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Analysis of the Effect of Inflation on Interest Rates in Indonesia (2015-2024)

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ABSTRACT

This study aims to examine the relationship between inflation and interest rates in Indonesia from 2015 to 2024 and the extent to which inflation affects interest rates in Indonesia from 2015 to 2024. This study uses a quantitative approach. Data collection used secondary data, with inflation data obtained from the Central Bureau of Statistics and interest rates data from Bank Indonesia for the period 2015 to 2024. The data analysis methods used in this study were correlation analysis and simple linear regression. The research results show a positive relationship between inflation and interest rates in Indonesia from 2015 to 2024. Meanwhile, inflation significantly impacted interest rates in Indonesia from 2015 to 2024.

Keywords: Inflation, Interest Rates, Indonesia

INTRODUCTION

This economic instability has impacted global economic development, marked by increasing integration between countries. Continued shifts in the global economy pose challenges in strengthening global economic sustainability. Domestically oriented trade policies and rising geopolitical risks in several countries have fueled uncertainty in global financial markets and suppressed Indonesia's global economic growth.

Inflation and interest rates are two key economic indicators that influence each other (Mariani et al., 2023). Rising inflation typically prompts Bank Indonesia to raise interest rates to curb price increases, while low inflation allows the central bank to lower interest rates to stimulate economic growth. This relationship is a key focus in economic studies, particularly regarding monetary policy.

Inflation is a process of rising prices that occurs generally in an economy. This occurs due to an imbalance between the flow of goods and money caused by various factors. Furthermore, purchasing power also influences the rate of inflation. People tend to consume based on price levels and income. High price fluctuations will reduce people's purchasing power, resulting in inflation that can paralyze production activities. Not all inflation negatively impacts the economy, especially if it occurs at a low level (under ten percent). Mild inflation can stimulate economic growth. This encourages entrepreneurs to increase production. Price increases enable entrepreneurs to gain greater profits. Excessively high economic activity will lead to increased inflation, and higher inflation will lead to higher prices for goods and services. Negative inflation occurs when the value exceeds ten percent.

Inflation, like other economic problems, should be avoided because it can have various negative impacts on society. Inflation tends to reduce the level of prosperity of a country's people. The decline in the real value of money held by the public is one impact that inflation can cause. Real income will decrease because people's incomes are fixed and cannot keep up with price increases. Inflation also causes a decrease in purchasing power, especially for the poor or low-income communities. Public interest in saving also decreases due to the declining value of the currency caused by rising inflation.

The interest rate is the annual interest payment on a loan, expressed as a percentage of the loan, derived from the amount of interest received annually divided by the loan amount (Samuelson and Nordhaus, 2016). The interest rate is expressed as a percentage of the principal per unit of time. Interest is a measure of the price of resources used by the debtor that must be paid to the creditor. High interest rates encourage investors to invest their funds in banks rather than in production or industrial sectors that carry a higher level of risk. Therefore, inflation can be controlled through interest rate policy. Interest rates can be divided into two categories: nominal interest rates and real interest rates. The nominal interest rate is the ratio between the amount of money repaid and the amount borrowed. The real interest rate emphasizes the ratio of the purchasing power of the money repaid to the purchasing power of the money borrowed. The real interest rate is the difference between the nominal interest rate and the inflation rate.

There are two types of factors that determine the value of interest rates: internal and external factors (Mankiw, 2018). Internal factors include national income, the money supply, and inflation. External factors include foreign interest rates and the expected rate of change in foreign exchange values. High interest rates automatically encourage people to deposit their funds in banks because they can expect a favorable return. This lowers public demand for cash as they are more likely to allocate it to their bank portfolios (deposits and savings). As the money supply decreases, spending decreases. Furthermore, prices of general goods and services tend to stagnate, or there is no inflationary push.

This study aims to examine the relationship between inflation and interest rates in Indonesia from 2015 to 2024 and the extent to which inflation affects interest rates in Indonesia from 2015 to 2024.

RESEARCH METHODS

This study uses a quantitative approach. A quantitative approach is a research method that uses numerical data and statistical analysis to understand a phenomenon (Kurdhi et al., 2023). This approach focuses on measuring variables, testing hypotheses, and generalizing research results to a broader population. The primary goal of a quantitative approach is to test theories or hypotheses, measure variables, and predict phenomena through numerical data analysis. This approach also aims to build mathematical models, discover relationships between variables, and make generalizations that can be applied to a broader population (Martono, 2010).

Secondary data is data that has been collected, processed, and published by another party, not by the researcher or the party conducting the current research (Margono, 2017). It is usually readily available in various forms, such as reports, scientific articles, government statistics, previous survey data, or publications from specific institutions. Inflation data obtained from the Central Bureau of Statistics and interest rates data from Bank Indonesia for the period 2015 to 2024.

The data analysis methods used in this study were correlation analysis and simple linear regression. Correlation analysis is a statistical method used to measure the strength and direction of the relationship between two variables (Sugiyono, 2013). The results of a correlation analysis indicate whether the variables move in the same

direction (positive correlation), in opposite directions (negative correlation), or are unrelated. Simple linear regression analysis is a statistical method used to predict the value of a dependent variable based on the value of one independent variable (Sugiyono, 2013). This method assumes a linear relationship between the two variables, which is depicted as a straight line on a graph.

RESULT AND DISCUSSION

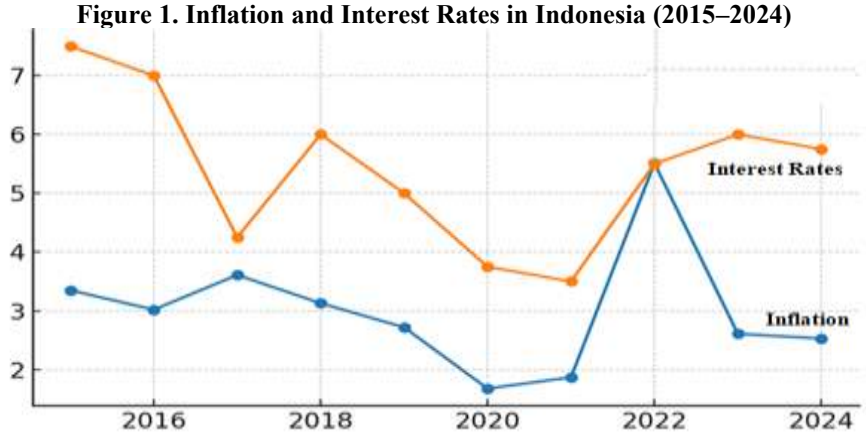
Overview

Inflation occurs because a society desires to live beyond its economic means, causing the public's effective demand for goods (aggregate demand) to exceed the quantity of goods available (aggregate supply). This results in an inflationary gap. Inflation can only occur if there is an increase in the volume of money in circulation. Without an increase in the money supply, for example, a crop failure will only temporarily increase prices. The increase in the money supply is like fuel for the fire of inflation. If the money supply increases, inflation will naturally cease. The rate of inflation is driven by the rate of increase in the money supply and public perceptions about prices. Interest rates are viewed as income earned from savings. Households will save more when interest rates are high because they receive more income from savers. At low interest rates, people are less inclined to save because they feel it's better to spend on consumption than to save. Therefore, at low interest rates, people tend to increase consumption spending.

Table 1. Inflation and Interest Rates in Indonesia (2015–2024)

Year	Inflation	Interest Rates
2015	3.35	7.5
2016	3.02	7.0
2017	3.61	4.25
2018	3.13	6.0
2019	2.72	5.0
2020	1.68	3.75
2021	1.87	3.5
2022	5.51	5.5
2023	2.61	6.0
2024	2.53	5.75

Figure 1. Inflation and Interest Rates in Indonesia (2015–2024)



Based on Table 1 and Figure 1, Indonesian inflation and interest rate data fluctuate from year to year (Badan Pusat Statistik, 2024). Indonesia's inflation data in 2015 was 3.35 percent, then decreased to 1.68 percent in 2020, after which it reached 2.61 percent and 2.53 percent in 2023 and 2024. Meanwhile, Indonesia's interest rate data in 2017 was 4.25 percent, then decreased to 3.75 percent in 2020. Indonesia in 2022 and 2023 tends to increase with interest rates of

5.5 percent and 6 percent respectively (Bank Indonesia, 2024).

Figure 2. Relationship Between Inflation and Interest Rates

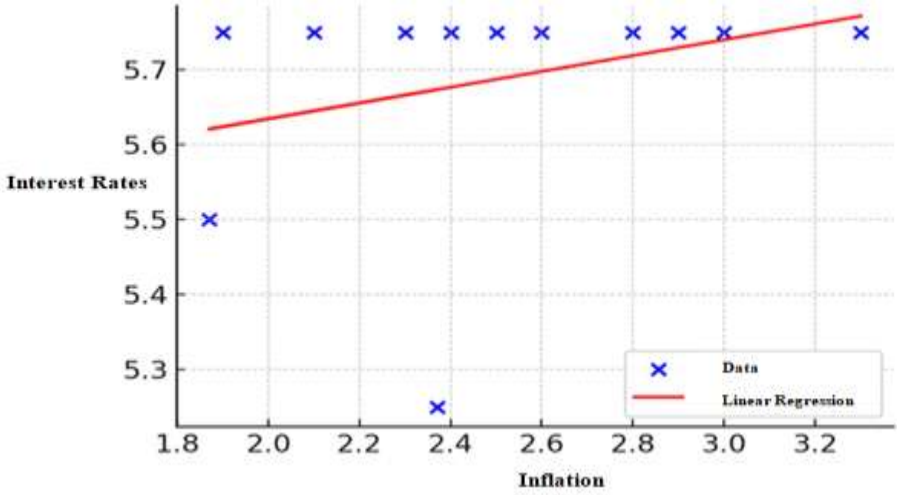


Table 2. Correlation Test

Correlations			
Inflation/Interest Rates		**Inflation**	**Interest Rates**
	Pearson Correlation	1	.350**
	Sig. (2-tailed)		.003
	N	10	10
Interest Rates	Pearson Correlation	.350**	1
	Sig. (2-tailed)	.003	
	N	10	10

Correlation Analysis Results

Based on Figure 2 and Table 2 show a positive relationship between inflation and interest rates in Indonesia from 2015 to 2024. Increases in inflation tend to be followed by increases in interest rates, in accordance with the Fisher effect concept, which explains that changes in inflation influence interest rate movements in the same direction (Chandra and Wahyuningsih, 2021). The Fisher effect concept is a concept in economics that explains the relationship between nominal interest rates, real interest rates, and anticipated inflation rates. Simply put, the Fisher effect states that nominal interest rates will adjust to reflect changes in anticipated inflation rates, so that real interest rates remain relatively stable (Beureukat, 2022). For example, if the central bank raises nominal interest rates to address rising inflation, real interest rates tend to remain stable, because the nominal interest rate increase is largely due to the anticipated increase in inflation.

Simple Linear Regression Results

Table 3. Simple Linear Regression Test

Coefficients[a]						
Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**
		B	**Std. Error**	**Beta**		
1	(Constant)	4.131	1.294		3.191	.013
	Inflation	.365	.111	.350	3.304	.003
a. Dependent Variable: Interest Rates						

Based on Table 3, inflation significantly impacted interest rates in Indonesia from 2015 to 2024. High inflation can prompt the central bank to raise interest rates

(Mahardika, 2019). This causes contraction or negative growth in the real sector. A further impact is increasing unemployment. This inflation gap arises because certain social groups successfully translate their aspirations into effective demand for goods. These social groups include the government, entrepreneurs, and labor unions. The government seeks to obtain a larger share of social output by printing new money. Entrepreneurs invest with capital obtained from bank loans, while labor unions or workers benefit from price increases. An interest rate is a liability on a loan, usually expressed as a percentage of the money lent. An interest rate is a percentage of the amount of money borrowed for a specific period (monthly or annual). An interest rate is a measure of the price of resources used by the debtor that must be paid to the creditor.

CONCLUSION AND SUGGESTION

The research results show a positive relationship between inflation and interest rates in Indonesia from 2015 to 2024. Meanwhile, inflation significantly impacted interest rates in Indonesia from 2015 to 2024.

The research findings suggest that this study can serve as a reference for policymakers in maintaining national economic stability. The government and Bank Indonesia need to maintain stable inflation to maintain interest rates at a level that supports economic growth.

Declaration by Authors

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REFERENCES

1. Badan Pusat Statistik. (2024). *Statistik Indonesia*. Jakarta: Badan Pusat Statistik.
2. Bank Indonesia. (2024). *Laporan Perekonomian Indonesia*. Jakarta: Bank Indonesia.
3. Beureukat, B. (2022). Pengaruh Suku Bunga terhadap Inflasi di Indonesia. *Oikonomia: Jurnal Manajemen, 18*(1), 39. https://doi.org/10.47313/oikonomia.v18i1.1546
4. Chandra, E. K. & Wahyuningsih, D. (2021). Analisis Pengaruh Suku Bunga, Jumlah Uang Beredar dan Nilai Tukar Terhadap Inflasi di Indonesia Periode 2011-2019. *Buletin Ekonomika Pembangunan, 2*(1), 37-54.
5. Kurdhi, N. A., Sunarta, D. A., SH, M., Nur, N., Jenita, S. E., Hatta, I. H. R., ... & Rahman, A. (2023). *Statistika Ekonomi*. Cendikia Mulia Mandiri.
6. Mahardika, O. N. P. (2019). *Pengaruh Inflasi Terhadap Kurs, Suku Bunga dan Jumlah Uang Beredar di Indonesia Tahun 2008-2017*. Skripsi. Universitas Islam Riau.
7. Mankiw, N. G. (2018). *Principles of Economics*. Cengage Learning.
8. Margono. (2017). Metodologi Penelitian Pendidikan. Jakarta: PT Rineka Cipta.
9. Mariani Alimuddin, S. E., Jana Sandra, S. E., Sarce Babra Awom, S. E., Pandiangan, S. M. T., Solehudin, M. M., Ahmad, S. E., ... & SE, M. (2023). *Pengantar Ekonomika*. Cendikia Mulia Mandiri.
10. Martono, Nanang. (2010). Metode Penelitian Kuantitatif. Jakarta: PT Raya Grafindo Persada.
11. Samuelson, P. A. & Nordhaus, W. D. (2016). *Economics.* McGraw-Hill Education.
12. Sugiyono. (2013). *Metode Penelitian Kuantitatif, Kualitatif dan R & D*. Bandung: Alfabeta.

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