

Analysis of the Effect of Inflation, Interest Rates and Exchange Rates on the Number of Sharia Banking Deposits in Indonesia

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Article's History:

Received 5 Agustus 2023; Received in revised form 7 September 2023; Accepted 11 September 2023; Published 1 Oktober 2023. All rights reserved to the Lembaga Otonom Lembaga Informasi dan Riset Indonesia (KITA INFO dan RISET).

Suggested Citation:

Tanto. (2023). Analysis of the Effect of Inflation, Interest Rates and Exchange Rates on the Number of Sharia Banking Deposits in Indonesia. JEMSI (Jurnal Ekonomi, Manajemen, Dan Akuntansi), 9 (5). 2255-2260. <https://doi.org/10.35870/jemsi.v9i5.1598>

Abstract:

This study tries to ascertain how Indonesia's sharia banking deposits are affected by the BI Rate, FDR, inflation, and exchange rates. The research method is quantitative research, and secondary data is used as the data source. The financial reports of Indonesia's sharia banks make up the study population, and research samples of financial report data from 2013 to 2022 are used. A quantitative approach using several linear regression approaches is applied. Using the EVIEWS version 8 analysis tool, the analytical techniques used are regression equation testing, classical assumption testing, and descriptive analysis. BiRate, FDR, inflation, and exchange rate are the variables considered. The findings of the study indicate that in Indonesia, sharia banking deposits are simultaneously impacted by the interest rate, the foreign exchange rate, inflation, and the Federal Reserve rate. The t-test results show that the exchange rate variable has a significant negative impact on Indonesian sharia banking deposits. This is demonstrated by partial calculations for the t-count, which show that while the exchange rate variable has a negative impact on the quantity of sharia banking deposits in Indonesia, the BI Rate, FDR, and inflation variables have positive impacts.

Keywords: BI Rate, Inflation, Sharia Banking, Exchange Rate.

Introduction

A bank is a crucial financial organization for the economy of a nation. The country's economic growth will be better the more developed the banking sector is. As financial entities, banks serve the community by raising and distributing funds in order to promote equity, economic progress, and national stability while enhancing the welfare of the general populace. There are currently two types of banks operating in Indonesia: conventional banks and sharia banks. The difference between the two lies in the principles adopted in their operations. Conventional banks operate using an interest system, which for Islamic banks is considered a ribawi system that is not in accordance with sharia. Meanwhile, Islamic banks use a system that does not contain elements of usury. One of them is the application of profit and risk sharing. Islamic banking is one of the banking systems that is receiving serious attention from the government. Sharia banking, as part of the national banking system, has an important role in the economy. Because it is possible that Islamic banks will become an alternative banking system that will apply in Indonesia. Since the implementation of Law No. 7 of 1992 concerning banking, which was later revised into Law Number 10 of 1998, the banking sector in Indonesia has been divided into conventional banks and Islamic banks. Conventional banks are defined as those that operate on the basis of interest, or Islamic sharia, while Islamic banks operate on the basis of profit sharing (Rustam, 2013).

The existence of sharia banking is expected to help develop a country's economy. The following are the goals and roles of Islamic banking in the economy: widespread economic prosperity, full employment, and optimal levels of economic growth; socio-economic justice and equal pay for all workers; stability of the value of money; and

mobilization and investment of savings that ensure just returns and efficient service. Islamic banks accept money from the general public in the form of deposits known as third-party funds as a financial institution that engages in financial intermediation. These funds are channeled through financing using the principles of profit sharing, buying and selling, or renting. Basically, the products offered by sharia banking can be divided into three main ones, namely: fund distribution products (financing), fund collection products (funding), and service products (service). In general, financing products (fund distribution) in sharia banking are divided into four categories, namely: financing with the sale and purchase principle, financing with the rental principle, financing with a complementary agreement, and financing with the profit-sharing principle. A sharia bank is, in essence, a bank or financial institution that adheres to Islamic principles and is devoid of usury, ghurur, gambling, and other practices forbidden by Islamic law. In carrying out sharia bank business activities, to avoid the occurrence of elements that are prohibited in Islam, in the mechanism of sharia bank business activities in collecting and distributing funds, there are various types of contracts, including Mudharabah, Musyarakah, Wadiah, and Ijarah contracts (Lumingkewas, 2016).

One alternative for saving investments in sharia banks is Mudharabah deposits in sharia banks. This is a deposit that has quite a large influence compared to other products offered by sharia banks. These savings themselves consist of two types, namely, Mudharabah Muthlaqah (Mudharabah savings) and mudharabah Muqayyadah (Mudharabah deposits). Basically, these products both store money in sharia banks. Deposits at sharia banks utilize a profit-sharing system, whereas deposits at conventional banks use an interest system. This is the main distinction between Mudharabah deposits and deposits at conventional banks. Thus, income from Mudharabah deposits is not fixed as with interest but fluctuates according to the level of income of the sharia bank. Mudharabah deposits are customer investments in sharia banks, so in accounting, the deposits are not recorded as bank debt but are recorded and referred to as investments, usually called unrelated investments (Mudharabah Muthlaqah). For example, in mid-2005, when the SBI interest rate (Bank Certificate Indonesia) and loans increased, the profit-sharing rate for sharia bank customers could reach 8.5%. This yield was higher than conventional bank interest, which at that time was only around 7%. However, after being increased, conventional bank deposit interest can reach up to 10%. This results in the level of profit sharing for Islamic banks becoming less attractive (Lumingkewas et al., 2019).

The transfer of customer funds from conventional banks to sharia banks or vice versa means that the funds collected by banks from the community can fluctuate, so that in carrying out financing activities for the community, sharia banks must be wise in determining them so that they are in balance with the funds collected. In analyzing this, Islamic banks use the financing-to-deposit ratio, namely the ratio comparing funds distributed to the public for financing with funds collected from the public through deposits. An important variable that affects the growth of sharia bank deposits is the policy of sharia banks in establishing the financing-to-deposit ratio as a benchmark. Savings or depositors with a profit motive are viewed in terms of traditional bank interest rates based on the definition above. The consumer decides to save their money in a traditional bank if the interest rate is higher than the profit-sharing rate, and vice versa if the profit-sharing rate is higher than the profit-sharing rate (Mamusung et al., 2021). clients opt to deposit their money rather than save it in a standard savings account since the earnings are higher even though the dangers are higher.

Literature Review

Sharia banking is one representation of Islamic economic applications that prohibits the use of the interest system in the economy because the interest system is considered usury, which is prohibited by religion. This is because the application of ribawi not only brings economic destruction but also damage to society. Before investing their funds, customers will compare the profit-sharing rate obtained from mudharabah deposits with conventional bank deposit interest rates (Mamusung et al., 2019). The high level of profit sharing makes more customers choose mudharabah deposits compared to conventional deposits. On the other hand, if interest rates are high, it is estimated that customers will tend to deposit their funds in conventional bank deposits. A service fee for using money or capital is known as interest, and it is typically stated as a percentage of the principal capital. Interest is paid at an agreed-upon time. Bank interest is defined as compensation that banks give to clients who buy or sell their products based on accepted criteria. The cost that customers (who have savings) must pay relative to what customers (who get loans) must pay to the bank is also referred to as interest (Pramudito et al., 2021).

Two factors, namely the supply of savings and the demand for capital investment (particularly from the business sector), affect interest rates (Pramudito, 2022). The difference between income and consumption is represented by savings (Pramudito, 2021). The financing-to-deposit ratio (FDR) provides insight into a bank's ability to provide financing. This ratio indicates how much money is borrowed from savings. A high ratio shows that a bank is lending all of its cash or is relatively illiquid; it can also be used to gauge the amount of liquidity (Pramudito et al., 2023). A low ratio, on the other hand, denotes a liquid bank with extra cash available for lending. The formation of inflation based on the natural rate of unemployment (Rembulan et al., 2023). The natural rate of unemployment is the level at which pressures on wages and prices cause them to be in equilibrium (Latumaerissa, 2014). Below that level, inflation generally tends to increase; above that, inflation tends to fall to normal levels (Arif, 2010). The price or value of a currency stated in terms of another country's currency is known as the exchange rate. The amount of domestic currency required to purchase one unit of foreign currency is known as the foreign exchange rate. Deposits are a type of client savings that have a bigger profit share than savings and a minimum amount as well as a set time limit.

Methodology

There are two different sorts of data in this study, namely qualitative data and quantitative data, based on the format of the data. Additionally, this study used quantitative data. Primary data and secondary data are the two categories of data used in this study. Research data received directly from primary sources (as opposed to through intermediary media) is known as primary data. Secondary data, on the other hand, refers to research information that has been acquired and documented by third parties and is obtained by researchers indirectly through intermediary media. The secondary data used in this study are secondary data for the time series 2013–2022, and researchers used secondary data for this study. Researchers used information from monthly BI rate reports published by BI as well as annual FDR, inflation, and Mudharabah deposit rate reports published by BUS. Commercial Indonesian banks that follow sharia law make up the study's population. Only a subset of the population is used by researchers as a representative. Purposive sampling was used to take the samples. The data analysis method is a way for processing research findings and drawing a conclusion. With the use of EVIEWS, quantitative analysis was used in this study. To help in processing, calculating, and analyzing statistical data, EVIEWS is software that can be used. Regression is used to gauge how much an independent factor has influenced the dependent. The multiple linear regression method is the analysis technique employed in this study to address the problem formulation.

Case studies

Regression analysis in the t-test produced a result of -11.256 with a significance level of 0.000, indicating that the SBI interest rate has a significance value of < 0.05 (5%), meaning that it has no discernible impact on sharia banking deposits. The researchers discovered evidence that support the conclusions of this research, where they mentioned the partial influence of SBI interest rates on deposits, although with small outcomes, which is contradictory to the hypothesis given. The source of economic instability or economic shock is none other than the result of using money as a commodity tool in order to obtain greater profits. If changes in interest rates occur every month, an investor will have great potential to invest. In this way, the SBI interest rate, or BIRate, will also improve. Lower borrowing costs will result from low interest rates. Low interest rates will encourage spending and economic growth, which will raise stock prices. Interest rates have a significant impact on the performance of real estate enterprises because they contribute to rising economic activity, which directly affects deposit growth. Because there is a negative correlation between interest rates and deposit growth, interest rates have a major impact on deposit growth. Interest rates are one of the variables that affect deposit growth.

The findings of this study demonstrate that the notion FDR profitability of sharia commercial banks is either untrue or of no consequence. T value for FDR is calculated to be 0.092. This number is less than the t-table's cutoff of 2.032 and the sig t cutoff of $0.927 > 5\%$ (0.05). As a result, testing for hypothesis H2 is not satisfied. In that some deposits are not impacted by the FDR variable. The findings of this study are corroborated by earlier research, which

found that while financing distribution had a positive impact on profits, the three variables tested financing distribution, FDR, and NPF ratio had opposite effects on profits. According to the partial test that has been done, total financing distribution and NPF have a genuine impact on bank profit, but only the FDR ratio has no real impact on profit. This is in contrast to other research's findings, which indicate that the financing-to-deposit ratio (FDR) has a considerable beneficial impact on ROA in part. The economic status of the object may differ from that observed by present researchers compared to that observed by earlier researchers as a result of differences in observations. Research findings can vary as a result of different data kinds.

Aside from that, the t-test indicates that FDR has little to no impact on earnings. This demonstrates that the high FDR, which indicates the great effectiveness of the intermediation function of sharia commercial banks, has no impact on the profits attained by the bank. When analyzing the function, it becomes clear that the FDR variable significantly affects deposits because the FDR coefficient has a negative value of 0.001 and a t-value of 0.092 (higher than 0.05). The negative regression coefficient explains that if the FDR increases by 1 unit, deposits will not decrease significantly by 0.001. Apart from being influenced by financing, the financing-to-deposit ratio is also influenced by total third-party funds. Increasing financing and reducing FDR to increase profits can be implemented simultaneously by increasing the collection of third-party funds beyond the distribution of financing. If you look at the historical data available on sharia commercial banks, this argument makes a lot of sense because the FDR value shows quite high numbers. In reality, the FDR value displayed numbers that were higher than 100% during a number of times. There is a substantial relationship between the inflation variable and deposit growth, as demonstrated by the regression analysis findings in the t-test, which showed that the variable acquired a result of -7.364 with a significance of 0.000. This means that the significance value of inflation is < 0.05 (5%), which is a significant influence. This is counter to the theory put forward. The findings of the research mentioned above demonstrate that price rises are a direct effect of the pace of inflation growth, and that profits may also decline as a result. There are two perspectives in studying inflation in Indonesia, namely the demand and supply sides. Inflation is a demand factor caused by excess money circulating in society, which affects demand and prices. Increasing public demand causes inflation, while inflation occurs due to supply factors with high operational costs; this could be due to high credit interest rates or because of strategic commodity prices by the government.

Depending on how much inflation there is, the inflation rate may have either a good or negative impact. The economy as a whole may suffer from excessive inflation, which can lead to many businesses filing for bankruptcy. According to the aforementioned theory, deposit growth can decline at high inflation levels, and if deposit growth declines, then the profits realized will also be modest. This means that establishing inflation, which can make the business world more active, economic development can cover unemployment, businesses have sufficient profits, and deposit growth proceeds properly, is a difficult item to realize. Inflation and deposit growth are positively and significantly correlated, according to additional study. In several emerging stock markets, inflation is positively correlated with the rate of return on investment in shares. This fact indicates that, with a high level of inflation, it can be expected that the rate of return on investment in shares will also be high. This indication could be caused by the positive correlation between inflation and real economic activity in many developing countries and the close relationship between monetary policy and real sector policy in these countries.

There is a substantial impact on deposit growth since the exchange rate has a significance value of < 0.05 (5%), according to the regression analysis's results for the t-test, which found a value of -5.989 with a significance level of 0.000. Hypothesis testing is justified because if the US\$ exchange rate experiences significance, then the results of this research can be said to be that the value of the rupiah is weakening. Because if the exchange rate strengthens, it will affect the growth rate of deposits. Each deposit's growth is affected differently by changes in macroeconomic variables; for example, one share may be positively impacted while another may be negatively impacted. If issuers with debt in dollars are negatively impacted by the sudden US\$ depreciation against the rupiah while their goods are sold locally, the issuer's growth of deposits, which is also negatively impacted, will experience a decline on the stock exchange, while the issuer is positively impacted, it will increase the growth of deposits. The exchange rate (kurs) is referred to as a money changer or foreign exchange in other languages. Foreign exchange refers to foreign money that can be used to pay for international business deals and that also has an official central bank exchange rate history.

Conclusion

It was established that the Bi Rate variable had a considerable and adverse impact on the volume of sharia banking deposits in Indonesia during the research observation period. The significance value from the t-test is less than $\alpha = 5\%$ (0.05), while the regression coefficient value from the Bi Rate is negative. This means that the first hypothesis (H1) of the Bi Rate variable, according to which the Bi Rate has a favorable and large impact on deposits, is disproved. The t-test results indicate that FDR has a favorable impact on the quantity of sharia banking deposits in Indonesia. This is so because the FDR coefficient value is positive and the significance value is less than $\alpha = 0.05$. Therefore, it can be concluded that the second hypothesis of the FDR variable, according to which FDR has a favorable and considerable impact on sharia bank profitability, is true. This occurs because sharia banking deposits are impacted by the value of the financing offered to consumers who use deposit monies, which is more profitable. The amount of banking deposits was shown to be significantly and favorably impacted by the inflation variable over the course of the research observation period. The t-test results indicate that there is a positive and significant relationship between inflation and the quantity of sharia banking deposits in Indonesia. This is so because the regression coefficient for inflation is positive and the significance value is less than $\alpha = 5\%$ (0.05). The third hypothesis (H3) from the inflation variable, which indicates that inflation has a positive and significant effect on the amount of sharia banking deposits in Indonesia, can therefore be stated to be accepted. The amount of sharia banking deposits in Indonesia is positively and significantly impacted by the currency rate, according to the findings of the t-test. This is so because the exchange rate's regression coefficient is positive and the significance value is less than $\alpha = 5\%$ (0.05). The third hypothesis (H3) from the exchange rate variable, which argues that the exchange rate has a favorable and considerable effect on the volume of sharia banking deposits in Indonesia, can therefore be stated to be accepted.

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