data will follow its diagonal line [17]. Another model for normality tests is the Kolomogrov-Seminov Test one-sample test, where the data can be normalized if the significant value > 0.05 then the residual value is normally distributed, but if the significant value is <0.05 then the residual value is abnormally distributed.

3.2.2 Uji Hipotesis

a. Simultaneous Test (Test F)

The simultaneous test shows whether all the independent variables that are included together have an effect on the dependent variable.

b. Uji determinan (R2)

One test to gauge how well the model can account for the fluctuation of dependent variables is the determinant test (R2). The determination coefficient's value falls within the range of zero and one. The determination coefficient's low value suggests that independent factors have a limited capacity to explain dependent variables. On the other hand, if the determination coefficient value is around 1, it indicates that the independent variable has a strong explanation for the dependent variable. c. Partial Test (t-Test)

The t-test is a test tool to find out how much influence the independent variable has on the dependent variable partially in the sense that the magnitude of the influence calculated is the influence of each independent variable on the dependent variable.

e. Multiple Linear Analysis

Regression analysis is a study of the dependence of a dependent variable with one or more independent variables with the aim of estimating funds or predicting the average population or dependent variable based on the value of known independent variables [17]. Regression analysis yields coefficients for every independent variable. Using an equation to predict the value of an independent variable yields this coefficient. The following is an expression for the multiple linear regression equation:

 $Y = \alpha + \beta 1X1 + \beta 2X2 + \beta 3X3 + e$

Information:

Y = *Return* on mining sector stocks

- A = Konstanta
- B = Coefficient of regression lines
- X1 = Inflation
- X2 = Exchange rate
- X3 = Interest rate
- E = Standard error

3.3 Data and Data Sources

The type of data used in this study is quantitative data. The data sources used in this study are secondary data, including:

- The mining sector stock price data obtained from the official website of the Indonesia Stock Exchange (IDX) for the 2022-2024 period is <u>www.idx.co.id</u>.
- 2) Inflation and exchange rate data obtained from Bank Indonesia's official website for the 2022-2024 period, namely <u>www.bi.go.id</u> and website <u>www.investing.com</u>
- 3) Interest rate data obtained from the official websites of the Central Statistics Agency (BPS) and Bank Indonesia for the 2022-2024 period.

3.4 Research Model

Based on the above explanation, this study uses a quantitative approach with a regression analysis model *Linear* by using SPSS 25 to test whether a hypothesis is accepted or rejected. Regression equations *Linear* Empirically in this study is as follows:

Y = α + β 1. X1 + β 2. X2 + β 3. X3 + e

Information:

- Y = *Return* Mining Sector Stocks
- A = Constant
- B = Regression line coefficient
- X1 = Inflation
- X2 = Exchange rate
- X3 = Interest rate
- e = Standard *error* (residual error).

4. **RESULTS AND DISCUSSION**

4.1 Classical Assumption Test 4.1.1 Multicollinearity Test

The purpose of the multicollinearity test is to determine whether or not the regression model based on the correlation between variables is independent. There should be no correlations between the independent variables in a decent regression model. The variables are not conventional if there is a free correlation between them. To find out whether there is multicollinearity or free multicollinearity, the tolerance and variance inflation factor (VIF) values are used. A low tolerance value equals a high VIF value, indicating the presence of multicollinearity. A tolerance value greater than 0.10 or a VIF value less than 10 are the most often used cutoff values to denote the lack of multicollinearity. According to the outcomes of data processing with IBM SPSS Statistics 25 software, it demonstrates that:

Table 1. Multicollinearity Test Data Processing Results							
		Unstandardized		Standardized			
		Coefficients		Coefficients	Collinearity	Statistics	
Mode	1	В	Std. Error	Beta	Tolerance	BRIGHT	
1	(Constant)	119,626	41,511				
	INFLATION	-6,050	2,747	-,434	,581	1,722	
	EXCHANGE RATE	-,006	,003	-,508	,412	2,426	
	INTEREST	-2,149	1,975	-,234	,487	2,052	

Table 1. Multicollinearity Test Data Processing Results

Source: Secondary data processed, 2024.

The preceding table's results indicate that there is no multicollinearity in the entire model because the inflation tolerance value of 0.581, the exchange rate is 0.412 and the interest rate is 0.478 above 10% and the VIF value of inflation is 1.722, the exchange rate is 2.426, and the interest rate is 2.052 does not exceed 10.

4.1.2 Heteroscedacity Test

The purpose of this test is to determine whether there is a variation inequality between the residuals of different observations in the regression model. Regression models that exhibit homokedasticity or no heteroscedasticity are considered to be of high quality. According to the outcomes of data processing with IBM SPSS Statistics 25 software, it demonstrates that:

				Standardized		
				Coefficients		
Mode	el	В	Std. Error	Beta	t	Mr.
1	(Constant)	54,529	27,560		1,979	,057
	INFLATION	-3,127	1,824	-,375	-1,714	,096
	EXCHANGE	-,003	,002	-,420	-1,615	,116
	RATE					

Table 2. Heteroscedacity Test Data Processing

	INTEREST	,689	1,311	,126	,525	,603
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a. Dependent Variable: LnRES_1

Source: Secondary data processed, 2024.

Based on the results of the table above, it can be concluded that there is no significant inflation of exchange rates and interest rates so that the entire regression model is free from heteroscedaity because the significant value is above 5%.

4.1.3 Uji Autokorelasi

The purpose of the autocorrelation test is to determine whether the perturbrillator error in the t-period and the error in the t-1 period in a regression model

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continuous are correlated. Because observations throughout time are tied to one autocorrelation another, occurs. An autocorrelation-free regression is a good regression model. The Durbin-Watson Test (DW test) Ghozali [17] is a statistical test that can be employed in this study to identify the presence of autocorrelation. According to the outcomes of data processing with IBM SPSS Statistics 25 software, it demonstrates that:

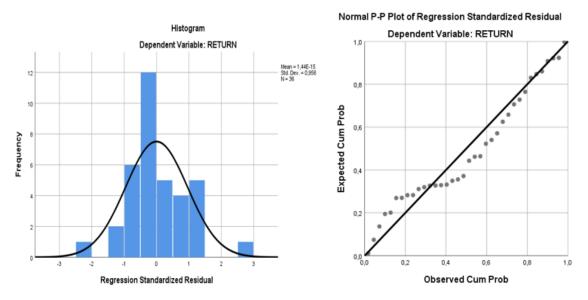
	Adjusted RStd. Error of the						
Model	R	R Square	Square	Estimate	Durbin-Watson		
1	,529a	,279	,212	5,40663%	1,968		

Source: Secondary data processed, 2024.

Based on the results of the table above, it can be concluded that the D-W number is 1.968. The D-W number is located between -2 to +2 which indicates that the regression model is free of autocorrelation.

4.1.4 Normality Test

The normality assumption test aims to find out whether the variables in the regression model have a normal distribution or not. The normality test in the study can use graph analysis, namely histograms and normal probability plots. The cumulative distribution of real data and the cumulative distribution of normal distributions are contrasted in normal probability charts. The data charting will be compared to a diagonal line, which is formed by a normal distribution [17]. According to the outcomes of data processing with IBM SPSS Statistics 25 software, it demonstrates that:



Source: Secondary data processed, 2024.

By looking at the histogram and normal plot images, it can be concluded that the histogram chart provides a distribution pattern that is close to normal (the peak point is close to zero "0"). While in the normal graph of the plot, you can see the dots spreading

around the diagonal line and the dots spreading according to the direction of the diagonal line. These two graphs, both histogram charts and plot normal graphs, show that regression models are feasible because they meet the assumption of normality.

4.2 Regression Test

The hypothesis to be tested is to find out whether there is an influence of the independent variable on the bound variable. For this reason, hypothesis testing was carried out using multiple linear regression analysis. The following are the results of the multiple linear regression test using IBM SPSS Statistics 25 Software showing that:

4.2.1 Test F (Simultaneous)

The F test is used to determine the influence of independent variables of inflation, exchange rate and interest rates on the dependent variables of stock returns in the mining sector for the 2022-2024 period.

Table 4. Results of Data Processing Test F (Simultaneous Test)								
Model	Sum	of Squares	df	Mean Square	F	Mr.		
Regressi	on	79,630	3	26,543	4,119	,000b		
Residual	L	206,218	32	6,444				
Total		285,848	35					
	-							

a. Dependent Variable: RETURN

b. Predictors: (Constant), INTEREST RATE, INFLATION, EXCHANGE RATE

Source: Secondary data processed, 2024.

Based on the output results using IBM SPSS Statistics 25 Software above, it shows that the F value is 4.119 with a significance of 0.000 (0.000 < 1%), so it can be concluded that inflation, exchange rates and interest rates simultaneously have a significant effect on stock returns in mining sector companies listed on the IDX for the 2022-2024 period.

Model Summar

4.2.2 Uji R Square

The R Square test is used to measure how far the model's ability to explain the variation of dependent variables, namely inflation, exchange rate, and interest rate variables on the variables of stock returns in the mining sector for the 2022-2024 period.

Table 5. Hail Processing R Test Data Square

widdei	Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate			
1	,528a	,279	,211	2,538564470065656			
a. Predictors: (Constant), INTEREST RATE, INFLATION, EXCHANGE RATE							

Source: Secondary data processed, 2024.

Based on the output results above Software IBM SPSS Statistics 25 The above shows that the value of Ajusted R Square of 0.211, then the correlation between the independent variable and the dependent is weak (0.211 < 5). Adjusted R Value Square 0.211 means variable return Stocks can be explained by inflation, exchange rate and interest rate variables of 21.1% while 78.9%can be explained by other variables outside the study.

4.2.3 Test t (Partial Test)

The t-test is a test tool to find out how much influence independent variables have on dependent variables partially in the sense that the magnitude of the influence calculated is the influence of each independent variable on dependent variables, namely inflation, exchange rate, and interest rate variables on the variable dreturn of mining sector stocks for the 2022-2024 period.

Table 6. Results of Partial Test Data Processing (Test t)

		Coefficientsa			
			Standardized		
	Unstand	lardized Coefficients	Coefficients		
Model	В	Std. Error	Beta	t	Mr.
	-				

1	(Constant)	56,137	19,490		2,880	,007
	INFLATION	-2,838	1,290	-,434	-2,200	,035
	EXCHANGE	-,003	,001	-,508	-2,173	,037
	RATE					
	INTEREST	-1,002	,927	-,232	-1,081	,288

a. Dependent Variable: RETURN

Source: Secondary data processed, 2024.

- From the output results, t calculated the inflation variable of -2.200 and a significant value of 0.035 (0.035 < 0.050) means significant. Consequently, it can be said that during the years 2022–2024, inflation significantly affects the return of mining industry shares listed on the IDX.
- From the output results, t calculated the exchange rate variable of -2.173 and the significant value of 0.037 (0.037 < 0.050) means significant.

Therefore, it can be concluded that the exchange rate has a significant effect on the return of mining sector stocks listed on the IDX for the 2022-2024 period.

3) From the output results, t calculated the interest rate variable of -1.081 and a significant value of 0.288 (0.288> 0.010) means insignificant. Therefore, it can be concluded that interest rates do not have a significant effect on the return of mining sector stocks listed on the IDX for the 2022-2024 period.

4.2.4 Multiple Linear Regression Test

Table 7. Multiple Linear Regression Test Data Processing Results

r			Il rest D'ata i roce	8	
		Unstandardize	Standardized		
		d Coefficients	Coefficients	t	Mr.
Mode	el	В	Beta		
1	(Constant)	56,137		2,880	,000
	INFLATION	-2,838	-,434	-2,200	,035
	EXCHANGE RATE	-,003	-,508	-2,173	,037
	INTEREST	-1,002	-,232	-1,081	,288
	F count	4,119			·
	Mr	0,000			
	Adjusted R Square	0,211			

Source: Secondary data processed, 2024.

Based on the results of multiple linear analysis, the effect of stock returns on mining sector companies listed on the IDX is as follows:

Y = 56.137 - 2.838 X1 - 0.003 X2 - 1.002 X3

The equation above shows that the multiple regression coefficient is 56.137. This value means that every decrease in Inflation by 1, decrease in Exchange Rate by 1 and Interest Rate by 1, the return on shares of mining sector companies is 56,137. With the help of IBM SPSS Statistics 25 Software, it can be found that the determinant coefficient (R Square) is 0.211 which means that 21.1% of the Return of Stocks is influenced by Inflation,

Exchange Rate and Interest Rates while 78.9% is influenced by other factors.

In this study, Adusted R Square was used because it used more than two research variables. In addition, the F value calculated at 4.119 is significant at 0.000 which is statistically significant at α 1%. From these results, it can be concluded that the fourth hypothesis, namely "Inflation, Exchange Rate, and Interest Rate simultaneously affect the Return of Shares in mining sector companies listed on the IDX in the 2022-2024 period, this means that the hypothesis is accepted.

DISCUSSION

Test Hypothesis Test Results t

The t-test was used to determine the partial influence of each independent variable. In this study, the independent variables are inflation, exchange rate, and interest rate on the dependent variables of return on mining sector stocks listed on the IDX for the 2022-2024 period.

a. The effect of inflation on stock returns

The study's hypothesis is that stock returns are negatively impacted by the rate of According to the preceding inflation. analysis's findings, inflation significantly and negatively affects the return of mining sector stocks listed on the IDX for the years 2022-2024. This result can be seen from the calculation of the inflation variable of -2.200 and a significant value of 0.035 (0.035 < 0.050). This shows that high and low inflation does not affect the return of mining sector stocks listed on the IDX for the 2022-2024 period. Based on the test results, hypothesis 1 is accepted, namely inflation has a negative effect on stock returns.

Two factors can contribute to inflation in general: increased production costs and excessive public demand. If the increase in production costs is higher than the income of a company, then this will cause a decrease in the profits that the company will get. This will cause a decrease in the company's share price which will also affect the return on shares that investors will get. This is in line with the results of research conducted by Align with research conducted by Nugroho & Hermuningsih [19] obtained the result that inflation has a negative and significant effect on stock returns.

b. The effect of exchange rates on stock returns

The study's hypothesis is that stock returns are negatively impacted by the exchange rate. According to the findings of the aforementioned analysis, the return on shares in the mining industry listed on the IDX for the 2022–2024 period is known to be negatively impacted by the exchange rate. The computation of the exchange rate of -2.173 shows this outcome, and a significant value of 0.037 (0.037 < 0.050) indicates significance. Based on the test results, hypothesis 2 is accepted, namely that the exchange rate has a negative effect on stock returns.

The results of the hypothesis test show that stock returns are not sensitive to the exchange rate, which shows that stock returns will increase if the money exchange rate decreases. This demonstrates that the high and low returns on the stocks of mining companies listed on the IDX for the 2022-2024 timeframe have not been impacted by the exchange rate relative to the dollar. Since stock returns are based on the rate at which stock prices vary, it can be concluded that fluctuations in the exchange rate have a negative impact on stock returns. The results of this study are strengthened by the results of research conducted by Suriyani & Sudiartha [6] using a partial test (t) of the exchange rate has a negative and significant effect on stock returns.

c. The effect of interest rates on stock returns.

The hypothesis in this study is that interest rates have a negative effect on stock returns. Based on the results of the analysis above, it is known that interest rates have a negative effect and do not have a significant effect on the return of shares in the mining sector listed on the IDX for the 2022-2024 period. This was obtained by calculating the interest rate variable of -1.081 and a significant 0.288 (0.288> 0.010) value of means insignificant. Based on the test results, hypothesis 3 is accepted, namely that interest rates have a negative effect on stock returns.

This explains that the return of shares in the mining sector listed on the IDX for the 2022-2024 period is sensitive to interest rates with a negative direction, which indicates an increase in stock returns if interest rates are low so that borrowing costs are lower. Low interest rates will increase investment and investor interest which causes stock prices to rise, with an increase in stock prices means that the returns received by investors will also increase. If SBI's interest rate increases, it can be expected that investment in the capital market will decline because people are more interested in saving their money in banks that offer higher interest rates than investing. That way, the stock price will decrease, which causes the return that investors will receive will also decrease. The results of this study are strengthened by the results of research conducted by Sitanggang & Munthe [20] obtained the result that interest rates have a negative and insignificant effect on stock returns.

Test Hypothesis Test Results F

The F test based on the output results using IBM SPSS Statistics 25 Software above shows that the F value is 4.119 with a significance of 0.000 (0.000 < 1%), so it can be concluded that inflation, exchange rates and interest rates simultaneously have а significant effect on stock returns in mining sector companies listed on the IDX for the 2022-2024 period. This shows that hypothesis 4 in this study is accepted, namely inflation, exchange rate and interest rate simultaneously affect stock returns.

This research is strengthened by the results of research conducted by Wijayanti & Sishadiyati (2020) which obtained the results that interest rates, exchange rates and inflation have a significant effect on stock returns. In line with research conducted by Nugroho & Hermuningsih (2020) and Annisa & Darmawan (2020)

5. CONCLUSION

Based on the results of the analysis and discussion that has been carried out in the

previous chapter, the conclusion of this study is:

- 1) For the 2022–2024 timeframe, inflation significantly and partially affects stock returns in mining sector businesses listed on the IDX. This result can be seen from the calculation of the inflation variable of -2.200 and a significant value of 0.035 (0.035 < 0.050) shows that it is significant.
- 2) The stock returns of mining companies listed on the IDX for the 2022–2024 period is significantly impacted by the exchange rate, which has a largely negative effect. This result can be seen from the t calculation of the exchange rate of -2.173 and the significant value of 0.037 (0.037 < 0.050) shows that it is significant.
- 3) Interest rates partially have a negative effect and do not have a significant effect on the return of mining sector stocks listed on the IDX for the 2022-2024 period. This was obtained from the calculation of the interest rate variable of -1.081 and a significant value of 0.288 (0.288> 0.010) means insignificant.
- 4) Inflation, exchange rates, and interest rates simultaneously have a significant effect on stock returns in mining sector companies listed on the IDX for the 2022-2024 period. This is obtained from an F value of 4.119 with a significance of 0.000 (0.000 < 1%).

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