

Determinants of the Profitability of Islamic Rural Banks During Covid-19 in Indonesia

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Abstract

The Return on Asset (ROA) value of Islamic rural banks (BPRS) keeps decreasing during the Covid-19 pandemic, specifically from 2020 to 2021. The ROA value of Sharia Commercial Bank and Sharia Business Unit also decreased in 2020 but increased in 2021. During the pandemic, many financial institutions were in trouble, but BPRS was still able to survive in the midst of a crisis. This phenomenon attracted some scholars to study the factors that made BPRS survive during a pandemic. This study aims to analyze the effect of internal and external factors on Islamic rural banks' profitability from the second quarter of 2020 to the first quarter of 2022. The sample used consisted of 134 Islamic rural banks with complete data to be analyzed. This study used panel data regression with ROA as the dependent variable. The result of regression shows that partially, FDR has a positive impact on ROA, whereas NPF and OER hurt ROA. On the other hand, CAR, GDP, and CPI have no impact on ROA. The finding shows that the internal factors of the BPRS have an important role in dealing with crises during a pandemic. The government is expected to support the digital transformation of BPRS in order to increase the efficiency and convenience of BPRS, so the public is attracted to join BPRS.

Keywords: Crises; Financial Ratio; Internal Factor; Macroeconomics; Profitability

INTRODUCTION

Coronavirus disease 2019 (Covid-19) was declared a pandemic on March 11, 2020 (MOH, 2020). Policies, as stated in Law Number 6 of 2020 and Instruction of the Ministry of Home Affairs Number 1 of 2021, namely Large-Scale Social Restriction (PSBB) and Enforcement of Restriction on Society Activity (PPKM), are implemented to prevent the transmission of Covid-19. The PSBB policy covers school and workplace closures, restrictions on religious activity, and activity in

public places. The PPKM policy covers restrictions on teaching, learning, and office activities, as well as restriction on operating hours and capacity limits for public places. These restrictive policies negatively impacted the economy because they lowered consumer demands and stalled many national and international industries (De Vito and Gómez, 2020).

According to the 2020 Economic Report on Indonesia (BI, 2021), in the early days of the Covid-19 pandemic, there was uncertainty in the global financial markets which affected the decline in foreign capital inflow to Indonesia, resulting in rupiah depreciation. In addition, export and economic activities in various sectors such as investment, production, tourism, transportation, and consumption and public confidence in economics also decreased. All of these contribute to the sharp contraction of Indonesia's economic growth.

Indonesia's economic growth which is described by the constant price GDP growth rate is 4.96% in the fourth quarter of 2019, then decrease to 2.97% in the first quarter of 2020. The impact of the Covid-19 pandemic on Indonesia's economy could be seen from the recession that occurred. Recession is a term used when there are two consecutive quarters of negative GDP growth (OJK, 2017). The GDP growth rate during the Covid-19 pandemic was negative for four consecutive quarters, namely in the second, third, and fourth quarters of 2020, and in the first quarter of 2021, which are -5.32%, -3.49%, -2.17%, and -0.70%, respectively. The GDP growth rate was positive from the second quarter of 2021 until the first quarter of 2022 (BPS, 2022).

Islamic banking is one of the institutions that contribute to economic growth (Supriani et al. 2021). According to the Law Number 21 of 2008, Islamic banking is all matters regarding Islamic banks and Sharia Business Unit (UUS), specifically business activities, institutions, and the process of carrying out their activities. Islamic bank consists of Islamic Rural Bank (BPRS) and Sharia Commercial Bank (BUS). BUS, UUS, and BPRS have also experienced the impact of Covid-19.

The resilience of Islamic banking in overcoming the impact of crises such as Covid-19 can be assessed based on its financial performance, poor bank performance will hurt economic growth (Nuhiu et al., 2017). Harahap (2006) stated that a bank's performance can be seen from its profitability. This statement is supported by Ferrouhi (2018) who declared that a bank's performance can be measured by its ability to generate a sustainable profit. One of the indicators of bank profitability is Return on Asset (ROA).

The spread of Covid-19 in Indonesia in 2020 caused a decrease in ROA values of BUS, UUS, and BPPRS, as many as 0.33%, 0.23%, and 0.60%, respectively. However, in 2021 the ROA value of BUS and UUS increased by 0.15% and 0.24%, respectively, but the ROA value of BPRS continued to decrease by 0.28%. Thus, it can be concluded that in the first year of the Covid-19 pandemic, BUS, UUS, and BPRS experienced a decrease in their ROA value, but in 2021, only BUS and UUS

succeeded in increasing their ROA value. The ROA value of BPRS had only increased in the first quarter of 2022 (OJK, 2022).

Bank financial performance can be used to see bank resilience in the face of crisis. Financial ratio analysis is one of the ways to measure bank financial performance, as in the assessment system of BPRS robustness level which declares financial ratio as an aspect that affects the performance of a BPRS (OJK 2019). Table 1 shows the development of BPRS' financial ratios from 2019 to the first quarter of 2022.

Table 1. Development of BPRS' financial ratios from 2019 to Q1 of 2022

| Financial ratios | Year | | | |
|------------------|----------|----------|----------|-------------|
| | 2019 (%) | 2020 (%) | 2021 (%) | Q1 2022 (%) |
| CAR | 17.99 | 28.6 | 23.79 | 24.09 |
| ROA | 2.61 | 2.01 | 1.73 | 1.74 |
| NPF | 7.05 | 7.24 | 6.95 | 7.05 |
| FDR | 113.59 | 108.78 | 103.38 | 108.98 |
| OER | 84.12 | 87.62 | 87.63 | 86.03 |

Source: Sharia banking statistics, 2022 (processed)

Since 2020, the ROA value of BPRS continued to decrease until the first quarter of 2022, this was accompanied by an increase in OER value, which means that during the Covid-19, BPRS had difficulty in controlling its operational efficiency. The NPF value that describes the proportion of nonperforming financing to total financing also increased in 2020, decreased in 2021, and increased again in the first quarter of 2022. The FDR value decreased in 2020 and 2021, then increased in the first quarter of 2022. Thus, it can be interpreted that BPRS' liquidity is getting better, even though the FDR value is still above 100% which is not yet included in the robustness category. The CAR values in 2020 to the first quarter of 2022 are higher than in 2019 before the pandemic occurred. All of the CAR values from 2019 until the first quarter of 2022 exceeded the robust CAR value, which is 15%.

The data showed that during the Covid-19, BPRS decrease in profitability, operational efficiency, financing quality, and liquidity. However, the high CAR has not been able to increase its profitability and this shows that BPRS has not run optimally. According to research conducted by Yusuf and Mahriana (2016), Harianto (2017), Azmy (2018), and Wahyudi (2020), it is found that bank profitability can be influenced by internal factors. Internal factors are factors related to bank management so that they can be controlled by the bank. Besides, bank profitability can also be influenced by external factors. External factors can be interpreted as factors that cannot be controlled by the bank, such as macroeconomic conditions (Cahyani 2018; De Leon 2020; Syachfuddin and Rosyidi 2020). All of these studies were carried out when the Indonesian economy was in normal condition.

What distinguishes this research from previous research is that this research was conducted during a crisis due to a pandemic, while previous research was conducted during normal economic conditions. This research wants to see what factors affect the profitability of BPRS during a pandemic, both internally and externally. This research will discuss the resilience of Islamic BPRS when hit by a crisis due to Covid-19 and what makes BPRS survive during Covid-19. Hence, the purpose of this study is to analyze the influence of internal and external factors on Islamic Rural Banks' profitability during Covid-19.

LITERATURE REVIEW

Islamic Rural Bank (BPRS)

According to Law Number 21 of 2008 concerning Islamic Banking, it is stated that BPRS is an Islamic bank that does not provide payment traffic service, this is what distinguishes BPRS from Islamic Commercial Banks (BUS) and Sharia Service Units (UUS). BPRS' scope of business activities is narrower than BUS and UUS because BPRS is prohibited from accepting giro savings, and foreign exchange services except for money changer services with a permit from Bank Indonesia, and providing insurance services. In addition, BUS and UUS could open overseas branches, unlike BPRS (OJK, 2008).

Based on the Regulation of Indonesia Financial Services Authority Number 25/POJK.03/2021, BPRS' products consist of two types, namely basic and advanced products. The basic products include funding products, financing, inter-bank placement, funds transfer, and collaboration with other institutions such as financial service agents without office, bancassurance with reference business model, marketing of electronic money from other issuers, cooperation in receiving or sending money to and from abroad, as well as IT-based saving and financing service with reference business model (OJK, 2021).

The advanced products consist of IT-based products (Mühlhäuser, 2008), such as SMS banking, mobile banking, or internet banking, officeless financial services, other IT-based activities through media connected to the BPRS system, bancassurance with distribution business model, bancassurance with integration business model. Other advanced products are products that could influence the assessment of BPRS' risk profile, such as foreign exchange activity, safe deposit box service, cooperation with IT-based saving and financing service with the channeling business model, as well as products that require permission from other authorities such as issuance of payment instruments using a card or without a card, and activity of other payment system services.

Profitability Ratio

Profitability describes the company's ability to earn profits (Kasmir, 2009). Profitability can also be interpreted as the bank's ability to utilize its resources to

obtain income that is greater than the costs. Hence, profitability is essential so that BPRS can carry out its operational activities.

Assessment of bank profitability can be measured through the profitability ratio. According to OJK (2019), the profitability level of BPRS can be seen from Return on Asset (ROA) and Return on Equity (ROE). ROA is used for measuring the level of profitability by comparing the income before tax with the total assets of BPRS. ROE is used to measure the level of profitability by comparing the income after tax with BPRS' paid-up capital.

ROA is a variable that is widely used in research to measure a bank's financial performance (Naushad, 2019). ROA measures the effectiveness of management in managing assets to generate income, thus ROA is a better ratio for measuring BPRS' profitability (Priatna, 2016). Based on the data availability, this study used ROA to measure BPRS's profitability. The ROA value can be obtained by dividing the income before tax by total assets (OJK 2019). The ROA ranking criteria based on the assessment system of BPRS robustness level are described in Table 2.

Table 2. ROA Ranking Criteria

| Value | Rank |
|-----------------------|------|
| ROA > 1.450% | 1 |
| 1.215% < ROA ≤ 1.450% | 2 |
| 0.999% < ROA ≤ 1.215% | 3 |
| 0.765% < ROA ≤ 0.999% | 4 |
| ROA ≤ 0.765% | 5 |

Source: OJK, 2019

Internal Factors Affecting Profitability

Arifin (2009) states that profitability is influenced by internal factors and external factors. Internal factors are factors that can be controlled by banks, such as business management, cost control, and revenue control (Arifin, 2009). Other internal factors, namely intellectual capital can also affect bank profitability. Intellectual capital is an intangible asset, including human resource capabilities, banking infrastructure, and relational capital (Stewart, 1998). One way to assess the internal condition of a bank is from its financial ratio report (Rachmadani et al., 2021). The internal factors used in this study are Capital Adequacy Ratio (CAR), Non-Performing Financing (NPF), Financing to Deposit Ratio (FDR), and Operating Expense Ratio (OER).

External Factors Affecting Profitability

External factors are factors beyond the bank's control, one of which is macroeconomic conditions (Rachmadani et al., 2021). According to Indonesia Financial System Statistics by Bank Indonesia, macroeconomic indicators consist of economic growth, BI 7-Day Reverse Repo Rate, JISDOR, inflation, and other indicators.

Arifin (2009) stated that another external factor apart from macroeconomic conditions is the competition in the bank's region. Banks with a large market share have the power to control the market, so they can increase their profitability, in addition, banks located in areas with a low level of competition are also able to increase their profitability because they benefit from monopolizing the market (Ferrouhi, 2018). This study uses macroeconomic indicators as external factors, namely GDP and CPI as a proxy for inflation.

Hypothesis

H₁: Capital Adequacy Ratio (CAR) hurts BPRS profitability

CAR is a ratio that measures the capital adequacy of a bank to support assets that contain risk. According to OJK (2019), the CAR value can be calculated by adding tier 1 and tier 2 capital, then dividing it with risk-weighted assets (RWA). The CAR ranking criteria based on the assessment system of BPRS robustness level are described in Table 3. However, based on the Regulation of Indonesia Financial Services Authority Number 66/POJK.03/2016, since January 1, 2020, the CAR value of BPRS is at least 12%. The higher CAR value indicates that BPRS is more able to bear the risk of loss.

Table 3. CAR Ranking Criteria

| Value | Rank |
|-------------------|------|
| CAR ≥ 15% | 1 |
| 13,5% ≤ CAR < 15% | 2 |
| 12% ≤ CAR < 13,5% | 3 |
| 8% ≤ CAR < 12% | 4 |
| CAR < 8% | 5 |

Source: OJK, 2019

CAR reflects the adequacy of bank capital to overcome the possibility of loss. A higher CAR value does not mean it will affect the increase in profitability, if the CAR value is high, that means there is less capital used to generate profit. BPRS must utilize its capital for profit-generating activities, such as financing while taking into account the level of capital adequacy as in the regulations. If BPRS does not optimize its capital, the ROA value could decrease.

Research by Almunawwaroh and Marliana (2018), Sari and Endri (2019), as well as Alnajjar and Abdullah Othman (2021), found that CAR hurts ROA, contrastingly the research by Alshatti (2016), Virgana et al. (2019), Wahyudi et al. (2019) and Bouhider (2021) found a positive effect of CAR on the ROA of Islamic banks in Indonesia. Some researchers found that CAR does not affect the ROA value of BPRS (Said and Ali, 2016; Harianto, 2017; Sutrisno and Widarjono, 2018; Azmy, 2018; Rofiqo and Afrianti, 2019; Wahyudi, 2020; Rachmadani et al., 2021).

H₂: Non-Performing Financing (NPF) hurts BPRS profitability

The non-Performing Financing (NPF) ratio is used to calculate the proportion between non-performing financing and total financing. Non-performing financing consists of substandard financing, doubtful financing, and bad financing. The NPF value can be obtained by dividing the nonperforming financing by total financing. The NPF ranking criteria based on the assessment system of BPRS robustness level are described in Table 4. The lower the NPF value indicates the better financial performance of the BPRS because there is less non-performing financing.

Table 4. NPF Ranking Criteria

| Value | Rank |
|------------------------|------|
| $NPF \leq 7\%$ | 1 |
| $7\% < NPF \leq 10\%$ | 2 |
| $10\% < NPF \leq 13\%$ | 3 |
| $13\% < NPF \leq 16\%$ | 4 |
| $NPF > 16\%$ | 5 |

Source: OJK, 2019

An increase in the NPF ratio may result in a reduction of ROA value. This can happen because the increase in nonperforming financing can potentially reduce the income that comes from financing products. Several studies found a negative effect of NPF on ROA (Yusuf and Mahriana, 2016; Harianto, 2017; Azmy, 2018; Sutrisno and Widarjono, 2018; Rofiqo and Afrianti, 2019; Istiqomaha et al., 2021). On the other hand, studies by Said and Ali (2016), Virgana et al. (2019), and Wahyudi (2020) found that NPF does not affect ROA.

H₃: Financing to Deposit Ratio (FDR) has a positive effect on BPRS profitability

FDR is a ratio that describes the liquidity of Islamic banks. Liquidity reflects a bank's ability to meet payment obligations shortly. FDR measures the soundness of a bank in giving financing to optimize its funds (Azmy, 2018). According to the Bank Indonesia Regulation Number 17/11/PBI/2015, a good FDR value is 78–92%. The FDR ratio can be calculated by dividing financing with third-party funds.

The FDR value must not be too high or too low, if it is too high, there will be a shortage of reserve funds needed to meet customer withdrawal requests, but if the FDR value is too low, it indicates that the bank has not optimized the funds to financing product, thus it can reduce the income that will be obtained from financing. Based on the previous explanation, it can be concluded that FDR has a positive effect on ROA, this is in line with previous research by Muhaemin and Wiliasih (2016), Virgana et al. (2019), Rofiqo and Afrianti (2019), and Bouhider (2021). However, there were previous research that found a negative effect of FDR on ROA (Yusuf and Mahriana, 2016; Azmy, 2018; Rachmadani et al., 2021) and some

studies did not find any effect of FDR on ROA (Said and Ali, 2016; Harianto, 2017; Sutrisno and Widarjono, 2018; Istan and Fahlevi, 2020; Wahyudi, 2020).

H₄: Operating Expense Ratio (OER) hurts BPRS profitability

OER reflects the bank's efficiency level in carrying out its operational activities. The OER value can be obtained by dividing the operating cost by the operating income. Operating costs can be defined as costs incurred to finance the operational activities of a BPRS, except for profit sharing for third-party funds. Operating income represents the income after deducting the profit sharing for third-party funds. The OER ranking criteria based on the assessment system of BPRS robustness level are described in Table 5. The higher the OER value of a BPRS means the less efficient its operational activities are.

Table 5. OER Ranking Criteria

| Value | Rank |
|-----------------|------|
| OER ≤ 83% | 1 |
| 83% < OER ≤ 85% | 2 |
| 85% < OER ≤ 87% | 3 |
| 87% < OER ≤ 89% | 4 |
| OER > 89% | 5 |

Source: OJK, 2019

The smaller the OER value means that the operating costs are smaller than the operating income, thus the ROA value increases. This means that OER hurts ROA. Previous research has found that OER harms ROA (Said and Ali, 2016; Muhaemin and Wiliasih, 2016; Harianto, 2017; Azmy, 2018; Sutrisno and Widarjono, 2018; Virgana et al., 2019; Rofiqo and Afrianti, 2019; Abou-Elseoud et al., 2020; Wahyudi, 2020; Istan and Fahlevi, 2020).

H₅: Gross Domestic Product (GDP) has a positive effect on BPRS profitability

GDP is used for assessing the state of a country's economy. GDP describes the increase in added value generated by all business units in a country within a specific period. GDP is divided into two types, namely real GDP and nominal GDP (BPS, 2022). Real GDP is evaluated at constant base-year market prices. Nominal GDP is a GDP measured in current market prices. Economic growth within a specific period can be seen from real GDP because the value is not affected by changes in prices. Meanwhile, shifts and economic structure can be seen in nominal GDP (BPS, 2022).

An increase in GDP indicates that there is an increase in the customer's financing and saving capability, thus it influences the increase in the ROA value of BPRS (Cahyani, 2018; Istiqomaha et al., 2021). Several studies have found that GDP has a positive effect on ROA (Istiqomaha et al., 2021; Rachmadani et al., 2021). However, De Leon (2020) and Bouhider (2021) found that GDP harms ROA, and in

the research by Cahyani (2018) as well as Syachfuddin and Rosyidi (2020), it is stated that GDP does not affect ROA.

H₆: Consumer Price Index (CPI) hurts BPRS profitability

Inflation is a general increase in the price of goods and services within a certain period. The inflation rate reflects the purchasing value of money. The indicator used to measure the inflation rate is Consumer Price Index (CPI). CPI is the change in prices for a basket of goods and services paid by consumers over some time. Changes in CPI from the previous time to the current time can reflect inflation or deflation of goods and services prices (BPS, 2022). Three main types of inflation are cost-push inflation, demand-pull inflation, and built-in inflation as a result of adaptive expectations (BI, 2020).

Inflation or an increase in the CPI over a certain period can affect the decrease of real income, so it is difficult for BPRSsumers to pay their installment. This price increase can also increase the operating cost of BPRS. Both of these can cause a decrease in the profitability of BPRS. Previous research by Muhaemin and Wiliasih (2016), Mohd Aziz (2017), and Bouhider (2021) have found that inflation hurts ROA, but some studies found inflation has a positive effect on ROA (Said and Ali, 2016; Dodi et al., 2018; De Leon, 2020; Abou-Elseoud et al., 2020), while other studies found that inflation does not affect ROA (Cahyani, 2018; Rofiqo and Afrianti, 2019; Wahyudi, 2020; Syachfuddin and Rosyidi, 2020; Istan and Fahlevi, 2020; Istiqomaha et al., 2021).

RESEARCH METHOD

This is a quantitative study using secondary data in the form of panel data which is a combination of cross-section and time series data. The time series data used is the data for the second quarter of 2020 to the first quarter of 2022. The population in this study is the BPRS in Indonesia. The sample is selected using the purposive sampling technique which is a sample selection technique based on certain criteria determined by the researcher (Nugroho, 2005). The criteria for the BPRS in this study are BPRS that operates during the second quarter of 2020 to the first quarter of 2022 and it should have all the data needed for this study in its quarterly financial report. Based on the criteria and after removing outliers, 134 BPRS are chosen as a sample in this study. Inferential analysis using panel data regression is used to analyze the variables that influence the profitability of BPRS. The panel data model used in this study is as follows:

$$ROA_{it} = \alpha_0 + \beta_1 LNCAR_{it} + \beta_2 NPF_{it} + \beta_3 FDR_{it} + \beta_4 LNBOPO_{it} + \beta_5 PDB_{it} + \beta_6 INF_{it} + \varepsilon_{it} \quad (1)$$

Description:

| | |
|-----|----------------------------|
| ROA | = Return on Asset |
| CAR | = Capital Adequacy Ratio |
| NPF | = Non-Performing Financing |

| | |
|---------------------------|---|
| FDR | = Financing to Deposit Ratio |
| OER | = Operating Expense Ratio |
| LN_GDP | = natural logarithm of Gross Domestic Product |
| LN_CPI | = natural logarithm of Consumer Price Index |
| α_0 | = intercept |
| β_1, \dots, β_6 | = slope |
| it | = the i-BPRS at t-time |
| ε | = error term |

RESULTS AND DISCUSSION

Results

In panel data regression, there are three approaches to determine the factors that influence the profitability of BPRS, namely the Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM). To identify the appropriate model between CEM and FEM, the Chow test is used. The p-value in the Chow test is 0.0000 which is lower than 0.05, thus FEM is the appropriate model for the panel data. Subsequently, the Hausman test is conducted to determine the suitable model between FEM and REM. The p-value in the Hausman test is 0.0000 which is lower than 0.05, thus FEM is the most suitable model for this study.

Classical assumption tests are conducted after the suitable model is chosen. Classical assumption tests consist of normality, multicollinearity, autocorrelation, and heteroscedasticity test. Gujarati (2003) stated that the fixed effect model does not need to be tested for autocorrelation. In addition, the assumption of normality has little impact on large data size (Gujarati, 2003; Ghasemi and Zahediasl, 2012). The greater the number of observations, the obtained result will be closer to the actual result. This study has thousands of observations so there is no need for a normality test. The Variance Inflation Factor (VIF) test is used to identify multicollinearity in the model. The VIF value of CAR, NPF, FDR, OER, LN_GDP, and LN_CPI are lower than 10. This indicates that there is no multicollinearity in the model. The white test is used to detect heteroscedasticity in the model. The Prob. The chi-Square value from the White test is 0.0685 which is greater than 0.05, thus there is no heteroscedasticity in the model.

The regression result is evaluated based on the coefficient of determination (R^2), an F-test, and a T-test. The R^2 in the FEM estimation result is 0.418842, which means 41.88% of the variance in ROA value is predicted by the independent variables and 58.12% of the variance in ROA value is unexplained by the model. The low R^2 is often found in analysis using cross-sectional data with a large number of observations (Gujarati, 2003). Hence, in this study, the F-test and T-test are more relevant to be used as the basis for seeing the influence of the independent variables on the ROA value of BPRS. The F-test in the FEM estimation result has a p-

value of 0.000000 which is lower than 0.05, thus, simultaneously the independent variables have a significant effect on the ROA of BPRS.

Table 6. Estimation of the Fixed Effect Regression Model

| Variable | Coefficient | Prob. |
|----------|-------------|--------|
| C | -2,014275 | 0.9685 |
| CAR | -0,002029 | 0.8475 |
| NPF | -0,173143* | 0.0000 |
| FDR | 0,017535* | 0.0027 |
| OER | -0,032207* | 0.0000 |
| LN_GDP | 0,652406 | 0.8968 |
| LN_CPI | -0,764721 | 0.9503 |

Notes: *significant at 5% level

The T-test is used to see the partial effect of the independent variable on the dependent variable. Based on the probability value in Table 6, it can be seen that NPF and OER have a negative and significant effect on ROA, while FDR has a positive and significant effect on ROA. The coefficient value shows that NPF has the biggest influence on the ROA of BPRS. On the other hand, CAR, GDP, and CPI do not affect ROA.

Discussion

The test found that Capital Adequacy Ratio (CAR) has no effect on the ROA of BPRS during the Covid-19 pandemic. This result is in line with the finding of studies about Islamic banks by Said and Ali (2016), Sutrisno and Widarjono (2018), Rofiqo and Afrianti (2019), and Abou-Elseoud et al. (2020). Harianto (2017) and Azmy (2018) also found that CAR does not affect the ROA of BPRS. Wahyudi (2020), who conducted the study using the data from the first quarter of 2020 also found that CAR does not affect ROA. All CAR values during the research period were between 33.30–35.08%, higher than the limit set by Indonesia Financial Services Authority (OJK) which is 15%. It means that BPRS has excellent capital adequacy. CAR does not affect ROA can be caused by the BPRS's carefulness to maintain its capital adequacy to withstand the risk of loss during the Covid-19 pandemic. However, this indicates that BPRS has not maximized its capital productivity to expand its business or give financing, thus its income does not increase.

Non-Performing Financing (NPF) has a negative and significant effect on the ROA of BPRS during the Covid-19 pandemic. This finding is in line with research about Islamic banks in Indonesia by Almunawwaroh and Marlina (2018), Sutrisno and Widarjono (2018), and Dodi et al. (2018). Muhaemin and Wiliasih (2016), Harianto (2017), Yusuf and Mahriana (2016), and Istiqomaha et al. (2021) also found a negative influence of NPF on the ROA of BPRS. Studies using the Covid-19 pandemic period by Setiawan (2021) and Putri et al. (2022) also found similar results. The higher NPF ratio means that there is more problematic financing

compared to the total financing, which will decrease the revenue that comes from financing. The NPF ratio values of BPRS from 2020 until the first quarter of 2022 were dominated by bad financing (OJK, 2022). Bad financing is financing that has arrears of payment for more than 360 days from the due date (OJK, 2019). This means BPRS does not generate revenue from financing for a long period which can lead to a decrease in the ROA value. Based on the economic sector, nonperforming financing of BPRS in 2020 until the first quarter of 2022 was dominated by the trade, restaurant, and hotel sectors, while based on the type of use, it is mostly used for working capital (OJK, 2021; OJK, 2022). This is to the 2020 Economic Report on Indonesia which states that the consumption, ingestion, transportation, tourism, and production sectors experienced a significant decrease during the Covid-19 pandemic (BI, 2021). To anticipate defaults from entrepreneurs during the crisis, BPRS must be more selective and stricter in providing financing, so that the NPF is still under control.

Financing to Deposit Ratio (FDR) has a positive and significant effect on the ROA of BPRS during the Covid-19 pandemic, in line with research by Muhaemin and Wiliasih (2016) that used BPRS as the subject of study. Some previous research by Almunawwaroh and Marliana (2018), Virgana et al. (2019) and Bouhider (2021) also found the same result with Islamic banks as the subject of study. The FDR value during the research period that met the requirement of 78–92% according to Bank Indonesia was only found in the fourth quarter of 2020 and the fourth quarter of 2021, while in other quarters the FDR value was greater than 92%. This indicates that during the research period, the third-party funds were optimized by being channeled for financing, thus there were fewer idle funds, than the financing generated income which affected increasing ROA. Said and Ali (2016) stated that a high FDR could only positively affect the ROA if it is accompanied by a low NPF. This is in line with the fact that based on the NPF ranking criteria, the NPF ratio values during the research period were considered low, all of the values were placed in rank one which is smaller or equal to 7%, or rank two which is greater than 7% and less than or equal to 10%. FDR has a close relationship with NPF, the higher the FDR the risk of an increase in NPF will also be high. Being selective in choosing financing customers will be very important so that the NPF is maintained. BPRS must be able to choose and placed credible staff in handling financing so that the bank does not suffer losses.

Operating Expense Ratio (OER) has a negative and significant effect on the ROA of BPRS during the Covid-19 pandemic. This result is consistent with some previous research by Said and Ali (2016), Sutrisno and Widarjono (2018), Rofiqo and Afrianti (2019), as well as Virgana et al. (2019) that used Islamic banks as the subject of study. Several researchers that used BPRS as the subject of study also found that OER hurts ROA (Muhaemin and Wiliasih, 2016; Harianto, 2017; Azmy, 2018). In addition, this result is also in line with studies by Wahyudi (2020) and Setiawan (2021) that used Islamic banks' data in 2020, and Putri et al. (2022) that used data

from BPRS in West Java from the first quarter of 2020 to the fourth quarter of 2021. The entire value of OER during the research period was higher than 84% which exceeds the predetermined OER criteria limit of 83% (OJK, 2019). The higher the OER value, the greater the operating cost compared to the operating income. This shows that during the research period, BPRS was not efficient in carrying out its operational activities, especially the cost used for employees which dominated the operating cost of BPRS (OJK, 2022). A high OER value will further reduce the ROA of BPRS. BPRS must be more efficient in operating banking by using digital technology to make it easier and reduce operational costs.

Gross Domestic Product (GDP) has no effect on the ROA of BPRS during the Covid-19 pandemic. This finding is in line with several studies that used Islamic banks as the object of study (Mohd Aziz, 2017; Dodi et al., 2018; Rofiqo and Afrianti, 2019; Syachfuddin and Rosyidi, 2020; Setiawan, 2021). Cahyani (2018) also found that GDP does not affect the ROA of BPRS. GDP does not affect ROA because the assets of the BPRS during the study period were dominated by receivables and profit-sharing financing. The income of the BPRS mostly came from the financing provided (OJK, 2022). Thus, ratios that are directly related to financings such as NPF and FDR would have a greater influence on the profitability of the BPRS compared to GDP which is an external factor.

Consumer Price Index (CPI) does not affect the ROA of BPRS during the Covid-19 pandemic. Cahyani (2018) and Istiqomaha et al. (2021) also found that inflation does not affect the ROA of BPRS, while Rofiqo and Afrianti (2019), as well as Syachfuddin and Rosyidi (2020), found that inflation does not affect the ROA of Islamic banks. The research by Wahyudi (2020) also found similar results using the Covid-19 pandemic as the period. The CPI value during the research period continued to increase slowly. The decrease in CPI only occurred in the third quarter of 2020. It means that during the Covid-19 pandemic, the inflation of goods and services was low and stable so it would not have too much impact on the operating cost of the BPRS which could affect the income of the BPRS. Hence, this is the reason that inflation does not affect the ROA of BPRS during the Covid-19 pandemic.

The results above show that the profitability of the BPRS is influenced by the performance of the bank on internal factors so the resilience of the BPRS during the pandemic is due to good management. To support business performance, BPRS must improve the quality of workers and apply digital technology to be more efficient in banking management. BPRS internal factors greatly affect the performance of a bank, while external factors do not really affect bank resilience, especially during a crisis, so only banks with good performance can survive well.

CONCLUSION

During the Covid-19 pandemic, from the second quarter of 2020 until the first quarter of 2022, the internal factors that significantly affect the ROA of the BPRS are FDR, NPF, and OER. FDR has a positive effect, while NPF and OER have a negative effect and NPF has the biggest influence on ROA. Meanwhile, external factors such as GDP and CPI as a proxy for inflation do not affect the ROA of the BPRS. It can be concluded that BPRS performance or internal factors have a major influence on the profitability and resilience of the BPRS during a crisis.

BPRS should be able to improve its risk mitigation performance, specifically in financing products because NPF has the biggest influence on ROA and also collaborate with IT-based institutions to increase digitalization, reduce operating costs, and increase ROA. BPRS must also improve the quality of human resources so that they can work more professionally and with dignity. It is recommended for further research to compare banking performance during a crisis due to a pandemic and after a pandemic, as well as adding other variables such as total assets and intellectual capital, as well as external variables such as market share and other macroeconomic indicators.

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