Does the BI 7 Days (Reverse) Repo Rate and Exchange Rate Affect Liquidity With Inflation as Intervening Variables on Islamic Commercial Banks in Indonesia ?

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Abstract

Introduction to The Problem: According to Islamic commercial bank liquidity data for the last 5 years, Islamic commercial bank liquidity has fluctuated but tends to decrease. the liquidity crisis that occurred in banks causing banks to default on most of their obligations. In the new normal era, Islamic banking liquidity is still faced with challenges and opportunities that need to be considered by Islamic banking industry.

Purpose/Objective Study: The purpose of this study is to analyze macroeconomic factors, namely the BI 7 Days (Reverse) Repo Rate and Exchange Rate which affects the Liquidity of Islamic Commercial Banks with Inflation as an intervening variable.

Design/Methodology/Approach: This type of research is quantitative research with secondary data of the type of time series data, monthly data from BIDRR, Exchange Rates, Inflation, and Liquidity of Islamic Commercial Banks for five years, namely 2017-2022. The sample used is purposive sampling. The data analysis technique in this study is Partial Least Squares-Structural Equation Model (PLS-SEM).

Findings: Based on the results of path analysis both directly and indirectly, this study indicates that variable BI 7 Days Reverse Repo Rate and Exchange rate effect significant to the Liquidity of Islamic Commercial Banks with Inflation as an Intervening Variable, either directly or indirectly.

Paper Type: Research Article

Keywords: BI 7 Days (Reverse) Repo Rate; Exchange Rate; Liquidity; Inflation; Islamic Commercial Banks

Introduction

In sharia banking, financing grew higher, reaching 20.9% (yoy) in January 2023. Economic liquidity also remained adequate to support economic activity, reflected in the narrow (M1) and broad (M2) money supply which grew by 8.5% (yoy) and 8.2% (yoy) respectively in January 2023. This development is in line with the accommodative liquidity policy stance by Bank Indonesia to support the availability of funds for banks to channel credit/financing to the business world. The global economy in 2023 is expected to face many challenges, including continuing geopolitical tensions, increasing potential for recession in developed countries, and climate change issues (BI, 2023).

In the midst of a slowdown in the national economy, there are five important issues that sharia banking must pay attention to. Among them are banking liquidity, regulatory changes, sharia ecosystem, focus on financing, and digitization. Perhaps, with the enactment of the Financial Sector Development and Strengthening Act (UU PPSK), there is no longer any obligation to spin-off sharia business units (UUS) to become sharia commercial banks. Meanwhile, liquidity is expected to get tighter, the banking industry is encouraged to be more innovative. The impact of the normalization of monetary policy has resulted in tighter liquidity availability.

Picture 1 Graphic of Islamic Banks Liquidity Data Periode 2017-2022
Source: The Financial Services Authority (OJK), 2023

In addition, based on picture above, According to Islamic commercial bank liquidity data for the last 5 years, Islamic commercial bank liquidity has fluctuated but tends to decrease. the liquidity crisis that occurred in banks causing banks to default on most of their obligations. In the new normal era, Islamic banking liquidity is still faced with challenges and opportunities that need to be considered by Islamic banking industry.

The challenge for Islamic bank liquidity is a decrease in credit quality and an increase in credit risk: As a result of the Covid-19 pandemic, many debtors are having difficulty paying credit installments, thus increasing credit risk for banks. This can reduce the liquidity of Islamic banks. Lowering interest rates, In the midst of the Covid-19 pandemic, Bank Indonesia lowered its benchmark interest rate to encourage economic growth. This can reduce bank profit margins and have an impact on Islamic bank liquidity. In financial market uncertainty, the Covid-19 pandemic has also created uncertainty in global financial markets, which can affect the liquidity of Islamic banks.

Meanwhile, opportunities for Islamic bank liquidity Increased demand for Islamic financing. During the Covid-19 pandemic, many debtors chose Islamic financing as an alternative to conventional financing. This can increase the liquidity of Islamic banks. Besides, there's development of financial technology. In the new normal era, financial technology is growing and can be used to increase the liquidity of Islamic banks by facilitating the transaction process and reaching a wider range of customers. Government policies that support sharia banking: The Indonesian government continues to encourage the development of sharia banking, including through the provision of incentives and supportive regulations, which can help increase the liquidity of sharia banks.

In facing challenges and taking advantage of these opportunities, Islamic banks need to continue to strengthen risk management and innovate in products and technology to be able to remain competitive and maintain good liquidity in the new normal era. If there is a liquidity problem at one bank, it can spread to other banks, thereby creating systemic risk (Kamila, 2018)). Liquidity is an important indicator of the financial performance of Islamic banks. Adequate and healthy liquidity enables Islamic banks to meet the funding needs of customers, carry out their operations effectively and efficiently, and meet predetermined payment obligations.

As a financial institution, Islamic banks play a very important role in the economy. Islamic banks mobilize funds from the public and channel them back in the form of credit. Therefore, adequate and healthy liquidity is very important for Islamic banks to maintain the stability and continuity of their operations. When an Islamic bank experiences a lack of liquidity, the bank is unable to meet the funding needs of customers and fulfill payment obligations. This can result in the reputation of Islamic banks being tarnished and reducing customer trust in banks. This condition can also affect the viability of the bank and trigger greater liquidity risk. On the other hand, if Islamic banks have sufficient liquidity, these banks can carry out their operations effectively and efficiently. This condition can increase customer trust and strengthen the bank's reputation. Healthy liquidity conditions can also enable Islamic banks to provide greater credit and participate in large project financing activities. Therefore, it is important for Islamic banks to monitor and manage their liquidity properly as part of financial performance.

Macroeconomic factors can affect the liquidity of Islamic banks in several ways such as interest rates. If interest rates rise, the cost of financing for customers will also increase. This can reduce the demand for financing and consequently reduce bank revenues. therefore, if the ratio decreases, the demand for financing can increase and ultimately increase bank revenues. Not only that, inflation can affect the liquidity of Islamic banks because high inflation rates can increase bank operating costs. This can affect the ability of banks to borrow funds from the market and can reduce bank liquidity. Then, strong economic growth can increase demand for financing from customers, which in turn can increase bank revenues. On the other hand, if economic growth slows down, demand for financing may decrease, which may affect bank revenues and liquidity. Monetary policies, such as interest rate policies and mandatory reserves, can affect the liquidity of Islamic banks. If the central bank raises interest rates, then the cost of financing for customers will also increase and can reduce demand for financing. If the central bank increases statutory reserve requirements, this can reduce the amount of money available for banks to borrow, which can affect bank liquidity. then, if you look at global financial market conditions, it can also affect the liquidity of Islamic banks. Global market fluctuations can affect the value of bank assets and can also affect the ability of banks to obtain financing. If global market conditions decline, investors may withdraw their funds from the market, which can reduce bank liquidity. In order to properly manage the liquidity of Islamic banks, banks must monitor and understand macroeconomic factors and make appropriate strategies to deal with the associated risks.

Liquidity can lead to bankruptcy of banks because they have to sell assets far below their value to meet the needs of their current financial obligations. Basic level risk management allows Islamic banking to take preventive action rather than reactive action in dealing with risks (Waemustafa & Sukri, 2016). According to (Ajao et al., 2012) Liquidity plays an important role in the success of the company. Islamic banking liquidity according to Islam is governed by sharia principles that promote fairness and sustainability in the economy. According to (Sulistyowati and Riyanto, 2014), Islamic

bank liquidity arrangements must pay attention to factors that affect liquidity such as credit risk, liquidity risk, and market risk. In addition, (Haris and Nugroho, 2018) also emphasized the importance of sharia principles in managing Islamic bank liquidity to ensure fairness and sustainability in the economy.

One of the main principles in managing Islamic bank liquidity is the Mudharabah principle or part of Islamic financing. According to the Mudharabah principle, Islamic banks must ensure that the money they collect from customers and investors is invested in productive projects that are lawful and beneficial to society. In addition, Islamic banks must also ensure that these projects meet economic, social and environmental criteria recognized by sharia. To ensure liquidity, Islamic banks can also use Islamic financial instruments such as Wadiah Certificates or Mudharabah Certificates to withdraw funds from customers.

However, Islamic banks must ensure that the instrument fulfills Islamic requirements and does not conflict with the principles of equity and sustainability. In addition, Islamic banks must also ensure that the investments they make do not contain elements of usury, gharar (uncertainty), or maisir (gambling). Islamic banks must pay attention to the principle of prudence in managing liquidity and making investments that are in line with sharia principles. In maintaining its liquidity, Islamic banks can also collaborate with other banks to obtain the funds needed to run their business. However, such cooperation must comply with sharia principles and not contain elements of usury or elements that conflict with other sharia principles. By adhering to sharia principles in managing liquidity, sharia banks are expected to be able to maintain business continuity and provide benefits to society in a fair and sustainable manner. The higher the liquidity, the better the company value. This is because the company is able to maintain performance in fulfilling obligations that are due.

Interest rates are the main tool of monetary policy and an important macroeconomic variable positively related to the country's economic growth. Usually, the interest rate is said to be cost of capital, means the price paid for the money used over a period of time certain. (Ahmed, 2018). Interest rates in Indonesia are usually known as the BI Rate. BI Rate is policy in the form of determining interest rates carried out by Bank Indonesia as a policy monetary and information given to the public. BI Rate in carrying out its activities in the form of stabilizing inflation so that it remains low and the amount of the BI Rate has been determined in various ways consideration by carrying out the monetary policy mechanism as the ultimate goal in maintain inflation (Prawiranegara & Ramdhan, 2016). To overcome this, starting from August 19, 2016, BI 7-Day Repo was implemented Rate (hereinafter referred to as BI7DRR). The purpose of enacting the BI7DRR is so that institutions banks do not need to wait at least 1 year to withdraw the money deposited. The banks can withdraw the money after keeping it for a minimum of 7 days at Bank Indonesia. Then the return is added to the amount of interest as previously promised. It is hoped that this policy can effectively control interest rates. Which of course has an impact on channeling credit from banks to the public to become smoother and increasing liquidity.(BI, n.d.)

Value exchange or exchange rate (foreign exchange rate) is the price of a country's currency relative to another country's currency (Sudi, 2010). Because of this exchange rate includes two currencies, then the period the balance is determined by the sides and demand from both eyes the money"Exchange (Excange Rate) is the exchange between two currencies different, is a comparison of values or the price between the two currencies." Can be concluded from several the definition above that the exchange rate is amount of money in a particular currency interchangeable with one unit another country's currency. Tandelillin (2000) states that economic factors macro has been empirically

proven have an impact on market conditions capital in several countries. Factors namely the growth rate of inflation, interest rates and currency exchange rates (exchange rates).

According to (Mubyarto, 2016), the classic inflation theory states that inflation is caused by an increase in the money supply which is not followed by an increase in goods and services on the market. Therefore, the solution to overcome inflation is to reduce the money supply. Likewise, (Santoso, 2019) was not matched by an increase in the production of goods and services. Therefore, handling inflation must be done with the right monetary policy such as raising interest rates or increasing bank mandatory reserves. In conclusion, inflation is a complex phenomenon that can be caused by various factors, and there are different theories that attempt to explain its causes. Understanding the causes of inflation is important for policymakers to design effective monetary and fiscal policies to manage inflation and maintain economic stability.

This study aims to determine whether the BI 7 Days Reverse Repo Rate variable has an influence on the Liquidity of Islamic Commercial Banks with Inflation as an intervening variable. This is based on the hypothesis: 1) H01 The BI7DDR variable has no effect on inflation Ha1: Variable BI 7DRR has an effect on inflation; 2) H02: Exchange rate variables have no effect on inflation, Ha2: Exchange Rate Variables have an effect on Inflation; 3) H03: BI7DRR variable has no effect on Liquidity Ha3: Variable BI7DRR affects Liquidity; 4) H04: Exchange rate variables have no effect on liquidity, Ha4: Exchange Rate Variables affect Liquidity; H05: Inflation variable has no effect on Liquidity, Ha5: Inflation Variable affects Liquidity; H06: The BI7DRR variable has no effect on liquidity through inflation as an intervening variable; Ha6: The BI7DRR variable influences liquidity through inflation as an intervening variable; H07: Exchange rate variables have no effect on liquidity through inflation as an intervening variable; Ha7: Exchange rate variables affect liquidity through inflation as an intervening variable

Methodology

This study aims to determine the effect between research variables through testing the hypotheses formed based on theoretical reviews conducted by researchers. This research wants to know the causal relationship between research variables, namely the BI 7 Days (Reverse) Repo Rate (X1), Exchange Rate (X2), Liquidity (Y), and Inflation (Z). The sampling technique was purposive sampling, in the form of secondary data, namely time series data for 5 years, totaling 60 samples from 2017-2022. Furthermore, on PLS-SEM stated that the minimum sample size used by PLS-SEM was 30-100 sample sizes. (Chin, 2000) In this case it can be said that the sample size is the minimum that used PLS-SEM is smaller than SEM in the form of BI 7 Days (Reverse) Repo Rate Data, Exchange Rates, Inflation and Liquidity of Islamic Commercial Banks, obtained from the website of Bank Indonesia, Service Authority Finance (OJK), and the Ministry of Trade. The analysis technique used in this study is the Structural Equation Model – Partial Least Square (SEM-PLS).

Results and Discussion

A. Result

Analysis using PLS consists of two parts, namely: (Imam Ghozali, 2017) 1) The first stage is to test the outer model or measurement model which defines how each indicator relates to its latent variables. This stage will test convergent validity, construct validity, discriminant validity and construct reliability of each research variable. 2) The second stage is to test the inner model (structural model) which describes the relationship between latent variables. This stage will test the Coefficient of Determination, Predictive Relevance, Goodness of Fit and Path Coefficients.

1. Outer Model Analyasis

Convergent Validity Test

The first stage of outer model measurement analysis is to look at the convergent validity value which is the loading factor value on the latent variable with its indicators. The reflexive measure of the indicator is said to be valid if the loading factor value is more than 0.70.

Table 1 *Loading Factors*

	BI7DRR	EXCHANGE RATE	INFLATION	LIQUIDITY
BI 7DDR	1.000			
EXCHANGE RATE		1.000		
INFLATION			1.000	
LIQUIDITY				1.000

Source: Output Program Smart PLS, 2023

Based on Table 1, all indicators in this study have valid convergent validity. The following is an image of the outer model according to a valid indicator:
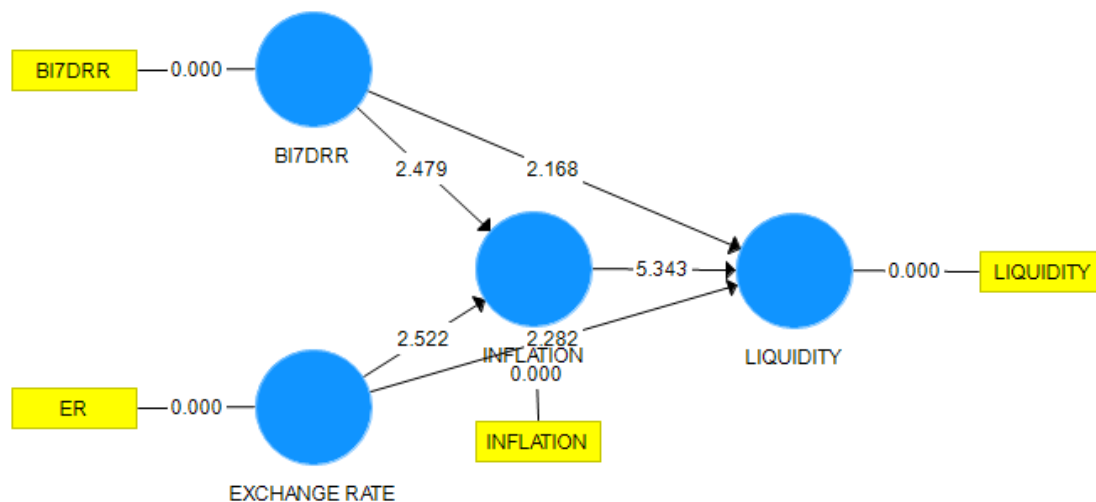
Picture 2 Outer Model
Source: Output Program Smart PLS, 2023

Construct Validity Test

A construct is said to have good construct validity if the Avarage Variance Extracted (AVE) value must be above 0.5.

Table 2 Average Variance Extracted (AVE) Value

Variabel	Average Variance Extracted (AVE)	Ket.
BI7DRR	1.000	Valid
EXCHANGE RATE	1.000	Valid
INFLATION	1.000	Valid
LIQUIDITY	1.000	Valid

Source: Output Program Smart PLS, 2023

Based on Table 2, it shows that all variables in this study have good construct validity values in representing indicators.

Composite Realibility Test

Composite reliability test can be observed from Cronbach's Alpha and Composite Reliability values. A construct can be said to be reliable, if it has a Composite Reliability or Cronbach's Alpha value above 0.70.

Tabel 3 Composite Reliability Test

Variabel	Cronbach's Alpha	Composite Reliability	Ket
BI7DRR	1.000	1.000	Reliable
EXCHANGE RATE	1.000	1.000	Reliable
INFLATION	1.000	1.000	Reliable
LIQUIDITY	1.000	1.000	Reliable

Source: Output Program Smart PLS, 2023

Based on Table 3 shows that all the variables in this study have a value Crobach's alpha and composite reliability are more than 0.5-0.6, so all variables are reliable.

2. **Inner Model Analysis**

Determination Coefficient Test

The coefficient of determination can be seen in Table R2 by multiplying the R2 value by 100%. According to , the R2 result of 0.67 indicates that the model is categorized as good, 0.33 is categorized as moderate and 0.19 is categorized as weak.

Tabel 4 Koefisien Determinasi (R2)

	R Square
LIQUIDITY	0.402
INFLATION	0.227

Source: Output Program Smart PLS, 2023

Based on Table 4 it shows that the R Square value in the Liquidity variable as the dependent variable (Y) is 0.402. This means that the value of R Square in this study can be categorized as moderate and means that the independent variable has been able to provide all the information needed to explain and predict the dependent variable. So, the BI 7 Days (Reverse) Repo Rate and Exchange

Rate variables have been able to explain the Liquidity variable of 40.2% while the remaining 59.8% is influenced or explained by other variables not examined.

Furthermore, the R Square in the Inflation variable as an Intervening variable (Z) is 0.227. This means that the R Square value in this study can be categorized as low and means that the intervening variable has been able to provide all the information needed to explain and predict the dependent variable. Thus, the BI 7 Days (Reverse) Repo Rate and Exchange Rate variables have been able to explain the Inflation variable of 22.7% while the remaining 77.3% is influenced or explained by other variables not examined.

Predictive Relevance (Q-Square) Test

This predictive relevance test indicates the predictive capability of the model whether the observation results produced by the model are feasible or not. A Q2 value that exceeds zero has a good meaning, whereas if a Q2 value is less than zero it indicates that the model lacks good predictive relevance. Based on the data obtained from the results of the previous PLS test, namely testing the coefficient of determination (R2). The predictive relevance value that can be known through Q2 calculations is as follows:

$$
\begin{aligned}
\text{Q Square} \quad &= 1 - [(1\text{-}R21) \times (1\text{-}R22)] \\
&= 1 - [(1\text{-}0{,}402) \times (1\text{-}0{,}227)] \\
&= 1 - [(0{,}598) \times (0{,}773)] \\
&= 1 - 0{,}462 \\
&= 0{,}538
\end{aligned}
$$

Based on the results of the Q2 calculation above, it can be stated that the model has a predictive relevance value of more than zero (0) or 0.538 or 53.8%. This indicates that the analysis model has good predictive relevance.

Goodness of Fit (GoF) Test

The goodness of fit model test can be seen from the NFI value which is 1 which means fit. Based on the data processing that has been done using the SmartPLS 3.0 program, the Fit Model values are obtained as follows:

Tabel 5 Model Fit

	Saturated Model	Estimated Model
SRMR	0.000	0.000
d_ULS	0.000	0.000
d_G	0.000	0.000
Chi-Square	0.000	0.000
NFI	1.000	1.000

Source: Output Program Smart PLS, 2023

3. **Analysis of Hypothesis Testing**
   Path Coefficients Test

After assessing the inner model, the next thing is to evaluate the relationship between latent constructs as hypothesized in this study. Hypothesis testing in this study was carried out by looking at

the T-Statistics and P-Values. The hypothesis is declared accepted if the T-Statistics value is > 1.96 and the P-Values are <0.05. The following are the results of the Path Coefficients of direct influence:

Tabel 6 Path Coefficients

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
BI7DRR -> INFLATION	0.256	0.276	0.103	2.479	**0.016**
BI7DRR -> LIQUIDITY	0.216	0.221	0.1	2.168	**0.034**
EXCHANGE RATE -> INFLATION	0.375	0.361	0.149	2.522	**0.014**
EXCHANGE RATE -> LIQUIDITY	-0.34	-0.347	0.149	2.282	**0.026**
INFLATION -> LIQUIDITY	-0.438	-0.433	0.082	5.343	**0.000**

Source: Output Program Smart PLS, 2023

Based on the table above, it shows that of the five hypotheses that have a direct effect, the hypothesis is accepted because the T-Statistics value > 1.96 P-Values <0.05. The test results also indicate that the p-value of all variables is smaller than 0.05, meaning that all variables have a significant effect.

Tabel 7 Specific Indirect Effect

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
BI7DRR -> INFLATION -> LIQUIDITY	-0.112	-0.118	0.047	2.379	**0.021**
EXCHANGE RATE -> INFLATION -> LIQUIDITY	-0.164	-0.160	0.078	2.117	**0.038**

Source: Output Program Smart PLS, 2023

Based on the table related to indirect effects, through specific indirect effects, the two hypotheses are accepted because the T-Statistics value > 1.96 P-Values <0.05. The test results also indicate that the p-value of all variables is smaller than 0.05, meaning that all variables have a significant effect.

B. Discussion
The Influence of BI 7 Days (Reverse) Repo Rate on Inflation

Based on Table 8, it shows that the BI 7 Days (Reverse) Repo Rate variable benefits have a positive influence on inflation, with a parameter coefficient value of 0.256. BI 7 Days (Reverse) Repo Rate also have a significant influence as can be seen from the t-statistic value, which is 2.479> 1.96 and the p-value is 0.016< 0.05 so that H01 is rejected and Ha1 is accepted. These results are also in line with research conducted by (Nurfarhana & Anita, 2018) which revealed that there is a significant influence on the BI Rate to the inflation rates. When the BI rate is increased, the loan interest rates offered by banks will also increase. This can reduce public demand for loans and

investments, so that the money supply in the market will decrease. Thus, inflation can be suppressed due to reduced money supply. Conversely, if the BI rate is lowered, the loan interest rates offered by banks will also decrease. This can increase public demand for loans and investments, so that the money supply in the market will increase. Thus, inflation can increase due to increased money supply. In addition, an increase in interest rates can also attract investors to put their money in safer investment instruments, such as bonds, thereby reducing liquidity in the money market and lowering the inflation rate. Conversely, when the BI 7 Days Rate is lowered, the prevailing interest rates on the money market also tend to fall. This will make borrowing costs cheaper, thereby increasing consumer demand and increasing the inflation rate. In addition, a decrease in interest rates can also encourage investors to withdraw their money from investment instruments that are less profitable, such as bonds, thereby increasing liquidity in the money market and increasing the inflation rate. n order to control inflation, Bank Indonesia uses various monetary policy instruments, including the BI 7 Days Rate, to influence the demand for money and stabilize prices in the market. Therefore, the BI 7 Days Rate has an important urgency in controlling inflation in Indonesia. it is different from (Setiartiti & Hapsari, 2019) which states that the BI Rate has no significant effect on inflation.

The Influence of BI 7 Days (Reverse) Repo Rate on Liquidity

Based on Table 8, it shows that the BI 7 Days Repo Rate variable has a positive influence on inflation, with a parameter coefficient value of 0.216. Perceived benefits also have a significant influence as can be seen from the t-statistic value, which is 2.168< 1.96 and the p-value is 0.034>0.05 so that H01 is rejected and Ha2 is accepted. These results are also in line with research conducted by (Aditya & Hariyani, 2021) and (Muchtar, 2017) which revealed that there is a significant influence on the BI Rate to the liquidity of banking institutions. The high level of the BI rate set by Bank Indonesia will resulting in increased interest rates on the bank so that it will not stimulate the development of economic enterprises, however the low level of the BI rate indicates that there is a slowdown economy. This relates to the supply and demand for credit distribution. Also with BI's reference rate which focuses on banking and real sector interest rates. The BI 7 Days Rate or the interest rate set by Bank Indonesia for interbank transactions with a period of 7 days can affect the liquidity of Islamic banks, because Islamic banks are also involved in interbank transactions and depend on money market liquidity. When the BI 7 Days Rate rises, Islamic banks that need funds from the money market will experience an increase in financing costs. This condition can affect the liquidity of Islamic banks, especially if the bank has difficulty covering its liquidity needs with other sources of funds. Conversely, when the BI 7 Days Rate falls, interest rates on interbank loans also tend to fall, so that Islamic banks that need funds from the money market will receive lower financing costs. This condition can help increase the liquidity of Islamic banks, because these banks can more easily obtain funds from the money market at a lower cost. Thus, the BI 7 Days Rate can affect the liquidity of Islamic banks, and it is important for Islamic banks to anticipate changes in the BI 7 Days Rate to anticipate their impact on their liquidity conditions.

The Influence of Exchage Rate on Inflation

Based on Table 8, it shows that exchange rate variable have a positive influence on inflation, with a parameter coefficient value of 0,375. Exchange Rate also have a significant influence as can be seen from the t-statistic value, which is 2.522> 1.96 and the p-value is 0.014< 0.05 so that H03 is rejected and Ha3 is accepted. These results are also in line with research conducted by (Umam & Isabela, 2018). positive and significant relationship to the percentage change in the inflation rate in

Indonesia. This is appropriate theory, that the higher the exchange rate, the higher the inflation rate Indonesia. The findings show that in the short term value the exchange rate has a positive and significant influence on the inflation rate inIndonesia. Likewise, in the long term, the exchange rate has an influence positive and significant to the inflation rate in Indonesia. In other words, the high and low levels of inflation influenced by the high and low value of the exchange rate generated by a country. An exchange rate that is too high or too low can affect the availability of goods and services in the domestic market, which in turn affects the inflation rate. If the exchange rate appreciates (strengthens), it will reduce the price of imported goods. In the short term, this can reduce the inflation rate. However, if the appreciation is too rapid and significant, this can also affect exporters, because the prices of exported goods become more expensive and less competitive. Therefore, in the long run, an appreciation that is too fast and significant can affect overall economic growth.On the other hand, if the exchange rate weakens, it will increase the price of imported goods, which in turn can increase the inflation rate in that country. However, if the exchange rate weakens continuously and significantly, it can affect the country's overall economic stability. Therefore, research on the relationship between the exchange rate and inflation is very important to help decision makers and economic actors understand the impact of changes in exchange rates on the inflation rate in a country. By understanding the relationship between the exchange rate and inflation, decision makers can take appropriate policies to control inflation and maintain overall economic stability.

The Influence of Exchage Rate on Liquidity

Based on Table 8, it shows that exchange rate variable have a negatif influence on Liquidity, with a parameter coefficient value of -0,340. Exchange Rate also have a significant influence as can be seen from the t-statistic value, which is 2.282> 1.96 and the p-value is 0.026< 0.05 so that H04 is rejected and Ha4 is accepted. These results are also in line with research conducted by (Aditya & Hariyani, 2021) that Exchange Rate has negative and significant relationship to the percentage change of Liquidity. An increase in the exchange rate will reduce the Liquidity because the dollar exchange rate increases will cause the rupiah currency to weaken and experience depreciation, the weakening of the rupiah will impact on production costs and increase in import prices which then causes decreased revenue, especially for companies engaged in imports and raw materials obtained from abroad. Exchange rates have an important urgency for the liquidity of Islamic commercial banks in Indonesia, because unstable exchange rates can affect bank liquidity conditions. Islamic commercial banks in Indonesia generally operate their activities using the rupiah currency and several foreign currencies such as United States dollars, euros, yen, and so on. Therefore, fluctuations in foreign currency exchange rates against the rupiah can have an impact on the liquidity conditions of Islamic commercial banks. On the other hand, if the rupiah exchange rate appreciates or strengthens, Islamic commercial banks that have assets in foreign currencies will benefit. These advantages can affect the condition of bank liquidity by increasing the bank's liquidity reserves and capital adequacy. In situations like this, Islamic commercial banks can have easier access to the liquidity needed to carry out their operations and fulfill obligations to customers.Therefore, understanding the urgency of the exchange rate on the liquidity of Islamic commercial banks in Indonesia is very important to maintain the stability of the Islamic banking system and manage the risks associated with fluctuations in foreign currency exchange rates. Decision makers in Islamic commercial banks need to pay attention to changes in exchange rates and make appropriate risk management strategies to optimize bank liquidity conditions.A decrease in revenue will make it difficult for the company to pay liabilities and cause bank trouble financing. When experiencing financing problems banks will reduce the proportion of

financing disbursement to avoid financing risks and maintain liquidity.(Dwi Putri Lestari & Rani, 2022)

The Influence of Inflation on Liquidity

Based on Table 8, it shows that Inflation variable have a negatif influence on Liquidity, with a parameter coefficient value of -0,438. Inflation also have a significant influence as can be seen from the t-statistic value, which is 5.433> 1.96 and the p-value is 0.000< 0.05 so that H05 is rejected and Ha5 is accepted. These results are also in line with research conducted by (Aditya & Hariyani, 2021) (Dwi Putri Lestari & Rani, 2022)**.** Rising inflation causes people's income decreases, so that the funds collected by the bank will not be optimal affect the decrease in the distribution of financing in order to avoid losses. So, the higher the inflation will cause a decrease in liquidity. This phenomenon can occur because the high rate of inflation will have an impact on a decrease in people's real income which will result in a decrease in people's desires save in the bank. Therefore, banks reduce the proportion of financing and are more selective in financing distribute financing to avoid the risk of default in order to maintain liquidity.(Ichwan & Nafik H.R, 2017). Inflation can cause a decrease in the value of money, so that the value of bank assets measured in currency can decrease. This can affect the availability of funds and bank liquidity conditions. When inflation increases, Islamic banks that hold assets in the form of bonds and securities will experience a decrease in the value of these assets. This condition can cause Islamic banks to experience difficulties in maintaining liquidity and meeting funding needs. An increase in inflation can also affect the funding costs of Islamic banks, thereby increasing the liquidity risk faced by banks. On the other hand, inflation can also affect financing requests by customers. This can make customers reluctant to take financing, so that demand for financing decreases. This can affect the availability of funds and bank liquidity conditions. Therefore, understanding the urgency of inflation on Islamic bank liquidity is very important in managing liquidity risk. Decision makers in Islamic banks need to properly monitor and analyze inflation conditions, as well as take steps to optimize bank liquidity in situations of high inflation. Efforts such as strengthening bank capital, managing liquidity risk properly, and increasing the efficiency of fund management can help Islamic banks overcome the impact of inflation on their liquidity.

The Influence of BI 7 Days (Reverse) Repo Rate on Liquidity with Inflation As an Intervening Variable

Based on Table 9, it shows that BI 7 Days (Reverse) Repo Rate variable have a negatif influence on Liquidity with Inflation as intervening variable, with a parameter coefficient value of -0,112. Inflation also have a significant influence as can be seen from the t-statistic value, which is 2.379> 1.96 and the p-value is 0.021< 0.05 so that H06 is rejected and Ha6 is accepted. These results are also in line with research conducted by (Muchtar, 2017) that BI Rate has an impact against islamic bank's short-term obligations in providing funds to be withdrawn by owners of deposits originating from credit given to the public. Therefore, BI's monetary policy, especially in terms of setting the BI 7 Days (Reverse) Repo Rate, is very important in controlling inflation in Indonesia. (Saputri & Hannase, 2021a) Furthermore influential macroeconomic indicators such BI Rate and Inflation not significant to CAR and FDR (Liquidity). Meanwhile, (Gunawan & Manda, 2021)Inflation has a positive value, which means that the greater the inflation, the greater the FDR level as Liquidity. This increase in interest rates can also affect inflation. If interest rates fall, then this can increase the amount of money circulating in society. In the short term, this can increase the demand for and supply of goods and services, so that inflation tends to increase. If inflation increases, people's purchasing power may

decrease. This can affect the liquidity of Islamic banks, because people tend to use less Islamic banking products, such as financing and mudharabah deposits. Conversely, if the BI 7 Days (reverse) repo rate decreases, inflation tends to increase, which can affect the liquidity of Islamic banks. Therefore, it is important for the government and the central bank to wisely monitor and regulate the BI 7 Days reverse repo rate so that inflation and liquidity of Islamic banks are maintained properly.

The Influence of Exchange Rate on Liquidity with Inflation As an Intervening Variable

Based on Table 9, it shows that Exchange Rate variable have a negatif influence on Liquidity with Inflation as intervening variable, with a parameter coefficient value of -0,164. Inflation also have a significant influence as can be seen from the t-statistic value, which is 2.177> 1.96 and the p-value is 0.038< 0.05 so that H07 is rejected and Ha7 is accepted. These results are also in line with research conducted by (Kamila, 2018) that In macroeconomic variables, inflation and exchange rates have a negative influence on bank liquidity. Exchange rates or currency exchange rates can affect a country's liquidity in several ways, primarily through its influence on inflation. An exchange rate that is too high or too low can affect inflation, which in turn can affect liquidity. When the exchange rate of a currency is too high, it means that the value of that currency is higher than the value of other currencies, this can make goods and services more expensive. If the price of goods and services increases, then inflation also tends to increase. This increase in inflation can cause people's purchasing power to decrease, so that the demand for cash is higher. If the demand for cash increases, this can affect liquidity Meanwhile, (Saputri & Hannase, 2021b) inflation rate and exchange rate enough to affect the profitability aspect Islamic banks, but do not have significant influence on aspects liquidity aspect.

Conclusion

From the results of the research and discussion above, the variables BI 7 Days Reverse Repo Rate and Exchange Rate have a significant influence on the Liquidity of Islamic Commercial Banks in Indonesia with Inflation as an intervening variable, both direct and indirect influence. Although some variables have a significant positive and negative influence. Bank Indonesia (BI) uses monetary policy instruments such as the BI 7 Days Reverse Repo Rate and the exchange rate as a way to control liquidity in the money market. The BI 7 Days Reverse Repo Rate is the interest rate paid by BI to commercial banks that deposit funds at BI within a period of seven days. Exchange rate, on the other hand, refers to the exchange rate of one country's currency against another country's currency. When BI raised the BI 7 Days Reverse Repo Rate, loan interest rates on the money market increased, thereby attracting investors to place their funds in Islamic commercial banks. This can increase the liquidity of Islamic commercial banks as they can borrow money at lower interest rates from BI and then provide loans to customers at higher interest rates, increasing their income.However, when BI increases the BI 7 Days Reverse Repo Rate, this can cause a weakening of the economy and reduce inflation. When inflation falls, financing for Islamic commercial banks tend to fall as well, thereby reducing their income. Exchange rates can also affect the liquidity of Islamic commercial banks. When the rupiah exchange rate depreciates against foreign currencies, imports become more expensive and exports become cheaper, thereby increasing domestic demand and increasing the liquidity of Islamic commercial banks. However, when the rupiah exchange rate strengthens, exports become more expensive and imports become cheaper, thereby reducing domestic demand and reducing the liquidity of Islamic commercial banks. In this case, inflation can become an intervening variable because when BI increases the BI 7 Days Reverse Repo Rate to reduce inflation, this can affect the financing of

Islamic commercial banks, which in turn can affect their liquidity. Likewise, when the exchange rate affects domestic demand, it can affect the liquidity of Islamic commercial banks, which can affect overall inflation. Therefore, BI must consider the impact of their monetary policy on the liquidity of Islamic commercial banks and overall inflation.

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