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LIQUIDITY RISK ANALYSIS IN ISLAMIC AND CONVENTIONAL BANKS: A COMPARISON DURING THE COVID-19 PANDEMIC

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ABSTRACT
The COVID-19 pandemic has had a major impact on the global economy including Indonesia, especially on the banking sector. This study uses a comparative quantitative research method. This study aims to compare risk management in Islamic and conventional banks using the t-Test and Mann-Whitney U test. During the COVID-19 pandemic, the data shows differences in current ratio, quick ratio, and LDR/FDR between conventional and Islamic banks. Islamic banks have a higher current ratio and quick ratio than conventional banks, indicating a better ability to meet short-term obligations and maintain liquidity. In addition, Islamic banks have a lower FDR. The results of the study can help investors in making investment decisions, but it is recommended to also consider other indicators. The study only focuses on analyzing liquidity risk in both types of banks during the pandemic, suggesting future research to expand the variables and research time.

Keywords: Liquidity Risk, Islamic Banks, Conventional Banks

INTRODUCTION

The COVID-19 pandemic is affecting the global economy, including Indonesia. In the midst of this pandemic, financial institutions must overcome three problems, namely credit and financing quality, liquidity adequacy, and bad debts (CNBC, 2020). Banking is a financial institution that has the role of collecting and channeling funds for the community with the aim of supporting national progress, increasing equitable development and results, economic stability, and improving the quality of life of the community (Ikhtisar Perbankan OJK, 2023).

According to Finance Minister Sri Mulyani Indrawati, the COVID-19 pandemic has destabilized the financial system (CNN Indonesia, 2020). Banks need to pay attention to risk management as economic uncertainty increases, especially in liquidity (Bank Indonesia, 2023). The Covid-19 pandemic has had a major impact on the banking sector in many countries. Banks are facing challenges in meeting liquidity needs due to decreased revenue and increased risk. The Covid-19 pandemic also affects consumer and corporate behavior in accessing banking services, which can affect bank liquidity (Fahrika, 2020).

When banks are unable to meet financial obligations, liquidity risk may arise. This risk can affect the bank's financial stability and overall financial performance (OCBC, 2023). Islamic banks have limitations in managing balances, but resilience is increasing as the Islamic financial system discourages risk transfer and rather shares risk. Liquidity risk management is important in maintaining bank operations during the pandemic (Grira & Labidi, 2020).

The purpose of this study is to conduct a comparison between conventional and Islamic banks in Indonesia during the COVID-19 pandemic using 3 (types) of liquidity ratios, namely current ratio, quick ratio, and loan to deposit ratio or financing to deposit ratio. In previous research, there has been no research on liquidity through a comparative study between Islamic banks and conventional banks in Indonesia during the COVID-19 pandemic.

LITERATURE REVIEW

Liquidity Risk

According to Bank Indonesia Regulation No. 11/25/2009, liquidity risk is the risk caused by a bank's inability to meet maturing funding. Banks must pay close attention to liquidity risk because bankruptcy can occur due to wrong decisions (Ghenimi et al., 2021).

According to Kasmir (2021), several types of ratios used to calculate bank liquidity ratios are current ratio, quick ratio, cash ratio and LDR or FDR. Measurement of liquidity risk in Islamic banks and conventional banks has several differences, namely LDR or FDR. This study uses 3 (types) of liquidity ratios, namely current ratio, quick ratio, and LDR or FDR.

Current Ratio

The current ratio shows how well the company can meet its short-term obligations with its current assets (Gustina, 2017). In simple terms, it calculates the amount of current assets available to cover short-term liabilities (Kasmir, 2021). The current ratio formula.

$$\textit{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}} *100\% \qquad (1)$$

A high current ratio value indicates that the bank has good liquidity, able to meet its short-term obligations. Meanwhile, a low current ratio value indicates that the bank has poor liquidity (Kasmir, 2021).

Quick Ratio

Quick ratio shows how well a company can meet its short-term obligations with current assets without considering inventory. This is done because inventory is considered to take a relatively long time to cash in (Khotimah, 2021). This ratio helps assess the bank's ability to access funds quickly to meet short-term obligations compared to other current assets (Kasmir, 2021). The quick ratio formula

$$\textit{Quick Ratio} = \frac{\text{(Current Assets – Inventory)}}{\text{Current Liabilities}} *100\% \qquad (2)$$

A high quick ratio value indicates that the bank has good liquidity, that is, it has current assets that are quickly disbursed which are sufficient to meet its short-term liabilities. Meanwhile, a low quick ratio value indicates that the bank has poor liquidity.

LDR or FDR

Loan to Deposit Ratio (LDR) shows how far the bank can repay the withdrawal of funds from depositors by using financing as its liquidity (Makkulau, 2022). FDR for Islamic banks and LDR for conventional banks. This ratio shows the ability of Islamic banks and conventional banks to distribute financing and credit from the total third party funds raised (Kasmir, 2021). The LDR or FDR formula

$$\text{LDR} = \frac{\text{Total Credit}}{\text{Total Third Party Fund}} *100\% \qquad (3)$$

$$\text{FDR} = \frac{\text{Total Financing}}{\text{Total Third Party Fund}} *100\% \qquad (4)$$

A high LDR/FDR value indicates a liquidity problem, where the amount of loans or financing provided by the bank is greater than the amount of deposits received. Conversely, a low LDR/FDR value indicates good liquidity.

HYPOTHESIS

Ahmet İncekaraa dan Harun Çetinkaya (2019) discuss the practice of risk management between Islamic and conventional banks in Turkey, revealing different relationships between the two banks, with conventional banks showing negatif or signifikan relationships. Issath Nimsith dan FHA. Shibly (2015) analyzed Sri Lankan Islamic and conventional banks' risk management, finding that conventional banks experienced higher risk of inflation in 2010 and 2011, while Islamic banks were less affected. According to Kharima's research (2016), conventional commercial banks are better in terms of Current Ratio and Quick Ratio. Conversely, in terms of Cash Ratio and FDR, Islamic commercial banks are superior.

H1: There is a difference between the current ratio of Islamic commercial banks and conventional commercial banks during the COVID-19 pandemic.
H2: There is a difference between the quick ratio of Islamic commercial banks and conventional commercial banks during the COVID-19 pandemic.
H3: There is a difference between the loan to deposit ratio/financing to deposit ratio of Islamic commercial banks and conventional commercial banks during the COVID-19 pandemic.

METHODS

This study uses comparative quantitative research. This study aims to determine whether there are differences between Islamic banks and conventional banks in Indonesia in terms of liquidity risk during the COVID-19 pandemic. This study uses secondary data obtained from the Financial Services Authority online through banking industry statistics, there are 39 samples used in this study, which use monthly data from April 2020 to June 2023.

Data Analysis Methods

Before the data was tested using the SPSS program, a normality test was conducted first. The results of the normality test were used as the basis for determining the appropriate comparative test analysis. The Paired Sample t-Test method was used if all data were normally distributed. If the data were not normally distributed, the Mann-Whitney U test was used.

RESULTS

Research on the liquidity of Islamic and conventional banks in Indonesia which includes Current Ratio, Quick Ratio, and LDR or FDR. Descriptive data from Islamic and conventional banks are shown in Table 1.

Table 1. Descriptive Statistics

	Minimum	Maximum	Mean	Std. Deviation
CR_Bank Konvensional	.1843	.2734	.231769	.0267323
QR_Bank Konvensional	.0811	.1730	.139677	.0213046
LDR_Bank Konvensional	.7713	.9218	.815285	.0345551
CR_Bank Syariah	.1759	.3235	.247669	.0346450
QR_Bank Syariah	.1188	.4019	.163815	.0582706
FDR_Bank Syariah	.6897	.8125	.757605	.0285715

Source: Processed Data (2024)

Table 1 shows that the maximum and minimum variations are low, with the standard deviation smaller than the mean. Standard deviation in banking liquidity in analyzing the bank's ability to meet its short-term obligations. It can be seen that there is a difference in the standard deviation of general banking and Islamic banking. This is because the liquidity of Islamic banks tends to be more stable and less volatile.

Normality Test

Table 2. Normality Test

	Statistic	Df	Sig.
CR_BU	.093	39	.200*
QR_BU	.117	39	.196
LDR_BU	.181	39	.002
CR_BS	.127	39	.112
QR_BS	.263	39	.000
FDR_BS	.084	39	.200*

Source: Processed Data (2024)

It can be seen in table 2, from the Kolmogorov-Smirnov normality test, the significance value> 0.05 is obtained for the current ratio and quick ratio in conventional banking. In conventional bank LDR, the significance value is <0.05. So that the current ratio and quick ratio data in conventional banks are normally distributed, while the LDR of conventional banks is not normally distributed (Sugiyono, 2022).
For the current ratio and FDR in Islamic banks, the significance value is> 0.05. in the quick ratio of Islamic banks, the significance value is <0.05. So that the current ratio and FDR data in Islamic banks are normally distributed, while the quick ratio is not normally distributed. To test the hypothesis of data that is not normally distributed using nonparametric, namely Mann-Whitney U. As for normally distributed data using parametric, namely the paired t test (Sugiyono, 2022).

Current Ratio

Table 3. Current Ratio

Variabel	Mean	Signifikan	Conclusion
CR_BK - CR_BS	-.01590	.000	Hypothesis accepted, there is a significant difference

Source: Processed Data (2024)

From the results of table 5, it can be seen that the significant value of 0.000 in the current ratio of conventional banks and Islamic banks during the COVID-19 pandemic <0.05, which indicates that the current ratio hypothesis is accepted and there is a difference in the current ratio.

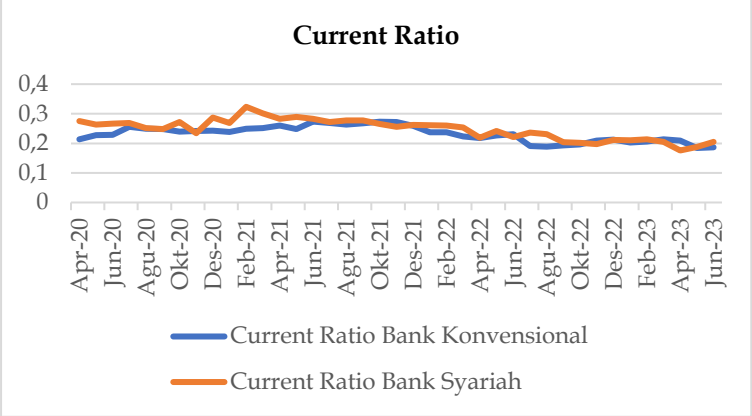

Figure 1. Current Ratio
Source: Processed Data (2024)

Current ratio is a liquidity ratio used to measure the bank's ability to meet its short-term obligations using current assets. The greater the current ratio, the better the company's ability to meet its short-term obligations (Kasmir, 2021). During the COVID-19 pandemic,

data analysis shows that there are differences in the current ratio between conventional and Islamic banks in accordance with research (Kharima, 2016). Islamic banks have a higher current ratio than conventional banks, with an average value of 0.2476 and 0.2317, respectively. This difference may affect the bank's ability to meet short-term obligations, which could be due to the type of products offered by each bank. In the context of Islamic economics, the current ratio can also be an indicator of the ability of Islamic banks to comply with sharia principles without taking excessive risks.

Quick Ratio

Table 4. Quick Ratio

Variabel	Signifikan	Conclusion
QR_Bank Konvensional	0,040	Hypothesis accepted, there is a significant difference
QR_Bank Syariah		

Source: Processed Data (2024)

In table 4, the significant value of 0.040 in the quick ratio of conventional banks and Islamic banks during the COVID-19 pandemic <0.05, which indicates that the quick ratio hypothesis is accepted and there is a difference in the quick ratio.

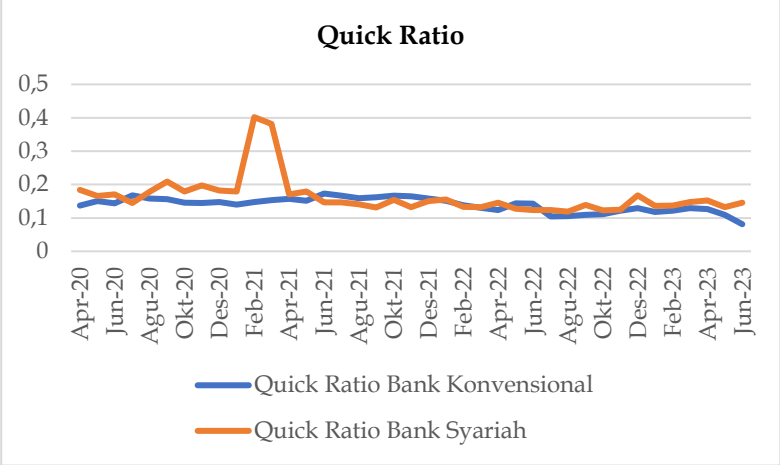

Figure 2. Quick Ratio
Source: Processed Data (2024)

Quick ratio measures the bank's ability to meet its short-term liabilities with its most liquid assets, namely cash and current receivables. This ratio is calculated by dividing cash and current receivables by current liabilities. The greater the quick ratio value, the better the bank's ability to meet its obligations with its most liquid assets (Kasmir, 2021). During the COVID-19 pandemic, data analysis showed significant differences in the quick ratio between conventional and Islamic banks, in accordance with research (Kharima, 2016). Islamic banks have a higher quick ratio than conventional banks, indicating the availability of more cash and current receivables to meet short-term liabilities. This is in accordance with the prudential principle in Islamic economics, where Islamic banks must have sufficient assets to guarantee the fulfillment of short-term liabilities

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LDR or FDR

Table 5. LDR or FDR

Variabel	Signifikan	Conclusion
LDR_Bank Konvensional	0,000	Hypothesis accepted, there is a significant difference
FDR_Bank Syariah		

Source: Processed Data (2024)

The significant value of 0.000 in the LDR / FDR of conventional banks and Islamic banks during the COVID-19 pandemic <0.05, which indicates that the LDR / FDR hypothesis is accepted and there are differences.

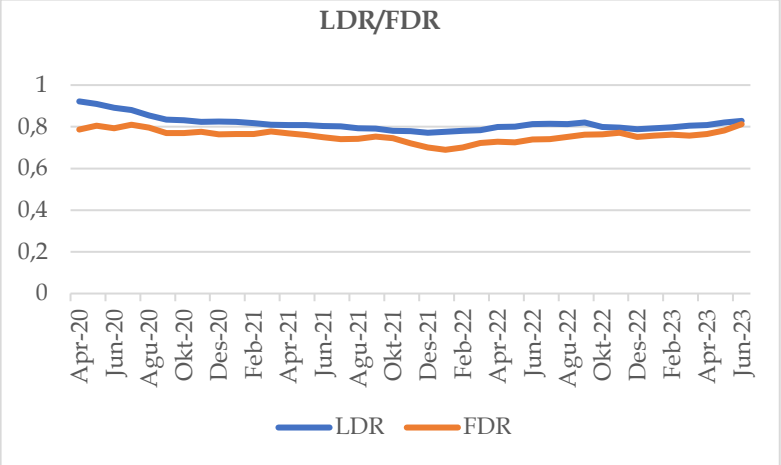

Figure 3. LDR or FDR
Source: Processed Data (2024)

The LDR and FDR ratios show the ability of Islamic and conventional banks to distribute financing and credit from third party funds collected (Prasidha & Wahyudi, 2015). A high LDR or FDR value will face higher liquidity risk (Kasmir, 2021). During the COVID-19 pandemic, data analysis showed significant differences in LDR/FDR between conventional and Islamic banks. The results of this test strengthen the findings of previous research conducted by Nurafini (2022) and Kharima (2016). The LDR of conventional banks is higher than the FDR of Islamic banks, with an average of 0.8152 and 0.7576 for each. This shows the cautious and conservative approach of Islamic banks in managing funds and compliance with sharia principles. This difference could be due to the different funding structures and types of financing products between the two banks. Different risk management policies and approaches also affect the difference in LDR/FDR between conventional and Islamic banks, where Islamic banks are more cautious in channeling funds to follow the sharia principles they adhere to.

CONCLUSION

Current ratio, During the COVID-19 pandemic, there is a significant difference in the current ratio between conventional banks and Islamic banks, where Islamic banks have a higher ratio. This difference can be caused by various factors, such as conservative type of risk management. Quick ratio, During the COVID-19 pandemic, data analysis shows a significant difference in the quick ratio between conventional and Islamic banks. Islamic banks have a higher quick ratio due to their focus on stability and being conservative in investment, while conventional banks have a larger proportion of short-term funds, causing their quick ratio to be lower. During the COVID-19 pandemic, data shows significant differences in LDR/FDR between conventional and Islamic banks. Conventional banks' LDR is higher due to greater credit risk, while Islamic banks are more cautious in risk management.

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