The Influence of Non-Performed Financing (NPF), Operational Costs, Financing to Deposit Ratio (FDR) and Net Operating Margin to Return on Assets at Indonesian Sharia Commercial Banks

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ABSTRACT

This study aims to determine the influence of Non-Performed Financing (NPF), Operational Costs, Financing to Deposit Ratio (FDR) and Net Operating Margin to Return on Assets at Indonesian Sharia Commercial Banks. This research was a quantitative using causal method to analyze the relationship between research variables. Data collected in this study from year 2016 to 2020 from the Financial Services Authority official website www.ojk.go.id. The result found that Non-Performed Financing (NPF), Operational Costs and Financing to Deposit Ratio (FDR) have no significant effect on Return on Assets. While Net Operating Margin has significant positive effect to Return on Assets at Indonesian Sharia Commercial Banks. This research is expected to provide a contribution that can be a solution, suggestion and recommendation that can be used as a reference for decision-makers, especially stakeholders of Sharia Commercial Banks in Indonesia. The results of this study is expected to add the repertoire of scientific literature, especially studies on the management of sharia financial transactions.


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INTRODUCTION

The business activities of Islamic Commercial Banks are collecting funds with a system that is different from the conventional bank (Miah & Uddin, 2017; Elsa, Utami & Nugroho, 2018; Salman & Nawaz, 2018). In Islamic Commercial Banks, the system imposed on raising funds from the public is by carrying out the wadiah contract and the mudharaba contract (Basheer, et. al., 2019; Syamlan & Jannah, 2019; Akber & Dey, 2020; Rusmita & Putri, 2020).

On the other hand, the system of fund distribution Islamic Commercial Banks carried out by an investment financing system with returns in the form of profit-sharing by performing mudharaba and musyarakah (Ghayad & Hamdan, 2021; Ryandono, et. al., 2021; Asiyah, et. al., 2021; Roziq & Sukarno, 2021). By this financing scheme, Islamic Commercial Banks get income from profit sharing, margin and rental income (Sudarsono & Saputri, 2018; Maulana & Rusmita, 2019; Yustiardhi, et. al., 2021).

In 2019, the return on assets of Islamic commercial banks has increased with 1.56% in May 2019 compared 1.31% to May 2018. Since experiencing a decline in 2014, the ratio of return to average total assets of Islamic commercial banks has begun to be able to reverse direction to show an increasing trend (Bisnis Indonesia, 2019).

During the period from March - October 2019, as describe on table 1, shows the return on asset of Islamic commercial banks decreased by 7.95%, but non-performing financing also decreased by 3.24%, Operational Costs on Operating Income was 0.65%, financing debt to ratio decreased by 1.39% and net of margin decreased quite significant at 20.53% from the period March - October 2019.

Table 1. Sharia Commercial Bank Performance Period of year 2019/2020

<table>
<thead>
<tr>
<th>Variable</th>
<th>March-October 2020 (Ratio)</th>
<th>March-October 2019 (Ratio)</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA</td>
<td>1.46</td>
<td>1.59</td>
<td>-7.95%</td>
</tr>
<tr>
<td>NPF</td>
<td>3.32</td>
<td>3.34</td>
<td>-3.24%</td>
</tr>
<tr>
<td>OCOI</td>
<td>85.52</td>
<td>86.52</td>
<td>-0.65%</td>
</tr>
<tr>
<td>FDR</td>
<td>79.03</td>
<td>80.14</td>
<td>-1.39%</td>
</tr>
<tr>
<td>NOM</td>
<td>11.35</td>
<td>14.48</td>
<td>-20.53%</td>
</tr>
</tbody>
</table>

As it is known that NOM is a ratio to assess a bank's ability to generate profits, which is the ratio between Operating Income compared to Operational Costs during a period, which is calculated by maintaining the stability of the Net Operating Margin level, so that if the NOM is low, the profitability rate is low and vice versa.

If the NOM is high, the rate of profitability is also high, so it means that the profits obtained come from operating income, so it can be seen that if operating income increases, profits also increase so that from the research data it can be seen that the NOM ratio level decreased by 20.53% of the period. March-October 2020 and 2019, so this shows that during the Covid-19 pandemic period it was quite affected, on average the operating income of Islamic Commercial Banks in Indonesia decreased and resulted
in a decrease in the level of profitability as well, this can be seen: The ROA ratio also decreased by 7.95%.

Previous research such as Ali & Laksono (2017) found that return on assets is an important indicator of profitability to measure the performance of a bank. Further Suryanto & Susanti (2020) found that non-performed financing was a financial ratio that shows the financing risk faced by banks due to the provision of financing and investment of bank funds in different portfolios.

Sudarsono & Saputri (2018) testing the effect of financial performance in the form of Return On Assets (ROA), Operational Expense to Operating Income (OER), Finance to Deposits Ratio (FDR), Non Performing Finance (NPF), and Interest Rate to profit-sharing rate on mudharabah deposit of Sharia banking in Indonesia period 2011 to 2017. Found that in the short term ROA and OER variable negatively affect the profit-sharing rate mudharabah deposits. While the variable of FDR and Interest rate have positive effect to profit-sharing rate of mudharabah deposit, on the other hand NPF variable does not affect to profit-sharing level of mudharabah deposit. Meanwhile in the long run the variable of FDR and OER have negative effect, the variable of Interest rate has positive effect. However, the ROA and NPF variables do not affect the profit-sharing of mudharabah deposits. Suartini, et. al., (2019) testing profitability, Non Performing Loan, Financing to Deposit Ratio and Operating Expense to Operating Income in Bank of sharia and the partial effect and simultaneous of NPF, FDR and Operating Expense to Operating Income ratio to Profitability Bank of sharia Period 2014 -2016 found that NPF, FDR and ROA simultaneously positive and significant impact on profitability Bank of sharia in the study period. The result found that partially NPF and FDR has not effect on profitability while Operating Expense to Operating Income has significant negative effect on profitability. On the other hand, the effect of simultaneous NPF, FDR and Operating Expense to Operating Income on profitability of 75.8% while the remaining 24.2% is the influence of other factors not examined.

Sitompul & Nasution (2019), found that partially that the Operational Cost of Operational Income had a significant negative effect on Return on Assets, while the Capital Adequacy Ratio, Non Performing Financing and Financing to Deposit Ratio did not affect Return on Assets of Islamic Commercial Banks in Indonesia. while simultaneously, the Capital Adequacy Ratio, Operational Cost to Opereational Revenue, Non Performing Financing and Financing to Deposit Ratio have a significant effect on Return on Assets of Islamic Commercial Banks in Indonesia. Handayani & Fitriati (2019) Testing the effects of Capital Adequacy Ratio (CAR), Financing to Deposit Ratio (FDR), Non Performing Financing (NPF), Operational Risk Based on Comparison between Operational Expense and Operational Revenue (BOPO), Third Party Funds (DPK) and Inflation towards Return on Assets (ROA). The results found that CAR and BOPO have significant effect towards ROA, while FDR, NPF, DPK and inflation have no significant effect towards ROA.

Ichsan, et. al., (2021) found that the Covid-19 pandemic has impacted the banking sector, resulting in poor financing due to debtors' disbursements as a result of the
large number of people losing their jobs and difficulties in financing payments. On the other hand, the results of the t test found that the Capital Adequacy Ratio (CAR), Operating Costs to Operating Income (BOPO), Financing to Deposit Ratio (FDR) had a positive and significant effect on financial performance (ROA) while Not Performing Financing (NPF) had a negative and insignificant effect on financial performance (ROA). Furthermore, simultaneously capital adequacy ratio (CAR), Operating Costs to Operating Income (BOPO), Financing to Deposit Ratio (FDR) and Not Performing Financing (NPF) significantly influenced the financial performance (ROA) of Sharia banks in Indonesia. Kadarningsih, et. al., (2021), testing the objectives of this study are to determine the effects of the Capital Adequacy Ratio (CAR), Financing to Deposit Ratio (FDR) and Non-Performing Financing (NPF) on the Return on Assets (ROA) mediated by operational costs to operational income. The research found that Capital Adequacy Ratio has a positive significant effect on financial performance in Sharia Banks. While the Financing to Deposit Ratio and Non-Performing Financing have an insignificant, negative impact on financial performance in Sharia Banks. Further the operational costs have a negative, significant impact on financial performance in Sharia Banks and cannot mediate the Capital Adequacy Ratio, Financing Deposit Ratio and Non-Performing Financing on financial performance in Sharia Banks.

Nahar, et. al., (2020) found that significant growth, sharia commercial bank in Indonesia has become one of the drivers of economic growth in Indonesia. Moreover, the variables Non Performing Finance (NPF), Capital Adequacy Ratio (CAR), Financing to Deposit Ratio (FDR), Operational Efficiency Ratio (OER), Inflation, Domestic Product Growth (GDP), and Exchange Rates. The results of this study indicate that Non-Performing Finance (NPF), Capital Adequacy Ratio (CAR), Financing to Deposit Ratio (FDR), Operational Efficiency Ratio (OER) have a significant influence on Islamic Bank Return On Assets (ROA) in Indonesia. In contrast, variables such Growth Domestic Product (GDP), and Exchange Rate appear with no significant effect on the Return on Assets (ROA) of Sharia Commercial Banks in Indonesia.

Asiyah, et. al., (2021) found that practical implication of this research is that Islamic banks prioritize Mudaraba Financing to be in line with increasing Murabaha Financing. Because partially Shirkah, Return on Assets, Financing to Deposit Ratio has a positive and significant effect on Mudaraba Financing. While simultaneously Temporary Shirkah Funds, Return on Assets, Financing to Deposit Ratio have a positive and significant effect on Mudaraba Financing.

Kartika, et.al., (2020) testing the effect of Financing to Deposit Ratio (FDR), Return on Assets (ROA), and Non Performing Financing (NPF) on profit sharing financing (Mudharabah and Musyarakah). Year 2012-2017. The results found that Financing to Deposit Ratio (FDR), Return on Assets (ROA), and Non Performing Financing (NPF) had no effect on profit sharing financing (Mudharabah and Musyarakah).
Based on the studies, it can be seen that in general there are different results. This study will be carried out differently by analyzing almost all independent variables that have been studied before, and which are elements of the independent variables which includes elements such as Non-Performed Financing (NPF), Operational Costs, Financing to Deposit Ratio (FDR) and Net Operating Margin to Return on Assets at Indonesian Sharia Commercial Banks from year 2016 to 2020.

RESEARCH METHOD

This study uses the causal research method. According to Sugiyono (2012), a causal relationship is a relationship that is cause and effect. So this research suggests the existence of an independent variable (influence) and a dependent variable (influenced). This type of research was chosen to test the hypothesis about the effect of one or more variables (independent variable) on other variables (dependent variable). The variables used to prove the existence of a causal relationship between Non Performing Financing (NPF), Operational Costs on Operating Income, Financing to Deposit Ration, Net Operating Margin (NOM) to Return on Assets (ROA) which collected from the Financial Services Authority official website www.ojk.go.id year 2016 to 2020.

The ROA in Islamic Banking increases, for people who are depositors of third party funds as well as investors in general it is a good signal and high and safe expectations in making their investments, this shows that the increased ROA shows the performance of Islamic banks is good. Conversely, if the ROA position of a sharia bank decreases, it indicates that the performance of the banking company is experiencing a decline and this will be an unfavorable signal and picture.

Hypothesis Development

*The effect of NPF on ROA*

NPF is identical to NPL in conventional commercial banks in research conducted by Indarti & Minanari (2019) in her research that non-performing loans reflect the credit risk of a bank, the smaller the non-performing loan, the smaller the credit risk. borne by the bank. The higher this ratio, the worse the quality of bank credit, which means that the number of non-performing loans is getting bigger, so that the possibility of banks in a problematic condition is getting bigger, with the results of the research showing that NPL has a significant negative effect on ROA. The object of this research is Islamic Commercial Banks, and NPL is identical to NPF, so in this research the hypothesis is formulated as follows:

\[ H^1: \text{Non Performing Financing (NPF) affects Return On Assets (ROA)}. \]
The effect of Operational Cost of the Operating Income on ROA

The Operational Cost of Operating Income ratio according to Lidyah, et. al (2019) is a comparison between operating costs and operating income in measuring the level of efficiency and ability of a bank in carrying out its operations. Lidyah, et. al (2019) found that the operational cost of operating income has no effect on profits. Banks that incur operational costs but cannot use these costs effectively will not generate profits. Based on this explanation, the following hypothesis can be formulated:

H₁: Operational Costs on Operational Income affect Return On Assets (ROA).

Effect of Financing to Deposit Ratio on ROA

Suryani (2012) found that the results of regression analysis showed that there was no significant influence between the Financing to Deposit Ratio (FDR) on Return on Assets (ROA). The results of research by Lidyah, et. al (2019) found that FDR has a negative and significant effect on profits, and that an increase in FDR will be followed by a decrease in profits. FDR is the bank's ability to repay withdrawals made by depositors by relying on credit provided as a source of liquidity. Based on the results of this study, the hypotheses that can be formulated in this study are as follows:

H₃: Financing to Deposit Ratio affects Return On Assets (ROA).

Based on the previous information, it can be described and explained the framework of the research in Figure 1 below:

![Figure 1. Research Framework](image-url)
**The Effect of Net Operating Margin (NOM) on ROA**

Suryanto & Susanti (2020) stated that NOM is a bank's ratio. NOM must be maintained stably, as well as if Low NOM, the level of profitability will also be low, which means that the profits obtained will be small, with the results of the NOM study not having a significant effect on Operational Cost of Operating Income, which means that these results do not apply to all Islamic banks in Indonesia.

However, in particular, there is a significant negative relationship if there is an increase in NOM, the implication is that the Operational Cost of Operating Income will decrease, and vice versa. In the research tested, the effect of NOM on ROA can be formulated as follows:

\[ H^4: \text{Net Operating Margin has an effect on Return On Assets (ROA)} \]

In the **Figure 1** shows the relationship between the independent variables which includes NPF, BOPO, FDR and NOM. The effect on profitability in this study is ROA, so the hypothesis of this study is:

\[ H^1: \text{Non Performing Financing (NPF) affects Return On Assets ROA).} \]
\[ H^2: \text{Operational Costs on Operational Income affect Return On Assets (ROA).} \]
\[ H^3: \text{Financing to Deposit Ratio affects Return On Assets (ROA).} \]
\[ H^4: \text{Net Operating Margin affects Return on Assets (ROA).} \]

Hypotheses with a significance test (probability) based on the criteria in this significance test include: (a) If the probability value (Prob) is greater than the 5% significance level (> 0.05), then there is no influence between the independent variable on the dependent or \( H^0 \) is accepted and \( H^a \) is rejected. (b) If the probability value (Prob) is smaller than the 5% significance level (<0.05), then there is an influence between the independent variable on the dependent or \( H^0 \) is rejected and \( H^a \) is accepted.

The research objects used in this study are Non-Performed Financing, Operational Costs of Operational Opinion, Financing to Deposit Ratio, Net Operating Margin and Return On Asset in Islamic Commercial Banks in Indonesia.

The research period was carried out from 2016 to 2020, data taken from the Financial Services Authority's monthly Statistical Data Report on the performance reporting of all Islamic Commercial Banks in Indonesia during the research period. Research data until the time it started to analyze the monthly report data data from January 2016 to October 2020, so that there were 58 data samples studied. As of December 2020, there are 14 Islamic Commercial Banks registered with the Financial Services Authority as stated in **table 2**.
Based on Table 2, it can be seen that as a whole, Islamic Commercial Banks in Indonesia up to October 2020 have a network of offices that include 490 units of Headquarters and Branch Offices, 1273 units of Sub-Branch Offices and 195 units of Cash Offices.

RESULT AND DISCUSSION

Before the research variables were analyzed by testing the SPSS statistical formula, the data from each research variable was described in advance.

This is intended to provide an overview of each variable being studied. The research data which is the dependent variable (Y) is Return on Assets, while the independent variables are NPF (X1), OCOI (X2), FDR (X3), and NOM (X4). The statistical descriptions of this study are shown in Table 3,

<table>
<thead>
<tr>
<th>Table 3. Descriptive Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>x1</td>
</tr>
<tr>
<td>----</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>x2</td>
</tr>
<tr>
<td>x3</td>
</tr>
<tr>
<td>x4</td>
</tr>
<tr>
<td>y</td>
</tr>
</tbody>
</table>

The variable (X1) has a mean value of 4.23 and a standard deviation of 0.83. This means that the mean value is greater than the standard deviation, thus indicating a good result. Because the standard deviation is a reflection of high deviations, the data that is
not diffused shows normal and unbiased results. The minimum value (X1) is 3.18 and the maximum value is 6.17.

The variable (X2) has a mean value of 90.24 and a standard deviation of 4.38. This means that the mean value is greater than the standard deviation, thus indicating a good result. Because the standard deviation is a reflection of high deviations, the data that is not diffused shows normal and unbiased results. The minimum value (X2) is 82.78 and the maximum value is 99.04.

The variable (X3) has a mean value of 81.36 and a standard deviation of 3.58. This means that the mean value is greater than the standard deviation, thus indicating a good result. Because the standard deviation is a picture of high deviation, so that the data that is not diffused shows normal and unbiased results. The minimum value (X3) is 77.02 and the maximum value is 89.32.

The variable (X4) has a mean value of 1.27 and a standard deviation of 0.43. This means that the mean value is greater than the standard deviation, thus indicating a good result. Because the standard deviation is a reflection of high deviations, the data that is not diffused shows normal and unbiased results. The minimum value (X4) is 0.17 and the maximum value is 1.92.

The variable (Y) has a mean value of 1.17 and a standard deviation of 0.40. This means that the mean value is greater than the standard deviation, thus indicating a good result. Because the standard deviation is a reflection of high deviations, the data that is not diffused shows normal and unbiased results. The minimum value (Y) is 0.16 and the maximum value is 1.88.

**Multiple Regression**

Regression analysis is used to determine the direction of the relationship between the independent variable and the dependent variable, whether each independent variable has a positive or negative relationship and to predict the value of the dependent variable if the value of the independent variable has increased or decreased. The results of multiple regression analysis can be seen in table 4.

<table>
<thead>
<tr>
<th>Model</th>
<th>Coefficientsa</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unstandardized Coefficients</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>.483</td>
<td>.138</td>
<td>3.490</td>
</tr>
<tr>
<td></td>
<td>Lag_x1</td>
<td>.009</td>
<td>.019</td>
<td>.016</td>
</tr>
<tr>
<td></td>
<td>Lag_x2</td>
<td>-.030</td>
<td>.008</td>
<td>-.232</td>
</tr>
<tr>
<td></td>
<td>Lag_x3</td>
<td>.003</td>
<td>.004</td>
<td>.018</td>
</tr>
<tr>
<td></td>
<td>Lag_x4</td>
<td>.686</td>
<td>.051</td>
<td>.782</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Lag_y
Based on the results of data analysis, the results of the Cochrane Orcutt multiple regression test in table 4. Based on the formulation of the problem and the framework of thought and referring to the results of data analysis, the results of the hypothesis analysis of this study can be explained as follows:

First, there was no significant effect of the variable Non Performing Financing (NPF) (X1) on Return On Asset (ROA) (Y), because the Prob value was 0.633> 0.05. So that there was no influence between the variable Non Performing Financing (NPF) (X1) on Return On Asset (ROA) Y, or in other words, H₀ was accepted and H₁ was rejected. Based on the results of test, it shows that Non-Performed Financing has no significant effect on Return on Assets, this shows that changes in the ROA ratio are not affected by the NPF ratio level, however, controlling the NPF level by Islamic Commercial Banks must be carried out by following provisions of the Financial Services Authority and Bank Indonesia Regulations. This result was in line with Sriyana, J. (2015). Abdillah, et. al., (2016). Husna & Satria (2019). Yusuf & Kholik, (2019). Widajatun & Ichsani (2019). Ichsan, et. al., (2021).

Second, there was a significant effect of the variable Operational Costs to Operational Income (X2) on Return On Asset (ROA) (Y), because the Prob value was 0.000 <0.05, this result was in line with Riadi (2018), Ichsan, et. al., (2021), Rajindra, et. al., (2021). So that there was an influence between the variable Operational Costs to Operational Income (X2) on Return On Asset (ROA) Y, or in other words, H₀ was rejected and H₁ was accepted. The results of the test show that Operational Costs on Operational Income have a negative effect on Return on Assets, and the results of the test have a significant effect on Return on Assets. Based on the results of these tests, it can be interpreted that the fluctuation of operating costs will have an effect on ROA, the increase in operating costs to get Islamic bank operating income will have an effect on decreasing the level of the ROA ratio, conversely if there was an efficiency in the operational costs, the ROA level will increase.

Third, there was no significant effect of the variable Financing to Deposit Ratio (FDR) (X3) on Return On Asset (Y), because the Prob value was 0.528> 0.05. So that there was no influence between the Financing to Deposit Ration (FDR)(X3) variable on Return On Asset Y, or in other words, H₀ was accepted and H₁ was rejected. This result in line with Ikhsan, et., al, (2018), Suartini, et., al, (2019), Husna & Satria (2019), Asiyah, et. al., (2021), Ichsan, et. al., (2021), Kadarningsih, et., al, (2021), Akbar (2021). Amalia (2021), Nugroho, et., al, (2021).

The data analysis shows that the Financing to Deposit Ratio has no effect on Return on Assets (ROA), this means that regardless of the amount of financing channeled and the amount of third party deposits in the form of deposits, savings and
current accounts which are products. the collection of funds from Islamic commercial banks has no effect on the level of ROA.

Fourth, there was a significant effect of the variable Net Operating Margin (X4) on Return on Assets (Y), because the Prob value was 0.000 <0.05 this result in line with Buchory (2016), Riadi (2018), Utami & Tho’in (2021). So that there is an influence between the variable X2 on Y, or in other words, \( H^0 \) was rejected and \( H^a \) was accepted. The result shows that there was a significant positive effect on Net Operation Margin on the Return on Assets on the t test, and the significance test also shows that the Net Operating Margin has a significant effect on Return on Assets. Further analysis, Net Operating Margin was directly related to ROA, so if the NOM ratio level increases, it will have an effect on increasing the ROA ratio, conversely if the NOM Ratio level decreases, the ROA ratio level will also decrease.

CONCLUSION

This study aims to determine the influence of Non-Performed Financing (NPF), Operational Costs, Financing to Deposit Ratio (FDR) and Net Operating Margin to Return on Assets at Indonesian Sharia Commercial Banks. The result found that Non-Performed Financing, Operational Costs and Financing to Deposit Ratio have no significant effect on Return on Assets. While Net Operating Margin has significant positive effect on Return on Assets at Indonesian Sharia Commercial Banks.

Based on the value of the coefficient of determination, it can be seen that the amount of Adjusted R Square is 0.961, this shows that the contribution of the Non-Performed Financing, Operational Costs on Operating Income, Financing to Deposit Ratio, and Net Operating Margin variables are 96.1% while the remaining 3.9% (100 - 96.1) was determined by other factors outside the model.

However, the analysis of this study only on the coefficient of determination, which measures how far the model’s ability to explain the dependent variable. Further research suggested to find out different variables. so that this research and study is ongoing and carried out by subsequent researchers.

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