



Does Non-Performing Financing and Capital Adequacy Impact Profitability of Islamic Banks in Indonesia?

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ABSTRACT

This research seeks to investigate the correlation between the impact of Capital Adequacy Ratio (CAR), Non-Performing Financing (NPF), Financing to Deposit Ratio (FDR), and Operational Efficiency Ratio (OER) on the profitability of Islamic Banks, specifically the Return on Assets (ROA). The population in this study included Sharia Commercial Banks registered by the Financial Services Authority (OJK) and the sampling method was purposive sampling. The research data used are financial statements for the 2017-2022 period with a total sample of 14 Sharia Commercial Banks. The analysis method is Multiple Linear Regression processed by Stata. The results of multiple linear regression analysis showed that the Islamic commercial banks study population covering 20 bank quarterly financial statements had negative results on all variables and CAR and NPF had no significant effect on ROA, while FDR and OER had a significant relationship with ROA.

Keywords: *Financial Performance, Profitability, Return on Assets*

1. INTRODUCTION

Banks are the financial sector that has felt the pandemic more than most sectors since the global spread of Covid-19 and has very quickly made financial markets slumped [1]. Islamic banking in Indonesia has consistently served as a benchmark for the growth and progress of Islamic banking institutions in Southeast Asia, following Malaysia's lead. This incident is because Indonesia has a majority Muslim population with a percentage of 90% of the Muslim population of 270 million people. The majority of the largest Muslim population in Indonesia makes the country's Islamic banking very likely to develop its market power because it has a clear target market [2]. Because banks are the main source of liquidity insurance for various economies [3], Therefore, banking sector resilience is an important driver for global economic recovery [4]. According to the IMF (2021), the global economy is expected to experience favorable growth rates of 5.9% in 2021 and 4.9% in 2022, thanks to favorable conditions within the banking and financial sectors. An essential condition for sustaining these supportive circumstances is the need for the global banking sector to uphold and potentially enhance its efficiency and productivity both during and in the aftermath of the COVID-19 crisis [5].

Islamic banking plays a significant role in the worldwide banking sector, particularly in facilitating global economic recovery during the COVID-19 pandemic. A study conducted by [6] demonstrated that in 2020, Islamic banking in Bangladesh proved valuable in supporting trade and trade investments, both of which were significantly impacted by the COVID-19 pandemic. [7] observed similar conditions in the Middle East and North Africa region. They highlight that Islamic banking in the area has encountered challenges stemming from declining oil prices, and the situation has been further aggravated by the COVID-19 pandemic, causing certain banks to experience a complete absence of cash inflow. [8] Islamic banking tends to be strong in the face of various financial crises. In other words, Islamic banking is expected to recover faster than other banks. This evidence is in line with research [9] and [10] concludes that Islamic banking performance is not affected by the pandemic, thus Islamic banking financial performance against the COVID-19 crisis is more resilient to crisis shocks than other banks.

Evaluating banking financial performance according to Islamic principles is crucial for Islamic banks, which operate uniquely based on Sharia guidelines. This study examines four key financial ratios: Capital Adequacy Ratio (CAR), Financing to Deposit Ratio (FDR), Non-

Performing Financing (NPF), and Operational Efficiency Ratio (OER). These ratios are directly linked to Return On Assets (ROA), a vital indicator in assessing financial performance, particularly during the challenging COVID-19 period, as they significantly impact a company's profitability.

Profitability describes a company's expertise in creating profits as well as operational efficiencies to utilize its assets [11]. In measuring profitability to generate profits and how efficient operations are, researchers choose Return on Assets because it is a picture of the effectiveness of banks in generating profits from assets. The higher the return on assets, the more effective banks can use their assets to generate profits. Conversely, with low asset returns, the level of efficiency of companies using assets to generate profits decreases.

Profitability and capital adequacy ratio are two interrelated concepts in the analysis of a company's financial performance. High profitability can improve a company's capital adequacy ratio through profit retention, whereas a high capital adequacy ratio can support profitability by providing financial stability and access to resources needed for growth and operational efficiency. Previous research concluded that capital adequacy ratios have a negative relationship to profitability [12]. While [13] concluding CAR is positively related to ROA.

Non-Performing Financing is a general term in Islamic financial companies that has a function to describe a portfolio of financing that is bad or experiencing significant payment arrears. NPF is directly related to the asset quality of Islamic banking. A high level of NPF can reduce a company's profitability, while low profitability can increase the risk of NPF. Therefore, good management of NPFs and efforts to increase overall company profitability is an important key to the success and stability of Islamic banking. Previous research [14] has shown that NPF has a positive relationship with profitability. The study is quite the opposite, which shows that NPF has a negative influence on ROA [15, 16].

FDR is influential or interrelated with the company's ability to make a profit or the stability of the company in obtaining profitability and the availability of working capital needed to run the business. Having sufficient funds allows the company's operations to run optimally. The researchers used FDR, which is a framework of liquidity ratios, to serve as a gauge that banks tend to use in providing loans or financing compared to funds provided by customers or their deposits. This ratio shows the extent to which banks use customer deposits to channel credit or financing to other parties. Previous research by [17] concluded FDR positively impacted the effect of ROA. The findings are in line with the foundation of previous researchers who have a positive

correlation [18]. The findings contradict [19] those who claim that FDR is negatively correlated with ROA.

OER is an expenditure required in carrying out bank operational activities including administrative costs, employee costs, information technology costs, and so on. OER can have a high impact on bank profitability due to the operational costs incurred that are too high, the greater the pressure on the profits generated. The lower the OER, the higher the bank's profit, and vice versa. According to [20], OER positively impacts ROA. The study contradicts [21] those that explain OER is negatively related to ROA.

Based on previous research, there is a correlation between financial ratios to bank profitability. The purpose of the study is to find out the four ratios associated with Return On Assets whether they have a different influence from previous research.

2. LITERATURE REVIEW

2.1. Theoretical Review

2.1.1. Return On Assets

Return On Assets (ROA) is a framework of the profitability ratio section that measures how efficient a company is in earning profits from asset expenditures. ROA generally provides an overview of the effectiveness of the company in managing its assets to maximize its profits [22]. How to calculate ROA itself by dividing the company's net profit and total assets.

ROA cannot provide a detailed picture of a company's financial performance. ROA must be analyzed and compared with other financial ratios to provide a more complex picture of Islamic banking in Indonesia.

2.1.2. Capital Adequacy Ratio

Capital Adequacy Ratio (CAR) is a financial ratio used to measure the scale of capital adequacy in banks in resisting the risk of losses that will occur. CAR is an important indicator in assessing financial stability and banks' ability to deal with the global economic crisis. The capital adequacy ratio has similarities with the comparative scale defined by capital and weighted assets included in risk management that are positively correlated with changes in profits. This shows that the capital adequacy ratio has increased, so the profit obtained has also increased [23].

2.1.3. Non-Performing Financing

Non-performing Financing is also called non-performing financing, doubtful loans, and bad loans. NPF with NPL is the same proxy for non-performing loans, except that NPF is used in credit calculation by Islamic banks, while Non-Performing Loan is a proxy that is

usually used to calculate conventional banking loans [24]. The ratio illustrates how well the company minimizes funding risk management. The higher the range of Non-Performing Financing ratios, the distribution of non-performing loans, or the poor management of bank financing swells. On the contrary, the low percentage of Non-Performing Financing means that the bank's performance achievement is more effective in managing funding [25].

2.1.4. *Financing to Deposit Ratio*

Financing to Deposit Ratio is categorized into the liquidity ratio section serves to estimate banking efficiency in repayment to customers to withdraw the budget by guaranteeing the financing capacity provided in the form of liquidity, calculated by calculating the total financing provided by banks with customers [26]. Given the influence of a firm's inability to fulfill its short-term obligations, liquidity becomes important, and lack of liquidity prevents firms from taking advantage of discounts or profit opportunities [27]. The financing deposit ratio itself is a comparative proxy that includes the amount of capital a company or bank has against capital. On the other hand, the FDR explains the efficiency of banks in relying on financing that is distributed in the form of liquidity, then distributed funds to debtors, and repayment to customers [25].

2.1.5. *Operational Efficiency Ratio (OER)*

Operational Efficiency Ratio (OER) functions to measure the operational effectiveness of each company, especially Islamic banking. OER is described in numerical terms that obtained operational functions in covering operational costs. Any additional operating expenses can reduce pre-tax profits so that the company's profits decrease [28].

The Operational Efficiency Ratio is usually calculated as a percentage. The low percentage of the Operational Efficiency Ratio is better in terms of operations, this implies that the operational costs used are relatively less than the level of operating income obtained. Operational Efficiency Ratio can provide an overview of the level of efficiency and cost control of an entity. If the Operational Efficiency Ratio is high, it may indicate that the entity is spending most of its revenue on operating expenses, which may signal a lack of efficiency in cost management. On the other hand, if the Operational Efficiency Ratio is low, it indicates that the entity managed its operating expenses well, increasing the potential net profit.

2.2.1. *Hypothesis Development*

Based on the aforementioned literature, it becomes evident that Return on Assets alone does not provide a comprehensive insight into a company's financial

performance. To obtain a more in-depth understanding of a company's financial health, it's essential to interconnect Return on Assets with other financial ratios. In this study, four distinct ratios are incorporated: Capital Adequacy Ratio (CAR), Non-Performing or Bad Loan Ratio (NPF), Liquidity Ratio (FDR), and Operational Efficiency Ratio (OER). These ratios have been recognized as efficient and commonly used in prior research to delve deeper into the assessment of Islamic banking's financial performance in Indonesia. Consequently, this study explores the correlation between the financial performance of Islamic banking in Indonesia, as represented by these four ratios, and company profitability, measured by Return on Assets (ROA).

A high CAR implies that the Bank will have difficulty carrying out the desired expansion or growth if it has. This happens because the capital increase required to meet capital adequacy ratio requirements can limit the availability of funds for investment or acquisition activities that can increase the profitability of the bank.

An empirical study is built on the assumption that there exists a positive relationship between the Capital Adequacy Ratio and a company's profitability. This implies that as the Capital Adequacy Ratio increases, so does the company's profitability, resulting in higher profits. Such an explanation fosters investor confidence, as banks with a high Capital Adequacy Ratio tend to exhibit greater stability in addressing various potential risks. This assertion is supported by the research conducted by [29], which affirms a positive correlation between the Capital Adequacy Ratio and profitability. This conclusion is further reinforced by [30], who discovered a significant positive relationship between the Capital Adequacy Ratio of Islamic commercial banks in Indonesia and the Return on Assets. However, this perspective contrasts with [15], whose research indicates that Indonesian banks affiliated with State-Owned Enterprises (SOEs) have reported a negative correlation between the Capital Adequacy Ratio and profitability. [19] concurs with these findings by explaining that the Capital Adequacy Ratio demonstrates a significant negative correlation. Based on a coherent explanation, the appropriate hypothesis:

Hypothesis 1: CAR has an influence on ROA

Non-performing Financing is positively correlated, so banks tend to have higher interest income because the majority of financing or loans result in timely payments. However, if Non-Performing Financing is negatively correlated, banks will face a greater risk of credit loss. To avoid such impacts, banks usually allocate their reserve funds or write down financing that cannot be recovered.

[21] stated that the Return on Assets of Islamic banking in Indonesia has no relationship with non-performing loans or is significantly positively correlated. The study continued to prove this finding and the results

[31] found that non-performing loans were positively correlated but did not have a significant effect on Return on Assets. both findings are refuted [22] which states that non-performing financing is insignificantly negatively related to Return on Assets. Following previous research, the corresponding hypothesis:

Hypothesis 2: NPF has an influence on ROA

A higher loan-to-deposit ratio allows more provident funds to be used for financing. This event allows the bank to generate maximum revenue through revenue sharing obtained from the budget, which leads to an increase in Return On Assets.

[31] and [32] further explained that the financing deposit ratio is significantly positively correlated with ROA. This finding is actually different from [21] explaining that the financing deposit ratio is significantly negatively correlated with profitability. Then the third hypothesis is:

Hypothesis 3: FDR had an influence on ROA.

Low OER indicates that the bank has good operational efficiency, is able to manage costs well, and increase ROA simultaneously. However, if an Islamic bank's operating expenses increase rapidly compared to its operating income, it may face pressure on its profitability. This can reduce Return on Assets because lower profits resulting in increased costs can reduce a bank's ability to generate good returns on its assets.

Research conducted [31] states that OER has a significant negative relationship with the Return On Assets of Islamic banks. This indicates that the high scale (OER) produced by Islamic banks then the Return On Assets of Islamic banks has depreciated. The research goes straight with research [33] which concludes that the Operational Efficiency Ratio (OER) is negatively correlated with return on assets. however, the study is contrary to [22], and [34] concluded that the OER variable has a significant positive correlation with return on assets. The final hypothetical formula is:

Hypothesis 4: OER has an influence on ROA

3. RESEARCH METHOD

This study uses a quantitative approach to reveal the correlation or suitability between variables with hypothesis testing. This study focuses on testing the relationship between variables in determining further research. The variables under investigation encompass Capital Adequacy Ratio, Non-Performing Financing, Financing to Deposit Ratio, and Operational Efficiency Ratio, while the outcome variable is Return On Assets. The objective of this study is to ascertain the connection between the financial performance of Islamic banking and its profitability. Then the corresponding multiple linear regression model :

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + e \quad (1)$$

Y is Return On Asset (ROA); a is constant; $b_1 - b_4$ is independent variable regression coefficient; X_1 is Capital Adequacy Ratio (CAR); X_2 is Financing to Deposit Ratio (FDR); X_3 is Non-Performing Financing (NPF); X_4 is Operational Efficiency Ratio (OER); and e is Error Term

The type of data used is secondary data obtained directly from the company's official website access and OJK. The population used is all Islamic commercial banks in Indonesia consisting of 10 private commercial banks and 2 local government-owned commercial banks registered with the OJK in the last five years. The data collection method comes from the bank's quarterly financial statements obtained from the official OJK website. After data collection, the data is processed using the Statistical Software for Data Science (STATA) data analysis tool.

The next step involves performing linear and multiple regression analyses after the statistical rules, hypothesis tests, and classical assumption tests have been met. This analysis method combines various independent variables that have the aim of determining significance and impact simultaneously. Regression analysis is used to answer research hypotheses.

4. RESULTS

The use of data in this study involved 240 quarterly financial statements consisting of four quarters from 12 Islamic commercial banks in Indonesia for the 2017-2022 period. The data used in quarterly financial statements includes variables such as CAR, NPF, FDR, and OER. Based on the data obtained, classical hypothesis tests were carried out including normality, multicollinearity, heteroscedasticity, and autocorrelation. After testing, the regression method can be used for data analysis and the results are as follows:

4.1. Descriptive Analysis

Table 1. Descriptive analysis results

Variable	Obs	Mean	Std. dev.	Min	Max
CAR	24	531.1758	176.6903	281.58	832
NPF	24	31.33583	15.85357	1.35	61.79
FDR	24	1022.983	139.0863	860.7	1450.84
OER	24	1150.937	125.5133	1033.07	1536.68
ROA	24	22.68417	8.79352	1.72	35.59

Sources: Data processed by STATA

As explained in the descriptive test in the table above, the lowest Return on Assets value of Islamic commercial banks is 1.72, which occurred at the end of 2021 when

the COVID-19 pandemic spread to Indonesia. Meanwhile, Sharia Commercial Banks had a maximum value of 35.59 which occurred in September 2019. Meanwhile, Islamic commercial banks have an average ROA of 22.68 with a standard deviation of 8.79. Meanwhile, judging from the side of the CAR table, the lowest value of Islamic commercial banks obtained 402.89 occurred at the end of 2020. Meanwhile, the maximum CAR was shown at 832 which occurred in June 2022. The average is 531.1758 and the standard deviation is 176.6903. As for the NPF variable, the minimum value of Islamic commercial banks is 1.35 which occurs at the end of 2022. The maximum value is 61.79 with an average value of 31.33583, and a standard deviation value of 15.85357. In the FDR value of Islamic commercial banks, the highest percentage was obtained at 1450.84 and the lowest number was 860.7 with an average value of 1022.983 and a standard deviation obtained at 139.0863. The highest value of the OER variable appeared at the end of 2021, with a magnitude of 1536.68, a minimum value of 1033.33, a standard deviation of 125.5133, and an average of 1150.937.

4.2. Classic Assumption Test

4.2.1. Normality test

The normality test has a function on the requirements of the classical assumption test to evaluate whether the residual value of the sample data collected has been normally distributed. A good regression analysis model refers to its residual values being normally distributed. In the table below are the results of the normality test using skewness and kurtosis tests as follows:

Table 2. Normality test results

Variable	Obs	Pr (skewness)	Pr (kurtosis)	Adj chi2(2)	Prob>chi2
Residual	24	0.1084	0.2873	3.98	0.1368

Sources: Data processed by STATA

From the results of the normality test, all variables above the probability are obtained at 0.1368. Which means the significance value >0.05 is normally distributed.

4.2.2. Multicollinearity Test

Table 3. Normality test results

VARIABLE	VIF	1/VIF
CAR	3.20	0.3126803
NPF	2.87	0.348687
FDR	2.06	0.485068

OER	1.79	0,558364
MEAN VIF	2.48	

Sources: Data processed by STATA

From the results of the Variance Inflation Factor test, it is concluded that all variables have no obstacles with multicollinearity. this is because the VIF value is smaller than 10 (FDR 3.20, CAR 2.87, NPF 2.06, and OER 1.79) with a tolerance value of not less than 0.1 (FDR 0.312, CAR 0.348, NPF 0.485, and OER 0.558) which means that all variables are concluded to be free from multicollinearity.

4.2.3. Heteroscedasticity Test

The method used in heteroscedasticity testing is the Breusch-Pagan Test as it is one of the most commonly used statistical tests to test heteroscedasticity. This test involves testing the null hypothesis to conclude that there is no heteroscedasticity in the test. If the resulting p-value is low (below the significance level of 0.005), then it can be concluded that there is evidence to reject the null hypothesis and indicate the presence of heteroscedasticity.

Table 4. Heteroscedasticity test results

chi2(1)	Prob > chi2
0.71	0.4006

Sources: Data processed by STATA

The prob value obtained in the test results above was obtained at $0.4006 > 0.05$, it was concluded that the data did not occur heteroscedasticity (passed the heteroscedasticity test).

4.2.4. Autocorrelation Test

The autocorrelation test method used is using Durbin-Watson method because it is considered one of the commonly used methods in detecting the presence of autocorrelation in residues or errors in determining regression models or time series analysis. The following are the results of autocorrelation testing using the Durbin-Watson method as follows:

$$\text{Durbin-Watson } d\text{-statistic}(5, 24) = 1.890802$$

The DW value of 1.890802 which is between -2 to $+2$ ($2 < 1.890802 < 2$), it can be concluded that the data did not autocorrelation or passed the autocorrelation test.

4.3. Multiple Linear Regression Analysis

Table 5. Multiple linear regression test results

ROA	Coefficient	Std. err.
CAR	-.0037782	.0109819

NPF	-0.0617606	.1037718
FDR	-0.031239	.0147324
OER	-0.0598512	.0122169
_cons	127.4683	24.13044

Sources: Data processed by STATA

In testing the data above, the form of the exact multiple linear regression equation is as follows:

$$ROA = 127,46 - 0,003CAR - 0,061NPF - 0,018FDR - 0,039OER$$

Penjelasan dari persamaan rumus diatas adalah :

- 1) The constant value is obtained at 127.4 which indicates that the independent variables are CAR (X1), NPF (X2), FDR (X3), and OER (X4) are zero so that the ROA(Y) value obtained in the range of 127.4.
- 2) CAR (Capital Adequacy Ratio) is a capital adequacy ratio that has a coefficient of -0.003 in the equation. This indicates that every 1% increase in CAR will be associated with a 0.003 unit decrease in ROA, if the other variables remain constant.
- 3) NPF (Non-Performing Financing) is financing that has problems or becomes bad debt and has a coefficient of -0.061 in the equation. This signifies that every 1% increase in NPF will correspond to a 0.061 unit decrease in ROA if the other variables remain constant.
- 4) FDR (Financing to Deposit Ratio) is the ratio of financing to deposits and has a coefficient of -0.018 in the equation. This explains that every 1% increase in FDR would be associated with a 0.018 unit decrease in ROA, if the other variables remained constant.
- 5) OER (Operational Efficiency Ratio) is the ratio of operating expenses to operating income and has a coefficient of -0.039 in the equation. Each 1% increase in OER would be associated with a 0.039 unit decrease in ROA, if the other variables remained constant.

In these tests, multiple linear regression equations are used in modeling the relationship between ROA and independent variables CAR, NPF, FDR, and OER. By incorporating the values of the independent variables into the equation, the value of profitability proxied with ROA can be estimated as to what might happen based on the combination of values of these independent variables.

4.4. Test The Hypothesis

4.4.1. Test (R^2)

Table 6. Partial determination coefficient test results (R^2)

R-squared	Adj R-squared
0.6774	0.6095

Sources: Data processed by STATA

The value of the coefficient (R-Square) in the dependent variable ROA is 0.6774 which shows that the independent variable is simultaneously correlated with a percentage of 67.74% on return on assets. While the figure of 32.26% was influenced by other variables that were not tested in the study. While the value of Adj R Square with a number of 0.6095 or a percentage of 60.95%. The coefficient of determination indicates CAR(X1), NPF(X2), FDR(X3), and OER(X4) is explained in a percentage of 60.95% in the ROA(Y) variable, while a percentage of 39.05% is explained in other variables.

4.4.2. T-Test

A partial significance test (t-test) is used to evaluate the relative contribution of each independent variable to the dependent variable in multiple linear regression models. A partial test can be performed by testing the null hypothesis that individual regression coefficients The value used in this test refers to the t-value calculated and then compared with the t-table on each variable. The criteria that must be considered include:

- (1) If $t \text{ counts} > t \text{ table/sig} < \alpha$, then H_a is accepted while H_0 is rejected.
- (2) If $t \text{ counts} < t \text{ table/sig} > \alpha$, then H_0 is accepted while H_a is rejected.

The following are the results of T testing using the help of STATA software, it is obtained:

Table 7. Partial Test Results T

VARIABLE	t	P>t
CAR	-0.34	.735
NPF	-0.60	.559
FDR	-2,12	-.047
OER	-4,90	-.000

Sources: Data processed by STATA

The table shows the results of the analysis in looking at the correlation between the influence of the independent variable with the dependent variable which is interpreted as follows:

- 1) The probability value of the CAR variable has a significance value of $0.735 \geq 0.05$. So it can be concluded that the CAR variable does not have a significant influence on ROA which indicates the first hypothesis is rejected.
- 2) The probability value of the NPF variable has a significance value of $0.559 \geq 0.05$. So it can be concluded that the NPF variable has no significant effect on ROA, and the second hypothesis is also rejected.
- 3) The probability value of the FDR variable has a significance value of $0.047 \leq 0.05$. The test results indicate that the FDR variable has a significant effect on ROA which is concluded by the third hypothesis accepted.
- 4) The last variable is OER with a probability value of significance obtained $0.000 \leq 0.05$. This is a perfect result on the partial T test requirements that can be concluded that the OER variable has a significant effect on ROA, which means that the fourth hypothesis is accepted.

5. DISCUSSION

5.1. *The Effect of Capital Adequacy Ratio (CAR) on Return On Assets.*

The results showed that H1 was rejected. A high CAR may indicate that the bank is not optimizing its capital use [35]. Banks should consider strategies to increase efficient use of capital, including more aggressive credit growth or better managing operating costs, to improve ROA. But the results of this study contradict the theory. Due to high credit risk, it causes an increase in total weighted assets which has an impact on decreasing CAR. The decline in CAR caused by the increase in credit has led to more bank interest income [36]. Sharia Banking must comply with Bank Indonesia regulations that require a minimum CAR of 8%, resulting in Islamic banks trying to consistently maintain their CAR in accordance with regulations. The negative influence of CAR shows that a low level of capital adequacy can pose risks to Islamic banks' finances. A low CAR may indicate that the bank has limitations in covering possible losses. The research is supported [25, 30] that CAR has no effect on ROA.

5.2. *The Effect of Non-Performing Financing (NPF) on Return On Assets (ROA)*

The findings indicated that H2 was not supported. The primary focus of banks is engaging in credit operations to generate income, making credit risk the leading contributor to banking losses. Non-Performing Financing (NPF) refers to loans encountering challenges in payment and/or repayment due to factors originating

from both the debtor's internal and external circumstances. However, this does not have a significant effect, indicating that there is uncertainty between the increase and decrease in NPF followed by an increase and decrease in ROA [37]. Although not significant to ROA, NPF remains a serious concern in Islamic banking. A high increase in NPF indicates high credit risk, low liquidity, or other risk management issues. Choosing the right decision is the best solution in maintaining financial health and good performance in the long term, including close monitoring of non-current financing, improving the receivables recovery process, and strengthening risk management. This is in line with research by [38] that NPF has an insignificant negative effect on ROA.

5.3. *The Effect of Financing to Deposit Ratio (FDR) on Return On Assets (ROA)*

The results showed H3 was acceptable. Financing to Deposit Ratio (FDR) is needed in measuring the profit sharing management of Islamic banks based on the number of deposit recipient customers. The deposit funding ratio is significantly negatively correlated with the bank's ROA, an increase in the deposit funding ratio negatively affects the bank's financial performance. FDR's significant negative influence on roa indicates the need for attention in liquidity management, credit risk control, and prudent fund management. Banks need to ensure that the Financing to Deposit Ratio remains within a healthy range, by maintaining a balance between safe financing disbursement and receipt of sufficient deposit funds. It is important for Islamic banks in Indonesia to manage FDR prudently, through diversification of funding sources, development of sustainable financing strategies, and close monitoring of credit and liquidity risks. Thus, banks can ensure good financial performance and maintain stability in carrying out their operations. The results of the study were supported by findings [21], and [30] tested a significant negative correlation in FDR with Return On Assets.

5.4. *The Effect of Operational Efficiency Ratio (OER) on Return On Assets (ROA)*

The results showed that H₄ was acceptable. Operational Efficiency Ratio abbreviated as OER has a function as a measure of the proportion between operational costs incurred. The assumption is that high OER can reduce bank profitability in terms of return on assets. It is necessary to evaluate the cost structure and find the best solution to reduce ineffective or unnecessary operational costs. This refers to close monitoring of expenses, implementation of technology to improve operational efficiency, and improvement of overall business processes. This finding is evidenced by research [31] and [35] which found the same results that OER is significantly negatively correlated with ROA.

6. CONCLUSION

Based on the discussion's findings, we can draw the following conclusions: Both Financing to Deposit Ratio (FDR) and Operational Efficiency Ratio (OER) have a significant impact on bank profitability, specifically Return on Assets (ROA). It's crucial for banks to maintain a healthy FDR by striking a balance between prudent financing disbursement and the accumulation of sufficient deposit funds. OER influences ROA, with a notably high OER adversely affecting a bank's asset return. This suggests that a high OER may hinder bank profitability concerning ROA. Non-Performing Financing (NPF) does not exhibit a direct effect on ROA. This is because there is uncertainty regarding the correlation between NPF fluctuations and subsequent changes in ROA. Capital Adequacy Ratio (CAR) does not directly impact ROA. High credit risk can lead to an increase in total weighted assets, subsequently decreasing CAR. However, Islamic banks must adhere to Bank Indonesia's regulations, which mandate a minimum CAR of 8%. Consequently, Islamic banks strive to consistently maintain their CAR in line with regulatory requirements.

7. LIMITATION

A limitation of this study is the R-Square value of 0.6774, explaining 67.74% of ROA's variance with untested variables affecting the remaining 32.26%. The study covers 2017-2022 in Indonesian Islamic banking, lacking a conventional banking comparison. Future research should consider unexamined variables, extend the study duration, explore additional proxies for independent variables, and conduct comparative analyses with conventional banking for a more comprehensive understanding.

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