

## **The Effect of NPF, BOPO, and FDR on the Profitability (ROA) of Bank NTB Syariah**

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### **Abstract**

*Islamic banking plays an important role in promoting national economic development, particularly through fund collection and financing activities based on Islamic principles. In promoting sound economic development, Islamic banking must certainly increase its profitability. This study attempts to examine the factors that influence the profitability of Islamic banks, more specifically Bank NTB Syariah, which is the focus of this study. The results of this study found that NPF and Bopo did not have a significant effect on the profitability (ROA) of Bank NTB Syariah. However, the BOPO variable did have an effect on ROA, albeit a negative one.*

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## **1. INTRODUCTION**

Islamic banking has an important role in driving national economic development, particularly through fundraising and financing distribution activities based on sharia principles. Islamic banks are financial institutions that function to facilitate economic mechanisms in the real sector through business activities such as investment, buying and selling or others based on sharia principles, namely a rule of agreement based on Islamic law between banks and other parties for the storage of funds, and financing of business activities, or other activities stated in accordance with sharia values that are macro and micro [1]. The role of Islamic banks is considered significant in the economy; of course, it is a big challenge for the Islamic banking system to continue to provide the best performance.

In bank financial performance, there are several main sources of indicators that are used as the basis for assessment, namely the financial reports of the bank concerned [2]. In relation to Islamic banking, the profitability of Islamic banks is reflected in Return on Assets (ROA) and Return on Equity (ROE) [3]. Return on Assets (ROA) is a ratio that describes a company's ability to generate profit for every rupiah of assets used [4]. Looking at the previous explanations, it can be explained again that ROA functions as an indicator used to measure a company's financial performance.

ROA, as an indicator of company effectiveness, is influenced by financial ratios such as CAR, NPF, BOPO, and FDR [5]. Non-performing financing (NPF), as one of the variables in this study, functions as an indicator that describes the level of risk of non-performing financing in relation to the total financing disbursed. A high NPF indicates an increasing potential for this to have a direct impact on declining profits and profitability.

Discussions regarding NPF are often associated with the risk of default. This risk refers to the large potential loss faced by banks when the financing disbursed experiences problems or is referred to as bad debt. NPF then functions as a ratio used to measure the bank's ability to cover the risk of credit failure by debtors [6]. Yulianto (2016) states that if a bank's NPF ratio increases, there will be a decrease in the number of deposits that can be collected from customers.

In addition to financing risk, operational efficiency also plays a significant role in determining a bank's profitability. Operating Costs to Operating Income (BOPO) is used as a measure of a bank's management efficiency in managing its operational activities. The BOPO ratio is used to measure the bank's efficiency and ability to carry out its operational activities [8]. Any increase in operational costs will result in a reduction in profit before tax, which will ultimately reduce the bank's profit or profitability and ultimately reduce the bank's total assets. Research by Wibowo and Syaichu (2013) shows that BOPO has a significant negative effect on ROA. This indicates that the higher the bank's financing burden, the lower the bank's profit will be.

Meanwhile, the *Financing to Deposit the Fund to Deposit Ratio* (FDR) measures a bank's ability to channel third-party funds. According to Moorey (2020), the FDR is a ratio used to measure a bank's liquidity level, indicating the bank's ability to meet financing demands using its total assets. The FDR also serves as a measuring tool that indicates the extent of a bank's financing development [10]. In a study by Mahfudz and Fachri (2021), they examined the effect of the FDR on ROA at Islamic commercial banks in Indonesia, and found that the *financing to deposit ratio* (FDR) found that FDR had a positive but not significant effect on Return on Asset (ROA). Different results were found in the study by Hakim, Pamikatsih, and Setiabudi (2023), who examined the effect of FDR on ROA in Islamic commercial banks. They found that FDR affected ROA. This study, of course, differs from the results of Sudarsono (2017), who found that FDR had a positive and significant effect on ROA.

Given the significant development of Islamic banking, this study attempts to examine the performance of Islamic banking, specifically Bank NTB Syariah, which serves as the case study. This study will examine the influence of *Non-Performing Financing* (NPF), Operating Costs to Operating Income (BOPO), *Financing to Deposit Ratio* (FDR) against Return on Asset (ROA) at Bank NTB Syariah.

## 2. RESEARCH METHODS

This study employed quantitative methods. Quantitative descriptive research is an objective explanation of a situation using data or numbers, beginning with data collection and ending with an explanation of the processed data (interpretation). The data in this study used secondary data sourced from the financial statements of Bank NTB Syariah. The data used were quarterly data starting from 2019-2023 regarding NPF, BOPO, FDR, and ROA. The data analysis method used was multiple regression statistical methods with secondary data for all four variables.

The independent variables used in this study are NPF, BOPO, and FDR. The dependent variable is profitability or ROA.

**Table 1** Operational Definition of Variables

Various	Definition	Formula	Measurement Scale
<b>Non-Performing Ratio (X1)</b>	The ratio used to measure the level of bank liquidity, which	$\text{NPF} = \frac{\text{Non-Performing Financing}}{\text{Total Assets}}$	Ratio

	shows the bank's ability to meet financing requests using its total assets.	$\frac{\text{Total Financing}}{\text{Total Financing}} \times 100\%$	
<b>Operating Expenses to Operating Income (X2)</b>	Ratio to measure the level of efficiency and ability of the bank in carrying out its operational activities	$\text{BOPO} = \frac{\text{Operational Costs}}{\text{Total Financing}} \times 100\%$	Ratio
<b>Financing Deposit Ratio (X2)</b>	The ratio used to measure the level of bank liquidity, which shows the bank's ability to meet financing requests by using the total assets owned by the bank.	$\text{FDR} = \frac{\text{Amount of Funds Provided}}{\text{Total DPK}} \times 100\%$	Ratio
<b>Return on Asset (ROA) (Y)</b>	ROA is the ratio of net profit to total assets, measuring the return on total assets after interest and taxes.	$\text{ROA} = \frac{\text{Profit before tax}}{\text{Average total assets}} \times 100\%$	Ratio

This study used EViews 12 as a tool to test the data. The testing process begins with classic assumption testing, including multicollinearity, normality, heteroscedasticity, and autocorrelation. This is followed by hypothesis testing, such as the t-test and F-test.

### 3. RESULTS AND DISCUSSION (12 Pt)

#### 3.1. Research Results

##### Classical Assumption Test

##### Test of Military Intelligence

**Table 2** Multicollinearity Test

	Coefficient	Uncentered	Centered
Variable	Variance	VIF	VIF
C	6.554.794	1.662.710	THAT
X1	0.301838	1.401.945	3.226.365
X2	0.000614	1.015.375	1.033.820
X3	2.37E-08	4.110.550	3.173.850

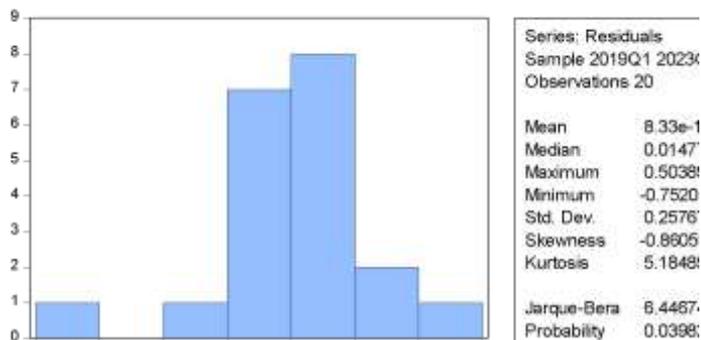
Source: EViews Data Processing Results

The results of the multicollinearity test show that the VIF value is  $<10$ . Therefore, from the test results, it can be concluded that the data in this study passes the

multicollinearity test, or the data test results are not affected by multicollinearity problems.

**Normality Test**

**Table 2** Normality Test



The results of the normality test show that the Jarque-Bera value is 6.446, or  $6.446 > 0.05$ . Therefore, this result can be concluded that this data is not affected by normality issues.

**Heteroscedasticity Test**

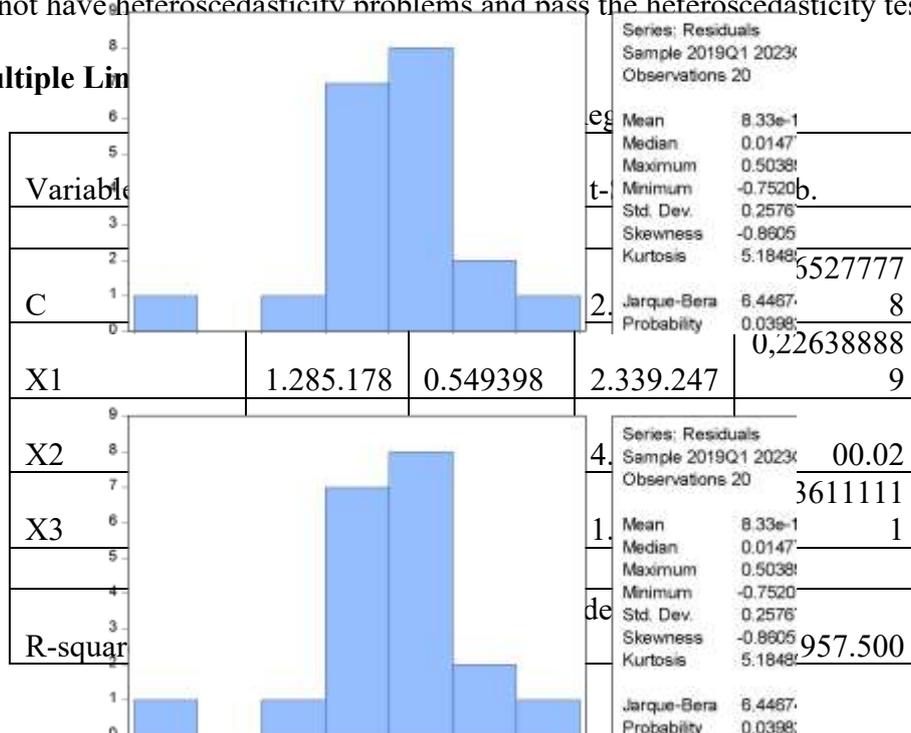
**Table 3** Heteroscedasticity Test

F-statistic	0.947359	Prob. F(9,10)	3,6645833
Obs*R-squared	9.204.498	Prob. Chi-Square (9)	2,9069444
Scaled explained SS	1.232.623	Prob. Chi-Square (9)	1,3576388

Source: EViews Data Processing Results

The results of this study indicate that the probability obs\*R-square value is 2.906, or  $2.906 > 0.05$ . From these results, it can be concluded that the data tested in this study do not have heteroscedasticity problems and pass the heteroscedasticity test.

**Multiple Lin**



Adjusted R-squared	0.554042	S.D. dependent var	0.420474
S.E. of regression	0.280793	Akaike info criterion	0.474459
Sum squared resid	1.261.516	Schwarz criterion	0.673605
Log likelihood	-0.744586	Hannan-Quinn criterion.	0.513334
F-statistic	8.868.314	Durbin-Watson stat	1.337.342
Prob(F-statistic)	0.001078		

Source: Eviews Data Processing Results

The results of the Multiple Regression Analysis Test in this study found that the t-test results for variable X1 had a t-statistic value of 2.399 with a probability value of  $0.226 > 0.05$ . These results indicate that variable X1 (NPF) does not have a significant effect. Then, the partial test results on variable X2 found a t-statistic value of -4.926 and a probability value of  $0.002 > 0.05$ . These results can be interpreted as indicating that the variable (BOPO) has a positive but insignificant influence on the ROA variable. For the FDR variable (X2), the partial test results found a t-statistic value of 1.999 and a probability value of  $0.436 > 0.05$ . These results indicate that variable X3 (FDR) does not have a significant influence on variable Y (ROA).

Apart from partial testing, the results of simultaneous testing (F Test) in this study show that the Prob F Statistic value is  $0.00 < 0.05$ , which indicates that the variables Non-Performing Ratio (X1), Operating Expenses Operating Income (X2), Financing Deposit Ratio (X3) simultaneously (simultaneously) have a positive and significant effect on the Return on Assets (ROA) variable.

### 3.2. Discussion

#### ***Influence Non-Performing Finance to Return on Assets***

The X1 variable in this study showed a prob result of  $0.266 > 0.05$ . This result indicates that the X1 variable does not have a positive and significant effect on the Y variable. The results of this study are in line with the research of Sutanti and Kharisma (2020), which examined the influence of *non-performing finance* on *return on asset*, found that NPF did not have a significant effect on *return on asset* (Y). This result could be due to the inconsistency in the relationship between sales and purchase financing and ROA, which causes NPF not to affect ROA [14]. In addition, research by Indrawati, Wardiningsih, and Wibowo (2015) concluded that NPF does not have a significant effect on ROA.

#### ***The Influence of Operating Expenses on Operating Income Return on Assets***

The X2 variable in this study shows that the probability value is  $0.002 > 0.05$  with a t-statistic value of -4.926. This result indicates that the X2 variable has a positive but not significant effect. The results of this study indicate that the BOPO ratio value is considered quite stable. However, with a fairly stable BOPO ratio value, it indicates that management has not been able to manage the resources they have to run their business efficiently. So, this affects the level of profit and will ultimately affect ROA [16]. Research from Hartini (2016), states that Operating Costs Operating Income

(BOPO) has a positive but not significant effect on ROA. The results of this study also strengthen the results in this study.

### **The Effect of Financing Deposit Ratio on Return on Assets**

The X3 variable in this study shows a t-statistic value of 1.999 with a probability value of  $0.436 > 0.05$ . These results indicate that FDR does not significantly affect ROA. The results of this study are in line with research by Amelia and Sholahuddin (2025), in their research explaining that FDR has a significant effect on Return on Assets (ROA). In addition, research [12] also concluded that FDR does not affect ROA. The results of this study could be caused by the distribution of funds to the public, which causes problems or failure of returns made by the public to the Bank which resulting in losses to the Bank.

## **4. CONCLUSIONS**

The development of Islamic banking, considered increasingly significant in driving the economy, certainly presents unique challenges in improving performance. This study examines a company's ability to generate profit for every rupiah of assets used. The results found that:

1. Variable X1 has a t-statistic value of 2.399 with a probability value of  $0.226 > 0.05$ . These results indicate that variable X1 (NPF) does not have a significant effect.
2. The partial test results on variable X2 found a t-statistic value of -4.926 and a probability value of  $0.002 > 0.05$ . These results can be interpreted as indicating that the variable (BOPPO) has a positive but insignificant influence on the ROA variable.
3. For the FDR variable (X2), the partial test results found a t-statistic value of 1.999 and a probability value of  $0.436 > 0.05$ . These results indicate that variable X3 (FDR) does not have a significant influence on variable Y (ROA).
4. The results of the simultaneous test (F Test) in this study show that the Prob F Statistic value is  $0.00 < 0.05$ , which indicates that the variables Non-Performing Ratio (X1), Operating Expenses Operating Income (X2), Financing Deposit Ratio (X3) simultaneously (simultaneously) have a positive and significant effect on the Return on Assets (ROA) variable.

## **5. ACKNOWLEDGMENTS**

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## **6. BIBLIOGRAPHY**

- [1] N. N. Nafiah, M. Hulaikhah, And A. A. Syaifudin, "Pengaruh Car, Npf Dan Fdr Terhadap Pembiayaan Murabahah Pada Bank Umum Syariah Di Indonesia (Studi Kasus Pada Bank Mandiri Syariah, Bank Bni Syariah Dan Bank Bri Syariah Triwulan I-Iv Tahun 2015-2019)," *J. Ekon. Syariah*, Vol. 5, No. September, Pp. 140–152, 2020.
- [2] L. P. Perioda, L. Spica, And W. Herdinigtyas, "Kondisi Bermasalah Pada Lembaga Perbankan Perioda 2000-2002," No. October, 2016.
- [3] Suryani, "Analisis Pengaruh Financing To Deposit Ratio ( Fdr ) Terhadap Profitabilitas Perbankan Syariah," Vol. 19, Pp. 47–74, 2011.
- [4] B. Oktrima And V. Indriani, "The Effect Of Return On Asset And Total Asset Turnover On Stock Return At Pt Bank Central Asia Tbk Period," Vol. 4, No. 2, Pp. 148–159, 2023.
- [5] L. R. Adyani, "Analisis Faktor-Faktor Yang Mempengaruhi," Pp. 1–25.

- [6] T. Rahman, “Peran Non Performing Financing (Npf) Dalam Hubungan Antara Dewan Komisaris Independen Dan Profitabilitas Bank Syariah,” Vol. 6, No. 1, Pp. 145–171, 2018.
- [7] A. Yulianto, “The Internal Factors Of Indonesian Sharia Banking To Predict The Mudharabah Deposits,” Vol. 5, No. 1, Pp. 210–218, 2016.
- [8] A. N. Dhiba And L. Esya, “Pengaruh Npf, Bopo, Gdp Dan Sbis Terhadap Pertumbuhan Aset Perbankan Syariah Di Indonesia,” Vol. 27, No. 1, Pp. 9–16, 2019.
- [9] E. S. Wibowo And M. Syaichu, “Analisis Pengaruh Suku Bunga, Inflasi, Car, Bopo, Npf Terhadap Profitabilitas Bank Syariah,” Vol. 2, Pp. 1–10, 2013.
- [10] I. Darsita, “Analisis Car, Npf, Bopo Dan Fdr Untuk mengukur Tingkat Kesehatan, Serta Pengaruhnya Terhadap ( Studi Kasus Pada Bank Umum Syariah/Busyangterdaftardi Bei ),” *J. Semarak*, 2020, Doi: <https://doi.org/10.32493/Smk.V3i1.4513>.
- [11] Mahfudz And F. M. Fachri, “( Studi Pada Bank Umum Syariah Di Indonesia Periode Tahun 2016-2019 ),” Vol. 10, No. 2000, Pp. 1–10, 2021.
- [12] L. Hakim, M. Pamikatsih, And H. Setiabudi, “Analisis Pengaruh Car, Npf, Dan Fdr Terhadap Roa Bank Umum Syariah,” Vol. 6, No. 1, Pp. 661–673, 2023.
- [13] H. Sudarsono, “Analisis Pengaruh Kinerja Keuangan Terhadap Profitabilitas Bank Syariah Di Indonesia,” *Econ. J. Ekon. Islam*, Vol. 8, 2017, Doi: <https://doi.org/10.21580/Economica.2017.8.2.1702>.
- [14] Sutanti And F. Kharisma, “Pengaruh Non Performing Finance Terhadap Return On Asset Pada Perbankan Syariah Periode 2013 - 2107,” Vol. 1, No. 3, Pp. 2198–2202, 2020.
- [15] N. Indrawati, Suprihatmi S. Wardiningsih, And E. Wibowo, “Pengaruh Capital Adequacy Ratio, Non Perfoming Financing, Financing To Deposit Ratio , Biaya Operasional, Dan Pendapatan Operasional, Dan Ukuran Perusahaan Terhadap Return On Asset Bank Umum Syariah Di Indonesia,” Vol. 161, Pp. 253–264, 2015.
- [16] P. R. Astuti, “Pengaruh Car , Fdr , Npf , Dan Bopo Terhadap Profitabilitas Perbankan Syariah,” Vol. 8, No. 03, Pp. 3213–3223, 2022.
- [17] T. Hartini, “Pengaruh Biaya Operasional Dan Pendapatan Operasional ( Bopo ) Terhadap,” Vol. 2, No. 1, Pp. 20–34, 2016.
- [18] S. Amelia And M. Sholahuddin, “Dan Financing To Deposit Ratio ( Fdr ) Terhadap Return On Asset ( Roa ) Dengan Non Performing Financing ( Npf ) Sebagai Variabel Moderasi Pada Bank Umum Syariah Indonesia,” Vol. 8, No. 1, Pp. 314–330, 2025.