Journal of Taxation, Accounting, Management and Economics, Vol 1 Issue 2, July 2023
e-ISSN: 2988-7097
p-ISSN: 2988-7089

ANALYSIS OF THE AMOUNT OF MONEY SUPPLY AND BI 7-DAY REVERSE REPO RATE ON INFLATION RATE IN INDONESIA

Ulfah Setia Iswara
Department of Economic, Sekolah Tinggi Ilmu Ekonomi Indonesia (STIESIA) Surabaya, Indonesia

Corresponding author: -

Abstract: *This study aims to analyze the amount in circulation and interest rates on inflation in Indonesia. Based on the source, the type of data in this study is secondary data, because the data collected is data in the form of numbers or numbers. The data used is quantitative data from January 2016 to December 2021 with this research conducted in Indonesia. This research is a qualitative descriptive study with a literature method through literature studies supported by secondary data obtained from Bank Indonesia and the Indonesian Central Bureau of Statistics. The results of this study explain that the money supply and interest rates affect the high and low inflation that occurs in Indonesia.*

Keywords: *Money Supply, BI 7-day Reverse Repo Rate, Inflation.*

INTRODUCTION

At this time, many issues are occurring in the global economy that impact the conditions of national economies. These problems are present in almost every country, both developed and developing, leading to economic crises. One of the causes of economic crises in a country is the increase in the inflation rate (Sahban & Se, 2018). In developed countries, for example, a similar situation occurred in the Weimar Republic, Germany, in the 1920s. At that time, Germany couldn't raise enough taxes, so it resorted to issuing securities to pay government bills, causing the price index to rise from 1 to 10,000,000,000. Meanwhile, a developing country experiencing significant inflation is Indonesia. In its economic history, Indonesia has faced economic crises marked by rising inflation rates, reaching hyperinflation conditions in the 1960s. During that period, inflation exceeded 100%, with the highest reaching 600% in 1965 (Kennedy, 2018).

Inflation is a familiar economic variable among the public. High inflation rates are a hot topic as they directly impact people's lives, affecting productivity efficiency, investment economics, capital increases, and uncertainty about future costs and income (Awaluddin, 2017).

According to the Central Statistics Agency, inflation is the continuous increase in the prices of goods and services in general. Consistent with this definition in the Indonesian language, inflation is the devaluation of money (paper) due to the rapid and abundant circulation of money (paper), leading to the increase in prices of goods in a specific area. Based on this explanation, another variable that can affect inflation is the amount of money in circulation. When the amount of money in circulation is greater than the production of goods and services, it leads to an increase in prices, resulting in inflation, meaning a decrease in the value of money. Conversely, if the amount of money in circulation is lower than the production of goods and services, prices decrease, leading to a decrease in inflation rates and an increase in the value of money (Santosa, 2017). In this case, the amount of money in circulation directly related to the inflation rate is the narrow definition or (M1) data, consisting of circulating currency plus demand deposits.

With the increasing amount of money in circulation each year, it undoubtedly affects the inflation rate in Indonesia. According to the research results of Ningsih & Kristiyanti (2019) titled "Analysis of the Influence of the Amount of Money in Circulation, Interest Rates, and Exchange Rates on Inflation in Indonesia for the Period 2014 – 2016," it is concluded that the amount of money in circulation has a negative and significant partial effect on inflation. This means that an increase in the inflation rate is related to the level of money in circulation. In line with these research findings, another study by Susilowati (2016) titled "Analysis of the Causal Relationship between the Amount of Money in Circulation and Inflation in Indonesia for the Period 1981 – 2015" shows a causal relationship between the amount of money in circulation and inflation. This implies that there is a cause-and-effect relationship between these two variables. Whether inflation affects the amount of money in circulation or the amount of money in circulation affects inflation.

There are several theories discussing the amount of money in circulation, one of which is the classical theory. Classical economics holds the view that money does not affect the increase in economic output (Igamo, 2018).In this regard, the consideration for companies or households in holding cash depends on the interest rate level. If the interest rate level increases, companies will buy securities, leading to a decrease in the amount of cash or demand for money. Conversely, if the interest rate level decreases, companies or the public will sell securities, leading to an increase in the amount of cash or demand for money.

Lapong's research (2016) shows a two-way causal relationship between the amount of money in circulation and the interest rate or BI 7-day Rate. This means that when the amount of money in circulation changes, it affects the interest rate, and vice versa. If the interest rate changes, it affects the amount of money in circulation. However, the causal influence of the interest rate on the amount of money in circulation is not as significant as the causal influence of the amount of money in circulation on the interest rate. This implies that both variables require a long-term relationship to influence each other.

Looking at the inflation in 2017, it can be categorized as quite constrained. However, Bank Indonesia (BI) has already moved the BI 7 Day Repo Rate to 7.25%. The increase in the BI 7 Day Repo Rate is a response to the rise in inflation and the depreciation of the rupiah. The BI 7 Day Repo Rate, as one of Bank Indonesia's monetary policy instruments, has a fundamental objective of maintaining price stability.As the monetary authority, Bank Indonesia has the task of maintaining economic stability in Indonesia, including controlling the inflation rate.

LITERATURE REVIEW

1. Relationship between Money Circulation and Inflation

Money supply is an economic variable that has an important position and role in influencing economic activity in influencing economic activity. In accordance with the proposed group monetarists, that the money supply plays an important role in influencing the economy from the monetary sector economy from the monetary sector. If the state of a country's economy unstable, which is characterized by an increase in the money supply, then it will lead to an increase in the price of goods continuously until the amount of money in money supply is equal to the money supply demanded and if this situation continues to occur, it will lead to inflation.

Based on the results of research (Susilowati & Daryono Soebagyo, 2016) entitled "Analysis of the Causality Relationship Between Money Supply and Inflation in Indonesia (1981 - 2015)", it can be concluded that the variable money supply has a stationary positive effect on inflation and the inflation variable has a stationary positive effect on money supply in Indonesia, or in other words the two variables are positively related. Inflation will occur if the additional volume of money in circulation exceeds the demand limit of the money supply. The more money in circulation in the community, the tendency of inflation will increase.

2. Relationship between BI-7 Day Reverse Repo Rate and Inflation

Bank Indonesia as the central bank of Indonesia which has the goal of achieving and maintaining the stability of the value of the Rupiah, continues to make effective policies to achieve this single goal. One of the efforts made is to create a new policy, namely the BI 7-Day Rate. The main purpose of this policy change is that the BI 7-Day Rate can control inflation. Based on the results of Ade Novalina's research (2017), entitled "The Ability of the BI 7-Day Repo Rate (BI7DRR) in Maintaining Indonesia's Economic Stability (Long-Term Monetary Transmission Approach)", that one of the macroeconomic indicators that affect the inflation rate is the BI 7-Day Repo Rate (BI7DRR). This Bank Indonesia interest rate is considered capable of controlling inflation, because if inflation occurs due to an increase in the money supply, Bank Indonesia will increase interest rates.

High interest rates will encourage investors to invest their funds in banks rather than investing them in the production sector or industries that have a higher level of risk. With this investment, it will reduce the excess money supply, so that the inflation rate can be controlled through interest rate policy. Based on the results of Kezia's research (2020) entitled "Analysis of the Different Effects of Central Bank Interest Rate Policies on Inflation in Indonesia", that the analysis of the BI 7-day Reverse Repo Rate is not significant at the 5% or 0.005% benchmark but has a positive effect in reducing inflation in Indonesia which reflects price stability as the ultimate goal of monetary policy. This means that interest rates do not directly affect inflation, but interest rates directly affect the money supply which will ultimately affect inflation.

RESEARCH METHOD

This study is a qualitative descriptive examination using the literature study method through literature reviews derived from previous research journals (Kurniawan, 2014) related to the title. Additionally, data access was obtained from websites as sources of information publication. A qualitative descriptive study can be interpreted as the researcher being the key instrument, where data collection techniques involve merging and analyzing data inductively (Sugiyono, 2012), thereby generating descriptive data such as narrating the results of interviews and/or observations.

RESULTS AND DISCUSSION

1. Results

1.1. The Development of Inflation in Indonesia

Inflation is the tendency for the general prices of goods and services to continuously rise. Inflation usually arises due to pressure from the supply side (cost-push inflation), the demand side (demand-pull inflation), and inflation expectations. The increase in the prices of goods and services leads to a decrease in the value of money. Inflation needs to be monitored because inflation stability is a prerequisite for creating a sustainable economy in a country. The measurement of price changes in a specific period compared to the previous period is referred to as the inflation rate. Below is the development of the inflation rate in Indonesia for the period from January 2016 to December 2021.

Source: Bank Indonesia, 2023

Figure 1. Graph of the Development of Inflation in Indonesia Period 2016 – 2021

The graph in Figure 1 indicates that the inflation figures in Indonesia show fluctuating results, experiencing uncertain increases and decreases over time. In June 2017, it reached the highest inflation rate in Indonesia during the research period, reaching 0.69%, followed by a significant decrease in August 2014 by 399%. Throughout the years 2015 to 2021, the inflation rate in Indonesia consistently remained below 5%, despite experiencing irregular fluctuations in both increases and decreases.

1.2. The Development of the Money Supply in Indonesia

Generally, the concept of the money supply refers to the amount of money available and circulating within the community. Within the monetary system, the money supply represents the liabilities of the monetary system (Central Bank, Commercial Banks, and People's Credit Banks/BPR) to the domestic private sector. The components of the money supply include currency, demand deposits, quasi-money, and securities other than shares issued by the monetary system owned by the domestic private sector with a remaining maturity of up to one year (Bank Indonesia, 2020).

According to its definition, the money supply is divided into two categories: narrow money (M1) and broad money (M2). Narrow money (M1) consists of currency and demand deposits held by the public, while broad money (M2) consists of quasi-money (savings, time deposits in both domestic and foreign currencies, as well as foreign currency deposits) and securities.

Based on these two definitions, the narrow money (M1) is the focus of this research variable. This is because currency and demand deposits are more likely to circulate in the community, ultimately influencing other economic variables such as inflation. Below is the development of the Narrow Money Supply (M1) in Indonesia for the period from January 2016 to December 2021.

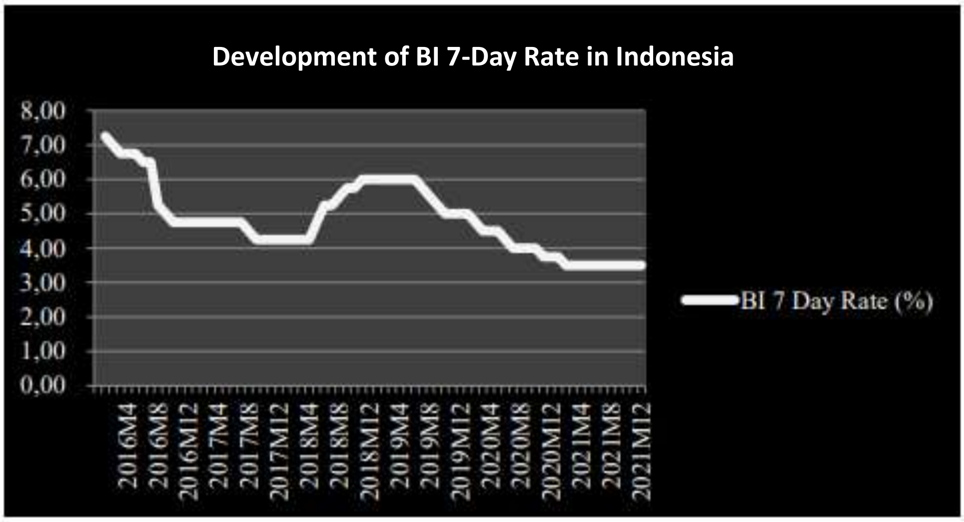
Source: Bank Indonesia, 2023

Figure 2. Development of the Money Supply in Indonesia, January 2012 to December 2021

In Figure 2, it is shown that the development of the amount of circulating money or (M1) is increasing steadily over time, with the highest figure occurring in December 2021, reaching IDR 2,282,200.26 billion. This is because money plays a significant role in everyday life, starting from economic activities such as production, consumption, and distribution, which are closely related to money. Therefore, the development of the amount of circulating money continues to increase. The government, in this case, the Central Bank as the Monetary Authority, always issues policies related to finance and banking to consistently maintain economic stability in Indonesia.

1.3. Development of BI 7-Day Rate in Indonesia

The BI 7-Day Rate is used as the new benchmark interest rate, replacing the BI Rate. This change is a common practice by central banks and is a strategy in the implementation of monetary operations. Below is the development of the BI 7-Day Rate in Indonesia for the period from January 2016 to December 2021.



Source: Bank Indonesia, 2023

Figure 3. Development of BI 7-Day Rate in Indonesia, January 2016 to December 2021

From Figure 3, it is evident that the development of the benchmark interest rate set by

Bank Indonesia has been gradually decreasing each year. This implies that every year, the demand for money increases over time. If this trend continues, it will undoubtedly affect the inflation rate. The Bank Indonesia benchmark interest rate serves as a reference for the banking sector to determine their interest rates for products such as savings, deposits, and loans. Therefore, the development of the BI 7-Day Reverse Repo Rate indirectly influences several macroeconomic variables and ultimately impacts the inflation rate (Fitria, 2018).

2. Discussion

The money supply has a one-way relationship with inflation, meaning that the money supply affects high and low inflation in Indonesia. The results of this study are in line with previous research conducted by Fauziyah (2016) showing that JUB affects inflation, this is to the facts in the field which state that inflation in Indonesia is also caused by the increase in the money supply in the community because the money supply is the liquidity of the economy that affects the economic activity of the community.

This is also the case with interest rates that affect inflation in Indonesia. In this study, it is reflected in the BI 7-Day Rate. The results of this study are supported by previous research conducted by Chandra (2021) which shows that interest rates and inflation have a positive influence and indicate that monetary policy tends to follow the rate of inflation. However, according to him, high interest rates do not always reduce the rate of inflation, for example, during religious holidays and the new year, inflation tends to increase and if interest rates are raised, it is not necessarily immediately responded to by the public.

The results of this study are in line with previous research conducted by Ilhamdi (2017) showing that during the observation period 2005 to 2015, interest rates and inflation have a two-way relationship Inflation is positively influenced by interest rates one period earlier and interest rate variables are also influenced by inflation one period earlier positively and significantly.

CONCLUSIONS AND SUGGESTIONS

Based on the results of research through these data, it is concluded that the money supply affects inflation in Indonesia. And interest rates reflected through the BI 7-Day Repo rate also affect inflation in Indonesia.

Based on the above conclusions and the research that has been done, the authors provide advice to Bank Indonesia to better control inflation and pay attention to the money supply and interest rates.

REFERENCE

Awaluddin. (2017). Inflasi Dalam Perspektif Islam. (ANALISIS TERHADAP PEMIKIRAN AL-MAQRIZI. Jurnal Ilmiah Syari'ah, 1-21.

Bank Indonesia. (n.d.). Inflasi. Retrieved from https://www.bi.go.id/id/fungsi-utama/moneter/inflasi/Default.aspx. 2020.

Fauziyah, W. E. (2016). Pengaruh BI Rate dan Jumlah Uang Beredar terhadap Tingkat Inflasi di Indonesia. Jurnal Pendidikan Ekonomi (JUPE), Volume 4 Nomor 3.

Fitria, A. &. (2018). Pengaruh Jumlah Uang Beredar, Tingkat Suku Bunga dan Inflasi Terhadap Pertumbuhan Ekonomi di Indonesia. . Jurnal Ekonomika Indonesia, Vol VII, No 1,24 - 32.

Igamo, A. (2018). The Impact of Electronic Money on The Efficiency of The Payment System And The Substitution of Cash In Indonesia. Sriwijaya International Journal Of Dynamic Economics And Business, 237 - 254.

Ilhamdi , R. (2017). Kausalitas Suku Bunga dan Inflasi di Indonesia. Jurnal Ilmiah Mahasiswa (Ekonomi Pembangunan FEB Unsyiah), ISSN : 2549 - 836302 Volume 2, Nomor 3.

Kennedy, P. S. J. (2018). Modul Ekonomi Makro Kompetensi Dasar: Mendeskripsikan masalah-masalah yang dihadapi pemerintah di bidang ekonomi.

Kezia, C. (2020). Analisis Perbedaan Pengaruh Kebijakan Suku Bunga Bank Sentral terhadap Inflasi di Indonesia. E-Journal Perdagangan Industri dan Moneter, Volume 8, Nomor 2.

Lapong , P. R. (2016). Analisis Kausalitas Jumlah Uang Beredar dan Suku Bunga Acuan Bank Indonesia (BI Rate) di Indonesia Periode 2009.1 - 2015.4. Jurnal Berkala Ilmiah Efisiensi, Vol 16, No. 02.

Ningsih, S., & Kristiyanti, L. M. S. (2019). Analisis pengaruh jumlah uang beredar, suku bunga dan nilai tukar terhadap inflasi di Indonesia periode 2014-2016. Jurnal Manajemen Dayasaing, 20(2), 96–103.

Sahban, M. A., & Se, M. M. (2018). Kolaborasi pembangunan ekonomi di negara berkembang (Vol. 1). Sah Media.

Santosa, A. B. (2017). Analisis Inflasi di Indonesia.

Susilowati, I., & Daryono Soebagyo, Me. (2016). Analisis Hubungan Kausalitas Antara Jumlah Uang Beredar dengan Inflasi di Indonesia (1981-2015). Universitas Muhammadiyah Surakarta.