



## The Effect Of Several Macroeconomic Variables On Stock Returns Of Manufacturing Companies in Indonesia

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**Abstract.** This study aims to analyze the influence of macroeconomic factors consisting of inflation, rupiah exchange rate, and interest rates on stock returns of manufacturing companies listed on the Indonesia Stock Exchange during the period 2021-2023. The research method uses a quantitative approach with multiple linear regression analysis. The research sample consists of manufacturing companies listed on IDX during the research period, selected using purposive sampling method. The results show that among the three macroeconomic factors studied, only the rupiah exchange rate has a significant influence on the stock returns of manufacturing companies. This is due to the characteristics of the manufacturing industry which has a high dependence on imported raw materials, so that exchange rate fluctuations directly affect the company's financial performance and stock returns. Meanwhile, inflation and interest rates did not show a significant effect on stock returns of manufacturing companies during the study period.

**Keywords :** Stock Return, Inflation, Rupiah Exchange Rate, Interest Rate, Manufacturing Companies

### 1. INTRODUCTION

The Indonesian capital market has experienced significant development in recent decades, with the manufacturing sector becoming one of the main pillars of the national economy. In the context of globalisation and complex economic dynamics, stock returns have become a key indicator that attracts the attention of investors and researchers to analyse the factors that influence them (Yu et al., 2024). In 2024, Indonesia's manufacturing sector faces complex dynamics that affect its stock returns. Macroeconomic conditions are relatively stable with controlled inflation and moderate interest rates, while the rupiah has strengthened post-election. The Manufacturing Production Index shows a positive trend, especially in the food, beverage, electronics, and automotive subsectors (Tokunaga & Okiyama, 2022). Nonetheless, the sector still faces a number of significant challenges. Rising global raw material costs, competition with imported products, and operating margin pressures are key factors affecting stock performance. The impact of post-pandemic global economic recovery, international supply chain shifts, and geopolitical dynamics also coloured the movement of manufacturing stock returns. Investors in the capital market showed a selective attitude, focusing more on manufacturing companies with strong fundamentals and technological adaptability (Nawrocki & Szwajca, 2022). As a result, manufacturing stock returns in 2024 will vary, reflecting the

growing complexity and uncertainty of the global economy. Some companies managed to show positive performance, while others are still struggling with structural challenges in the industry.

Inflation, foreign exchange rates, and interest rates are critical macroeconomic variables that potentially have a substantial impact on stock performance. Unstable inflation rates can create economic uncertainty, affect production costs, and in turn impact the profitability of manufacturing companies (Dbouk et al., 2022). Fluctuations in the exchange rate of the rupiah against foreign currencies, particularly the US dollar, also play an important role given that most manufacturing companies are dependent on imported raw materials or export activities. Bank Indonesia's interest rate as a monetary policy instrument has a complex correlation with stock returns. Changes in interest rates can affect investment decisions, the company's cost of capital, and the attractiveness of alternative investment instruments (Helm et al., 2020). In the context of manufacturing companies, this condition is even more critical given that this sector requires large investment capital and is sensitive to macroeconomic changes. Previous research shows mixed results regarding the relationship between macroeconomic variables and stock returns. Some studies indicate a significant effect, while others show a weak or non-linear relationship. This creates an interesting research gap to be studied more deeply, especially in the specific context of manufacturing companies in Indonesia. The manufacturing sector was chosen as the object of research because it has a strategic role in the Indonesian economy. Its contribution to Gross Domestic Product (GDP), employment, and export-driving potential make this sector highly relevant to research. The complex dynamics between macroeconomic variables and stock returns in this sector can provide important insights for policy makers, investors, and academics (Zakhidov, 2024). The purpose of this study is to analyse the effect of inflation, exchange rates, and interest rates simultaneously and partially on stock returns of manufacturing companies listed on the Indonesia Stock Exchange. With a quantitative approach and in-depth analysis, it is expected that this study can make an empirical contribution in understanding the dynamics of the Indonesian capital market, especially in the manufacturing sector.

## **2. LITERATURE REVIEW**

Stock Return is the profit that investors will get in the form of capital gains. Capital gain is the profit obtained by investors from buying and selling shares in the form of the difference between the selling price and the purchase price (Akbar, 2021). Inflation is defined as an increase in the amount of currency in circulation or an increase in the liquidity of the economy. An increase in the money supply is expected to increase the overall price of goods

and services. The exchange rate is the price of a unit of foreign currency against the domestic currency, or the price of domestic currency against foreign currency, in this case the exchange rate of the rupiah (IDR) against the United States dollar (USD) is the price of one US dollar (USD) to the Indonesian rupiah (IDR), or can be interpreted as the price of one Indonesian rupiah against one US dollar (Nguse et al., 2021). Bank Indonesia Certificates (SBI) are securities used to confirm short-term debt issued by Bank Indonesia, using a discount system.

Inflation will increase a company's revenue and costs. If the increase in production costs is higher than the price increase that consumers can enjoy, the profitability of the company will decrease. If the company earns a smaller profit, it will cause investors to be reluctant to invest in the company, which will cause the stock price to fall, and ultimately affect the stock income received by investors (Tiblola et al., 2024). Previous research conducted by (Hoong et al., 2023) shows that there is a significant influence between inflation and stock returns. In line with the findings show that inflation has a negative and significant effect on stock returns. H1: Inflation affects stock returns of manufacturing companies.

Traditional methods believe that there is a positive correlation between currency exchange rates and stock returns. Changes in the exchange rate will affect the company's revenue and operating costs, which in turn will cause changes in stock returns. The portfolio balance method assumes a significant relationship (Sausan et al., 2020). Negative correlation between stock returns and currency exchange rates. Devaluation of the national currency will increase export volume. If the elasticity of international market demand is sufficient, then the cash traffic of domestic companies will increase, otherwise if the issuer buys foreign products and in the presence of debt in dollars, the stock price and stock returns will fall. Previous research that the exchange rate has a significant impact on stock returns (He et al., 2023). H2 : The rupiah exchange rate affects the stock income of manufacturing companies.

Rising interest rates will increase interest expense and the cost of capital, so the company's profits fall. This reduction in profits will reduce stock returns, because the company's expected share price in the capital market has fallen, and conversely, a decrease in interest rates triggers people's desire to invest more, it has an impact on increasing stock returns in the capital market. Investing funds in stocks with high interest rates will eliminate investment opportunities otherwise, if the interest rate lowers the lower limit of interest rates, investors tend to invest in stocks in the capital market at the expense of the opportunity to get interest returns (Rheynaldi et al., 2023). Previous research conducted by Lee et al., 2023 showed that interest rates have a significant impact on stock returns. This is in accordance with the results

of research Rashid et al., 2023 showing that interest rates have a significant negative effect on stock returns. H3: Interest rates Acts on stock returns of manufacturing companies.

### 3. METHODS

The population of this study were 256 manufacturing companies listed on the Indonesia Stock Exchange 2021-2023, then selected 149 manufacturing companies as samples. Research on sampling techniques based on objectives. Sampling standards are as follows:1) Manufacturing companies that have been listed and are still listed in the manufacturing sector on the Indonesia Stock Exchange; 2) Manufacturing companies that publish reports for consecutive years; 3) Manufacturing companies that do not lose money during the 2021-2023 period. Data analysis is based on secondary data, namely in the form of summary financial statements of manufacturing companies selected as research samples (Juniani et al., 2023). In addition, the multiple linear regression method was used to analyse the data to determine the effect of Inflation, Rupiah Exchange Rate and Interest Rate Variables on the Return Variables of manufacturing companies listed on the Indonesia Stock Exchange.

### 4. RESULTS

Data analysis using multiple linear regression method shows the following results. In addition, when the error rate is 0,05 percent, the analysis results show that Only the rupiah exchange rate has an impact on stock returns, while inflation and interest rates have no impact on the stock returns of manufacturing companies listed on the Indonesia Stock Exchange for the period 2021-2023.

**Table 1. Multiple Linear Regression Analysis Results.**

	B	Sign	Conclusion
Constant	6,247		
Inflation	0,027	0,736	Rejected
Exchange Rate	-0,832	0,035	Accepted
Interest Rate	-0,257	0,453	Rejected
R	0,721		
R Square	0,706		
Adj. R Square	0,695		

**Source: Secondary Data Processed (2024)**

Based on Table 1, the regression equation model is obtained as follows:

$$Y = 6,247 + (0,027)X_1 - (0,832)X_2 - (0,257)X_3$$

Because only the Indonesian rupiah has a significant value lower than the error rate value of  $0,035 < 0,05$ . In part, inflation has a positive regression coefficient, meaning that an increase in inflation will increase stock returns. The significant value of the Indonesian rupiah exchange rate is 0,035 and has a negative regression coefficient value, indicating that the Indonesian rupiah exchange rate has a negative impact on stock returns, which means that an increase in the US dollar will reduce the stock returns of manufacturing companies. At the same time, the interest rate is negatively correlated with stock returns, represented by a negative regression coefficient value, which indicates that an increase in interest rates will reduce the stock returns of manufacturing companies. The calculation of the coefficient of determination (Adjust R-Square) of 0,695 or 69,5% means that changes in stock returns by 69.5% are explained by inflation, rupiah exchange rate and interest rate variables, and the remaining 30,5% It is explained by other factors not included in the regression model.

## 5. DISCUSSION

Based on recent data, inflation in Indonesia in 2023 shows interesting dynamics to be analysed in the context of its influence on stock returns of manufacturing companies. Throughout 2023, Indonesia managed to keep its inflation rate at a manageable level, with average inflation coming in at under 4%, well below the 10% threshold that investors consider critical. Bank Indonesia noted that inflation in 2023 was relatively stable, with factors such as commodity price controls, tight monetary policy, and food supply management contributing to economic stability. This supports the findings of previous research which confirms that inflation below 10% does not significantly affect the stock returns of manufacturing companies. From an investor perspective, the stability of inflation at low levels creates a conducive investment environment. Manufacturing companies have developed adaptive strategies to deal with inflationary pressures, including production cost efficiency, supply chain optimisation, and technology implementation to lower operational costs (Muhammad, 2023). These strategies enable companies to maintain profit margins despite inflationary pressures.

Recent research confirms that investors focus more on a company's fundamental performance than just inflationary fluctuations. Factors such as product innovation, operational efficiency, and the company's ability to create added value become key considerations in investment decisions. This explains why small changes in the inflation rate do not directly impact the stock returns of manufacturing companies. It is interesting to note that Indonesian

manufacturing companies have shown resilience in the face of various economic challenges. Through sustainable strategies such as production cost reduction, operating cost optimisation, and focus on marketing efficiency, they have managed to maintain profitability. As a result, investors remain confident in the ability of manufacturing companies to generate stable returns, regardless of annual inflation fluctuations. Inflation data further strengthens the argument that low and stable inflation rates do not significantly affect the stock returns of manufacturing companies in Indonesia (Ayu, 2020). Investors' main focus shifts to the adaptability and sustainable strategies of companies in creating value and maintaining competitiveness in a dynamic market. The results of previous research from Abdo et al., 2023 and Chiang, 2023 that shows inflation has no effect on stock returns

The dynamics of the rupiah exchange rate in 2023 show a very interesting pattern to be analysed in the context of its influence on stock returns of manufacturing companies. Throughout 2023, the rupiah experienced significant fluctuations, with an average exchange rate ranging from IDR 14,000-15,500 per US dollar, reflecting both global economic volatility and domestic factors. Bank Indonesia reports indicate that fluctuations in the rupiah exchange rate are influenced by several key factors, including global monetary policy, international trade conditions, and market sentiment. Manufacturing companies that have a high dependence on imported raw materials are particularly sensitive to exchange rate movements, which directly affect their production cost structure and profitability. Investors show high caution in responding to exchange rate movements. The depreciation of the rupiah has different impacts among manufacturing companies. Companies with an export orientation can potentially benefit from a weakening rupiah, while companies with high import dependency will experience profit margin pressure. The results of previous research from Cahyana et al., 2023 and Ginting & Gularso, 2023 which shows the rupiah exchange rate has an effect on stock returns

It is interesting to note that in 2023, some manufacturing companies managed to turn the challenges of exchange rate fluctuations into opportunities. They innovate in risk management, optimise their cost structure, and seek alternative sources of local raw materials to mitigate the negative impact of exchange rate movements. The rupiah exchange rate is proven to have a significant influence on stock returns of manufacturing companies. Investors are getting smarter in choosing stocks by considering the company's ability to manage exchange rate risk, which does not simply depend on exchange rate fluctuations, but rather on adaptation strategies and management resilience in the face of economic uncertainty.

Indonesia's interest rate environment in 2023 shows complex dynamics and is interesting to analyse in the context of its influence on stock returns of manufacturing

companies. Bank Indonesia (BI) in 2023 implemented a fairly selective monetary policy, with the average benchmark interest rate ranging from 5.75% to 6.25%, reflecting efforts to maintain economic stability and control inflation. Throughout 2023, Bank Indonesia made several interest rate adjustments in order to maintain macroeconomic balance. This policy did not directly affect the stock returns of manufacturing companies, but rather focused more on controlling inflation and creating a conducive investment environment. Investors are getting smarter in understanding that interest rate changes are not the only factor that determines investment decisions. interest rate changes in 2023, this did not significantly affect the stock returns of manufacturing companies. Industry resilience, sophisticated risk management strategies, and strong company fundamentals are the main factors that attract investors. The manufacturing industry remains one of the attractive sectors with a high level of investor confidence, regardless of interest rate fluctuations. The results of previous research from Bagchi & Paul, 2023 and Martins et al., 2023 which shows interest rates have no effect on stock returns.

The relationship between investment returns and investment risk is a fundamental concept in financial management. This study explores the complex dynamics of macroeconomic factors on stock returns of manufacturing companies, focusing on three key variables: inflation, rupiah exchange rate, and interest rate. The research findings reveal that of the three macroeconomic factors studied, only the rupiah exchange rate has a significant influence on stock returns of manufacturing companies. The unique characteristics of the manufacturing sector in the context of the Indonesian economy show a high sensitivity to currency fluctuations, which is more dominant than inflation and interest rates. This condition can be attributed to the structure of the manufacturing industry that has a high dependence on imported raw materials, significant export markets, and the complexity of global supply chains. The practical implications of the findings of this study are significant for investors and company management, who need to develop risk mitigation strategies focusing on foreign exchange management (Purwitasari et al., 2021).

Although inflation and interest rates did not show a direct influence in this study, they remain important macroeconomic indicators in the consideration of investment decisions. Limitations of the study include the relatively short time span of the study, the specific focus on the manufacturing sector, and the potential for uncontrolled external factors. The main conclusion of the study confirms the complexity of the relationship between macroeconomic factors and stock returns. The rupiah exchange rate proves to be a key variable in understanding the dynamics of stock returns of manufacturing companies in Indonesia, providing valuable

insights for investors, academics, and policy makers in analysing and anticipating capital market movements.

## **6. CONCLUSION**

This study provides an in-depth insight into the dynamics of macroeconomic factors and their influence on stock returns of manufacturing companies on the Indonesia Stock Exchange during the period 2021-2023. The results of statistical analysis and comprehensive discussion reveal the key finding that only the rupiah exchange rate has a significant influence on stock returns of manufacturing companies, while inflation and interest rates do not show a meaningful causal relationship. The significance of the rupiah exchange rate lies in the structure of Indonesia's manufacturing industry, which is highly dependent on imports of raw materials. Fluctuations in currency exchange rates directly affect production cost structures, profit margins, and in turn impact stock returns. Savvy investors understand that a company's ability to manage exchange rate risk is a key factor in investment valuation.

## **LIMITATION**

For Investors, Conduct an in-depth analysis of the exposure of manufacturing companies to exchange rate risk, Develop an investment diversification strategy that considers exchange rate sensitivity, Pay attention to the ability of company management to mitigate exchange rate risk. For Manufacturing Companies Develop a comprehensive hedging strategy, Diversify raw material sources and markets, Increase operational efficiency to minimise the impact of exchange rate fluctuations. Future research is recommended to extend the research time span, add macroeconomic variables such as Gross Domestic Product (GDP), expand the research sample, and use more complex statistical analysis methods. Investors are recommended to conduct in-depth analyses of manufacturing companies' exposure to exchange rate risk, develop diversification strategies, and pay attention to the ability of company management to mitigate risks. The limitations of the study include a limited time period focus, the use of three macroeconomic variables, and a limited sample of manufacturing companies on the Indonesia Stock Exchange, but it provides an important empirical contribution in understanding the dynamics of stock returns in the manufacturing sector.

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