

The Impact of BI Rate to Inflation in Indonesia In 2005-2019

Aulia Muslimah ¹⁾

¹⁾ Mulawarman University, Samarinda, Indonesia

¹⁾ am.texas03@gmail.com

ABSTRACT

This study aims to determine the effect of the BI Rate on Inflation in Indonesia in 2015-2019, this type of research is an associative quantitative approach then data collection is carried out at Bank Indonesia East Kalimantan Province and the Central Statistics Agency and the analytical technique used is Simple Regression Analysis. The results showed that the t test results obtained sig value of $0.011 < 0.05$ and the value of *t*ung = $6.513 < \text{value of } = 2.160$ then there is a partial effect. BI Rate has a significant effect on inflation, it can be seen from the coefficient of determination (R Square) of 0.765, this means that the influence of the BI Rate affects inflation by 76.5%, the remaining 35.5% is the contribution of other factors not observed in this study. The BI Rate can be explained by the Inflation variable through the regression equation $Y = 5,529 + 1,636 X$. This study shows that the influence of the BI Rate on Inflation is 1,636, thus the BI Rate has a significant effect on Inflation in Indonesia in 2005-2019.

Keyword: Bi Rate, Inflation

INTRODUCTION

As this goal is stated in Law no. 23 of 1999 concerning Bank Indonesia, as amended by Law no. 3 of 2004 and Law no. 6 of 2009 in article 7 that Bank Indonesia has a goal to achieve and maintain stability in the value of the Rupiah. The stability of the Rupiah in question has two dimensions. The first dimension of the stability of the rupiah is the stability of the prices of goods and services as reflected in the development of the inflation rate. Meanwhile, the second dimension is related to the stability of the Rupiah exchange rate against other countries' currencies. Indonesia adheres to a floating exchange rate system (free floating). In an effort to achieve this goal, since July 1 2005, Bank Indonesia has implemented the Inflation Targeting Framework (ITF) monetary policy framework. The policy framework is seen as in line with the institutional mandate and aspects mandated by law. Within this framework, inflation is the preferred target (overriding objective). Bank Indonesia continues to make various improvements to the monetary policy framework, in accordance with changes in dynamics and challenges that occur in the economy, in order to strengthen its effectiveness.

METHOD

This research method uses quantitative research methods. The researcher took this step based on the results of the studies used based on theoretical studies. To complete this research, secondary data were sourced from data from Bank Indonesia and the Central Bureau of Statistics. The data analysis technique used statistical data that had been collected and then processed and analyzed using the help of the SPSS version 23.0 for Windows program. The

analysis carried out is 1) Simple Linear Regression Analysis to find out how big the relationship is between the two variables 2) Partial Significant Test (t-test) to prove the hypothesis with a significant level; 3) Multiple Correlation Coefficient Analysis. (R) to determine the strength or direction of the relationship between the two variables and the magnitude of the influence caused by one variable (the independent variable) on the other variable (the dependent variable).

RESULT AND DISCUSSION

Result

Interest rates and inflation tend to fluctuate. Interest rates in 2015 occurred due to the high uncertainty in global financial markets due to the possibility of an increase in the US Federal Reserve interest rate (Fed Fund Rate) as well as the diversity of monetary policies pursued by the European Central Bank. In 2016 there was a decrease in interest rates which occurred because pressure on the rupiah exchange rate had subsided. Then in 2017 there was another 4.25% reduction in interest rates. This is caused by several factors. First, because of inflation. Second, the current account deficit (CAD) remains under control at the level of 1.5 to 2 percent of gross domestic product (GDP). Third, external risk factors subside. Fourth, there is a reduction in the benchmark interest rate. In 2018-2019 interest rates reached 5.00% to 6.00%.

The regression output shows that the t table value is 2.1603 when compared to t count > t table or $6.513 > 2.1603$ which indicates that the alternative hypothesis is accepted and the null hypothesis is rejected and the regression output above also shows that the significance number for the BI variable Rate of 0.000. this value is smaller than the significance level of 0.05 so it can be concluded that the BI Rate individually affects inflation and it can be concluded that the hypothesis is accepted.

Discussion

From the simple linear regression formula above, it can be seen that the value of the constant is 5,529. This indicates that if the independent variable, namely the BI Rate, is considered constant or 0, the value of the regression coefficient BI Rate (X) is 1,636, meaning that if other independent variables the value is fixed and BI If the rate increases by 1%, the inflation rate will increase by 5,529 coefficients with a positive value, meaning that there is a positive relationship between the BI Rate and inflation. The higher the BI Rate, the higher the inflation. The level of significance value generated by the BI Rate is 0.00 where this value is smaller or $0.00 < 0.05$. So at this stage H_a has been accepted and H_o has been rejected.

Table 1. Simple Linear Regression

Model		Unstandardized Coefficients		Standardized	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	5,529	1,874		2,950	,011
	BI Rate	1,636	,251	,875	6,513	,000

Source: Processed Data (2021)

From the results of testing the regression analysis as shown in the t-count table, it shows that the statistical calculation results show that the variables included in the model significantly affect inflation. t table count = 0.25; 13 the results of the distribution in table t are 2,160. based on the results of the table above, $6.513 > 2.160$ which states that there is an influence from the independent variable X (BI Rate) on variable Y (inflation), the hypothesis is accepted. Then the significance of the variable shows a significance level of 0.000 which is smaller than the significant level of 0.05 or $0.000 < 0.05$. So from this H_a accepted while H_o was rejected.

Table 2. t Tabel

Model		Unstandardized Coefficients		Standardized	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	5,529	1,874		2,950	,011
	BI Rate	1,636	,251	,875	6,513	,000

Source: Processed Data (2021)

Table 3 shows that the results of the correlation R show an output of 87.5%, the coefficient of determination shown from the adjusted R2 value is 0.765, this means that 76.5% of inflation can be explained by variations in the independent variable, namely the BI Rate, while the rest $(100\%) - 76.5\% = 23.5\%$) is influenced by other factors outside the variables or variables that are not examined such as the money supply, state debt, demand pull and cost push, production costs, exchange rates. The R value itself is 0.875 which is multiplied by 2 times to produce R square. This implies that the variable X (BI Rate) has an effect on the independent variable Y (inflation).

Table 3. Coefficient of Determination

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,875 ^a	,765	,747	2,07306

CONCLUSION

Based on the research results, it was found that the BI Rate had a negative effect on inflation. Bank Indonesia, which regulates the BI Rate, has the influence that if inflation is high, the BI Rate will also rise to reduce inflation again and to make people prefer to invest in investment instruments with high interest so that inflation will fall again because the money supply decreases in society. This finding is not in accordance with previous research when interest rates rise, inflation also increases. Based on the results of the researchers, it was found that the BI Rate (X) had a significant influence on Inflation (Y), which was equal to 76.5%.

REFERENCES

- Antonov, A. R.(2015). Forecasting and Analysis of Electrical Energy Needs in West Sumatra Province Until 2024 Using the Multiple Linear Regression Analysis Method. *Journal of Electrical Engineering*, 34-43.
- Basuki, N. P. (2012). Analysis of Factors Affecting Inflation in Indonesia in the Period 2000.1-2011.4. *Journal of Economics*, 10. Boediono, D. (2014). *Synopsis Series of Introduction to Economics No.2 Macroeconomics*. Yogyakarta: BPFE-Yogyakarta.
- Dabukke, A. T. (2017). The Influence of the Bank Indonesia Interest Rate (BI Rate) and World Oil Prices on Inflation in Indonesia. *JOM Fekon*, 1-11. Fitria, A. d. (2018). The Influence of the Money Supply, Interest Rates and Inflation on Economic Growth in Indonesia. *Indonesian Economics*, 24-32. Frederick, M. 2010. *Economics of Money, Banking and Financial Markets*. Jakarta: Salemba Empat.
- Gregory, M. (2012). *Macroeconomic Theory*. Fifth Edition. Translation. Jakarta: Erlangga Publisher. Hendry Cahyono, W. E. (2014). The Influence of the BI Rate and the Amount of Money in Circulation on the Inflation Rate in Indonesia. *Journal of Economics*, 1-9. Himmi, N. (2017). Correlation of Self Efficacy Against Mathematical Reasoning Ability of Trigonometry Short Semester Students. *Pythagoras*, 143-150.
- Latuemarissa, J. R. (2013). *Banks and Other Financial Institutions*. Jakarta: Salemba Empat. Mahendra, A. (2016). Analysis of the Influence of the Money Supply, SBI Interest Rates and the Exchange Rate in Indonesia. *JRAK*, 1-12.
- Marwansyah, S. (2017). Analysis of Investment Returns, Premium Income, and Claim Expenses on Insurance Company Profits in Indonesia. *Journal of Accounting, Economics and Business Management*, 213-221.
- Mukhlis, I. (2015). *Financial and Banking Economics: Theory and Applications*. Jakarta : Salemba Empat. Ningsih, S. (2018). Analysis of the Influence of the Money Supply, Interest Rates, and Exchange Rates on Inflation in Indonesia for the 2014-2016 Period. *Journal of Resource Economics*, 96- 103.

- Nuri Agusminata, T. M. (2017). The Influence of the Money Supply and Interest Rates and Government Spending on Inflation in Indonesia. *Economic Forum*, 188-200.
- Perlambang, H. (2010). Analysis of the Influence of the Money Supply, SBI Interest Rates, Exchange Rates on the Inflation Rate. *Journal of Economic Media*, 1-19.