The Impact of COVID-19 Pandemic on Financial Performance of Islamic Banking in Indonesia

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Abstract. This study evaluates the financial performance of Islamic banking in Indonesia during the Coronavirus pandemic by looking at the financial accounts of chosen Islamic banks. The variables of the study include NPF, FDR, CAR, ROA, and ROE. This quantitative examination utilized a comparative-analytical approach. Samples utilized were 5 Islamic full-pledged banks in the country. Financial reports before the pandemic (the fourth quarter of 2019 and the first quarter of 2020) and after the pandemic (the fourth quarter of 2020 and the first quarter of 2021) were investigated. The data then examined with a paired sample t-test utilizing the SPSS program. The results of the study indicated that the Coronavirus pandemic doesn't influence the financial performance of Islamic banking in this country. It is showed by the outcomes of the paired sample t-test of the variables under study, in which NPF, FDR, CAR, ROA, and ROE do not exhibit any substantial difference in the Islamic banking industry performance both before and after the Coronavirus pandemic.

Keywords: Financial performance · Islamic banking · COVID-19 pandemic

1 Introduction

COVID-19 is a new inflectional virus that was first found in Wuhan towards the end of 2019. The World Health Organization (WHO) reported COVID-19 as a pandemic in view of its fast spread all through the world, including Indonesia. As a work to stifle the potential spread of Coronavirus, the government has carried out enormous scope social limitations (PSBB and then PPKM) in numerous areas all through Indonesia. The implementation of the PSBB was first officially announced on April 10, 2020, but the policy turned out to have a wide effect, namely hitting the economy as can be seen from the economic growth in the 2nd quarter of 2020 which decreased to 5.32% compared to the same period of the previous year [1].

Because of the Coronavirus pandemic that has spread all through Indonesia, most areas of the economy have encountered decay, including the financial and banking industries. In Indonesia, a dual banking system applies, namely the conventional banking system and the sharia banking system that operate together. Various studies show that Islamic banking tends to be more resilient in facing crises than conventional banking

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[2]. When there was a global crisis in 2008 which caused the world economy to experience shocks that affected conventional banking, the performance of Islamic banking in the country did not experience a significant effect [3]. This means that Islamic banks are more resistant to financial crises. Apart from being a sharia system that guarantees justice, Islamic banking is also trusted not only to pursue high profit sharing, but also to pay attention to the benefit and welfare of the people [4].

The current study endeavors to depict the financial performance of Islamic banking before and after the Coronavirus pandemic. Specifically, it is expected to test the resilience of Islamic banking in confronting the economic and financial crises caused by the pandemic, by scrutinizing financial reports particularly the ratio of Non-Performing Financing (NPF), Financing to Deposit Ratio (FDR), Capital Adequacy Ratio (CAR), Return on Asset (ROA), and Return on Equity (ROE).

2 Literature Review

The COVID-19 pandemic has inevitably dealt a blow to the economic conditions of all countries in the world. However, the magnitude of the impact of the Coronavirus pandemic on economic actors and sectors has shown different results, including between the conventional and Islamic financial industries.

From previous researches, the financial condition of Islamic banking in Indonesia was relatively unaffected by the pandemic as seen from a number of indicators, namely CAR, ROA, NPF, and FDR, which did not show any significant difference compared to before the pandemic. The examination between the financial condition of Shariah BCA and its conventional BCA during the Coronavirus pandemic show contrasts in the factors of CAR, ROA, and LDR (Loan to Deposit Ratio). Meanwhile, there is no tremendous contrast between the two above banks in NPL (Non-Performing Loan) and BOPO (Operational Cost to Operating Income) [5]. This shows that Islamic banking in Indonesia is by all accounts more resilient to the crisis caused by the Coronavirus pandemic contrasted with conventional banks [6].

However, other researches showed different results. There was a significant decrease in ROA in Islamic banks due to this pandemic, although for the FDR variable, these banks were categorized as very stable and did not experience problems in distribution of the financing. As for the NPF variable, Islamic commercial banks are not disturbed, while Islamic business units have increased significantly but are still within reasonable and safe limits below 5% [7].

Meanwhile, in another study, it was found that some variables such as net operating margin, ROA, and FDR were negatively affected by the pandemic, but growth rate of total assets, CAR, NPF, and operating efficiency ratios were not negatively influenced by this COVID-19 pandemic [8].

3 Research Methods

The information utilized for this study were financial reports of five Islamic banks in this country, in particular Bank Muamalat Indonesia, Bank Panin Dubai Syariah, BCA Syariah, Bank Aceh, and BPD Nusa Tenggara Barat Syariah. The types of data collected are (1) financial statements for the 4^{th} quarter of 2019 and the 1^{st} quarter of 2020 published before the COVID-19 pandemic; (2) Financial reports for the 4^{th} quarter of 2020 and the 1^{st} quarter of 2021 published after the COVID-19 pandemic.

To assess the financial performance of the above selected banks, the financial ratios obtained through the bank's financial statements were analyzed using the subsequent ratios:

- Earning Asset Quality Ratio
  Earning assets quality ratio is an analysis to determine the ability of assets owned by a bank in the adequacy of financing risk management. Earning assets quality ratio can be measured by Non-Performing Financing (NPF). This ratio is normally used to measure the ratio of non-performing financing (loss, doubtful or substandard quality) with the total financing provided. The formula for calculating NPF is:

$$\mathrm{NPF} = \frac{\text{Non - Performing Financing}}{\text{Total Financing}} \times 100 \tag{1}$$

- Liquidity Ratio
  Liquidity Ratio is an analysis used to measure the capability of a bank in fulfilling current liabilities. Liquidity Ratio can be measured by financing to deposit ratio (FDR). FDR is a ratio to measure the amount of funds placed in the form of financing sourced from third party collection funds. The formula for calculating FDR is:

$$\mathrm{ROA} = \frac{\text{Total Financing}}{\text{Third Party Fund}} \times 100 \tag{2}$$

- Solvency Ratio
  Solvency Ratio is the ratio for measuring the ability of the bank to fulfill long-term and short-term obligations. The measurement of solvency ratio was done using CAR. CAR is a ratio to assess the adequacy of capital possessed by a bank in bearing the risk of loss. The formula for calculating CAR is:

$$\mathrm{CAR} = \frac{\text{Total Equity}}{\text{Total AMTR}} \times 100 \tag{3}$$

- Profitability Ratio
  Profitability ratio is an analysis used to measure the profitability achieved in a bank. The profitability ratio can be measured by ROA and ROE.

  Return on Assets (ROA) is a ratio to assess the effectiveness of banks in using their assets to generate profits. The ROA calculation formula is:

$$\mathrm{ROA} = \frac{\text{Net Profit Before Tax}}{\text{Total Asset}} \times 100 \tag{4}$$

  Return On Equity (ROE) is a ratio to measure the effectiveness of banks in using investor funds to generate profits. The ROE calculation formula is:

$$\mathrm{ROE} = \frac{\text{Net Profit After Tax}}{\text{Total Equity}} \times 100 \tag{5}$$

This study uses an analytical tool in the form of paired sample t-test which is conducted to analyze the mean comparison between two paired samples. The paired simple t test in this study compares the ratio of selected Islamic banking both before and after the pandemic with decision making based on Sig. (2-tailed). The paired sample t-test is a part of parametric statistical analysis. The application used to analyze the data is SPSS (Statistical Product and Service Solutions) version 26.

4 Results and Discussion

Before analyzing the data using the paired sample t-test, the normality test was first performed. The Shapiro Wilk was carried out to test the normality because the sample used was small and less than 50 ($N < 50$) [6] and the results showed that the residual values of all variable data were normally distributed because the Sig value > 0.05.

To determine the difference between the averages of two paired samples, paired sample t-test was conducted. Two samples tested were the ratio of NPF, FDR, CAR, ROA, and ROE of Islamic banking either before or after the COVID-19 pandemic (Table 1).

Based on Table 1, NPF decreased by 0.046% from 2,542 to 2,496 after the pandemic. This decrease in NPF may be influenced by the improving economic conditions since the 4th quarter of 2020 and the 1st quarter of 2021 which have an impact on the business performance of customers who receive financing from Islamic banks. Referring to Bank Indonesia regulations regarding the criteria for evaluating the NPF ratio, the mean NPF values before and after the pandemic are at 2%–5%, which is classified as quite good.

Then, the FDR ratio increased by 2.68% after the pandemic which showed that FDR before the pandemic was better than FDR after the pandemic. Based on Bank Indonesia regulations regarding the criteria for evaluating the FDR ratio, the mean FDR before and after the pandemic is 94.75%, which is classified as good. Meanwhile, the CAR ratio

Table 1. Descriptive Statistics Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	NPF_Before	2,5420	5	2,02074	,90370
	NPF_After	2,4960	5	1,90270	,85091
Pair 2	FDR_Before	82,3160	5	12,06061	5,39367
	FDR_ After	84,9940	5	18,30794	8,18756
Pair 3	CAR_ Before	24,0880	5	12,00971	5,37091
	CAR_ After	28,3760	5	11,79215	5,27361
Pair 4	ROA_ Before	1,0900	5	,96732	,43260
	ROA_ After	,9150	5	,86954	,38887
Pair 5	ROE_Before	6,5290	5	7,29295	3,26151
	ROE_ After	5,7780	5	7,45313	3,33314

increased by 4.29% after the pandemic which shows that the CAR after the pandemic is better than before. Based on Bank Indonesia regulations, the CAR ratio of Islamic banks before and after the pandemic was at >8%, which is classified as good.

The ROA ratio decreased by 0.18% after the pandemic, which means ROA before the pandemic was better than after it. Based on Bank Indonesia regulations, the ROA values before and after the pandemic are at 0.5%–1.25%, this is classified as quite good. Finally, the ROE ratio decreased by 0.75% after the pandemic, which shows ROE before the pandemic was better than ROE after the pandemic. Based on Bank Indonesia regulations regarding the ROE ratio assessment criteria, the ROE values before and after the pandemic are at 5–12.5%, which is classified as quite good.

In view of the outcomes of the paired sample t-test in Table 2, the worth of Sig. (2-tailed) for NPF (Non Performing Financing) is 0.769 or >0.05 so H0 is accepted, meaning there is no substantial difference between NPF of Islamic banking after the pandemic and before it. This shows that Islamic banking can deal with its resources so they can deal with non-performing advances during the Coronavirus pandemic.

The value of FDR variable is 0.598 or >0.05 so that H0 is accepted, meaning there is no major difference between the FDR of Islamic banking before and after the pandemic. It shows that Islamic banking can provide financing sourced from third party funds properly during the pandemic.

The value of Sig. for CAR (Capital Adequacy Ratio) is 0.263 or >0.05 so H0 is accepted, meaning there is no substantial difference in CAR of Islamic banking before the pandemic take place and after it. This shows that Islamic banking is able to overcome the risk of using its capital so that it plays an important role in business development during the COVID-19 pandemic crisis.

Table 2. Paired Samples Statistics

	Paired Differences					t	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference			
				Lower	Upper		
NPF_Before - NPF_After	,04600	,32685	,14617	−,35984	,45184	,315	,769
FDR_Before - FDR_After	−2,67800	10,46952	4,68211	−15,67762	10,32162	−,572	,598
CAR_Before - CAR_After	−4,28800	7,36481	3,29364	−13,43262	4,85662	−1,302	,263
ROA_Before - ROA_After	,17500	,32315	,14452	−,22624	,57624	1,211	,293
ROE_Before - ROE_After	,75100	,90888	,40646	−,37752	1,87952	1,848	,138

Meanwhile, the value of Sig. for ROA (Return On Assets) based on the results of the paired sample t test is 0.293 or >0.05 so that H0 is accepted, meaning there is no major contrast in ROA of Islamic banking before the pandemic take place and after it. This shows that Islamic banking can manage its assets and generate profits even in times of crisis.

Finally, the value of Sig. for ROE (Return On Equity) is 0.138 or >0.05 so H0 is accepted, meaning that there is no substantial contrast in ROE of Islamic banking before the pandemic occur and after it. This demonstrates the way that Islamic banking can deal with its capital which is set apart by creating benefits despite the fact that they are in an emergency circumstance of the Coronavirus pandemic.

The outcomes of different tests using the paired sample t- test on the following ratios, i.e. NPF, CAR, FDR, ROA as well as ROE show the whole significance value is >0.05 indicating that there is no significant difference between the financial performance of Islamic banking industry in Indonesia before the pandemic occurs and after it using the sample of this study. Therefore, it tends to be presumed that the COVID-19 pandemic does not influence the financial performance of Islamic banking in Indonesia. It means that Islamic banking in Indonesia is most likely able to survive during the economic crisis amidst the COVID-19 pandemic.

5 Conclusion

The ongoing Coronavirus pandemic is still a serious challenge for all economic players, including Islamic banking. However, the performance of the Islamic banking industry appears stable and resilient both before and after the pandemic.

In the midst of economic conditions that have not yet recovered, new strategies and innovations must continue to be developed by Islamic banking to overcome various problems that may happen. Islamic banking is expected to support the government in the National Economic Recovery (PEN) program. The synergy of Islamic banking for economic recovery can be done by increasing the distribution of financing in various sectors, especially in sectors that continue to record profits during the pandemic, such as the telecommunications, health, food, and beverage sectors.

As a business entity, Islamic banking must grow and increase its profitability in order to continue to help the national economy, improve people's welfare, reduce unemployment, as well as alleviate poverty.

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