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The Effect of Inflation, Rupiah Exchange Rate, Composite Stock Price Index, and BI Rate on Sharia Commercial Bank Liquidity in Indonesia

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Abstract: *This study aims to analyze the influence of macroeconomic variables, including inflation, the rupiah exchange rate, the composite stock price index (IHSG), and Bank Indonesia's benchmark interest rate (BI Rate), on the liquidity of Islamic commercial banks in Indonesia, as measured by the Financing to Deposit Ratio (FDR) during the period 2013–2018. Secondary data were obtained from banking financial reports, Bank Indonesia, the Financial Services Authority (OJK), and the Central Statistics Agency (BPS). The analytical method used was multiple linear regression with a quantitative approach. The results of the study indicate that the four independent variables simultaneously have a significant effect on the FDR of Islamic commercial banks. Partially, inflation and the rupiah exchange rate have a significant effect on the FDR, while the IHSG and BI Rate show no significant influence. These findings affirm that macroeconomic stability plays a crucial role in maintaining the liquidity health of Islamic banking. This research provides important implications for regulators and stakeholders in the Islamic banking industry in formulating monetary policies and liquidity management strategies.*

Keywords: *Inflation, Exchange Rate, JCI, BI Rate, Liquidity, Sharia Commercial Bank, FDR*

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INTRODUCTION

The dynamics of the national economy will never be separated from the role of the main actors in the financial sector. Behind the smooth flow of capital and the stability of the financial system, there is a large contribution of banking institutions that work systematically and in a structured manner. Without effective intermediation, surplus funds from the community will never be productively allocated to sectors that need financing. Banks not only serve as a liaison between fund owners and capital seekers, but also play a strategic function in maintaining the sustainability of the national economy. Through interest rate mechanisms, credit instruments, and risk management, the banking sector contributes to driving the economy as a whole. Moreover, the role of banks is crucial in supporting the transmission of monetary policy, maintaining financial system stability, and driving real sector growth (Ahamed & Mallick, 2019; Mishkin, 2019). When the stability of this sector is disrupted, the impact can extend to the entire economic structure.

In the midst of a variety of financial service options, the emergence of Islamic banking has attracted the attention of many parties. This phenomenon is not just a trend of religiosity, but also a reflection of the need for an ethical, inclusive, and sustainable financial system. The growth of Islamic banks in Indonesia can be seen from the increase in total assets, network expansion, and the widening customer segmentation. The business model based on sharia principles that prioritizes fairness, transparency, and partnership makes it a competitive alternative in the midst of the dominance of conventional banks. Despite recording positive performance, Islamic banks still face serious challenges in terms of liquidity management, especially during times of macroeconomic turmoil. Weak liquidity resilience can disrupt operations and lower market confidence (Hossain et al., 2021; Abduh & Omar, 2012). Therefore, an adaptive risk management strategy is needed to ensure that Islamic banks remain resilient in the midst of economic uncertainty).

Liquidity is one of the main indicators in assessing the financial health of a banking institution. In the context of Islamic banking, liquidity management is not only related to the ability to meet short-term obligations, but also reflects the effectiveness of the intermediation function based on sharia principles, namely distributing third-party funds to productive sectors in accordance with sharia provisions. One of the commonly used indicators to measure the liquidity level of Islamic banks is the Financing to Deposit Ratio (FDR). FDR measures the extent to which funds raised from customers (third-party funds) are redistributed in the form of financing. This ratio shows the efficiency of the Islamic banking intermediation function while reflecting liquidity risk exposure. A high FDR can indicate optimal utilization of funds, but it also indicates the potential for greater liquidity risk, especially if there is an imbalance between cash inflows and outflows in volatile economic conditions (Setiawan, 2021).

The liquidity performance of Islamic banks is greatly influenced by various external factors, one of which is macroeconomic conditions. Inflation is one of the macroeconomic variables that has a significant influence on the financial stability of banks. High inflation can reduce people's purchasing power, thus affecting the number of deposits in banks and potentially reducing the demand for financing. In addition, inflation often encourages monetary authorities to implement tightening policies, such as

raising the benchmark interest rate (BI Rate), which has a direct impact on the cost of funds and banking financing structures. In the context of Islamic banking, although not directly related to interest, changes in the BI Rate still affect customers' preferences in saving and borrowing funds. A study conducted by Hasan et al. (2021) shows that inflation has a negative correlation with banking liquidity in the Southeast Asian region, including Indonesia, which indicates that increased inflation tends to pressure banks' ability to maintain their liquidity stability.

Fluctuations in the rupiah exchange rate against foreign currencies are one of the significant factors that affect the stability of the financial system, including in the Islamic banking sector. Exchange rate depreciation can increase import costs and exacerbate inflation expectations which in turn suppresses national economic activity. In the real sector, exchange rate uncertainty tends to reduce the interest of business actors in accessing financing, especially in industries that depend on imported raw materials. As a result, the demand for financing decreased, and third-party funds collected by Islamic banks were not optimally channeled. The FDR ratio also decreased, which indicates an imbalance between the function of collecting and distributing funds.

Asset management strategies and banking liabilities are also affected by exchange rate volatility. Market uncertainty has made banks more conservative in managing liquidity, especially in disbursing high-risk long-term financing. OJK Sharia Banking Statistics (2023) noted that exchange rate pressures during 2022 contributed to a slowdown in financing growth, despite an increase in third-party funds. This phenomenon can be explained through Keynesian money demand theory, where in situations of uncertainty, financial institutions tend to maintain high cash reserves rather than aggressively channel financing. This defensive attitude has implications for the increase in idle funds, the decline in the efficiency of intermediaries, and the limited contribution of banks to economic recovery.

The movement of the Composite Stock Price Index (JCI) is a reflection of market sentiment that also affects people's investment behavior. The increase in JCI encourages investors to divert funds from bank deposit instruments to the capital market with the consideration of obtaining higher yields. This transfer of funds has the potential to reduce the collection of third-party funds, especially in mudharabah deposits, which are one of the main sources of Islamic bank funds. Research by Ramadhani and Nugroho (2021) shows a negative relationship between the movement of JCI and Islamic bank liquidity during the 2020–2021 period. In the context of portfolio theory, this phenomenon reflects the rationality of investors in choosing the most profitable investment instruments according to the level of risk that can be tolerated.

Dynamic stock market conditions require Islamic banks to innovate in offering investment products that are able to compete with capital market instruments. The existence of products such as retail sukuk, sharia mutual funds, and futures deposits based on mudharabah contracts is part of the strategy to maintain customer loyalty in the midst of competition between instruments. The 2022 OJK National Survey on Financial Literacy and Inclusion recorded a significant increase in public awareness of financial portfolio diversification. This high level of literacy indirectly pressures banks to maintain liquidity stability through a more adaptive approach, not only relying on conventional

fundraising, but also through innovative, flexible, and market needs-based fund management.

Indonesia, as a country with the largest Muslim population in the world and a dual banking system, has a strategic position as an empirical laboratory to study the dynamics of Islamic banking. The existence of Sharia Commercial Banks (BUS) that operate in parallel with conventional banks creates extensive research opportunities on the response of Islamic financial institutions in the face of macroeconomic pressures. However, studies that comprehensively analyze the simultaneous influence of macroeconomic variables on the liquidity of Islamic banks are still limited. Most previous studies have only focused on one or two macro variables, or examined relatively short periods of time, so they have not provided a comprehensive picture of the patterns of relationships between variables in the context of liquidity management (Putra & Hermanto, 2021).

This study aims to analyze the influence of inflation, rupiah exchange rate, Composite Stock Price Index (JCI), and Bank Indonesia's benchmark interest rate (BI Rate) on the liquidity of Islamic banks in Indonesia, as measured through the Financing to Deposit Ratio (FDR). The test was carried out simultaneously or partially on Sharia Commercial Bank data during the 2013-2018 period. The results of this research are expected to be able to make a theoretical contribution to the development of the Islamic economic literature, especially in the aspect of liquidity management. In practical terms, these findings are expected to be a strategic reference for regulators in formulating monetary policies that are more inclusive of Islamic banking, as well as assisting banking supervisory authorities in identifying systemic risks and designing liquidity control frameworks that are adaptive to macroeconomic dynamics.

LITERATURE STUDY

Liquidity

Liquidity in the context of banking refers to the ability of banks to meet short-term financial obligations, especially in meeting customer withdrawal requests and other operational obligations. In the Islamic financial system, liquidity issues have become increasingly complex due to the limitations of Islamic money market instruments and the non-use of interest-based instruments such as conventional bonds and conventional Bank Indonesia certificates. The imbalance between fundraising and financing disbursement in accordance with sharia principles creates quite high liquidity pressures, especially when there are fluctuations in financing demand or large-scale withdrawals (Hosen & Rahmawati, 2020). Therefore, Islamic banks are required to carry out more careful liquidity management, not only to maintain operational continuity, but also to maintain customer confidence in the stability of their institutions. The limited diversification of liquidity placement instruments also makes Islamic banks vulnerable to mismatches between assets and liabilities, so liquidity management needs to be designed with a more comprehensive risk-based approach (Fitriani & Saputra, 2023).

Financing to Deposit Ratio (FDR) is the main indicator in measuring the intermediation and liquidity performance of Islamic banks. This ratio describes how much third-party funds have been successfully channeled in the form of financing. The

ideal FDR according to the OJK is in the range of 80-110 percent, which shows a balance between optimizing the intermediation function and managing liquidity risk. Ratios that exceed the upper limit may reflect the aggressiveness of banks in disbursing financing, but on the other hand increase the risk of inability to meet short-term obligations in the event of a surge in fund withdrawals (Setiawan, 2021; OJK, 2022). Studies conducted by Harahap and Lubis (2022) show that FDRs have high sensitivity to macroeconomic pressures such as inflation, benchmark interest rates, and exchange rates, so it is important to dynamically monitor these ratios in liquidity risk management policymaking. In addition, the research of Mutmainnah et al. (2021) confirms that FDR fluctuations have a significant correlation with the stability of banks' net profits, which shows the importance of liquidity control in maintaining the sustainability of profitability and financial health of Islamic banking.

Inflation

Inflation is an economic indicator that reflects the general and continuous increase in prices in an economy. Inflation is a key indicator of macroeconomic conditions that describes the general and sustained increase in the prices of goods and services over a period of time. In the financial system, inflation affects monetary stability and household economic behavior, including consumption patterns and investment decisions. High inflationary pressures cause the real value of people's deposits to decline, which can reduce the incentive to save in banks. A decrease in savings rates has a direct impact on the amount of third-party funds that banks have successfully raised, which ultimately reduces the bank's ability to disburse financing. A study by Wulandari and Nugroho (2022) found that the inflation rate that exceeds 5 percent per year significantly reduces the accumulation of third-party funds in Islamic banks in Indonesia. This decline in funds not only has an impact on short-term liquidity, but also disrupts the intermediation and financing function of the productive sector in the medium term.

Within the framework of Islamic banking, inflation presents more complex structural challenges. The profit-sharing scheme that is the basis of Islamic banks' operations does not automatically adjust to changes in the benchmark interest rate that conventional banks usually use as an instrument responsive to inflation. As a result, Islamic banks are more vulnerable to the phenomenon of displaced commercial risk, which is a condition when customers move to conventional banks because yields in Islamic banks are considered less competitive in high inflation situations (Karim & Yusoff, 2021). While inflation prompts monetary authorities such as Bank Indonesia to raise the benchmark interest rate (BI Rate), Islamic banks are faced with a dilemma between maintaining yield competitiveness and maintaining liquidity stability. Findings from Hasan et al. (2021) show that inflation has a significant negative influence on Islamic banking liquidity in developing countries in Asia, including Indonesia, especially when inflation is accompanied by exchange rate fluctuations and a decline in people's real incomes. This research reinforces the importance of adaptive macroeconomic risk management policies for Islamic banking in the face of increasingly volatile inflationary pressures in the post-pandemic era.

Rupiah Exchange Rate

The exchange rate is the relative price of a country's currency against foreign currencies that reflects the fundamental strength of the economy, capital flows, and global

market perceptions of domestic stability. Exchange rate changes, especially the depreciation of the rupiah, can trigger economic pressure through increased import costs, surge in inflation, and a decrease in the competitiveness of domestic investment. In the Islamic financial system, the impact of the exchange rate is stronger due to the limitations in the use of conventional derivative instruments that are generally used for hedging. When exchange rates fluctuate sharply, the real sector becomes more cautious in expanding businesses, so the demand for financing also decreases. A study by Kurniawan and Irawan (2021) shows that the weakening of the rupiah above 10% in a year significantly reduces the growth of financing for Sharia Commercial Banks in Indonesia, especially in the trade sector and processing industries that depend on imported raw materials.

The level of exchange rate volatility also affects people's deposit behavior in the banking sector. Market uncertainty can reduce public confidence in the stability of the financial system, and encourage capital outflows from the banking system to other instruments that are considered safer or more stable, such as gold or foreign currencies. This condition has a direct impact on the decline in Third Party Funds (DPK) and disrupts the bank's liquidity balance. In the context of liquidity management, the depreciation of the rupiah creates double pressure, namely through a decrease in funding sources and weakening financing demand. The FDR ratio tends to be affected indirectly due to the mismatch between available funds and financing realization. The findings from Yusof and Majid (2022) corroborate this view by showing that exchange rates have a significant negative correlation with the performance of Islamic banking in the ASEAN region, especially in terms of liquidity and profitability. These results underscore the importance of an early warning system and exchange rate risk management instrument based on sharia principles so that Islamic banks are able to operate sustainably in uncertain global economic conditions.

Composite Stock Price Index (JCI)

The Jakarta Composite Stock Price Index (JCI) is the main barometer that reflects the dynamics of the Indonesian capital market. The fluctuations reflect investors' collective perceptions of economic stability, corporate performance, and macroeconomic policy direction. When the JCI shows a consistent upward trend, expectations for investment returns in the capital market increase, prompting the flow of public funds to move from bank deposits to stock instruments. This phenomenon is known as shifting of funds, which directly has an impact on the decline of Third Party Funds (DPK) in the banking sector. The impact is felt more strongly in Islamic banks that do not offer fixed interest rates and rely more on profit-sharing schemes, so that the competitiveness of conventional investment products becomes more limited, especially in the midst of speculative market sentiment.

The decline in deposits due to the exodus of funds to the capital market has implications for the decline in the financing capacity of Islamic banks to the real sector. This imbalance between the collection and disbursement of funds can reduce the Financing to Deposit Ratio (FDR) to a non-optimal level, as well as disrupt short-term liquidity stability. Although the JCI does not directly determine the performance of Islamic banking, changes in people's investment preferences due to capital market fluctuations create its own pressure on the performance of the sharia-based financial

sector. Research by Iqbal et al. (2022) shows that the movement of JCI has an indirect but significant influence on the performance of Islamic banking through changes in the allocation of public assets, especially in periods of market instability such as the pandemic or global geopolitical pressures. Therefore, Islamic banks are required to innovate products that are able to maintain customer loyalty, as well as strengthen integration with the Islamic capital market to remain relevant in the increasingly dynamic national financial ecosystem.

BI Rate

Bank Indonesia's benchmark interest rate (BI Rate) is a fundamental instrument in the framework of national monetary policy, especially in efforts to control inflation and stabilize exchange rates. Although Islamic banking does not in principle implement an interest mechanism, the dynamics of the BI Rate still have a significant impact on the community's fundraising strategy. The BI Rate hike has prompted conventional banks to raise deposit rates, making conventional deposit products more attractive to customers who are oriented towards fixed and definite returns. This change creates competitive pressure on Islamic banks that rely on profit-sharing systems, which in practice have a more limited level of flexibility and responsiveness to changes in the benchmark interest rate.

The impact of the BI Rate change is not only competitive, but also structural in the form of displaced commercial risk—namely the risk of funds being transferred from Islamic banks to conventional banks due to inequality in return expectations. This condition has led to the erosion of Islamic banks' Third Party Funds (DPK), which ultimately reduces the institution's ability to distribute financing to the real sector and maintain liquidity ratios such as the Financing to Deposit Ratio (FDR). A study conducted by Aulia and Beik (2023) confirms that the sensitivity of Islamic bank deposits to BI Rate movements is a crucial challenge in liquidity management. The imbalance between demand and supply of funds at a time when the BI Rate is increasing can hamper the intermediation function of Islamic banking, especially in an ecosystem that is still dominated by fixed return preferences.

This problem is even more complex when national economic growth slows down, where public expectations of guaranteed investment returns become more conservative. In situations like this, the preference for interest-based banking products tends to increase. Therefore, Islamic banks need to develop value-based liquidity management strategies, for example by optimizing the use of Islamic money market instruments and diversifying competitive Islamic investment products. Strengthening the long-term fund structure and increasing public literacy on Islamic financial principles is also an important element to maintain the competitiveness and operational sustainability of Islamic banks in an economic landscape that is heavily influenced by monetary policy.

Previous Research

Several previous studies have supported the relationship between macroeconomic variables and banking liquidity. Santoso (2016) found that inflation, exchange rates, interest rates, and JCI affect the ROE and LDR of Islamic banks. Anas (2015) in his research revealed that the exchange rate and BI Rate have a significant influence on the profitability of Islamic banks. Aviliani et al. (2015) show that the BI Rate is the variable that most affects the performance of banking indicators, including liquidity. These

findings are an important basis for building an argument that macroeconomic conditions are very relevant in determining the financial health of Islamic banking, especially from the liquidity aspect. More recent research by Putri and Hosen (2020) states that fluctuations in the BI Rate and exchange rates simultaneously have a significant effect on deposits and the ability to distribute financing at Islamic commercial banks in Indonesia. Meanwhile, a study conducted by Ramadhani and Firmansyah (2021) proves that the JCI variable has an indirect impact on liquidity through investor risk perception of the banking sector. Similar findings were also put forward by Prasetyo and Utami (2022), who concluded that the BI Rate and inflation have a negative influence on the FDR rate, indicating pressure on the intermediation function of Islamic banks.

Overall, the results of the study strengthen the theoretical foundation that macroeconomic indicators have an important role in shaping the liquidity dynamics of Islamic banks, both directly through the influence on fund collection and indirectly through changes in people's investment preferences. Therefore, Islamic bank management is required to have an adaptive strategy in response to changes in dynamic macro indicators.

RESEARCH METHOD

This study uses a quantitative approach with the type of associative research, which is research that aims to find out the extent of the relationship and influence between two or more variables statistically. Quantitative research is chosen because it is able to provide objective, measurable, and testable results for validity and reliability. The main focus of this study is to examine the influence of macroeconomic variables, namely inflation, the rupiah exchange rate against the United States dollar (USD), the Composite Stock Price Index (JCI), and the Bank Indonesia benchmark interest rate (BI Rate) on the liquidity of Sharia Commercial Banks (BUS) in Indonesia. Liquidity in this study is measured through the Financing to Deposit Ratio (FDR) indicator, which reflects the bank's ability to channel the funds raised into financing.

The type of approach used is explanatory because it aims to explain the causal relationship between the variables studied simultaneously or partially, as well as analyze the strength of their influence. This study not only describes the existing phenomenon, but also provides an in-depth understanding of the causes and effects that occur between macroeconomic conditions and the level of liquidity of BUS.

The object of the study included all Sharia Commercial Banks that operated officially in Indonesia during the research period, namely from 2013 to 2018. The selection of this time range is based on the consideration of the availability of consistent and complete data, and includes the growth phase of the Islamic banking industry after the global financial crisis which provides significant economic dynamics. In addition, this period represents a period of monetary policy transition as well as national economic fluctuations that can have an impact on the financial stability of Islamic banks.

The data used is secondary data sourced from various official and credible publications, including:

1. Sharia Banking Statistics (SPS) from the Financial Services Authority (OJK),
2. Indonesia's Economic Report and monetary data from Bank Indonesia (BI),

3. Annual reports and statistical reports from the Central Statistics Agency (BPS),
4. Capital market data from the Indonesia Stock Exchange (IDX).

The data collected consisting of annual data includes:

1. Inflation rate (in percent),
2. The annual average exchange rate of rupiah against USD (in rupiah),
3. The value of the JCI at the end of the year (in the point index),
4. BI Rate benchmark interest rate (in percent),
5. The annual FDR ratio of the BUS is sampled.

The operational definition of a variable is described in detail as follows:

1. Inflation is the rate at which the prices of goods and services are generally increased, measured by an annual percentage of the Consumer Price Index (CPI).
2. The rupiah exchange rate is the annual average exchange rate of the rupiah against the USD published by BI.
3. JCI describes the overall movement of stock prices in the Indonesian capital market and is used as an indicator of investor perception of economic conditions.
4. The BI Rate is a benchmark interest rate set by Bank Indonesia and is used as a reference in determining the market interest rate between banks and conventional banking deposits.
5. FDR (Financing to Deposit Ratio) is the ratio between the total financing disbursed by BUS and the total third-party funds (DPK) collected. The higher the value of FDR indicates that the greater the proportion of financing to the funds raised, but this also decreases liquidity reserves.

The data analysis technique used is multiple linear regression analysis, because it is able to test the simultaneous and partial influence of several independent variables on one dependent variable. To ensure the validity of the regression model used, classical assumptions were first tested which included:

Normality Test, to test the distribution of data,

1. Multicollinearity test, to find out the relationship between independent variables,
2. Heteroscedasticity test, to test whether there are non-constant residual variants,
3. Autocorrelation test, to test whether there is a correlation between residuals in different periods.

After the classical assumption was met, a simultaneous test (F-test) was performed to determine the common influence of all independent variables on FDR, and a partial test (t-test) to test the influence of each variable separately. The coefficient of determination (R^2) is used to measure how much an independent variable explains the variation of the dependent variable.

All data processing is carried out using the latest version of SPSS statistical software, as it supports parametric statistical tests with advanced regression features and more structured interpretation of results. It is hoped that this approach will be able to produce valid and useful empirical findings in understanding the dynamics of the influence of macroeconomic factors on BUS liquidity scientifically and applicatively in Islamic finance industry policies.

RESULT

Results of Simultaneous Analysis (F Test)

The results of the simultaneous regression analysis through the F test show that the four independent variables, namely Inflation, the Rupiah Exchange Rate against the United States Dollar (Exchange Rate), the Composite Stock Price Index (JCI), and the Bank Indonesia benchmark interest rate (BI Rate), together have a significant influence on FDR. This is indicated by a significance value of 0.000, which is well below the significance limit of 0.05. Thus, an alternative hypothesis (Ha1) that states that the four variables simultaneously affect FDR is accepted. In addition, a determination coefficient value (R^2) of 0.431 or 43.1% was obtained. This means that as much as 43.1% of the variation in the FDR rate can be explained by the variables Inflation, Exchange Rate, JCI, and BI Rate. Meanwhile, the remaining 56.9% was explained by other factors that were not included in this study model.

Partial Analysis Results (t-Test)

The results of partial analysis using the t-test showed that not all variables had a significant influence on FDR individually. Here are the details of the results:

1. Inflation had no significant effect on FDR, with a significance value of 0.979 (> 0.05). Therefore, the hypothesis that Inflation had a partial effect on FDR was rejected.
2. The rupiah exchange rate against the US dollar also had no significant effect on FDR, with a significance value of 0.102 (> 0.05). An alternative hypothesis is again rejected in this case.
3. The Composite Stock Price Index (JCI) has proven to have a significant influence partially on FDR. The significance value obtained is 0.002 (< 0.05), so an alternative hypothesis is accepted.
4. The BI Rate shows a very significant influence on FDR, with a significance value of 0.000 (< 0.05). This shows that Bank Indonesia's benchmark interest rate has a strong correlation with liquidity management in Islamic banks.

DISCUSSION

Simultaneous Analysis and Interpretation

The results of statistical analysis through the F test show that the variables of Inflation, the Rupiah Exchange Rate against the United States Dollar (Exchange Rate), the Composite Stock Price Index (JCI), and the benchmark interest rate of Bank Indonesia (BI Rate) simultaneously have a significant influence on the level of liquidity (Financing to Deposit Ratio / FDR) in Sharia Commercial Banks in Indonesia. This is reinforced by a significance value of 0.000, which is far below the threshold of 0.05. Thus, an alternative hypothesis (Ha1) that states that the four macroeconomic variables have a simultaneous effect on FDR is accepted.

The value of the determination coefficient (R^2) obtained from the multiple regression test was 0.431 or 43.1%, which shows that the 43.1% variation that occurred in FDR can be explained by the variables Inflation, Exchange Rate, JCI, and BI Rate. Meanwhile, the remaining 56.9% is explained by other factors not included in this model. These results indicate that although these four macroeconomic variables play a significant

role, there is still a large contribution of other variables to the liquidity dynamics of Islamic banks.

This condition reflects the complexity of the factors that affect the liquidity of Islamic financial institutions. A study by Setiawan and Nasution (2020) underlines that macroeconomic indicators are only one aspect of the overall variable that affects the health of banking liquidity. Internal factors such as fund management efficiency, asset quality, financing structure, and fundraising strategy also had a significant impact on FDR's condition. In the context of Islamic banking, the profit-sharing system and the principle of sharia prudence also strengthen the dynamics of liquidity management that are not entirely in line with the characteristics of conventional banks (Maulana & Hamzah, 2022).

Inflation, as one of the independent variables, has an influence on people's purchasing power which indirectly affects the amount of deposits (DPK) in banks. When inflation increases, the real value of money decreases, so people tend to reduce savings, which then affects the ability of banks to distribute financing. These findings are in line with research by Hidayati and Yusuf (2021), which shows that rising inflation can suppress the liquidity of Islamic banks due to declining public participation in saving and increasing demand for financing instruments.

The rupiah exchange rate against the US dollar also plays an important role. Sharp exchange rate fluctuations often create uncertainty in the financial system, including banking. The depreciation of the rupiah can increase the pressure on bank operating costs, especially in the context of project financing or investment that depends on the import component. These results are in line with the findings of Wulandari and Prasetyo (2020) who stated that exchange rate volatility has an indirect effect on FDR, especially through long-term project-based financing mechanisms.

The Jakarta Composite Stock Price Index (JCI) is an indicator of market sentiment and national economic stability. When the JCI declines, investors tend to withdraw their funds from the capital market and place them in banking instruments. This can increase deposits and improve liquidity ratios. Conversely, when the JCI increases, funds can move to the stock market and cause a decrease in deposits, which negatively impacts FDR. Empirical studies by Kartika and Ramadhani (2023) support the influence of JCI on bank liquidity, especially in the financial sector that is responsive to capital market fluctuations.

The BI Rate as a monetary policy instrument also has a direct effect on banks' decisions in setting financing margins and deposit interest rates. An increase in the BI Rate will generally reduce the demand for financing because costs become more expensive, as well as increase deposits because deposit interest rates become more attractive. In the context of sharia, the impact of the BI Rate is not completely linear because the profit margin is determined by the principle of contract agreements. However, data shows that the movement of the BI Rate still provides market signals that affect the behavior of Islamic banks in regulating their liquidity structure (Fitriana & Azmi, 2021).

Beyond these four main variables, there are many other factors that should be considered in modeling the liquidity of Islamic banks. Internal factors such as the level of

capital adequacy (CAR), non-performing financing ratio (NPF), operational efficiency (BOPO), to product innovation and service digitalization are important elements that can affect customer trust and preferences. Research by Rizky and Fauziah (2022) states that the digital transformation carried out by Islamic banks has a positive impact on public fund collection and service efficiency, which ultimately supports liquidity stability.

Thus, the results of this study provide an understanding that the influence of macroeconomic variables on liquidity is significant but not completely deterministic. A multidimensional approach is needed in the financial analysis of Islamic banks, especially those that consider the integration between macro external aspects and institutional internal factors. Follow-up research with a longer period of time, the addition of independent variables, and a cross-institutional data panel approach of Islamic banking institutions can enrich the findings and improve the generalization of results.

Partial Interpretation Analysis

1. Inflation to Liquidity (FDR)

   Based on the t-test, it can be seen that Inflation has no effect on Liquidity (FDR). This is proven by the results of the SPSS calculation, where the significance value produced for the Inflation variable is 0.979. Because the significance value is above 0.05, Ha2 which reads that it is suspected that Inflation partially has a significant effect on the Liquidity (FDR) of Sharia Commercial Banks in Indonesia is rejected and H02 which reads that it is suspected that Inflation partially does not have a significant effect on the Liquidity (FDR) of Sharia Commercial Banks in Indonesia is accepted.

   Based on the analysis and interpretation above, it can be said that Inflation partially has no effect on the Liquidity (FDR) of Sharia Commercial Banks in this study period, namely January 2013 – December 2018.
2. Rupiah Exchange Rate (Rate) to Liquidity (FDR)

   Based on the t-test, it can be seen that the Rupiah Exchange Rate (Exchange Rate) has no effect on Liquidity (FDR). This is proven by the results of the SPSS calculation, where the significance value produced for the Rupiah Exchange Rate variable (Exchange) is 0.102. Because the significance value is above 0.05, Ha2 which reads that the Rupiah Exchange Rate (Exchange) partially has a significant effect on the Liquidity (FDR) of Sharia Commercial Banks in Indonesia is rejected and H02 which reads that the Rupiah Exchange Rate (Exchange) partially does not have a significant effect on the Liquidity (FDR) of Sharia Commercial Banks in Indonesia is accepted.

   Based on the analysis and interpretation above, it can be said that the Rupiah Exchange Rate (Exchange) partially has no effect on the Liquidity (FDR) of Sharia Commercial Banks in this study period, namely January 2013 – December 2018.
3. Composite Stock Price Index (JCI) to Liquidity (FDR)

   Based on the t-test, it can be seen that the Composite Stock Price Index (JCI) has no effect on Liquidity (FDR). This is proven by the results of the SPSS calculation, where the significance value produced for the Composite Stock Price Index (JCI) variable is 0.002. Because the significance value is below 0.05, Ha2 which reads that the Composite Stock Price Index (JCI) partially has a significant effect on the Liquidity (FDR) of Sharia Commercial Banks in Indonesia is accepted

and H02 which reads that Inflation is suspected of having a Partial Effect on the Liquidity (FDR) of Sharia Commercial Banks in Indonesia is rejected.

Based on the analysis and interpretation above, it can be said that the Composite Stock Price Index (JCI) partially has no effect on the Liquidity (FDR) of Sharia Commercial Banks in this research period, namely January 2013 – December 2018.

4. Interest Rate (BI Rate) to Liquidity (FDR)

   Based on the t-test, it can be seen that the Interest Rate (BI Rate) has an effect on Liquidity (FDR). This is proven by the results of the SPSS calculation, where the significance value produced for the variable Interest Rate (BI Rate) is 0.000. Because the significance value is below 0.05, Ha2 which reads that the Interest Rate (BI Rate) partially has a significant effect on the Liquidity (FDR) of Sharia Commercial Banks in Indonesia is accepted and H02 which reads that the Interest Rate (BI Rate) partially does not have a significant effect on the Liquidity (FDR) of Sharia Commercial Banks in Indonesia is rejected.

   Based on the above analysis and interpretation, it can be said that the Interest Rate (BI Rate) partially affects the Liquidity (FDR) of Sharia Commercial Banks in this study period, namely January 2013 – December 2018.

CONCLUSION

Based on the results of the research and discussion on the Analysis of the Influence of Inflation, Rupiah Exchange Rate (Exchange Rate), Composite Stock Price Index (JCI) and Interest Rate (BI Rate) on the Liquidity (FDR) of Sharia Commercial Banks in Indonesia for the Period January 2013 – December 2018, the author draws the following conclusions:

1. Based on the simultaneous F Test (together), it can be seen from the SPSS calculation that the significance value is smaller than 0.05, which is 0.000 with an influence level of 43.1%. It can be concluded that Inflation, Rupiah Exchange Rate (Exchange Rate), Composite Stock Price Index (JCI) and Interest Rate (BI Rate) affect the Liquidity (FDR) of Sharia Commercial Banks in Indonesia during this study period.
2. Based on the t-test, it can be seen that Inflation has no effect on Liquidity (FDR). This is proven by the results of the SPSS calculation, where the significance value produced for the Inflation variable is 0.979. Because the significance value produced is above 0.05, based on the results of the analysis and interpretation above, it can be said that the Rupiah Exchange Rate (Exchange Rate) partially has no effect on the Liquidity (FDR) of Sharia Commercial Banks in Indonesia during this study period.
3. Based on the t-test, it can be seen that the Rupiah Exchange Rate (Exchange Rate) has no effect on Liquidity (FDR). This is proven by the results of the SPSS calculation, where the significance value produced for the Rupiah Exchange Rate variable (Exchange) is 0.102. Because the significance value produced is above 0.05, based on the results of the analysis and interpretation above, it can be said that inflation partially has no effect on the Liquidity (FDR) of Sharia Commercial Banks in Indonesia in this study period.

4. Based on the t-test, it can be seen that the Composite Stock Price Index (JCI) has an effect on Liquidity (FDR). This is proven by the results of the SPSS calculation, where the significance value produced for the Inflation variable is 0.002. Because the significance value produced is below 0.05, based on the results of the analysis and interpretation above, it can be said that the Rupiah Exchange Rate (Exchange Rate) partially affects the Liquidity (FDR) of Sharia Commercial Banks in Indonesia in this study period.
5. Based on the t-test, it can be seen that the Interest Rate (BI rate) has an effect on Liquidity (FDR). This is proven by the results of the SPSS calculation, where the significance value produced for the variable Interest Rate (BI rate) is 0.000. Because the significance value produced is below 0.05, based on the results of the analysis and interpretation above, it can be said that the Interest Rate (BI rate) partially affects the Liquidity (FDR) of Sharia Commercial Banks in Indonesia in this study period.

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