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The Effect of Exchange Rates, Interest Rates, Inflation, Net Exports on Economic Growth in Indonesia

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ABSTRACT

Maintaining steady inflation and interest rates is crucial for the government to uphold economic stability. Economic growth represents the continuous and gradual improvement in a country's economic performance, as evidenced by increased productive capacity and rising national income. This research employs a quantitative methodology to investigate the separate and combined effects of inflation, net exports, interest rates, and exchange rates on Indonesia's economic growth between 2015 and 2023. In contrast to earlier studies, this investigation encompasses a wider range of macroeconomic variables, offering a more thorough analysis. The study analyzes quarterly secondary data for Indonesia spanning 2015–2023 using the Ordinary Least Squares (OLS) econometric technique. Findings indicate that inflation has a significant positive impact, net exports also positively contribute, while interest rates and exchange rates negatively influence Indonesia's economic growth, though significantly. The government's key focus should remain on ensuring stable inflation and interest rates to achieve economic stability.
Keywords: Economic Growth, Exchange Rate, Interest Rate, Inflation, Net Export.
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1. INTRODUCTION

A crucial measure for assessing a nation's overall performance, particularly in developing countries, is economic growth. Various macroeconomic elements, including inflation, net exports, interest rates, and exchange rates, have a direct impact on this growth (Van Dan & Binh, 2019). To devise effective strategies for enhancing welfare and achieving financial stability, it is essential for governments and public policymakers to have a thorough grasp of how these factors affect economic development.

Various economic theories address the concept of economic growth. The Solow Model, widely regarded as the most prominent theory in this field, argues that enhancements in physical capital, rather than labor or capital stocks, are the primary drivers of economic expansion (Caslin, 2018). Additionally, numerous other well-known economic growth theories emphasize the role of technological progress in fostering economic development. For example, the Ramsey Model proposes that the accumulation of capital not only promotes economic growth but also facilitates technological advancements, which stands in contrast to the conclusions drawn by the Solow model (Hossain, 2022). Furthermore, endogenous growth theories, such as the Barro and Lucas model, posit that economic growth is influenced by factors including the accumulation of both physical and human capital, as well as the impact of government intervention (Stanić & Račić, 2019).

The exchange rate is significantly influenced by international trade and macroeconomic stability (Sugiharti et al., 2020). Fluctuations in exchange rates can affect the prices of imports and exports, consequently impacting the trade balance and economic growth. Studies indicate that depreciation of

the rupiah can enhance Indonesia's export performance but may also lead to substantial short-term inflation (Majok et al., 2024). Research conducted by Rangkuty et al., (2020), suggests that maintaining a stable exchange rate is crucial for sustaining economic growth transformation, as considerable volatility can hinder and stimulate investment.

According to Fleming, Mundell-Fleming's theory posits an inverse relationship between exchange rates and economic growth. As exchange rates increase, net exports (the gap between imports and exports) decrease, resulting in reduced output and slower economic expansion (Martín, 2021). The value of the rupiah has a significant impact when it fluctuates. A depreciated rupiah can lead to a positive trade balance by stimulating export demand, as Indonesian products become more affordable compared to those from other nations. The rupiah's exchange rate, particularly against the US dollar, can substantially influence economic growth and domestic imports (Heriqbaldi et.al., 2023). Additionally, the exchange rate is linked to investment levels; higher investment tends to boost a country's economic growth and foreign exchange reserves (Hatim et al., 2022).

Interest rate increases are intended to reduce inflation but can hinder private investment due to higher borrowing costs Adi & Budiarti (2015); Kusumastuti, et. al (2022). In Indonesia, , Bank Indonesia's interest rate policy (BI Rate) has been effective in maintaining macroeconomic stability, although it often results in suboptimal decisions regarding price stability and economic growth (Todaro & Smith, 2020). Aggressive interest rate hikes can slow economic growth by reducing investment, while excessive interest rate cuts may lead to high inflation under certain conditions. In addition, in Indonesia, research by Sugiharti et al., (2020) found that, in the long term, excessively high interest rates tend to weaken economic growth, primarily because the private sector heavily relies on credit financing.

In Indonesia, Bank Indonesia consistently oversees interest rate policies, which have proven effective in maintaining macroeconomic stability. Todaro & Smith (2020) highlighted that sharp increases in interest rates can hinder economic growth by reducing investment, while overly aggressive rate cuts may, under certain circumstances, lead to excessive inflation. Similarly Majok et al., (2024)) emphasized that persistently high interest rates can weaken economic growth in the long term, particularly because the private sector heavily depends on credit-based financing.

Research by Syamsiyah, Ardana, & Bayumi (2022), indicates a negative correlation between inflation and economic growth, as high inflation disrupts markets and reduces the efficiency of resource allocation. In Indonesia, elevated inflation has a detrimental impact on economic growth, especially in sectors sensitive to price changes, such as manufacturing and household consumption.

In wealthy nation, the average annual inflation rate remains below 2 percent, whereas in developing countries like Indonesia, it typically falls between 4 and 6 percent. Indonesia's monetary authorities continue to strive to prevent inflation from escalating into double digits. The country's high inflation is largely driven by its rapidly growing economy. Additionally, rising costs in areas such as fuel prices, electricity tariffs, and transportation fares, along with specific domestic economic policies, have played a significant role in contributing to elevated inflation levels (Rangkuty et al., 2020)

Net export play a pivotal role in economic development by illustrating the impact of a countries export and import activities on economic growth. As a nation rich in natural resources such as gas and coal, Indonesia has a vital role in fostering innovation and driving its economic progress. International trade, in turn, contributes to economic growth by enhancing productivity and efficiency (Mazorodze, 2024; Sarwar at al., 2021). While net exports significantly influence economic expansion, reliance on commodity exports makes the economy susceptible to global price volatility. In modern economies, exports are essential, and research indicates that increasing manufacturing exports may serve as a more sustainable strategy for long-term economic growth (Sugiharti et al., 2020).

Net exports, which represent the difference between a nation's exports and imports, highlight the crucial role of international trade in economic development. Indonesia, with its abundant natural resources, is able to generate foreign currency and stimulate economic growth by exporting commodities such as coal, palm oil, and natural gas (Hossain, 2022). This demonstrates the importance of global trade in fostering economic growth through improved efficiency and productivity. According by (Umi, 2017), while net exports significantly contribute to economic growth, an overreliance on commodity exports can expose the economy to vulnerabilities from global price fluctuations. Modern economies depend heavily on exports, and studies suggest that increasing manufacturing exports could offer a more sustainable growth strategy (Sugiharti et al., 2020).

Additionally, research shows that while exports contribute to economic growth, imports have a detrimental effect (Hodijah & Angelina, 2021). The expansion of exports in Indonesia positively impacts the economy by boosting government revenue and improving the trade balance. A surplus in exports can help reduce the growing budget deficit. Exports also play a role in job creation and stimulating economic development. According to (Estevadeordal, 2017) and Upadhyaya et al., (2023) focusing on promoting exports and reducing imports is vital, as imports, while lowering costs for households and businesses, can negatively affect the economy.

Previous studies indicate an inverse relationship between inflation, interest rates, and currency exchange rates. While the results regarding inflation have varied, they are not consistent. It is essential to understand how factors such as SBI interest rates, currency values, net exports, inflation, and other economic variables influence Indonesia's economy, especially given its status as a developing nation. As a result, researchers are eager to explore the factors driving Indonesia's economic growth. By utilizing established theories and findings from previous research, this study aims to determine whether the dependent variables—exchange rates, interest rates, net exports, and inflation—align with the independent factors.

Effective policy-making relies on the use of objective and reliable research outcomes. This allows decision-makers to craft economic strategies that are adaptable and responsive to global changes. Governments can develop more efficient fiscal and monetary policies by understanding the impact of inflation, interest rates, net exports, and exchange rates on economic growth. Given Indonesia's dependence on commodity exports and its influence on global pricing, it is crucial for the country to focus on sustainable development to promote equitable and long-term economic prosperity.

While many studies on economic growth focus on individual factors like inflation or interest rates, this study takes a novel approach by examining four key variables—exchange rates, interest rates, inflation, and net exports—together. This approach offers a more holistic perspective on the factors driving Indonesia's economic development. It provides deeper insights into how these variables interact and collectively influence the Indonesian economy on a global scale.

2. METHODS

In this study, economic growth serves as the primary variable of interest, with exchange rates, interest rates, inflation, and net exports as the influencing factors. Economic growth is measured using Gross Domestic Product (GDP). To analyze the relationship, multiple linear regression is applied, enabling an examination of how these independent variables affect the dependent variable, both individually and collectively (Widarjono, 2018). The initial econometric model for this research is outlined in formula (1) prior to applying the Natural Logarithm transformation.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon \tag{1}$$

Equation after applying the natural logarithm is described in formula (2).

$$Y = \beta_0 + \beta_1 L_n X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \in \qquad (2)$$

The regression coefficients are represented as $\beta 1$, $\beta 2$, $\beta 3$, and $\beta 4$, where X1 is the currency exchange rate, X2 is the interest rate, X3 is inflation, X4 is net exports, Ln is the natural logarithm, and ε is the standard error. When Y represents economic advancement, $\beta 0$ serves as the constant factor.

Figure 1. Research Framework
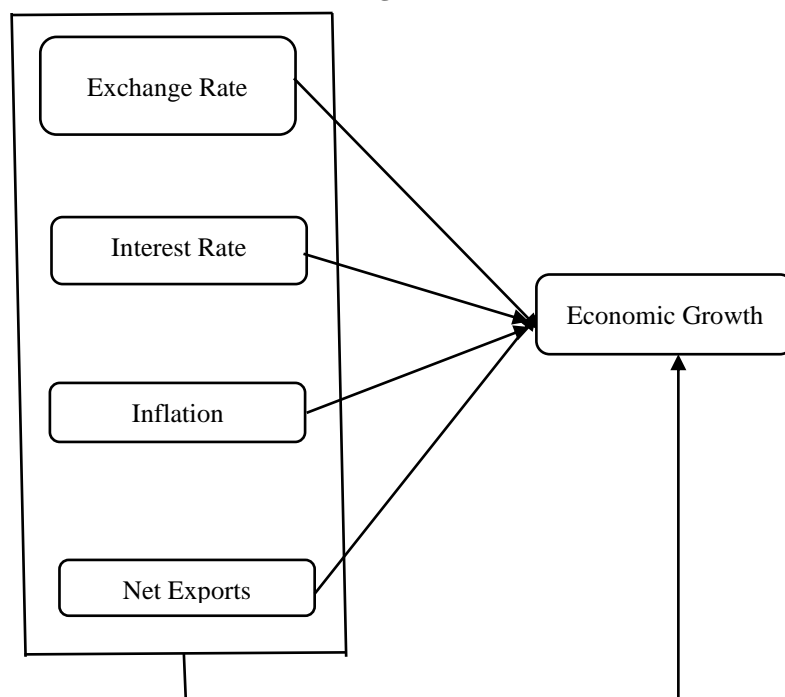
Description:
Partial Relationship Line ▼
Simultaneous Relationship Line ▼

Source: Author Data, 2024

Economic growth indicators over a given period can reflect a nation's development progress. Gross Domestic Product (GDP) is a fundamental measure of economic development and a reliable indicator of economic stability (Windhani, Purwaningsih, Mulyaningsih, Samudro, & Hardoyono, 2023). This research also explores the relationship between interest rates and economic growth, as illustrated in Figure 1. Two opposing forces are at play: rising and falling interest rates. Higher interest rates can lead to increased borrowing costs for businesses and households, which may reduce investment and consumption. Additionally, they can attract capital inflows, potentially strengthening the currency but at the risk of decreasing exports. Consequently, economic growth tends to slow due to reduced investment and consumption. On the other hand, lower interest rates can stimulate investment and consumption by making borrowing more affordable, thereby fostering short-term economic growth. However, this approach carries the risk of triggering inflation in the long run (Hoang, Thi, & Minh, 2020).

Economic growth serves as the primary driver of a nation's development and progress. As the economic system advances, citizens experience rising income levels, leading to improved well-being and quality of life. An increase in economic growth reflects the successful achievement of economic

development (Mankiw, 2019). The Solow Model emphasizes that economic growth is fueled by advancements in physical capital rather than solely by labor or capital stock (Todaro & Smith, 2020). Additionally, various prominent growth theories highlight the critical role of technological innovation in driving economic growth.

A nation`s foreign exchange valuation is influenced by fluctuations in exchange rates. An increase in exchange rates does not necessarily lead to economic growth (Ybrayev, 2021). Higher exchange rates often lead to a decline in net exports, which can negatively impact production and hinder economic growth (Heriqbaldi et al., 2023). So this research takes the form of knowing the effect of the exchange rate on economic growth in Indonesia as per the research framework above.

Inflation refers to a significant and sustained increase in prices over a specific period. It is a fundamental aspect of the economy, not merely a numerical figure to be managed (controlled inflation). Inflation reflects an overall rise in the cost of goods (Fiaz at al., 2022). As inflation continues, it reduces purchasing power due to declining real incomes. This situation forces individuals to spend more, even though their spending becomes less effective (Majok et al., 2024). This research examines the relationship between inflation and economic growth, highlighting how high inflation can erode purchasing power, leading to reduced consumption and investment. It also increases production costs, particularly when raw material prices rise, potentially slowing economic growth if not accompanied by productivity gains. Conversely, low inflation may weaken aggregate demand and hinder economic activity, prompting businesses and consumers to delay spending and investment. Therefore, to support sustainable economic growth, maintaining moderate inflation is essential, as it ensures strong demand and economic expansion while keeping growth within a manageable and stable framework.

Net exports present the difference between the total value of a nation's exports and its imports. Typically expressed as (X—M), positive net exports indicate that the value of exports exceeds that of imports. On the other hand, negative net exports signify that imports surpass the value imports' value. In opposite, a poor internet export means that the value of imports surpasses that of exports.

Exports refer to good ans services produced in one country and sold to buyers in another. A significant volume of exports has a substantial impact on the global balance of trade. Modern economies depend on exports as they provide individuals and businesses access to new product markets (Sugiharti et al., 2020). Exports are essential for fostering economic growth, with global trade—driven mainly by exports—contributing significantly to economic development (Sugiharti et al., 2020). Exports are essential for fostering economic growth, with global trade—driven mainly by exports—contributing significantly to economic development (Ginting, 2017). Moreover, exports positively influence economic growth and highlight the participation of domestic firms in international markets (Stanić & Račić, 2019).

This research examines the relationship between net national exports by analyzing whether net exports are positive or negative. A positive net export balance can boost domestic income and production, stimulate economic growth by creating jobs, and increase national output. In contrast, negative net exports (where imports exceed exports) may indicate reliance on imported goods and a decline in domestic output(Safitri, Anwar, & Abbas, 2022). Additionally, a persistent trade deficit can lead to increased capital outflows, which may influence economic growth dynamics

3. RESULT AND DISCUSSION
3.1 Results

The regression models employed in this study need to satisfy the requirements for normality, multicollinearity, heteroscedasticity, and other standard assumption tests. The data for the study were analyzed using Eviews software.

3.1.1 Normality Test

This study applies a normality test to evaluate the regression model and assess whether confounding or residual variables follow a normal distribution. The One-Sample Kolmogorov-Smirnov test is used for this normality evaluation. The test examines the asymptotic significance or the p-value for each tail. If the asymptotic significance (asymp. Sig.) is below 0.05, it indicates that the residual data is not normally distributed. On the other hand, a value above 0.05 suggests that the residual data is normally distributed (Gujarati, 2013). The next section presents the results of the normality test.

Table 1. Results of the Normality

One-Sample Kolmogorov-Smirnov Test	
	Unstandardized Residual
N	36
Kolmogorov-Smirnov Z	.527
Asymp. Sig. (2-tailed)	.944

Table 1 shows the results of the normality test, with a Kolmogorov-Smirnov significance value of 0.944, which is above the 0.05 threshold. This suggests that the regression model is suitable, as it satisfies the normality assumption for the data used in this study.

3.1.2 Multicollinearity Test Results

Collinearity is a technique used to assess the relationship between two or more independent variables in multiple regression analysis. To identify the presence of multicollinearity, the tolerance values and Variance Inflation Factor (VIF) for each independent variable are evaluated. Multicollinearity is not considered an issue if the tolerance value is greater than 0.10 and the VIF is less than 10 (Wooldridge, 2018). A detailed summary of the multicollinearity evaluation is provided in Table 2.

Table 2. Multicollinearity Test Results

Models	Collinearity Statistics		Description
	Tolerance	VIF	
Ln_X1	0.457	2.187	There is no multicollinearity.
X2	0.396	2.527	There is no multicollinearity.
X3	0.479	2.086	There is no multicollinearity.
Ln_X4	0.858	1.165	There is no multicollinearity.

The multicollinearity test results, as outlined in Table 2, reveal that the Collinearity Statistics, including tolerance and VIF values, meet the required thresholds. For variable X1, the tolerance value is 0.457, exceeding 0.10, and the VIF is 2.187, below 10. Similarly, variable X2 shows a tolerance value of 0.396, which is greater than 0.10, and a VIF of 2.527, also below 10. Variable X3 has a tolerance of 0.479, above 0.10, with a VIF of 2.086, remaining under 10. Finally, variable X4 demonstrates a tolerance value of 0.858, exceeding 0.10, and a VIF of 1.165, still below 10. These findings indicate that none of the four variables exhibits multicollinearity issues.

3.1.3 Heteroscedasticity Test Results

Das (2019) explains that the assessment aims to determine whether the variability of residuals differs across observations. A robust regression model satisfies the heteroscedasticity criterion. In this study, the Glejser test was used to evaluate

heteroscedasticity. If the p-values for all independent variables are greater than 0.05, it can be inferred that the regression model meets the heteroscedasticity assumption. Table 3 provides a detailed summary of the heteroscedasticity evaluation results.

Table 3. Results of the Heteroscedasticity Test

Coefficients

Models		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.177	.077		2.299	.028
	Ln_X1	-.014	.010	-.329	-1.394	.173
	X2	-.003	.008	-.116	-.458	.650
	X3	.011	.006	.390	1.691	.101
	Ln_X4	.004	.002	.338	1.966	.058
a. Dependent Variable: Abs_Res						

The results of the heteroscedasticity analysis using the Glejser test, as shown in Table 3, indicate the following significance levels: variable X1 has a significance level of 0.173, which is greater than 0.05; variable X2 records a significance level of 0.650, also exceeding 0.05; variable X3 shows a significance level of 0.101; and variable X4 presents a significance level of 0.058. Based on these findings, it can be concluded that the regression model used in this study does not exhibit heteroskedasticity.

3.1.4 Test Results of Determination (R^2)

The coefficient of determination (R^2) is a key measure used to evaluate a model's ability to explain variations in the dependent variable (Wooldridge, 2018). R^2, which reflects the determination coefficient, ranges from 0 to 1. A higher R^2 value indicates that the independent variables effectively account for the variability in the dependent variable. Conversely, an R^2 value approaching 1 signifies that the independent variables can accurately predict changes in dependent variable (Baltagi, 2021).

Table 4. Test Results of Determination (R^2)

Models	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.998[a]	.997	.996	.09980

Table 4 show that the model achieved an R^2 value of 0.998, equivalent to 99.8%. This indicates that the independent variables in the model explain 99.8% of the variation in the dependent variable. However, it also implies that 0.2% of the variability remains unexplained, suggesting the potential influence of factors not included in the model.

3.1.5 F Test Results

The F-test is employed to evaluate the extent to which independent variables account for the variation in the dependent variable (Wooldridge, 2018). This test is demonstrated in table 5.

Table 5. F Test Results

Models	F Count	Sig.
1	2451.635	0,000

The F Count value is 2,451.635, obtained from testing four independent variables simultaneously: exchange rates, interest rates, inflation, and net exports. With a significance probability value of 0.0001, which surpasses the F statistic threshold of 2.679, it is evident that the significance probability is below 0.05. This indicates that the independent variables collectively influence the dependent variable.

3.1.6 T Test Results

The T-test, also known as the partial test, evaluates the individual impact of each independent variable on the dependent variable. In contrast, the F-test analyzes the combined effect of all independent variables. Partial regression testing, while holding other variables constant, seeks to identify the specific influence of a single independent variable on the dependent variable (Bambang, 2012). The results of this test are presented in Table 6.

Table 6. T Test Results

Coefficients

Models	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	17.818	.156		114.120	.000
X1 (exchange rate)	-1.677	.021	-1.197	-80.299	.000
1 X2 (Interest Rate)	.119	.015	.123	7.676	.000
X3 (inflation)	.653	.013	.751	51.571	.000
X4 (Exports Netto)	-.091	.004	-.266	-24.432	.000
a. Dependent Variable: Y (Economic Growth)					

Based on the partial test results in Table 6, the exchange rate variable exhibits a negative effect of -1.667. In contrast, the variable under review shows a positive effect of 0.119. Additionally, the net exports variable has a negative impact of -0.091, while the inflation variable exerts a positive influence of 0.653. The T-test results can be represented through the regression function provided in formula (3).

$$Y = 17,818 - 1,677X_1 + 0.119X_2 + 0.653X_3 - 0.091X_4 + e \tag{3}$$

Constant

$$B = 17,818, t = 114.120, Sig. = 0.000 \tag{4}$$

The constant in [formula (4)] implies that the economy will expand to 17,818 if all independent variables—such as exchange rate, interest rate, inflation, and net exports—are set to zero. With a significance value of 0.000, which is below 0.05, this constant is deemed significant, demonstrating its substantial influence on the model.

Exchange Rate

$$B = -1.677, t = -80.299, Sig. = 0.000, Beta = -1.197 \tag{5}$$

Formula (5) illustrates the negative coefficient of -1.677 for the exchange rate, meaning that for each unit increase in the exchange rate, economic growth will decrease by 1.677 units. The exchange rate has a significant impact on economic growth ($p < 0.001$), with a t-value of -80.299 reflecting a strong and substantial negative effect. Additionally, a beta value of -1.197 suggests that, like the other variables, the exchange rate factor plays a crucial role.

Interest Rate

B = 0.119, t = 7.676, Sig. = 0.000, Beta = 0.123   (6)

Formula (6) presents a positive coefficient of 0.119 for interest rates, indicating that a rise in interest rates can lead to a 0.119-unit increase in economic growth for each unit increase in those rates. This value significantly influences economic growth (Sig. = 0.000). While interest rates have a positive effect, their impact is relatively small compared to other factors, as reflected by the beta value 0.123.

Inflation

B = 0.653, t = 51.571, Sig. = 0.000, Beta = 0.751   (7)

With a favorable coefficient of 0.653 as shown at formula (7)an increase in inflation will lead to economic growth of 0.653 units for each unit rise. This factor significantly affects economic development (p = 0.000). The analysis shows that inflation strongly influences economic growth, supported by its t-value of 51.571. With a beta of 0.751, inflation is important in driving economic expansion.

Net Exports

B = -0.091, t = -24.432, Sig. = 0.000, Beta = -0.266   (8)

As show in formula (8), net exports have a negative coefficient of -0.091, meaning that each unit increase in net exports leads to a 0.091-unit decrease in economic growth. This value is significant for economic growth (Sig. = 0.000), with a t-value of -24.432 indicating a notable negative impact. However, with a Beta value of -0.266, the influence of net exports is less pronounced compared to other variables such as inflation or the exchange rate. Prior to and following the pandemic, exports hindered economic growth due to low export volumes and reduced competitiveness in the global market. For instance, the coffee sector, which struggles to compete internationally, highlights the need for product innovation to enhance competitiveness. Improving both domestic and international sales or exports could stimulate economic activity in Indonesia, generate substantial employment opportunities, and boost overall economic growth.

3.2 Discussion

3.2.1 Exchange Rate on Economic Growth in Indonesia

The value of the currency significantly negatively impacts economic growth, indicating that adverse effects could pose a threat to economic stability. These findings are consistent with the research of (Makmur et al., 2023), which demonstrates that a rise in currency value hampers economic development, especially in developing nations.

When the rupiah depreciates and the dollar strengthens, economic growth tends to decline. A weaker rupiah signals economic struggles, causing foreign investors to withdraw their investments, highlighting the significant impact of rupiah fluctuations on Indonesia's economic potential. Conversely, when the rupiah appreciates and the dollar weakens, economic growth generally improves. A more stable rupiah exchange rate enhances foreign investors' confidence in the national economy, encouraging increased foreign investment, which can further boost economic growth in Indonesia. Research by Shintya & Wahyudi (2022) found that the exchange rate negatively affects economic growth, with an increase in the exchange rate linked to a decrease in economic progress. According to the Mundell-

Fleming model, there is a negative correlation between exchange rates and economic growth, meaning that a rise in the exchange rate leads to lower net output—the difference between exports and imports. This reduction diminishes the production of goods, ultimately hindering economic progress, as noted by (Mankiw, 2019). Thus, from a Keynesian perspective, the government plays a vital role in ensuring stable economic growth.

3.2.2 Interest Rates on Economic Growth in Indonesia

Interest rates play a crucial role in influencing investments, where lower rates tend to encourage investments, thereby stimulating economic growth (Hadush et al., 2023). The concept that suggests excessively high interest rates can discourage capital owners from investing in promising businesses, leading to a sloswdown in economic growth, and vice versa, is well-established. The amount of money circulating in the economy can influence inflation. When interest rates on loans and deposits rise, individuals may prefer saving their money in banks, which reduces the flow of funds in the economy. If higher interest rates cause entrepreneurs to reduce investments due to increased operational costs, it will lower the purchasing power of goods and services, negatively impacting the economy and weakening the rupiah's value. This leads to economic instability in the country.

This study reveals that the interest rate has a significant value of 0.119. it suggests that the interest rate has a substantial positive impact on economic growth. These results align with the research of (Stanić & Račić, 2019), which emphasizes the significant influence of inflation, interest rates, and exchange rates on economic growth, both individually and collectively. Similar studies by Adi & Budiarti (2015) and Luhfiana, Imaniar, & Mumtaz, (2022), found that the BI Rate positively affects economic growth, with a regression coefficient of 0.119 and a significance value of 0.000, which is below 0.05, indicating a boost in economic growth.

Interest rates are crucial in shaping current investments, as lower rates tend to boost investment, driving economic growth. This supports the theory that excessively high interest rates can discourage capital owners from investing in promising businesses, leading to a slowdown in economic development, and vice versa. The amount of money circulating in the economy also affects inflation (Van Dan & Binh, 2019). When interest rates on credit and deposits rise, people may opt to save more in banks, which reduces the circulation of money in the economy. If higher interest rates lead business owners to scale back their investments due to increased operational costs, it will reduce the purchasing power of goods and services, resulting in an economic downturn and a depreciation of the rupiah, causing instability in the economy. Therefore, interest rate policies are a key focus for both the central bank and the government in maintaining the country's economic stability (Wardani, 2022).

3.2.3 Inflation on Economic Growth in Indonesia

Inflation and economic growth are key macroeconomic factors that are closely linked (Saefulloh et al., 2023). Keeping inflation low and stasble can encourage economic growth, as it ensures smooth economic activities. When inflation is stable and manageable, it motivates entrepreneurs to increase their production (Ekinci et al., 2020). Inflation-driven price increases can prompt business owners to ramp up production in anticipation of higher profits (Salim, Fadila, & Purnamasari, 2021). An increase in production boosts gross domestic product (GDP), which in turn supports economic growth. However, if inflation becomes excessive or uncontrolled, it can have a negative impact on the economy.

Excessive Price increases or inflation can lead to a situation where individuals who were previously able to meet their daily needs can no longer do so, due to rising prices (Ekinci et al., 2020). This creates economic instability and results in a slowdown in economic growth (Nguyen & Huyen, 2024). On the other hand, very low and unstable inflation can also harm economic growth (Tobă, Simion, & Țîrcă, 2023). Moderate and unstable price increases may reduce entrepreneurs' motivation to increase production, which can affect the GDP and subsequently hinder a country's economic growth.

Stable inflation is essential for promoting economic growth, as a reasonable level of inflation can boost economic activities. Research by (Makmur et al., 2023) shows that when inflation is well-managed, it can encourage both consumption and investment. A moderate inflation rate helps businesses feel more optimistic about future economic conditions, fostering growth. Additionally, stable inflation signals a strong economy, which increases confidence among market participants and stimulates economic activity (Majok et al., 2024). Keeping inflation within manageable levels can lead to higher nominal wages, boosting people's purchasing power and driving economic growth. However, it is crucial to acknowledge that excessive inflation can threaten economic stability, requiring careful monitoring by the government and monetary authorities. Moderate inflation can invigorate economic dynamism, as demonstrated by the positive effects of steady inflation on economic growth (Ula, 2024). Therefore, through Bank Indonesia, the government should actively implement macroeconomic policies to maintain low and stable inflation, supporting consistent and sustainable economic development.

Research findings suggesting that inflation has a positive effect on economic growth challenge traditional economic theories, which typically consider inflation as a barrier to growth. While inflation can sometimes yield benefits, unchecked inflation may lead to risks such as price volatility and diminished purchasing power (Nurajizah et al., 2024).

To address this, the government must adopt monetary policies that regulate the money supply and stabilize exchange rates to reduce price fluctuations in imports and exports. Despite its potential benefits, inflation needs to be maintained at manageable levels, as both excessive and minimal inflation can undermine long-term economic stability (Pollin & Bouazza, 2024). A comprehensive approach that balances monetary policy, fiscal measures, and structural reforms is crucial to preventing inflation from becoming a barrier to sustainable economic growth.

3.2.4 *Net Exports on Economic Growth in Indonesia*

The research findings revealed that exports had a negative impact on economic growth, as indicated by a regression coefficient of -0.091 and a significance level of 0.0580, which is greater than 0.05. During and after the pandemic, exports negatively influenced economic growth due to their low volume and lack of global market competitiveness. For example, the coffee industry, which has not yet reached a competitive level compared to Vietnam, highlights the need for product innovation. Such improvements would enhance competitiveness against other countries, boosting both domestic and international sales or exports, thereby stimulating economic activity in Indonesia. Moreover, this would create numerous job opportunities and contribute to economic development.

The results of this research align with previous studies (Shintya & Wahyudi, 2022); which found that exports are negatively correlated and have a significant impact on economic growth. This outcome is due to the competitive dynamics in international trade, where Indonesian products fail to meet the competitive standards set by other countries offering similar goods. Furthermore, this study supports the findings of Pangaribuan et al., (2024),

which, through time series analysis, demonstrate that exports have a negative and significant effect on economic growth. The study also suggests that improving the efficiency of export permit services and focusing on key commodities could help improve market access. On the other hand, some studies argue that export levels positively and significantly impact gross domestic product as a measure of economic growth, citing that increased export activities lead to higher economic growth, greater production of goods and services, and the creation of new job opportunities in the community (Luhfiana et al., 2022).

An export surplus surplus indicates a strong economy, suggesting that an increase in net exports should improve the balance of transactions and provide more resources for domestic investment. An increase in export goods directly contributes to GDP or income growth. Since exports play a more significant role in driving economic growth than imports, this finding is consistent with research, which showed that exports did not have a positive or significant impact on Indonesia's economic growth. The high demand for goods and services from other countries leads to export values surpassing imports (Ervani, 2013). Growing foreign demand stimulates the production of goods and services, potentially driving higher growth in Indonesia.

4. CONCLUSION

The results of this research suggest that the exchange rate significantly and adversely affects economic growth. This implies that economic expansion frequently accelerates when the value of the rupiah falls relative to other currencies. Additionally, interest rates favour economic growth, meaning that higher interest rates can swiftly boost economic development. Similarly, inflation has a positive relationship with economic growth, which means that rising inflation can sometimes lead to increased economic activity. Conversely, net exports restrain economic growth, indicating that a drop in net exports (such as when imports outpace exports) can also slow economic expansion. To ensure continuous economic growth, the government and the Bank of Indonesia must intervene with policies regulating interest rates, exchange rates, and inflation under stable conditions, thus fostering economic activity that eventually contributes to growth.

The policies that could be implemented include ensuring the stability of the rupiah exchange rate to avoid significant declines, carefully managing interest rates, effectively controlling inflation, and promoting export growth by enhancing the competitiveness of Indonesian products in global markets. This can be accomplished by fostering product innovation and improving the quality of exports to better compete with goods from other countries. Furthermore, trade policies that support exports, particularly in sectors with high growth potential, are necessary. A cohesive and stable approach to interest rates, exchange rates, inflation, and exports can drive more dynamic economic activities, ultimately supporting sustained long-term economic growth.

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