

## The Determinant Effect of Financial Performance on Return on Assets (ROA) in Full-Fledged Islamic Banks in Indonesia for the 2015-2019 Period

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ARTICLE INFO	ABSTRACT
Published Online: 13 July 2022	The objective of this analysis is to determine the impact of Capital Adequacy Ratio (CAR), Non-Performing Financing (NPF) and Operating Income versus Operating Expenses (Biaya Operasional Pendapatan Operasional/ BOPO) on Return on Assets (ROA) on Full-Fledged Islamic Banks in Indonesia during the 2015-2019 research period. The number of samples used was four companies depending on the purpose of sampling. The technique used in data analysis includes a multi-linear regression analysis studied with EVIEW 9. The findings of the test hypotheses indicate that CAR has a negative and substantial impact on ROA. At the same time, NPF has no effect on ROA. BOPO has a negative and important effect on ROA. At the same moment, the variables of CAR, NPF and BOPO have a major impact on ROA.
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### INTRODUCTION

Banks are financial intermediaries and have an important role in developing the national economy. The bank receives funds from consumers and directs them to those clients who need funds. There are two financial operating systems in the national banking sector, so called traditional banks and Islamic banks. The variations between the principles and features of the two structures are the legal basis, the organizational activities, the control of funds and the mechanisms of benefit sharing. In conducting the business as illustrated in the teachings of the Indonesian Ulema Council (*Majelis Ulama Indonesia/ MUI*), Islamic banks shall adhere to Islamical teaching or Islamic moral values, based upon the Alquran and hadith. The presence of Islamic banks is expected to be an option for Muslims to perform transactions in compliance with religious law.

As financial institutions, banks need to maintain their efficiency in order to be able to function optimally. In addition, Islamic banks must deal with traditional banks that have more advantages and are increasing rapidly in

Indonesia. Competition with existing traditional banks helps Islamic banks to boost their efficiency and services. The financial result of the bank is a summary of the accomplishments of the bank in its activities, including in terms of financing, marketing, processing and distribution of funds, technology and human capital. Financial results expressed in the financial statements provides statistics for foreign and domestic parties, which can be measured using various metrics including year-to-year benefit and financial ratios.

The financial ratio indicators used by traditional banks in the estimation of bank financial results are not distinct from those used by Islamic banks. According to Sudan (2015: 77), bank financial results can be seen from multiple ratios, including liquidity, profitability, solvency and market comparisons. The growth of Islamic banking sector has been a core factor in the progress of the Islamic economy. The growth of Islamic banking can be seen from the financial performance of Full-Fledged Islamic Banks in 2015-2019, which is indicative of an improvement in Islamic banking performance.

**Table 1.** The Performance Development of Full-Fledged Islamic Bank

Year	ROA (%)	CAR (%)	NPF (%)	BOPO (%)	NOM (%)	FDR (%)	DPK (Billion Rp)
2015	0.49	15.02	4.84	97.01	0.52	88.03	174.895
2016	0.63	16.63	4.42	96.22	0.68	85.99	206.407
2017	0.63	17.91	4.76	94.91	0.67	79.61	238.393

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<b>2018</b>	1.28	20.39	3.26	89.18	1.42	78.53	257.606
<b>2019</b>	1.73	20.59	3.23	84.45	1.92	77.91	288.978

**Source:** Islamic Banking Statistics ([www.ojk.go.id](http://www.ojk.go.id))

Profitability is the most appropriate metric for assessing the efficiency of banks. Strong bank performance will improve public trust, and vice versa. If the efficiency of the bank declines, public confidence in the bank will also decline (Suwarno and Muthohar, 2018: 95). Various indices of the factors that may determine profitability, including capital, are influenced by the Capital Adequacy Ratio (CAR), asset quality is driven by Non-Performing Financing (NPF), and profitability is driven by the costs of Operating Expenses compared to Operating Income (BOPO).

On the basis of Tristingtyas (2013) research results, it is reported that CAR has a strong and important ROA impact, which means the higher the CAR, the higher the ROA, to increase or boost the bank's financial efficiency. Research by Hellen (2019) notes however that the relationship between CAR and the ROA is substantial and negative, which means that as the ROA is raised, the profitability of the banks will decline and vice versa. Research results from Rahman (2019) indicate that the effects of NPF on ROA are negative and significant.

The study conducted by Dermawan (2020), on the other hand, illustrates NPF has a positive influence on ROA. However, Suwarno's research findings (2018) suggest that the beneficial effect of NPF on financial efficiency can be overlooked (ROA). Suwarno (2018) and Dermawan (2020) study findings found that BOPO is negative for ROA. The adverse relation between BOPO and ROA can be clarified since the higher the BOPO, the lower the ROA level of the bank. A low level of BOPO demonstrates a strong banking management skill that can generate full return on operating cost to boost the ROA impact. Meanwhile, Sekarwati's research (2018) states that BOPO has no effect on ROA.

The purposes of this study are:

1. To examine the effect of CAR on the ROA in Indonesia in 2015-2019 by Full-Pledged Islamic Banks.
2. To examine in 2015-2019 NPF's effect on ROA in the Full-Fledged Islamic Banks of Indonesia.
3. In Indonesia 2015-2019, to examine the effect of BOPO on ROA in Full-Fledged Islamic Banks.
4. In Indonesian Full-Fledged Islamic Banks to examine the CAR, NPF and BOPO effect on ROA simultaneously.

**LITERATURE REVIEW**

A bank is an institution which collects public funds through deposits and distributes them to the public in the form of credit and also improves citizens living standard (Riyadi, 2017: 55). According to Iswari (2015: 3), a Sharia Bank/ Islamic Bank is a business institution with the purpose of

raising public funds and channeling funds into the society using structures and business processes focused on Islamic or Quranic law and on the principles of hadiths. Islamic banks obey the ideals of the Philosophy of Justice and Equal Opportunities, the Principle of Harmony and other operations (Surat An-Nisa paragraph 58).

According to Muchtar (2016: 120), some principles or laws adopted by the Islamic banking system include:

- a. It is not permitted to pay debts with a valuation other than the value of an advanced value debt.
- b. As a risk of the performance of the business of the institution investing the money, the funder must share in its gains and expenses.
- c. "Making money from money" is not condoned by Islam. Money is just an investment medium and not an asset, because it has no inherent value.
- d. There is no excuse for the *gharar* factor (uncertainty, speculation). The outcomes of a contract are well known by all sides.
- e. Only companies not banned by Islam can be allotted investments. For instance, it is not acceptable for the liquor business to invest in Islamic banking.

The results of the financial reporting of banks may be used, according to Riyadi (2017: 377), to be a reference for banks in several policy decisions concerning prudential banking business or transactions, including:

- a. Decisions on investment and credit
- b. Evaluation of cash flow forecast
- c. Providing economic capital details

According to Fahmi (2010: 2), the financial report is an audit conducted by an organization to determine the degree to which an enterprise has performed adequately and accurately using financial updating laws. In the evaluation of banks' financial results, one should look at each Full-Fledged Islamic Bank's financial records. By looking at the resulting profitability, investors should do a success analysis, here is the financial ratios used in this study:

The profitability ratio is the ratio for measuring the capacity of the organization to benefit from its daily business operations (Hery, 2016: 104). The higher the value of the ROA, the higher the net benefit from each rupee of total assets. On the other hand, the lower the ROA, the less the net benefit from every *Rupiah* of the total assets reported (Hery, 2016: 106). If the ROA is closer to 1 this increases the bank's profitability as any asset is profitable (Ariyanti, 2017: 9).

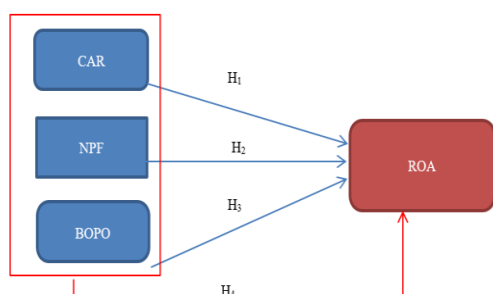
One of the most critical considerations to encourage business and avoid the possibility of bankruptcy is the Capital Adequacy Ratio (CAR). A higher CAR level increases banks' ability to escape a loan or high risk assets default risk (Riyadi, 2017). If a bank has enough resources to handle volatile

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investments, the liquidity of the bank would be kept (Olivia and Riyadi, 2018).

Credit risk accepted by banks is one of the non-current credit threats that banks attribute to debtors in the banking industry. The higher a bank's bad credit ratio (NPL) shows that bank credit quality will cause losses (Riyadi, 2018). Bank Indonesia's NPF cap is a limit of 5% if it reaches 5% and it has an effect on the health of the bank in question (Harun, 2016: 73).

BOPO is a ratio used to determine a bank's efficacy and capability when performing its business (Wibisono, 2017: 48). The higher the cost of bank sales, the less inefficient the operating activities are, the more effective the BOPO is in its market operations (Wibisono, 2017: 57). The following research framework can be presented based on an explanation of previous research, the theoretical basis above and the problem formula in the previous chapter:



**Figure 1.** Framework of Thinking

### HYPOTHESIS

Based on the theoretical basis and framework of thought previously discussed in this study, the following hypotheses are formulated in this study:

### RESULTS AND DISCUSSION

#### Descriptive Analysis

**Table 2.** The Calculation of Minimum, Maximum, Mean, and Standard Deviation Values

	ROA	CAR	NPF	BOPO
Mean	0.757	17.013	4.337	92.564
Median	0.590	16.060	4.480	94.280
Maximum	1.820	29.730	7.110	99.500
Minimum	0.040	12.000	2.440	81.260
Std.Dev.	0.582	4.726	1.333	5.351
Skewness	0.394	1.160	0.331	-0.709
Kurtosis	1.854	3.802	2.228	2.382
Jarque-Bera	1.613	5.020	0.861	1.996
Probability	0.446	0.081	0.650	0.369
Sum	15.140	340.250	86.730	1851.270
Sum Sq.Dev.	6.426	424.313	33.770	544.072
Observations	20	20	20	20

**Source:** primary data processed (2020)

H1 Capital Adequacy Ratio (CAR) has a significant effect on Return On Assets (ROA).

H2 Non-Performing Financing (NPF) has a significant effect on Return On Assets (ROA).

H3 Operational Cost compared to Operating Income (BOPO) has a significant effect on Return On Assets (ROA).

H4 CAR, NPF, and BOPO simultaneously have a significant effect on Return On Assets (ROA).

### METHOD

This quantitative analysis employs secondary details in the form of financial reports on the time dimensions of each Islamic banking enterprise in Indonesia for a span of five years from 2015 to 2019. In this analysis, there are three independent variables, namely the proxying of capital by CAR, the proxying of asset quality by NPF, the output of the BOPO and the profitability of the ROA proxies. Meanwhile, the vector independent is ROA-propelled profitability.

The survey is calculated using a purposeful sampling methodology to calculate with the parameters Full-Fledged Islamic Bankss that are included in statistic data of the OJK, post financial reports on its website and have assets above 20 trillion in 2015-2019, namely PT Bank Muamalat Indonesia, Tbk, (BMI), PT Bank BRISyariah, Tbk, (BRIS), PT Bank Syariah Mandiri, (BSM), and PT Bank BNI Syariah (BNIS) with a total of 20 samples. Normality checks, panel data regression calculations and multiple regressions were carried out to process and interpret the results. In this analysis, data processing used in *Eviews 9.0* to show the effects on firm valuation of leverages, liquidity and scale.

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The total sample (n) of 20 samples were obtained, with a ROA value of minimum 0.040 owned by the BMI in 2017, and a maximum value of 1820 owned by BNIS in 2019, based on the calculations results in Table 2. During the observation period the average (mean) ROA is 0.757 with a standard deviation of 0.582. These results show that the default deviation value is lower than the average ROA, which shows that the variability is relatively low.

In the CAR variable, a minimum value of 12,000 is obtained by BMI in 2015 and a maximum value of 29,730 for BRIS in 2018 with an average (mean) of 17.013 and a standard deviation of 4.726. These results appear that the standard deviation value is lower than the average CAR which indicates that the deviation from the variable data is relatively low.

The NPF variable has a minimum value of 2,440 for BSM in 2019 while the maximum value of 7,110 for BMI companies in 2015 with an average (mean) of 4.337 and a standard deviation of 1.333. These results show that the standard deviation value is lower than the average NPF which indicates that the deviation from the variable data is quite low.

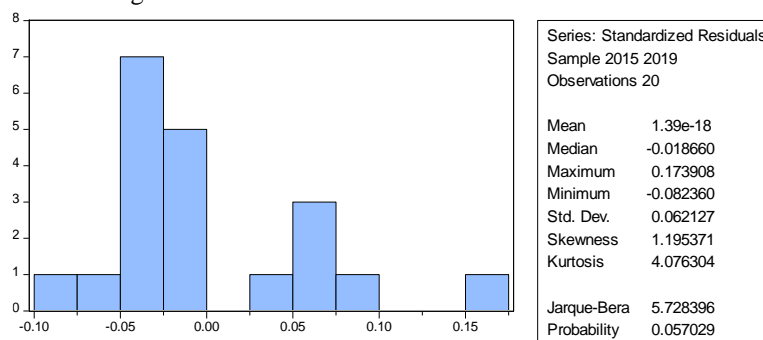
The BOPO variable has a minimum value of 81,260 for BNIS in 2019 and a maximum value of 99,500 for BMI

in 2019 with an average (mean) of 92.564 and a standard deviation of 5,351. These results indicate that the standard deviation value is lower than the average BOPO which indicates a low deviation from the variable data.

**Normality test.** The normality test intends to examine whether in the regression model, the dependent variable and the independent variable are normally distributed or not. A good regression model is a regression model that has a normal distribution or is close to normal, thus it is feasible to do statistical testing.

To determine whether the data is normally distributed or not, it is required to compare the calculated probability value of JB with an alpha level of 5%. If the JB probability value is greater than 0.05, it will appear that the residuals are normally distributed and vice versa. From Table 2 the normality test below reveals that the probability value of JB 0.057029 is greater than 0.05. This means that the data is normally distributed. It is, therefore,  $H_0$  is accepted, which means that the residual data is normally distributed since the significance value is more than 0.05 as shown the result on table.3 below:

**Table 3.** Results of Normal Test with Kolmogorov Smirnov



Source: primary data processed (2020)

**Chow test.** The chow test is a test to compare the *common effect* model with the *fixed effect*. The Chow test in this research employs the *eviews 9.0* program. Meanwhile, the hypothesis built in the Chow Test is as follows:

$H_0$ : *Common Effect Model*

$H_1$ : *Fixed Effect Model*

$H_0$  is rejected if the P-value is smaller than the  $\alpha$  value. Conversely,  $H_0$  is accepted if the P-value is greater than the  $\alpha$  value. The  $\alpha$  value utilized is 5%.

**Table 4.** Results of Chow Test

Redundant Fixed Effects Tests  
Equation: Untitled  
Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	10.761399	(3,13)	0.0008
Cross-section Chi-square	24.960176	3	0.0000

Source: primary data processed (2020)

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The results of the chow test in Table 3 above denote that the *p-value* for *cross section F Chi-Square* = 0.0008 <0.05, this means that H0 is rejected while H1 is accepted, so the appropriate model is the *Fixed Effect* model compared to the *Common Effect*.

**Hausman Test.** This test compares the fixed effect model with the random effect in determining the best model utilizing as a panel data regression model. The Hausman test employs a program similar to the Chow test, so called the EvIEWS 9.0 program. Meanwhile, the hypothesis formed in the Hausman Test is as follows:

- H0: *Random Effect* Model
- H1: *Fixed Effect* Model

H0 is rejected if the P-value is smaller than the  $\alpha$  value. Conversely, H0 is accepted if the P-value is greater than the  $\alpha$  value. The  $\alpha$  value utilized is 5%. The results of the Hausman test represent that the p-value for the random cross section = 0.0000 <0.05, this means that H0 is rejected and H1 is accepted, so the appropriate model is the *Fixed Effect* model compared to the *Random Effect*.

**Panel Data Regression Analysis.** According to the model test above, the model utilized is the *Fixed Effect* model. This model is utilized in order to determine the effect of CAR, NPF and BOPO on Return On Assets (ROA) in Full-Fledged Islamic Banks for the period of 2015-2019. The results of panel data regression can be seen in the Table 5 below.

**Table 5.** Results of *Fixed Effect* (FE) in Panel Data Regression

Dependent Variable: ROA Method: Panel Least Squares Date: 12/15/20 Time: 09:54 Sample: 2015 2019 Periods included: 5 Cross-sections included: 4 Total panel (balanced) observations: 20				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
CAR	-0.018606	0.005672	-3.280606	0.0060
NPF	-0.038212	0.020000	-1.910577	0.0784
BOPO	-0.082333	0.006633	-12.41224	0.0000
C	8.860273	0.591149	14.98821	0.0000

From the Table 5 above, the panel data regression for Return On Assets is as follows:  $Y = 8.860273 - 0.018606CAR - 0.038212NPF - 0.082333BOPO$ .

According to the regression equation, it can be analyzed the effect of each independent variable on ROA, entail:

- a. A constant of 8.860273 shows that the estimated value of ROA is 8.860273 with the assumption that the independent variables of CAR, NPF and BOPO are 0 or constant.
- b. The CAR coefficient is -0.018606, with a negative regression direction which means that every 1 unit increase in the CAR variable decreases the ROA output by -0.018606 units, assuming that the other independent variables of the regression model are constant.
- c. The NPF coefficient is -0.038212, with a negative regression direction which means that every 1 unit

increase in the NPF variable decreases the ROA output by -0.038212 units, assuming that the other independent variables of the regression model are constant.

- d. The BOPO coefficient is -0.082333, with a negative regression direction which means that every 1 unit increase in the BOPO variable decreases the ROA output by -0.082333 units, given that the other independent variables of the regression model are constant.

**T Test (Partial Test).** The t test intends to describe how far the effect of an independent variable individually in explaining the dependent variable. The independent variables in this study are CAR, NPF and BOPO, while the dependent variable is Return On Assets (ROA). The test criteria utilized are as follows:

- If the probability <0.05 so H0 is rejected
- If probability > 0.05 so H0 is accepted

**Table 6.** Result of Partial Test

Variable	t	Sig.	Conclusion
CAR	-3.280606	0.0060	Ha <sub>1</sub> accepted
NPF	-1.910577	0.0784	Ha <sub>2</sub> rejected
BOPO	-12.41224	0.0000	Ha <sub>3</sub> accepted

The findings of the t test resulted in the probability which less than 0.05, which is the CAR variable has a significant effect on ROA in Full-Fledged Islamic Banks for the period 2015-2019, but the t test results on the NPF

variable show that the significance value for the NPF variable is 0.0784 This value is greater from a significance level of 0.05, which denotes that NPF has no effect on ROA in Full-Fledged Islamic Banks for the period 2015-2019. Meanwhile,

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the t test on BOPO shows a value smaller than the significance level of 0.05. Thus, it can be concluded that BOPO has a significant effect on ROA in Full-Fledged Islamic Banks for the period 2015-2019.

**F Test.** The model reliability test or model feasibility test, or more generally known as the F test (some often refer to it as the simultaneous model test), is the initial stage of determining whether or not the regression model is estimated to be feasible. If the calculated prob-F value is lower than the error rate (alpha) of 0.05 (determined), it can be said that the estimated regression model is feasible, whereas if the calculated prob-F value is greater than the error rate of 0.05, it can be said that the estimated regression model is not feasible.

From the calculation results, the F value is 187.6909 and the significant value is 0.000. As the significance value is less than 5 percent or 0.05,  $H_0$  is accepted, so it can be inferred that it is reasonable to use the approximate linear regression model to describe the impact of CAR, NPF and BOPO on ROA. In other words, for the 2015-2019 period, the variables CAR, NPF and BOPO have a significant effect on ROA in Full-Fledged Islamic Banks simultaneously.

### DISCUSSION

**The Effect of CAR variable on ROA.** Based on the research findings, it can be denoted that the CAR variable has a negative and significant effect on the ROA of Full-Fledged Islamic Banks registered during the period 2015-2019, supporting Hellen's research (2019) which notes that CAR has a significant effect and is negatively correlated with ROA, implying that if there is an increase in CAR, a decrease in bank profitability will follow. Similarly, Rahman and Santoso (2019), Almunawwaroh and Marlina (2018) indicate that ROA is adversely affected by CAR. The findings of this report, however, differ from Muhaemin and Wiliasih's (2016) research results, which found that CAR had a positive impact on profitability.

The findings of this study vary from the previously explained hypothesis that the higher the CAR ratio the bank is capable of supporting its operational activities and making a significant contribution to the profitability rate. The disparity in the results of this study can be caused by the capital retained by the bank, if it is not managed effectively and placed on profitable investments, it will not be able to provide benefits for the bank. In addition, banks' capacity to leverage and optimize resources for productive investments remains weak, meaning that Islamic banks operating between 2015 and 2019 have not optimized their existing capital.

**The Effect of NPF variable on ROA.** Based on the research findings, it can be denoted that the Non Performing Financing (NPF) variable has no effect on the Return on Assets (ROA) of registered Full-Fledged Islamic Banks during the 2015-2019 period.

The results of this study support the research of Rahman and Santoso (2019) which proves that NPF has no effect on ROA. Similarly, Sagantha (2020) proves that NPF has no effect on profitability performance.

Riyadi and Yulianto (2014) also show that ROA seems to have no effect on NPF. This study, however, differs from the research conducted by Hellen et al (2019), Mukhibad and Khafid (2018), Muhaemin and Wiliasih (2016), which demonstrates that NPF has a negative and significant effect on ROA.

The difference in the results of this study may be attributed to the improving trend of the NPF value of each bank in the period 2015-2019, which was still under the provisions of the Financial Services Authority (5%), so that it did not have a significant effect on profitability.

### **The Effect of BOPO variable on ROA of Full-Fledged Islamic Banks.**

Based on the research findings, it can be denoted that the Operational Cost to Operations (BOPO) variable has a negative and significant effect on the Return on Assets (ROA) of Full-Fledged Islamic Banks during the 2015-2019 period. It is owing to the fact that the efficiency level of a bank in carrying out its operations has an effect on the level of income generated by the bank. The results of this study support the research of Hellen et al (2019), Karim and Hanafia (2020), Muhaemin and Wiliasih (2016) which prove that BOPO has a negative and significant effect on ROA. The higher the BOPO, the more inefficient the bank is. The greater the BOPO shows that the amount of operating costs to earn income is increasing, so it tends to decrease the bank's profitability, and vice versa, a high-efficiency bank indicates that the bank is more effective in running its business. In the meantime, studies by Parenrengi and Hendratni (2018) indicate that BOPO has a positive impact on ROA.

### **Simultaneous Effect of CAR, NPF and BOPO variables on ROA.**

Based on the research findings, the variables CAR, NPF and BOPO simultaneously have a significant effect on ROA in Full-Fledged Islamic Banks for the period 2015-2019. This is in line with the research results by Hellen et al (2019) that indicates that the financial performance of Full-Fledged Islamic Banks is simultaneously influenced by CAR, NPF and BOPO. Similarly, the research conducted by Karim and Hanafia (2020) shows that the variables CAR, BOPO, NPF have an impact on profitability simultaneously.

### CONCLUSION

**Recommendation.** This research is in accordance with the influence of the determinants of Islamic banking performance on ROA in Full-Fledged Islamic Banks. The factors influencing on this research entail, *Non Performing Financing (NPF)*, *Capital Adequacy Ratio (CAR)*, and *BOPO* towards the *Return on Assets (ROA)*.

Based on the observation and examination results on the Full-Fledged Islamic Banks' annual reports for the period

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of 2015-2019 utilizing 20 samples, the hypothesis testing in this study succeeded in supporting the 3 proposed hypotheses, includes H1, H3 and H4, while it did not support the hypothesis of H2, as follows:

1. CAR has a negative and significant effect on Return On Assets (ROA). Based on the sample data, it appears that an increase in CAR has a negative effect on ROA which has decreased in that period.
2. NPF has no effect on Return On Assets (ROA)
3. BOPO has a negative and significant effect on ROA, while;
4. The variables of CAR, NPF and BOPO have a significant effect on ROA simultaneously.

### REFERENCES

1. Almunawwaroh, M. dan Marliana, R. 2018. Pengaruh CAR, NPF dan FDR Terhadap Profitabilitas Bank Syariah di Indonesia. *Jurnal Ekonomi dan Keuangan Syariah*. Vol. 2 No. 1 January 2018. ISSN : 2540-8402.
2. Ariyanti, I., Dhiana P.P., Pranaditya, A. 2017. Pengaruh CAR, NPF, NIM, BOPO, dan DPK terhadap Profitabilitas dengan FDR sebagai Variabel Intervening (Studi Kasus Perbankan Umum Syariah Tahun 2011-2014). *Jurnal Ekonomi-Akuntansi*. Universitas Pandanaran-Semarang.
3. Fahmi, I. 2010. *Analisis Kinerja Keuangan*. Bandung: Alfabet.
4. Farida, L.L.K. 2018. Analisis CAR, BOPO, NPF, FDR, NOM, dan DPK Terhadap Profitabilitas (ROA) Pada Bank Umum Syariah dan Bank Pembiayaan Rakyat Syariah Di Indonesia (tahun 2013-2017). *Skripsi*. Fakultas Ekonomi dan Bisnis Islam. Institut Agama Islam Negeri Salatiga.
5. Harahap, S.S. 2010. *Analisis Kritis atas Laporan Keuangan*. Jakarta: PT RajaGrafindo Persada.
6. Harun, U. 2016. Pengaruh Ratio-Ratio Keuangan CAR, LDR, NIM, BOPO, NPL terhadap ROA. *Jurnal Riset Bisnis dan Manajemen*. Vol 4 ,No.1, 2016: 67-82.
7. Hasanah, E.M. 2017. *Pengaruh Capital Adequacy Ratio (CAR) Dan Non Performing Financing (NPF) Terhadap Profitabilitas (ROA) Dengan Financing To Deposit Ratio (FDR) Sebagai Variabel Intervening Pada Bank Umum Syariah (Periode 2012-2016)*. *Skripsi*. Salatiga: Fakultas Ekonomi dan Bisnis Islam IAIN Salatiga.
8. Hellen, Fadru, dan Asyik, N.F. 2019. Analysis Of The Influence Of Capital Adequacy Ratio (CAR), Non Performing Financing (NPF), Net Operating Margin (NOM), Operational Cost And Operational Revenue (BOPO), Finance To Deposit Ratio (FDR) To The Financial Performance Of Syariah Banking In Indonesia Year 2011-2017. *Kurs : Jurnal Akuntansi, Kewirausahaan dan Bisnis*. Vol. 4 No. 2, Desember 2019 (181-191).
9. Hery. 2016. *Financial Ratio For Business*. Jakarta: PT Gramedia.
10. Ikit, 2015. *Akuntansi Penghimpun Dana Bank Syariah*. Yogyakarta: Deepublish.
11. Karim, A. 2009. *Analisis Fiqih Keuangan*. Jakarta: PT Raja Grafindo.
12. Karim, A. dan Hanafia, F. 2020. Analisis CAR, BOPO, NPF, FDR, NOM, dan DPK Terhadap Profitabilitas (ROA) Pada Bank Syariah Di Indonesia. *Target: Jurnal Manajemen Dan Bisnis.e-ISSN : 2715-9361*.Vol. 2 No. 1 | Juni.
13. Kasmir. 2014. *Analisis Laporan Keuangan*. Jakarta: Rajawali Pers.
14. Lemiyana dan Litriani, E. 2016. Pengaruh NPF, FDR, BOPO terhadap Return On Asset (ROA) pada Bank Umum Syariah. *I-Economic* . Vol. 2. No.1 Juli.
15. Muchtar, B., dkk, 2016. *Bank dan Lembaga Keuangan Lain*. Jakarta: Kencana.
16. Muhaemin, A. dan Wiliasih, R. 2016. Analisis Faktor-Faktor Yang Memengaruhi Profitabilitas Bank Pembiayaan Rakyat Syariah Di Indonesia. *Jurnal Nisbah*. Vol. 2 No. 1 Tahun 2016. ISSN 2442-4455.
17. Munawir S. 2010. *Analisa Laporan Keuangan*, Edisi Keempat. Yogyakarta: Liberty.
18. Nawawi, I. 2011. *Perbankan Syariah*. Jakarta: Prenadamedia Group.
19. Nurvarida, N. 2017. *Analisis Pengaruh BOPO, CAR, NPF, FDR dan NOM Terhadap Profitabilitas (ROA) pada Bank Umum Syariah Periode 2012-2016*. *Skripsi*. Salatiga: Fakultas Ekonomi dan Bisnis Islam IAIN Salatiga.
20. Pardede, D.N. dan Pangestuti, I.R.D. 2016. Analisis Pengaruh CAR, Dana Pihak Ketiga (DPK), NIM, dan LDR terhadap Profitabilitas Perbankan dengan LDR sebagai Variabel Intervening. *Diponegoro Journal Of Accounting, Volume 5, Nomor 2, Tahun 2016, Halaman 1-13*.
21. Parenrengi, S. dan Hendratni, T.W. 2018. Pengaruh Dana Pihak Ketiga, Kecukupan Modal Dan Penyaluran Kredit Terhadap Profitabilitas Bank. *Jurnal Manajemen Strategi dan Aplikasi Bisnis*. Vol 1, No.1, Desember 2018, pp. 9 – 18. eISSN 2655-237X.
22. Rahman, T., dan Santoso, A. 2019. Determinants of Islamic Banking Performance: An Empirical Study in Indonesia. *Muqtasid* 10 (2), 2019:139-154.
23. Riyadi, S. dan Yulianto, A. 2014. Pengaruh Pembiayaan Bagi Hasil, Pembiayaan Jual Beli, Financing To Deposit Ratio (FDR) Dan Non

“The Determinant Effect of Financial Performance on Return on Assets (ROA) in Full-Fledged Islamic Banks in Indonesia for the 2015-2019 Period”

- Performing Financing (NPF) Terhadap Profitabilitas Bank Umum Syariah Di Indonesia. *Accounting Analysis Journal* 3 (4) (2014). ISSN 2252-6765.
24. Riyadi, S. 2017. *Manajemen Perbankan Indonesia Teori Praktek dan Studi Kasus*, Jakarta: PT Raja Grafindo Persada.
  25. Riyadi, S. 2017. *Financial Performance Efficiency of Indonesia Government Banks in Improving Profitability*, Int. J. Financial Innovation in Banking, Vol. 1, Nos. 3/4, 2017.
  26. Riyadi, S dan Olivia, Yunita. 2018. Pengaruh Dana Pihak Ketiga, Biaya Operasional, Pendapatan Operasional, Capital Adequacy Ratio dan Jakarta Interbank Offered Rate Terhadap Penyaluran Kredit Pada Bank Buku 4 Tahun 2013-2017. *Perbanas Review* Vol.3, No.2 (2018).
  27. Suwarno, Rima Cahya., dkk. Analisis Pengaruh NPF, BOPO, CAR, dan GCG terhadap Kinerja Bank Umum Syariah di Indonesia Periode 2013-2017.
  28. Sarwono, Jonathan. 2007. *Analisis Jalur Untuk Riset Bisnis dengan SPSS*. Yogyakarta: Andi
  29. Tristingtyas, V. dan Mutaher, O. 2013. Analisis Faktor-faktor yang Mempengaruhi Kinerja Keuangan Pada Bank Umum Syariah Di Indonesia. *Jurnal Akuntansi Indonesia*. Vol. 3 No. 2 Juli 2013, Hal. 131 – 145.
  30. Undang-Undang Republik Indonesia Nomor 21 Tahun 2008 Tentang Perbankan Syariah.
  31. Wibisono, M.Y. 2017. Pengaruh CAR, NPF, BOPO, FDR terhadap ROA yang Dimediasi oleh NOM. *Jurnal Bisnis & Manajemen*. Vol. 17, No. 1, 2017 : 41 – 62.
  32. Yuwono, F. A. W. M. (2012). Analisis Pengaruh Dana Pihak Ketiga, Loan to Deposit Ratio, Capital Adequacy Ratio, Non Performing Loan, Return on Assets, Dan Sertifikat Bank Indonesia Terhadap Jumlah Penyaluran Kredit (Studi pada Bank Yang Terdaftar di BEI Periode 2007-2010). *Diponegoro Journal of Accounting*, 1(1), 1–14.