



The influence of NPF, FDR, and BOPO on ROA at BPRS Amanah Rabbaniah Banjaran

Nur'aeni^{1*}, Finda Nur Wahyuni²

^{1,2}*Faculty of Economic and Islamic Banking, Universitas Ma'soem, Sumedang 45363, Indonesia*

**Corresponding author email: nuraeni.mesy@gmail.com*

Abstract

This study aims to determine how the influence of NPF, FDR, BOPO on ROA at BPRS Amanah Rabbaniah Banjaran partially or simultaneously. This type of research is quantitative associative with secondary data types and uses data collection techniques in the form of documentation and literature study. While the sampling technique is non-probability sampling, with a population of all quarterly financial reports of BPRS Amanah Rabbaniah with a sample of quarterly financial statements of BPRS Amanah Rabbaniah for the period 2017-2021. The result of this study is that there is no effect between NPF on ROA where $t_{count} < t_{table}$ ($-0.9565 < 2.109$). There is a significant but negative effect between FDR on ROA where $t_{count} > t_{table}$ ($-2.1309 > 2.109$). There is an effect of BOPO on ROA where $t_{count} > t_{table}$ ($4.798 > 2.109$). and simultaneously there is a significant effect between NPF, FDR and BOPO on ROA at BPRS Amanah Rabbaniah Banjaran where $F_{count} > F_{table}$ ($11.48 > 2.64$).

Keywords: Non Performing Financing, Financing to Deposit Ratio, operational efficiency ratio, Return On Assets.

1. Introduction

Indonesian Islamic banking, which consists of Islamic Commercial Banks, Islamic Business Units, and Islamic People's Banks, continues to show positive growth. According to the Financial Services Authority (OJK) in 2019, total Islamic financial assets reached US\$99 billion, where total Islamic financial assets increased from the previous year of US\$86 billion. The increase in total assets put Indonesia in 7th position with the largest total Islamic financial assets in the world. The biggest increase was in the Islamic banking sector with an increase of US\$10 billion from the previous year to US\$38 billion.

Islamic banking functions as an intermediary between parties who have excess and those who need funds (Apriyanti et al., 2021). In order to maintain public trust, the Bank needs to maintain its financial performance. To measure financial performance, the bank can perform an analysis of the financial statements. Analysis of financial reports can be done in several ways, one of which is by analyzing financial ratios (Widyaningrum & Septiarini, 2015).

BPRS Amanah Rabbaniah in its operational activities has the ultimate goal of obtaining maximum profit. To measure the level of profit earned by the bank, it can use the profitability ratio. Profitability can be said to be one of the right indicators to measure the performance of a company, because the higher the company's profitability, the better the bank's performance (Subramanyam, 2014).

One indicator that can be used to determine the level of profitability is Return on Assets (ROA). ROA is important for banks because it can be used to measure a company's effectiveness in generating profits by utilizing its assets. The greater the ROA, the better the company's performance, because the rate of return is greater (Nugroho et al., 2021).

Based on previous research, there are factors that are thought to affect ROA, namely Non Performing Financing (NPF), Financing to Deposit Ratio (FDR) and Operational Costs Operating Income (Sapa & Awaluddin, 2022). NPF is a parameter for assessing the performance of Islamic banking in managing the risk of financing provided (Said & Ali, 2016). FDR is an indicator to measure bank liquidity (Kartika et al., 2020). BOPO is an indicator used to measure the level of efficiency and the ability of a bank to carry out its operations (Ariff, 1988). The following is a Table 1 of the development of NPF, FDR, BOPO and ROA at BPRS Amanah Rabbaniah for the 2017-2021 period:

Table 1: Development of NPF, FDR, BOPO and ROA at BPRS Amanah Rabbaniah for the 2017-2021 period

Periode	Triwulan	NPF	FDR	BOPO	ROA
2017	I	5.22 %	77.52 %	66.02 %	5.36 %
	II	4.35 %	85.39 %	64.99 %	2.92 %
	III	5.25 %	76.64 %	65.25 %	2.91 %
	IV	4.88 %	74.34 %	65.18 %	3.00 %
2018	I	4.78%	71.11%	63.08%	2.85%
	II	4.35 %	85.01 %	64.72 %	2.78 %
	III	4.40 %	75.61 %	64.96 %	2.79 %
	IV	4.54 %	79.41 %	64.96 %	2.91 %
2019	I	4.41 %	86.98 %	61.60 %	2.82 %
	II	4.23 %	85.31 %	60.85 %	2.85 %
	III	4.80 %	78.12 %	61.48 %	2.95 %
	IV	0.80 %	99.69 %	48.97 %	3.67 %
2020	I	0.20 %	102.18%	46.94 %	1.18 %
	II	0.88 %	79.72 %	76.35 %	6.34 %
	III	3.90 %	78.26 %	68.73 %	6.32 %
	IV	3.21 %	76.46 %	71.97 %	5.64 %
2021	I	0.20 %	102.18%	46.94 %	1.18 %
	II	0.88 %	79.72 %	76.35 %	6.34 %
	III	3.90 %	78.26 %	68.73 %	6.32 %
	IV	3.21 %	76.46 %	71.97 %	5.64 %

Source: <https://www.ojk.go.id> and <https://bprsar.co.id> 2022

Based on Table 1 above, it can be seen that the ratios of NPF, FDR, BOPO and ROA fluctuate. NPF in the second quarter of 2017 decreased by -16.7%. In 2017, the third quarter experienced an increase of 20.6%. In 2017, the fourth quarter of the NPF decreased by -7.04%. Furthermore, in 2018 quarter I to quarter II NPF decreased by -2.04% and -8.99% respectively. Then in 2018 the III and IV quarters of the NPF increased by 1.14% and 3.18% respectively. In 2019 quarter I to quarter II, NPF again experienced a decline of -2.86% and -4.08%, respectively. In 2019, the third quarter of the NPF increased again. However, in the fourth quarter of 2019, the NPF declined again. Furthermore, in 2020 the first quarter of the NPF decreased by -75%. In 2020 the second quarter has increased. Then in 2020 the third quarter experienced another increase of 3.43%. However, in 2020, the fourth quarter of the NPF decreased by -17.6%. In 2021, the first quarter of the NPF increased by 3.11%. In the second to fourth quarters the NPF continued to decline respectively by -1.18%, -7.38% and -14.6%. However, in the second quarter of 2017 the NPF decreased but ROA also decreased, this is not in accordance with the theory that if the NPF falls, it will have an impact on increasing ROA (Lynn, 2004). Discrepancies also occurred in 2018 quarter I, 2018 quarter II, 2018 quarter III, 2019 quarter II, 2020 quarter I, 2020 quarter II, 2021 quarter II and 2021 quarter IV. The smaller the NPF ratio, the smaller the financing risk borne by the Bank (Sitompul & Nasution, 2019).

FDR in the second quarter of 2017 increased by 10.1%. In the third and fourth quarters, they decreased by -10.24% and -3.00%, respectively. In the first quarter of 2018, FDR decreased by -4.34%. Furthermore, in the second quarter of 2018 the FDR again experienced an increase of 19.54%. In 2018 quarter III, FDR fell to -11.05%. In 2018, the fourth quarter of FDR increased by 5.02%. In 2019, the first quarter of FDR experienced another increase of 9.53%. Then in 2019 the second quarter to the third quarter decreased again to -1.91% and -8.42%. However, in the fourth quarter of 2019, FDR again increased by 23.7%. In the first quarter of 2020, FDR increased by 2.49%. However, in 2020 quarter II to quarter IV FDR decreased by -21.9%, -1.83% and -2.30% respectively. Furthermore, in the first quarter of 2021, the FDR decreased by -0.95%, however, in the second quarter of 2021, the FDR increased by 2.65%. In the third quarter of 2021, the FDR again decreased by -6.70%. And in the fourth quarter of 2021, FDR will again increase by 2.59%. However, in the fourth quarter of 2017, FDR has increased but ROA has decreased, this is not in accordance with the theory which states that if FDR increases, ROA will also increase (Sitompul & Nasution, 2019). In addition, there were also discrepancies in 2018 quarter II, 2019 quarter I, 2019 quarter II, 2019 quarter III, 2020 quarter I, 2020 quarter II and 2021 quarter II. The lower the FDR, the less effective the bank is in channeling funds (Sitompul & Nasution, 2019).

BOPO in the second quarter of 2017 decreased by -1.56%. In 2017 in the third quarter, BOPO increased by 0.40%. Then in 2017 quarter IV, BOPO decreased by -0.10%. In 2018 the first quarter of BOPO decreased by -0.03%. In 2018, the second quarter experienced an increase of 0.02%. In 2018 quarters III and IV, BOPO again increased to 64.96%. In 2019 quarter I, BOPO decreased to 5.17%. Then in 2019 the second quarter decreased by -1.21%. and then in 2019 the third quarter BOPO increased by 1.03%. However, in 2019 the fourth quarter of BOPO decreased by -20.34%. In the first quarter of 2020, BOPO decreased by 4.14%. Then in the second quarter of 2020,

BOPO increased by 62.65%. Furthermore, in the third quarter of 2020, BOPO decreased by -9.98%. In the first quarter of 2021, BOPO has increased by 1.84%. Then in 2021 quarter II to quarter III BOPO experienced an increase of 0.54% and 1.80% respectively. And in 2021 quarter IV, BOPO has again decreased by -2.22%. And in 2021 quarter IV, BOPO has again decreased by -2.22%. However, in 2017 the second quarter of BOPO decreased but ROA also decreased, this is not in accordance with the theory that a decrease in BOPO should have an impact on an increase in ROA (Koch & MacDonald, 2014). In addition, the gap between existing theories also exists in 2017 quarter II, 2018 quarter II, 2018 quarter III, 2019 quarter III, 2020 quarter I, 2020 quarter II, 2020 quarter III and 2021 quarter I the lower the BOPO ratio, the better the performance of a bank. This shows that the bank uses existing resources for its operational activities efficiently. The greater the BOPO, the smaller the ROA of a bank (Sitompul & Nasution, 2019).

2. Literature Review

According to Kuncoro (2002) NPF is a financial ratio that can be used by banks to find out how much financing risk is experienced by banks because of the difference between the financing provided and the investments made by banks. This risk occurs because the customer is unable to fulfill the obligations along with the profit sharing to the bank in accordance with the previously agreed period (Finance, 2022). The size or size of NPF describes the achievements of a bank in disbursing funds that have been managed. NPF can affect the level of profitability of Islamic banks if the problem financing is high, so that it can ultimately reduce the income received by banks. If the NPF value gets higher, it indicates that the bank is managing its financing unprofessionally. This also indicates the high risk of financing disbursements in line with the high NPF faced by banks.

According to Rivai (2010) FDR is a ratio that shows the extent of a bank's ability to repay depositors' withdrawals by relying on financing as a source of liquidity (Ariff, 1988). The higher the FDR ratio, the lower the liquidity capability of a bank. This is because the amount of funds used to finance financing is getting bigger (Sitompul & Nasution, 2019). Conversely, the lower the FDR value indicates the ineffectiveness of a bank in disbursing its financing.

According to Pandia (2012) BOPO is a ratio used by banks to describe the ability of bank management to control operating costs to operating income. The lower the BOPO ratio indicates that the more efficient a bank is in controlling its operating costs, that way the profit obtained by a bank will be greater. If there is an increase in the BOPO ratio, it will have an impact on reducing profit before tax which will ultimately reduce the level of profitability of a bank (Koch & MacDonald, 2014).

According to Muhammad (2013) ROA is a ratio that provides an overview of bank productivity in managing funds invested in all assets so as to generate profits. High profits will make banks trusted by the public to raise more funds, that way banks will get the opportunity to lend funds more broadly.

3. Materials and Methods

The type of research used in this study is quantitative associative. Quantitative research is a study that demands a lot of the use of numbers, starting from data collection, interpretation of the data, as well as the appearance of the results (Singh, 2006). While associative research is a study that aims to find out the relationship between two or more variables that bind each other (Newbold, 2013). The object studied in this study is the financial statements that BPRS Amanah Rabbaniah has published regularly. The type of data used is secondary data, where the data is taken from the official website of BPRS Amanah Rabbaniah with the address of the <https://bpsar.co.id/> website (BPRS, 2022) and the official web from the Financial Services Authority (OJK) with the <http://www.ojk.go.id/> website address (Finance, 2022).

Its data collection techniques use documentation and literature studies. The population in this study is the entire financial statements of BPRS Amanah Rabbaniah Banjaran. Meanwhile, the sample used is Purposive Sampling in the form of quarterly financial statements of BPRS Amanah Rabbaniah for the 2017-2022 period. The data testing tools and hypothesis tests used are multiple correlation analysis, multiple regression analysis, coefficient of determination analysis, t test and F test (Brannen, 2017).

4. Result and Discussion

4.1. The effect of NPF on ROA in BPRS Amanah Rabbaniah Banjaran

Coefficient of Determination Analysis is a follows :

$$\begin{aligned}
 r_{x_1y} &= \frac{n(\sum X_1Y) - (\sum X_1)(\sum Y)}{\sqrt{[n(\sum X_1^2) - (\sum X_1)^2] [n(\sum Y^2) - (\sum Y)^2]}} \\
 &= \frac{20(276.3355) - (73.02)(78.22)}{\sqrt{[20(304.5578) - (73.02)^2] [20(347.9876) - (78.22)^2]}} \\
 &= \frac{5,526.71 - 5,711.6244}{\sqrt{[6,091.156 - 5,331.9204] [6,959.752 - 6,118.3684]}} \\
 &= \frac{-184.9144}{\sqrt{(759.2356)(841.3836)}} \\
 &= \frac{-184.9144}{\sqrt{638,808.382}} \\
 &= \frac{-184.9144}{799.254} \\
 &= 0.2313
 \end{aligned}$$

The following are the results of the calculation of the coefficient of determination analysis:

$$\begin{aligned}
 \text{KD} &= R^2 \times 100\% \\
 &= (-0.2313)^2 \times 100\% \\
 &= 0.0534 \times 100\% \\
 &= 5.34\%
 \end{aligned}$$

Based on the calculations above, the results of the coefficient of determination of $0.0534 = 5.34\%$ were obtained, meaning that the influence of the NPF variable of 5.34% on ROA in BPRS Amanah Rabbaniah Banjaran and the remaining 94.66% was influenced by other factors that were not studied in this study.

The results of the t test of the NPF variable are as follows:

$$\begin{aligned}
 t_{count} &= \frac{r\sqrt{n-2}}{\sqrt{1-r^2}} \\
 &= \frac{(-0.2313)\sqrt{20-2}}{\sqrt{1-(-0.2313)^2}} \\
 &= \frac{(-0.2313)\sqrt{18}}{\sqrt{1+0.0534}} \\
 &= \frac{(-0.2313)(4.243)}{\sqrt{1.0534}} \\
 &= \frac{-0.98140}{1.026} \\
 &= -0.9565
 \end{aligned}$$

Based on the results of the t test, a calculated value of -0.9565 was obtained with a ttable value of ($df = n-k = 20 - 3 = 17$) which is 2.109 with a significance level of 5% then a $t_{table} < \text{calculation}$ was obtained ($-0.9565 < 2.109$). So it can be concluded that H_0 is accepted and H_1 is rejected, meaning that NPF does not have a significant effect on ROA in BPRS Amanah Rabbaniah Banjaran.

4.2. FDR's influence on ROA in BPRS Amanah Rabbaniah Banjaran

Coefficient of Determination Analysis is a follows :

$$\begin{aligned}
 r_{x_2y} &= \frac{n(\sum X_2Y) - (\sum X_2)(\sum Y)}{\sqrt{[n(\sum X_2^2) - (\sum X_2)^2] [n(\sum Y^2) - (\sum Y)^2]}} \\
 &= \frac{20(6,200.9486) - (1,612.16)(78.22)}{\sqrt{[20(131,234.0066) - (1,612.16)^2] [20(347.9876) - (78.22)^2]}} \\
 &= \frac{124,018.972 - 126,103.155}{\sqrt{[2,624,680.132 - 2,599,059.866] [6,959.752 - 6,118.368]}}
 \end{aligned}$$

$$\begin{aligned}
&= \frac{-2,084.183}{\sqrt{(25,620.266) (841.3836)}} \\
&= \frac{-2,084,183}{\sqrt{21,556,482}} \\
&= \frac{-2,084,183}{4,643,972} \\
&= -0.4488
\end{aligned}$$

The following are the calculation results from the analysis of the coefficient of determination:

$$\begin{aligned}
\text{KD} &= R^2 \times 100\% \\
&= (-0.4488)^2 \times 100\% \\
&= 0.20142 \times 100\% \\
&= 20.14\%
\end{aligned}$$

Based on the calculations above, the results of the coefficient of determination of 0.2014 = 20.14% were obtained, meaning that the influence of the FDR variable of 20.14% on ROA in BPRS Amanah Rabbaniah Banjaran and the remaining 79.86% was influenced by other factors that were not studied in this study.

The results of the FDR variable t test (X2) are as follows:

$$\begin{aligned}
t_{count} &= \frac{r\sqrt{n-2}}{\sqrt{1-r^2}} \\
&= \frac{(-0.4488)\sqrt{20-2}}{\sqrt{1-(-0.4488)^2}} \\
&= \frac{(-0.4488)\sqrt{18}}{\sqrt{1-0.2014}} \\
&= \frac{(-0.4488)(4.243)}{\sqrt{0.7986}} \\
&= \frac{-1.9042}{0.8936} \\
&= -2.1309
\end{aligned}$$

Based on the results of the t test, a calculated value of -2.1309 was obtained with a ttable value of (df = n-k = 20-3 = 17) which is 2.109 then the ttable > calculation (-2.1309 > 2.109). So it can be concluded that H0 is rejected and H1 is accepted, meaning that FDR has an effect but is negative towards ROA in BPRS Amanah Rabbaniah Banjaran.

4.3. The effect of BOPO on ROA in BPRS Amanah Rabbaniah Banjaran

Coefficient of Determination Analysis is a follows :

$$\begin{aligned}
r_{x_3y} &= \frac{n(\sum X_3Y) - (\sum X_3)(\sum Y)}{\sqrt{[n(\sum X_3^2) - (\sum X_3)^2] [n(\sum Y^2) - (\sum Y)^2]}} \\
&= \frac{20(5,292.312) - (1,311.44)(78.22)}{\sqrt{[20(87,122.7876) - (1,311.44)^2] [20(347.9876) - (78.22)^2]}} \\
&= \frac{105,846.254 - 102,580.837}{\sqrt{[1,742,455.75 - 1,719,874.87] [6,959.752 - 6,118.368]}} \\
&= \frac{3,265.417}{\sqrt{(22,580.88) (841.3836)}} \\
&= \frac{3,265.417}{\sqrt{18,999,180.76}} \\
&= \frac{3,625.417}{4,358.805} \\
&= 0.7491
\end{aligned}$$

The following is the calculation result from the analysis of the coefficient of determination:

$$\begin{aligned} \text{KD} &= R^2 \times 100\% \\ &= (0.7491)^2 \times 100\% \\ &= 0.5611 \times 100\% \\ &= 56.11\% \end{aligned}$$

Based on the calculations above, the results of the coefficient of determination of $0.5611 = 56.11\%$ were obtained, meaning that the influence of the BOPO variable of 56.11% on ROA in BPRS Amanah Rabbaniah Banjaran and the remaining 43.89% was influenced by other factors that were not studied in this study.

The results of the BOPO variable t test are as follows:

$$\begin{aligned} t_{count} &= \frac{r\sqrt{n-2}}{\sqrt{1-r^2}} \\ &= \frac{(0.7491)\sqrt{20-2}}{\sqrt{1-(0.7491)^2}} \\ &= \frac{(0.7491)\sqrt{18}}{\sqrt{1-0.5611}} \\ &= \frac{(0.7491)(4.243)}{\sqrt{0.4389}} \\ &= \frac{3.1784}{0.6624} \\ &= 4.798 \end{aligned}$$

Based on the results of the t test, a calculated value of 4.798 was obtained with a ttable value of (df = n-k = 20-3 = 17) which is 2.109 then the thitung > ttable ($4.798 > 2.109$). So it can be concluded that H0 is accepted and H1 is rejected, meaning that BOPO has a significant effect on ROA in BPRS Amanah Rabbaniah Banjaran.

4.4. Simultaneous Effect of NPF, FDR and BOPO on ROA in BPRS Amanah Rabbaniah Banjaran

Multiple Correlation Analysis is as follows :

$$\begin{aligned} r_{x_1x_2} &= \frac{n(\sum X_1X_2) - (\sum X_1)(\sum X_2)}{\sqrt{[n(\sum X_1^2) - (\sum X_1)^2] [n(\sum X_2^2) - (\sum X_2)^2]}} \\ &= \frac{20(5,766.9088) - (73.02)(1,612.16)}{\sqrt{[20(304.5578) - (73.02)^2] [20(131,234.0066) - (1,612.16)^2]}} \\ &= \frac{115,338.176 - 117,719.923}{\sqrt{[6,091.156 - 5,331.920] [2,624,680.132 - 2,559,059.866]}} \\ &= \frac{-2,381.747}{\sqrt{[759.235] [25,620.266]}} \\ &= \frac{-2,381.747}{\sqrt{19,451,818.33}} \\ &= \frac{-2,381.747}{4,410.421} \\ &= -0.5400 \end{aligned}$$

$$\begin{aligned} r_{x_1x_3} &= \frac{n(\sum X_1X_3) - (\sum X_1)(\sum X_3)}{\sqrt{[n(\sum X_1^2) - (\sum X_1)^2] [n(\sum X_3^2) - (\sum X_3)^2]}} \\ &= \frac{20(4,819.1895) - (73.02)(1,311.44)}{\sqrt{[20(304.5575) - (73.02)^2] [20(87,122.7876) - (1,311.44)^2]}} \\ &= \frac{96,383.79 - 95,761.348}{\sqrt{[6,091.156 - 5,331.920] [1,742,455.752 - 1,719,874.874]}} \\ &= \frac{622.441}{\sqrt{[759.235] [222,580.878]}} \end{aligned}$$

$$= \frac{622.441}{\sqrt{17,144,206.76}}$$

$$= \frac{622.441}{4,140.556}$$

$$= 0.1503$$

$$x_2x_3 = \frac{n(\sum X_2X_3) - (\sum X_2)(\sum X_3)}{\sqrt{[n(\sum X_2^2) - (\sum X_2)^2] [n(\sum X_3^2) - (\sum X_3)^2]}}$$

$$= \frac{20(104,750.5690) - (1,612.16)(1,311.44)}{\sqrt{[20(131.234.006) - (1,612.16)^2] [20(87122.787) - (1,311.44)^2]}}$$

$$= \frac{2,095,011.38 - 2,114,251.11}{\sqrt{[2,624,680.132 - 2,559,059.685][1,742,455.752 - 1,719,874.874]}}$$

$$= \frac{-19,239.730}{\sqrt{[25,620.266][22,580.878]}}$$

$$= \frac{-19,239.730}{\sqrt{57,852,812.2}}$$

$$= \frac{-19,239.730}{24,052.611}$$

$$= -0.7999$$

The results of the multiple correlation analysis are as follows:

$$r_{x_1x_2x_3y} = \sqrt{\frac{r^2x_1y + r^2x_2y + r^2x_3y - 2(rx_1y)(rx_2y)(rx_3y)}{(rx_1x_2)(rx_1x_3)(rx_2x_3)}}}{1 - (r^2x_1x_2)(r^2x_1x_3)(r^2x_2x_3)}$$

$$= \sqrt{\frac{(-0.2313)^2 + (-0.4488)^2 + (0.7491)^2 - 2(-0.2313)(-0.4488)(0.7491)(-0.5400)(0.5103)(-0.7999)}{1 - ((-0.5400)(0.5103)(-0.7999))^2}}$$

$$= \sqrt{\frac{(-0.0534) + (-0.2014) + (0.5611) - 2(0.0171)}{1 - (0.2204)^2}}$$

$$= \sqrt{\frac{0.3063 - 0.0342}{1 - 0.0485}}$$

$$= \sqrt{\frac{0.6492}{0.9515}}$$

$$= \sqrt{0.6823}$$

$$= 0.8260$$

Based on this calculation, an r of 0.8260 was obtained, meaning that there is a very strong relationship between NPF, FDR and BOPO to ROA in BPRS Amanah Rabbaniyah Banjaran for the 2017-2021 period of 0.8260.

Multiple Regression Analysis as Table 2:

Tabel 2: Determinan

Determinan A	Determinan A ₁	Determinan A ₂	Determinan A ₃	Determinan A ₄
193,048,960.304	-1,015,570,040.377	-70,249,816.886	509,472.960	30,287,302.647

Next is carried out calculations to find the constant (α), regression coefficient X1 (b₁), regression coefficient X2 (b₂),

$$(\alpha) = \frac{A_1}{A} = \frac{-1,015,570,040.377}{193,048,960.304} = -5.2607$$

$$(b_1) = \frac{A_2}{A} = \frac{-70,249,816.886}{193,048,960.304} = -0.3639$$

$$(b_2) = \frac{A_3}{A} = \frac{509.472.960}{193,048,960.304} = 0.0026$$

$$(b_3) = \frac{A_4}{A} = \frac{30,287,302.647}{193,048,960.304} = 0.1569$$

Based on the above calculations, a multiple regression model can be obtained as follows:

$$Y = \alpha + b_1x_1 + b_2x_2 + b_3x_3$$

$$Y = -5.2607 - 0.3639 X_1 + 0.0026 X_2 + 0.1569 X_3$$

- If NPF, FDR and BOPO are considered constant, then ROA is -5.2607.
- The value of the coefficient b1 = every decrease in one unit of value of the variable NPF (X1) then ROA (Y) will reduce the ROA by -0.3639.
- The value of the coefficient b2 = every increase in one unit value of the variable FDR (X2) will increase the ROA by 0.0026.
- The value of the coefficient b3 = every increase in one unit of value of the BOPO variable (X3) will increase by 0.1569.

The calculation of the coefficient of determination analysis of the variables NPF, FDR and BOPO against ROA, is as follows:

$$\begin{aligned} \text{KD} &= R^2 \times 100\% \\ &= (0.8260)^2 \times 100\% \\ &= 0.6823 \times 100\% \\ &= 68.23\% \end{aligned}$$

Based on the calculations above, the results of the coefficient of determination from NPF, FDR and BOPO on ROA at BPRS Amanah Rabbaniah Banjaran were 68.23% and the remaining 31.77% was influenced by other factors that were not studied in this study.

The results of the calculation of the F test are as follows:

$$\begin{aligned} F &= \frac{r^2/k}{(1-r^2)/(n-k-1)} \\ &= \frac{0.6823/3}{(1-0.6283)/(20-3-1)} \\ &= \frac{0.0953}{0.7141/16} \\ &= \frac{0.2274}{0.0198} \\ &= 11.48 \end{aligned}$$

Based on the results of the F test, a calculated F value of 2.1352 and a Ftabel value (df1 = k-1 = 3-1 = 2) (df2 = n-k = 20-3 = 17) was obtained with a significance level of 5% then the Ftabel was 2.64. so it can be known that Fhitung > Ftabel (11.48 > 2.64). So H0 is rejected and H1 is accepted, meaning that NPF, FDR and BOPO simultaneously have a significant effect on ROA in BPRS Amanah Rabbaniah for the 2017-2021 period.

5. Conclusion

Based on the results of research conducted on the influence of NPF, FDR and BOPO on ROA at BPRS Amanah Rabbaniah Banjaran, it can be concluded that NPF has no significant effect on ROA in BPRS Amanah Rabbaniah Banjaran. This can be seen from the results of the t test where the calculation of the ttabel < (-0.9565 < 2.109). So it can be concluded that H0 is accepted and H1 is rejected. Then in the coefficient of determination test, the magnitude of the R2 value was 5.34% and the remaining 94.66% was influenced by other factors that were not studied in this study. FDR influenced the ROA in BPRS Amanah Rabbaniah Banjaran but the direction was negative. This can be seen from the results of the t test where the calculation of the ttabel > (-2.1309 > 2.109). So it can be concluded that H0 is rejected and H1 is accepted. Then in the coefficient of determination test, the magnitude of the R2 value was 20.142% and the remaining 79.86% was influenced by other factors that were not studied in this study. BOPO has a significant effect on ROA at BPRS Amanah Rabbaniah Banjaran. This can be seen from the results of the t test where the calculation of the ttabel > (4.798 > 2.109). So it can be concluded that H0 is rejected and H1 is accepted. Then in the coefficient of determination test, the magnitude of the R2 value was 56.11% and the remaining 43.98% was

influenced by other factors that were not studied in this study. NPF, FDR and BOPO simultaneously affect the ROA in BPRS Amanah Rabbaniah Banjaran. This can be seen from the results of the F test where $F_{hitung} > F_{tabel}$ (11.48 > 2.64) then H_0 is rejected and H_1 is accepted. Then in the coefficient of determination test, the magnitude of the R^2 value is 68.23%. This means that the effect of NPF, FDR and BOPO on ROA of 68.23% and the remaining 31.77% was influenced by other factors not studied in this study.

References

- Apriyanti, R., Ab Rahman, A., & Maharani, S. (2021). Empirical Studies Of The Effect Of Operational Costs And Operating Income, Financing To Deposit Ratio Against Return On Asset With Non-Performing Financing As Intervening Variables In Sharia Bank Indonesia 2013-2020. *Niqosiya: Journal of Economics and Business Research*, 1(1), 21-36.
- Ariff, M. (1988). *Islamic banking*. Asian-Pacific Economic Literature Vol. 2, No. 2 (September 1988), pp. 48-64.
- BPRS, A. R. (2022). Financial Report - BPRS Amanah Rabbaniah. <http://bprsar.co.id> (accessed Jan. 13)
- Brannen, J. (Ed.). (2017). *Mixing methods: Qualitative and quantitative research*. Routledge.
- Finance, O. J. (2022). Banking Financial Reports. <https://www.ojk.go.id> (accessed Jan. 13).
- Kartika, R., Jubaedah, S., & Astuti, A. D. (2020). The influence of financing to deposit ratio, return on assets and non performing finance on profit sharing finance of sharia banks in Indonesia. In *1st International Conference on Accounting, Management and Entrepreneurship (ICAMER 2019)* (pp. 136-140). Atlantis Press.
- Koch, T. W., & MacDonald, S. S. (2014). *Bank management*. Cengage Learning.
- Lynn, G. (2004). Tracking troubling vapor releases in New Hampshire. *LUSTLINE*, 47, 13-16.
- Newbold, P. (2013). *Statistics for business and economics*. Pearson.
- Nugroho, L., Badawi, A., Nugraha, E., & Putra, Y. M. (2021). What determines islamic performance ratio of islamic banking in indonesia? An analysis using financing to deposit ratio as moderator. *Share: Jurnal Ekonomi dan Keuangan Islam*, 10(1), 104-123.
- Said, M., & Ali, H. (2016). An analysis on the factors affecting profitability level of Sharia banking in Indonesia. *Banks & bank systems*, (11, Iss. 3), 28-36.
- Sapa, N., & Awaluddin, M. (2022). Effect of Non Performing Financing and Operating Expenses of Operating Income on Profitability of Islamic Commercial Banks. *Adpebi International Journal of Multidisciplinary Sciences*, 1(1), 455-463.
- Singh, Y. K. (2006). *Fundamental of research methodology and statistics*. New Age International.
- Sitompul, S., & Nasution, S. K. (2019). The effect of CAR, BOPO, NPF, and FDR on profitability of sharia commercial banks in Indonesia.
- Subramanyam, K. R. (2014). *Financial statement analysis*. Không nhà xuất bản.
- Widyaningrum, L., & Septiarini, D. F. (2015). The Influence of CAR, NPF, FDR, and OER, on ROA in Islamic Rural Banks in Indonesia from January 2009 to May 2014. *Journal of Theory and Applied Sharia Economics*, 2(12).