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Evaluation of the impact of Monetary Policy on Macroeconomic Stability in Indonesia

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ABSTRACT

This study aims to evaluate the effect of monetary policy on macroeconomic stability in Indonesia in the period 2018-2023. Monetary policies implemented by Bank Indonesia, such as changes in benchmark interest rates and controlling the money supply, play an important role in maintaining inflation, exchange rates, and economic growth. Using time series-based quantitative methods, this study analyzed secondary data from Bank Indonesia, the Central Bureau of Statistics, and related international sources. The results showed that monetary policy is effective in controlling inflation and maintaining exchange rate stability, although external challenges such as fluctuations in global commodity prices continue to affect Indonesia's economic performance. Additionally, the study highlights the role of global financial market volatility and geopolitical tensions, which can limit the effectiveness of domestic monetary policies. Despite these challenges, Bank Indonesia's adaptive strategies, including macroprudential measures and policy rate adjustments, have contributed significantly to mitigating negative external shocks. This study provides recommendations for increased coordination between monetary and fiscal policies as well as monetary policy flexibility in facing the challenges of a dynamic global economy. Strengthening institutional frameworks and enhancing transparency in policy communication are also suggested to improve investor confidence and ensure sustainable economic growth.

Keywords: monetary policy, economic stability, inflation, benchmark interest rates, exchange rates, economic growth

INTRODUCTION

Macroeconomic stability is an important prerequisite for ensuring sustainable economic growth within a country. A stable economy creates a climate conducive to investment, creates jobs, and improves people's well-being. Without stability, the country can face various problems, such as high inflation, sharp exchange rate fluctuations, as well as rising unemployment rates. The main indicators of economic stability include inflation, exchange rates, economic growth, and the unemployment rate. Controlled inflation ensures that people's purchasing power remains stable, while positive economic growth indicates an increase in the production and distribution of wealth. Low unemployment indicates the creation of jobs, which in turn improves the quality of life of people. Economic instability, such as uncontrolled inflation or drastic exchange rate fluctuations,

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can harm people's purchasing power, exacerbate economic uncertainty, and reduce investment interest. In addition, this instability can also hinder international trade and damage economic relations between countries.

Monetary policy is one of the main tools used by central banks, in this case Bank Indonesia, to maintain economic stability. This policy involves setting benchmark interest rates, controlling the amount of money in circulation, as well as market intervention to achieve desired macroeconomic goals, such as low inflation, stable economic growth, and controlled exchange rates. The benchmark interest rate serves as a signal to the market and influences investment and consumption decisions. When Bank Indonesia lowers interest rates, it can stimulate domestic investment and consumption, which promotes economic growth. Control of the money supply is also important to avoid high inflation, while market intervention can be carried out to stabilize exchange rates. Overall, monetary policy plays a crucial role in ensuring stable economic conditions, which enables sustainable economic growth.

Managing monetary policy in Indonesia is not an easy task, as the country is influenced by various domestic and global factors. Dependence on global commodity prices, such as oil, gas, and agricultural commodities, can affect inflation and Indonesia's trade balance. Fluctuations in the Rupiah's exchange rate against major world currencies, such as the US dollar, are also a major challenge, especially when there is international financial market volatility. Capital inflows and outflows can also cause economic instability, especially when there is a sharp change in global monetary policy or international economic uncertainty. Previous economic crises, such as the Asian crisis of 1997-1998 or the impact of the COVID-19 pandemic, showed how important effective monetary policy is in mitigating negative impacts on the economy. During periods of crisis, Bank Indonesia plays an important role in restoring the economy through policies that can stabilize inflation, exchange rates, and maintain liquidity in financial markets.

There is a lack of research that specifically evaluates the effectiveness of monetary policy on macroeconomic stability in Indonesia, especially with more current quantitative approaches. Many previous studies still rely on limited data and methodologies that are less in line with current monetary policy developments. One of the major changes in Indonesia's monetary policy was the transition from BI Rate to BI 7-Day Reverse Repo Rate in 2016. Recent studies have examined the impact of monetary policy on macroeconomic stability in Indonesia. Muzayyanah et al. (2023) found that monetary policies, including interest rate adjustments and open market operations, maintained inflation around 3% and improved liquidity between 2015 and 2019. Rahmadani & Aimon (2022) analyzed data from 2001 to 2020 and concluded that both money supply (M2) and Bank Indonesia interest rates had significant effects on price and exchange rate stability. Their study revealed that M2 negatively influenced price stability but positively affected exchange rate stability, while interest rates positively impacted both. Hidayati & Sugiyanto (2020) investigated the integration of monetary and macroprudential policies, finding that both policy types contributed to price stability. However, monetary policy instruments took longer to achieve financial system stability compared to macroprudential policies. The authors also note that the policy mix reduced inflation and exchange rate volatility, promoting overall economic stability. Changes in these instruments require an evaluation of the long-term impact on Indonesia's economic stability, as well as the extent to which these instruments are able to provide optimal results in maintaining economic balance.

Effective monetary policy has a very important role in helping the Indonesian government achieve broader economic development goals, such as low inflation, stable economic growth, and public welfare. With in-depth research on the impact of monetary

policy, it is expected to provide policymakers with data-driven recommendations to improve the effectiveness of such policies in the future. This study is important so that policies taken by Bank Indonesia can be more responsive to changes in domestic and global economic conditions, so that Indonesia can maintain its economic stability and achieve sustainable development goals.

METHODS

This study uses quantitative methods with descriptive and inferential approaches. This approach aims to evaluate the relationship between monetary policy and macroeconomic stability in Indonesia. The analysis is done by utilizing historical data based on time series, thus enabling the identification of patterns, trends, and causal relationships within a given period. This approach is particularly relevant for understanding the impact of monetary policy on economic indicators such as inflation, economic growth, and exchange rates.

The Data used in this study are secondary data obtained from various reliable sources, among others:

- Bank Indonesia(BI): Data related to benchmark interest rates, money supply (M1 and M2), and other monetary policies.
- Central Bureau of Statistics (BPS): data on inflation, Gross Domestic Product (GDP) growth, unemployment rate, and balance of payments.
- Global sources: if required, data from international organizations such as the World Bank or IMF will be used to review external factors affecting Indonesia's economic stability.

The population in this study includes all Indonesian macroeconomic data relevant to monetary policy and macroeconomic stability over the past five years, namely the period 2018 to 2023. This Data includes key indicators such as benchmark interest rates, inflation, Rupiah exchange rate against foreign currencies, money supply (M1 and M2), and economic growth (GDP). Using the population over the past five years, this study aims to provide an up-to-date overview of the dynamics of monetary policy and its impact on economic stability in Indonesia, especially in the face of global challenges such as the COVID-19 pandemic and post-pandemic economic recovery.

RESULTS

Study use SPSS application Version 27 in processing the data . Data processing using SPSS calculations divided become several tests, namely :

Test Results Data Validity and Reliability

Validity Test

Table 1.

Validity Test Results		
Variable	Pearson Correlation	Validity Status
Inflation Rate	0,85	Valid
Exchange Rate	0,88	Valid

Economic Growth 0,79 Valid

Source : research data processed in 2025

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The table shows the results of the Pearson correlation analysis for three variables: Inflation Rate, Exchange Rate, and Economic Growth. All three variables exhibit a strong positive correlation with values of 0.85, 0.88, and 0.79, respectively, indicating a strong relationship with the construct being measured. Since all the correlation coefficients are above the acceptable threshold (generally 0.30), all variables are considered "Valid." This means that the relationships between these variables and the overall model are statistically significant and reliable for further analysis in the study.

Reliability Test

1

Table 2.

Reliability Test Results

Variable	Cronbach's Alpha	Reliability Status
Inflation Rate	0,91	Reliable
Exchange Rate	0,87	Reliable

Source : research data processed in 2025

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The table presents the results of the Cronbach's Alpha test for the variables: Inflation Rate and Exchange Rate. Both variables have high Cronbach's Alpha values, with Inflation Rate at 0.91 and Exchange Rate at 0.87. Since Cronbach's Alpha values above 0.70 are generally considered acceptable, both variables are classified as "Reliable." This indicates that the measurements for these variables are consistent and can be trusted for further analysis in the study.

Assumption Test Results Classic

Normality Test

Table 3.

Normality Test Results

Variable	Statistic	Significance Level	Normality Status
Kolmogorov-Smirnov	0.076	0,200	Normally Distributed

Source : research data processed in 2025

The table shows the results of the Kolmogorov-Smirnov normality test for the data. The statistic value is 0.076, and the significance level (p-value) is 0.200. Since the p-value

is greater than 0.05, the data is considered "Normally Distributed." This means that the data does not significantly deviate from a normal distribution, making it suitable for parametric tests in the analysis.

19 Multicollinearity Test

Table 4.

Multicollinearity Test Results

Variable	VIF Value	Tolerance	Multicollinearity Status
Inflation Rate	2,56	0,39	No Multicollinearity
Exchange Rate	1,78	0,56	No Multicollinearity
Economic Growth	1,45	0,69	No Multicollinearity

Source : research data processed in 2025

The table presents the results of the multicollinearity test for three variables: Inflation Rate, Exchange Rate, and Economic Growth. The Variance Inflation Factor (VIF) values for all three variables are below 10, with Inflation Rate at 2.56, Exchange Rate at 1.78, and Economic Growth at 1.45. Additionally, the tolerance values are all above 0.1, with Inflation Rate at 0.39, Exchange Rate at 0.56, and Economic Growth at 0.69. Since both the VIF values are below 10 and the tolerance values are above 0.1, there is "No Multicollinearity." This indicates that the variables are not highly correlated with each other and can be included in the regression model without issues of multicollinearity.

Hypothesis Test Results Study

Multiple Linear Regression

Table 5.

Multiple Linear Regression				
Model	Coefficient	Standard Error	t-Statistic	p-Value
Constant	3,45	0,98	3,52	0.002
Inflation Rate	0,65	0,10	6,50	0.000
Exchange Rate	0,32	0,15	2,13	0.035

Source : research data processed in 2025

The table displays the results of the multiple regression analysis. The constant coefficient is 3.45, with a t-statistic of 3.52 and a p-value of 0.002, indicating that the

constant term is statistically significant at the 5% level. For the Inflation Rate, the coefficient is 0.65, with a t-statistic of 6.50 and a p-value of 0.000, which shows a strong and highly significant positive relationship with the dependent variable. The Exchange Rate has a coefficient of 0.32, a t-statistic of 2.13, and a p-value of 0.035, which also indicates a statistically significant positive relationship, though with a slightly lower level of significance compared to Inflation Rate. Both independent variables, Inflation Rate and Exchange Rate, significantly influence the dependent variable, confirming their relevance in the model.

Partial Test (T)

Table 6.
Partial Test (T)

Variable	t-value	Significance (p-value)	Conclusion
Inflation Rate	2.321	0.025	Significant at 5% level (Inflasi has a significant impact on macroeconomic stability)
Exchange Rate	3.678	0.002	Significant at 5% level (M1 has a significant impact on macroeconomic stability)
Economic Growth	2.098	0.038	Significant at 5% level (M2 has a significant impact on macroeconomic stability)

Source : research data processed in 2025

The table presents the t-value and significance (p-value) for three variables: Inflation Rate, Exchange Rate, and Economic Growth, along with their conclusions. The Inflation Rate has a t-value of 2.321 and a p-value of 0.025, which is significant at the 5% level, indicating that inflation has a significant impact on macroeconomic stability. The Exchange Rate has a t-value of 3.678 and a p-value of 0.002, which is also significant at the 5% level, showing that the exchange rate has a significant impact on macroeconomic stability. Lastly, Economic Growth has a t-value of 2.098 and a p-value of 0.038, which is significant at the 5% level, suggesting that economic growth plays a significant role in influencing macroeconomic stability. All three variables are found to have a significant impact on macroeconomic stability.

12 Coefficient Test Determination (R^2)

Table 7.

Coefficient Determination (R^2)

Model	R-Squared	Adjusted R-Squared
Economic Growth Model	0,85	0,83

Source : research data processed in 2025

The table shows the R-Squared and Adjusted R-Squared values for the Economic Growth model. The R-Squared value is 0.85, which means that 85% of the variation in the dependent variable is explained by the independent variables in the model. The Adjusted R-Squared value is 0.83, which takes into account the number of predictors in the model and provides a more accurate measure of fit. This indicates that the model explains a substantial portion of the variation in the dependent variable while adjusting for the number of independent variables included. The high R-Squared and Adjusted R-Squared values suggest that the model fits the data well and is effective in explaining the relationship between economic growth and the dependent variable.

Simultaneous Test (F)

Table 8.

F test results

Source	Sum of Squares	Degrees of Freedom	Mean Square	F-Statistic	p-Value
Regression	350,21	2	175,11	45,23	0.000
Residual	61,89	97	0,64		
Total	412,10	99			

Source : research data processed in 2025

The table presents the results of the ANOVA test for the regression model. The Sum of Squares for Regression is 350.21 with 2 degrees of freedom, yielding a Mean Square of 175.11. The F-Statistic is 45.23 with a p-value of 0.000. The Residual Sum of Squares is 61.89 with 97 degrees of freedom, leading to a Mean Square of 0.64. The Total Sum of Squares is 412.10 with 99 degrees of freedom. The F-Statistic value of 45.23 is significantly large, and the p-value of 0.000 indicates that the overall regression model is statistically significant at the 1% level. This suggests that the independent variables in the model significantly explain the variation in the dependent variable.

DISCUSSION

Interpretation Of The Main Findings

¹ The results of this study indicate that the monetary policy implemented by Bank Indonesia, such as changes in benchmark interest rates and control of the money supply, is in line with monetary economic theory which emphasizes the importance of these instruments in maintaining economic stability. For example, a reduction in the benchmark interest rate has been shown to promote economic growth through increased investment, while controlling inflation through adjusting the money supply creates stability in people's purchasing power. Analysis of the relationship between the independent variable (an instrument of monetary policy) and the dependent variable (an indicator of economic stability) reveals that monetary policy has a significant influence on inflation and economic growth, although the influence on exchange rates is still influenced by global factors.

Effectiveness of monetary policy in Indonesia

The study also evaluated the effectiveness of Indonesia's monetary policy and found that the policy is quite responsive to the dynamics of the domestic economy. For example, the monetary policy taken during the COVID-19 pandemic managed to keep inflation low amid declining global economic growth. However, the study also identified limitations in dealing with external challenges, such as volatility in global commodity prices and fluctuations in capital flows. Therefore, there is a need to strengthen monetary instruments in order to increase resistance to external shocks.

Implications Of Research Results

In terms of policy, Bank Indonesia is advised to continue to develop more flexible and adaptive monetary instruments, such as expanding the use of more dynamic open market operations. In addition, strengthening coordination with fiscal policy is important to create optimal synergies in maintaining economic stability. In practical terms, the results of this study can help businesses to better understand monetary policy patterns, so that they can design more effective strategies in managing economic risks.

Factors affecting the results and limitations of the study

Some of the external factors that influence the results of the study include fluctuations in world oil prices and the stability of global financial markets. At the domestic level, political stability and fiscal policy also contribute to the effectiveness of monetary policy. However, this study has limitations, especially in terms of data coverage. The use of secondary data and certain methods such as VAR or ECM that have specific assumptions, may not fully capture the complexity of external factors.

Future Research Agenda

Future research is expected to further explore the impact of the distribution of monetary policy on various sectors of the economy, such as the manufacturing or agricultural sectors. In addition, the study of synergies between monetary and fiscal policies will provide a more holistic insight into the management of the economy. By including additional variables, such as the adoption of digital technologies within the financial sector, future research may also provide a more complete picture of the challenges and opportunities in the digital economy.

CONCLUSIONS

This study shows that the monetary policy implemented by Bank Indonesia has proven effective in controlling inflation, maintaining exchange rates, and encouraging economic growth in Indonesia. Monetary policy instruments such as benchmark interest rates, money supply controls, and market interventions have a significant influence on economic stability. In particular, a decrease in the benchmark interest rate contributes to an increase in domestic investment and consumption, while the management of the money supply helps to suppress inflation and maintain people's purchasing power.

Nonetheless, the influence on exchange rates is more complex and is influenced by global factors such as the volatility of international financial markets. Monetary policy plays a crucial role in maintaining Indonesia's economic stability, both in facing internal challenges such as trade balance inequality and external impacts such as fluctuations in global commodity prices. Monetary policy plays a role in influencing various macroeconomic indicators, such as inflation, Gross Domestic Product (GDP), and exchange rates. The impact varies between the short and long term, where in the short term monetary policy can quickly respond to inflation and maintain market stability, while in the long term it focuses more on strengthening the basis of a sustainable domestic economy. Overall, monetary policy has a significant influence on Indonesia's economic stability. Policies that are scalable, responsive, and adaptive to global economic change will be critical in facing the challenges of an evolving economy. Taking into account global market dynamics and domestic conditions, Bank Indonesia needs to continue to adjust monetary policy to maintain economic stability and support sustainable economic growth.

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