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Effect of Financing to Deposit Ratio and Operational Efficiency on Profitability (ROA) with NPF as Intervening in Islamic Banks

Muhammad Tho'in
Institut Teknologi Bisnis AAS Indonesia
*Correspondence email: thoin.stieaas@gmail.com

Abstract

The purpose of this research is to determine the effect of Financing to Deposit Ratio and Operational Efficiency on Profitability (ROA) with Non Performing Financing (NPF) as Intervening in Islamic Commercial Banks in Indonesia. This research method uses a quantitative descriptive approach. Research that allows statistical calculations to use numerical data, and is used as a data analysis tool by describing the data collected to finally reach a conclusion. The type of data used in this study is secondary data which is a monthly series of data with a time period of 2015-2021. The data used are financial ratio data provided by Statistics Indonesia Islamic Commercial Banks which include the ratio of Financing to Deposit Ratio (FDR), and Operational Efficiency, Return on Assets (ROA) and Non Performing Financing (NPF). Data collection techniques in this study by utilizing field studies. The variables used by the researcher are independent variables which include the ratio of FDR (X_1) and Operating Expenses and Operating Income (X_2), the dependent variable which includes the ratio of ROA and the intervening variable which includes the ratio of NPF. The data analysis method used in this research is multiple linear regression analysis and path analysis. Multiple linear regression analysis was conducted to determine the linear relationship between several independent variables (X) and the dependent variable (Y). While the path analysis method is a causality analysis that occurs when exogenous variables directly or indirectly affect endogenous variables. The results showed that partially the FDR and Operational Efficiency variables had an influence on the NPF variable. In addition, only and Operational Efficiency and NPF variables partially have an effect on ROA. Based on the results of the path analysis test, it can be explained that only the Operating Cost of Operating Income (X_2) has an indirect effect on Return on Assets (Y) through NPF (Z). That is, the NPF variable is able to mediate the relationship between Operational Costs of Operating Income and Return on Assets.

Keywords: *Return on Assets, Financing to Deposit Ratio, Efisiensi Operasional, Non-Performing Financing*

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1. INTRODUCTION

Financial institutions as an important and inseparable part in supporting the smooth running of economic activities, one of these financial institutions is Islamic banking. Besides being able to support economic activities, Islamic banks are able to cut the chains that cause deep-rooted injustice with the usurious aspect that can cause human misery. The existence of Islamic banking in Indonesia, which has a Muslim majority population, is not the main factor, this is because Islamic banking is present as a solution to the many ribawi practice activities carried out by the community regardless of social status including religion and so on. Because the practice of usury itself has been prohibited by all religions, not only Islam (Vincent, 2014). Islamic banks themselves cannot be underestimated, because these institutions have a large enough influence in developing the community's economy. Seeing the role of Islamic banks in Indonesia which is very strategic and cannot be underestimated, it is hoped that the management of Islamic banks in Indonesia will continue to improve and develop their performance, especially their financial performance (Umiyati., Maisyarah., & Kamal, 2020).

The future of financial institutions can certainly be assessed through the financial performance that has been carried out and what has been achieved. One way is to see how much profitability is generated in a certain period by this institution (Nugroho., Badawi., & Hidayah, (2019). The performance of financial institutions can be seen from the profitability of these institutions which focuses on the ability to earn profits or profits in operations of the business carried out Good or bad financial performance in Islamic banks can be analyzed using analytical tools or ratios that are available in the form of financial ratios Profitability ratios in the form of Return On Assets (ROA) which are used to measure the performance of Islamic commercial banks in Indonesia in this research.

Where ROA shows the level of ability of the company in this case Islamic commercial banks in Indonesia to generate profits or profits from the assets it uses (Heikal., Khaddafi., & Ummah, 2014); (Rostami., Rostami., & Kohansal, 2016).

Talking about profit, then the factors that can affect the level of profitability of a bank. including the factors internally and externally. Achieving the expected level of profitability requires various efforts and strategies to achieve an optimum level of bank soundness. Bank health is the result of financial assessment, asset health, management, earnings, liquidity and risk sensitivity (Dalianis., Henriksson., Kvist., Velupillai., & Weegar, 2015). One effort can be done by reinforcing the banking capital structure by balancing the proportion of business with business capital requirements which will increase the ability to translate future situations that will be risky in business, as well as by increasing operational efficiency so that it can help increase profits. Several studies that have been conducted by Syah (2018) and Rahmani (2017) state that the variables that are thought to affect the profitability (ROA) of Islamic banking are Financing to Deposit Ratio, Operating Expenses for Operating Income, and Non-Performing Financing.

Financing to Deposit Ratio is a ratio that measures how well a bank can repay the amount withdrawn by depositors, which depends on the funding provided as a source of liquidity (Sihotang, 2021). Supported by research conducted by (Rahmani, 2017) which states that the FDR variable is known to have a significant effect on ROA. The results of this study are also in line with the results of research conducted (Moorcy, Sukimin & Juwari, 2020) which states that the Financing to Deposit Ratio partially has a positive and significant effect on Return On Assets.

Operational efficiency or Operating Expenses Operating Income (BOPO) is a comparison between operating costs and operating income. This ratio is used to measure the level of efficiency and ability of the bank in carrying out its operations (Iskandar, 2017). Supported by research conducted by Febrianthi (2013) which states that partially Operating Expenses and Operating Incomevariable has a significant effect on ROA. In addition, the results of research conducted by Al Iqbal & Budiyanto (2020) state that BOPO has a significant effect on Return On Assets (ROA). Non-Performing Financing Ratio (NPF) is 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. This risk occurs due to the customer's failure or inability to repay the loan amount received. Based on data from the Financial Services Authority (OJK), the NPF in Islamic banks is ideally below 5%, if it is more than it is classified as non-performing financing. The level of non-performing financing can certainly affect the level of bank profitability. The reason the NPF variable is used as an intervening variable is that from the perspective of banking financing activities, it is never separated from the risk of non-performing financing. The occurrence of non-performing financing is not only caused by external factors, but also due to poor operational performance. Supported by the results of research conducted by Munir (2018) which states that the NPF variable has a positive and significant effect on ROA. Looking at the results of research conducted by Syah (2018), the NPF variable has an influence on ROA.

2. RESEARCH METHOD

This research uses a type of quantitative research. Research that allows statistical calculations to use numerical data and is used as a data analysis tool by describing the data collected to finally reach a conclusion. The type of data used in this study is secondary data which is a monthly series of data with a time period of 2015-2021. The data used are financial ratio data provided by Statistics Indonesia Islamic Commercial Banks which include the ratio of Financing to Deposit Ratio (FDR), Operating Expenses and Operating Income, Return On Assets (ROA) and Non Performing Financing (NPF). Data collection techniques in this study by utilizing field studies (field research). Field research techniques are commonly referred to as secondary data or data collection obtained from other parties (already available). The data comes from the Islamic Banking Statistics Report issued by the Indonesian Financial Services Authority. Variables that show how to measure each variable in this study are called operational variables. The variables used by the researcher are independent variables which include the ratio of FDR (X_1) and Operating Expenses and Operating Income (X_2), the dependent variable which includes the ratio of ROA and the intervening variable which includes the ratio of NPF. The data analysis method used in this research is multiple linear regression analysis and path analysis. Multiple linear regression analysis was conducted to determine the linear relationship between several independent variables (X) and the dependent variable (Y). While the path analysis method is a causal analysis that occurs when exogenous variables directly or indirectly affect endogenous variables or variables that are the result of the presence of independent variables.

3. RESEARCH AND DISCUSSION

3.1. Research Result

The results of regression analysis The Effect of Financing to Deposit Ratio (X_1) and Operating Costs on Operating Income (X_2) on Non-Performing Financing (Z).

Table 1. Results of Regression Analysis: Effect of X1 and X2 on Z

Independent Variable	Unstandardized Coefficients Beta	T	Sig.
Constanta	-10,852	-15,973	0,000
Financing to Deposit Ratio (X_1)	0,031	2,221	0,028
Operating Expenses Operating Income (X_2)	0,139	9,829	0,000

Source: processed data, 2022

Based on the significant value of t in table 1 above, it can be concluded that the Financing to *Deposit* Ratio (FDR) variable has a value of t = 2.221 with a significance level of 0.028 and t table = 1.98969. The probability value of 0.028 is smaller than 0.05 and the value of $t_{count} > t_{table}$. So it can be concluded that the X_1 variable has a partially significant effect on the NPF. This means that H0 is rejected.

The results of the regression analysis of the Effect of Financing to Deposit Ratio (X_1), Operating Costs on Operating Income (X_2) and Non-Performing Financing (Z) on Return on Assets (Y).

Table 2. Results of Regression Analysis: Effect of X_1, X_2 and Z on Y

Independent variable	Unstandardized Coefficients Beta	T	Sig.
Constanta	10,212	23,953	0,000
Financing to Deposit Ratio (X1)	0,006	1,267	0,209
Biaya Operasional Pendapatan Operasioanal (X2)	-0,109	-16,855	0,000
Non Performing Financing (Z)	0,070	2,034	0,045

Source: processed data, 2022

Based on the significant value of t in table 2 above, it can be concluded that the Variable Operating Income Operating Costs has t = 9.829 with a significance level of 0.000 and t table = 1.98969. The probability value of 0.000 is less than 0.05 and the $t_{count} > t_{table}$. So it can be concluded that the X_2 variable has a partially significant effect on the NPF. This means that H_0 is rejected.

Based on the significant path analysis, it can be seen that the indirect influence between the independent variables partially on the Y variable through the Z variable is as follows.

Table 3. Test Results for the Effect of Mediation Variables

Variable	**Indirect Effect**	**$S_{indirect\ effect}$**	**T_{count}**	**t_{table}**	**Description**
X1	0,00217	0,0015	1,446	1,988	Not significant
X2	0,00973	0,0048	2,027	1,988	Significant

Source: processed data, 2022

From table 3 shows that the variable X_1 has a value of $t_{count} < t_{table}$ with a significance level of 0.05.

While, the variable X_2 has a value of $t_{count} > t_{table}$ with a significance level of 0.05. The value of the mediation coefficient is 0.0119, so it can be concluded that the Z variable does not influence or mediate the X variable to Y. Meanwhile, the Z variable can mediate the X_2 variable to Y.

3.2. Discussion

Based on the results of hypothesis testing, the research results obtained from descriptive analysis, classical assumption test and path analysis regarding the relationship between Financing to Deposit Ratio (FDR), Operating Costs of Operating Income, Non Performing Financing, and Return on Assets.

a. The Direct Effect of Financing to Deposit Ratio (FDR) and Operating Income Operating Costs on NPF

1) Effect of Financing to Deposit Ratio (FDR) on NPF

From the test results above, it can be seen that the FDR variable has a positive beta value, which means that FDR has a positive influence on NPF. Based on the significance value FDR has a significant effect on NPF, this is evidenced by a significant value less than 0.05 (0.029 < 0.05). This means that increasing the distribution of financing by using the FDR ratio can result in negligence in the financing process. This will risk non-performing financing in the future which will increase the NPF ratio. However, problematic financing does not only come because of internal factors but also due to the fault of the customer. The results of this study are in accordance with research conducted by Mandasari (2021), Poetry & Sanrego (2011).

2) The Effect of Operating Costs on Operating Income on NPF

From the test results above, it can be seen that the operating costs of operating income variable has a positive beta value, which means that the BOPO has a positive influence on the NPF. Based on the significance value operating costs of operating income has a significant effect on NPF, this is evidenced by a significance value that is smaller than 0.05 (0.000 < 0.05). That is, the higher the value of the BOPO ratio indicates that the lower the efficiency level of banks in managing their operational costs. This can lead to an increase in non-performing financing due to a reduction in total financing. The results of this study are in accordance with research conducted by and Nugrohowati & Bimo (2019).

b. Direct Effects of Financing to Deposit Ratio (FDR), Operating Costs of Operating Income (BOPO) and Non-Performing Financing (NPF) on Return on Assets (ROA)

1) Effect of Financing to Deposit Ratio (FDR) on ROA

From the test results above, it can be seen that the FDR variable has a positive beta value, which means that FDR has a positive influence on ROA. Based on the significant value FDR has an insignificant effect on ROA, this is evidenced by a significance value greater than 0.05 (0.209 > 0.05). This means that any increase or decrease in FDR has no effect on the size of the ROA. This is because the financing disbursed by banks has not run optimally, so that non-current financing is in line with increasing the total financing disbursed. The results of this study are in accordance with research conducted by Widyaningrum & Septiarini (2015), Lemiyana & Litriani (2016) and Mirawati, Putra & Fitri (2021)

2) The Effect of Operating Costs on Operating Income on ROA

From the test results above, it can be seen that operating costs of operating income variable has a negative beta value. Based on the significant value of BOPO has a significant effect on ROA, this is evidenced by a significance value that is smaller than 0.05 (0.000 < 0.05). This means that if operating costs of operating income value increases, it means that efficiency decreases, resulting in a decrease in the profitability of the bank obtained. According to research (Ponco, n.d.) this is caused by the level of efficiency of the bank in its operating process which affects the income or income earned by the bank. In addition, the large BOPO ratio is also due to the high cost of funds raised and the low interest income from investment. So that the larger the BOPO, the smaller/decrease the financial performance of the bank, and vice versa, if operating costs of operating income is getting smaller, it can be concluded that the financial performance of a company (banking) is increasing or improving. The higher the burden will reduce the profit owned by the bank. If the state of operating costs increases but is not accompanied by operating income, this will result in reduced ROA. To maximize bank profitability, policymakers must cut unnecessary operating and labor expenses. Most banks are currently reducing their operating costs by laying off additional employees especially when the economy is in crisis. Banks must evaluate employee performance prior to dismissal. This is to improve the quality of employees and as motivation to be more productive. Banks also need to establish policies and manage maximum spending in each department to reduce bank costs and maximize bank profitability. The results of this study are in accordance with research conducted by Mirawati, Putra & Fitri (2021), Apriyanti et al. (2021), Lemiyana & Litriani (2016).

3) Effect of Non-Performing Financing (NPF) on ROA

From the above test, it can be seen that the NPF variable has a positive beta value. Based on the significant value, NPF has a significant effect on ROA, this is evidenced by a significance value that is smaller than 0.05 ($0.045 < 0.05$). This means that the positive results indicate that the banking performance is considered good in the NPF ratio. So, the default rate disbursed by the bank is considered low. The level of soundness of financing through the NPF ratio can affect the achievement of bank profits. The results of this study are in accordance with the research conducted by Munir (2018) with the same results.

c. Direct Effects of Financing to Deposit Ratio (FDR) and operating income operating costs on Return on Assets (ROA) through Non-Performing Financing (NPF)

1) Effect of Financing to Deposit Ratio (FDR) on Return on Assets (ROA) through Non-Performing Financing (NPF)

Based on the results of hypothesis testing, it can be concluded that the Financing to Deposit Ratio (X1) has no indirect effect on Return on Assets (ROA) through NPF (Z), which means that the NPF variable is not able to mediate the relationship between Financing to Deposit Ratio (FDR) on Return on Assets (ROA). So it can be concluded that the high Non Performing Financing (NPF) of Islamic Commercial Banks will not affect the relationship between Financing to Deposit Ratio (FDR) to Return on Assets (ROA). The results of this study are in accordance with the research conducted by Supriyanto (2020) and Taufik (2017).

2) The Effect of Operating Costs on Operating Income on Return on Assets (ROA) through Non-Performing Financing (NPF)

Based on the results of hypothesis testing, it can be concluded that the Operating Cost of Operating Income (X_2) has an indirect effect on Return on Assets (Y) through NPF (Z). That is, the NPF variable is able to mediate the relationship between Operating Costs of Operating Income and Return on Assets (ROA). The smaller the BOPO ratio, the better operations will be, this is because the costs incurred are smaller than the income earned. The higher operating cost ofo income ratio, the quality of financing will decrease, which in turn will have an impact on the risk of financing or financing problems. The results of this study are in accordance with the research conducted by Apriyanti et al. (2021), Mirawati, Putra & Fitri (2021), and Fitri (2021).

4. CONCLUSION

Based on the results of the analysis described in the previous chapter, regarding the effect of financing distribution and operational efficiency on the profitability of Indonesian Islamic Commercial Banks with Non-Performing Financing as intervening, it can be concluded that partially FDR and Operational Costs of Operating Income variables have an influence on the NPF variable. In addition, only BOPO and NPF variables partially have an effect on ROA. Based on the results of the path analysis test, it can be explained that only the Operating Cost of Operating Income (X_2) has an indirect effect on Return on Assets (Y) through NPF (Z). That is, the NPF variable is able to mediate the relationship between Operational Costs of Operating Income and Return on Assets.

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