



THE INFLUENCE OF FINANCIAL PERFORMANCE ON PROFITABILITY AT ISLAMIC COMMERCIAL BANKS IN INDONESIA

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ABSTRAK

Rasio ROA berfungsi sebagai metrik untuk menilai profitabilitas bank secara keseluruhan. Tinggi atau rendahnya ROA dipengaruhi oleh seberapa efektif manajemen bank mengelola asetnya. Penelitian ini bertujuan untuk menganalisis dampak beberapa faktor terhadap *Return On Assets* (ROA), termasuk *Capital Adequacy Ratio* (CAR), *Non-Performing Financing* (NPF), *Net Operating Margin* (NOM), *Operating Expenses and Operating Income* (BOPO), dan *Financing to Deposit Ratio* (FDR). Dengan menggunakan pendekatan kuantitatif, penelitian ini berfokus pada sampel 9 Bank Umum Syariah yang dipilih melalui *purposive sampling*. Data yang digunakan terdiri dari informasi sekunder, khususnya laporan triwulanan yang mencakup tahun 2016 hingga 2020. Model regresi data panel diterapkan, yang mengarah pada pemilihan *Fixed Effect Model* (FEM) untuk analisis ini. Penelitian menunjukkan bahwa ROA bank umum syariah dipengaruhi oleh variabel-variabel berikut sekaligus: CAR, NPF, NOM, BOPO, dan FDR. Terdapat korelasi positif antara ROA dan variabel CAR. Pengembalian aset bank umum syariah tidak dipengaruhi oleh faktor NPF dan NOM. Begitu pula untuk bank umum syariah, faktor BOPO dan FDR secara signifikan mengurangi ROA mereka.

Kata Kunci : Kinerja Keuangan, CAMEL, Bank Syariah.

ABSTRACT

ROA ratio serves as a metric to assess the overall profitability of the bank. Whether ROA is high or low is influenced by how effectively bank management manages its assets. This research aims to analyze the impact of several factors on *Return on Assets* (ROA), including *Capital Adequacy Ratio* (CAR), *Non-Performing Financing* (NPF), *Net Operating Margin* (NOM), *Operating Expenses and Operating Income* (BOPO), and *Financing to Deposit Ratio* (FDR). This research uses a quantitative approach, focusing on a sample of 9 Islamic Commercial Banks selected through *purposive sampling*. For this purpose, the data used consisted of secondary information, specifically quarterly reports covering the years 2016 to 2020. A panel data regression model is applied, which leads to the selection of the *Fixed Effect Model* (FEM) for this analysis. Research shows that Islamic commercial banks' ROA is affected by the following variables all at once: CAR, NPF, NOM, BOPO, and FDR. There is a positive correlation between ROA and the CAR variable. Islamic commercial banks' return on assets is unaffected by the NPF and NOM factors. as well as for Islamic commercial banks, the BOPO and FDR factors significantly reduce their ROA.

Keywords : Financial Performance, CAMEL, Islamic Bank.

INTRODUCTION

Indonesia's Islamic banking development has increased every year, although not significantly. In 2012 - 2013 there were 11 BUSs, in 2014 - 2015 it became 12 BUSs, while in 2016 - 2017 it

increased to 13 BUSs, and in 2018 - 2020 it increased to 14 BUSs, but in 2021 it became 12 BUSs due to the merger of 3 (three) large BUSs, namely “BNISyariah”, “BRISyariah”, and “Bank Syariah Mandiri” and became “Bank Syariah Indonesia”.

Table 1. Islamic Banking Development

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
BUS	11	11	12	12	13	13	14	14	14	12
UUS	24	23	22	22	21	21	20	20	20	21
BPRS	158	163	163	163	166	167	167	164	163	164

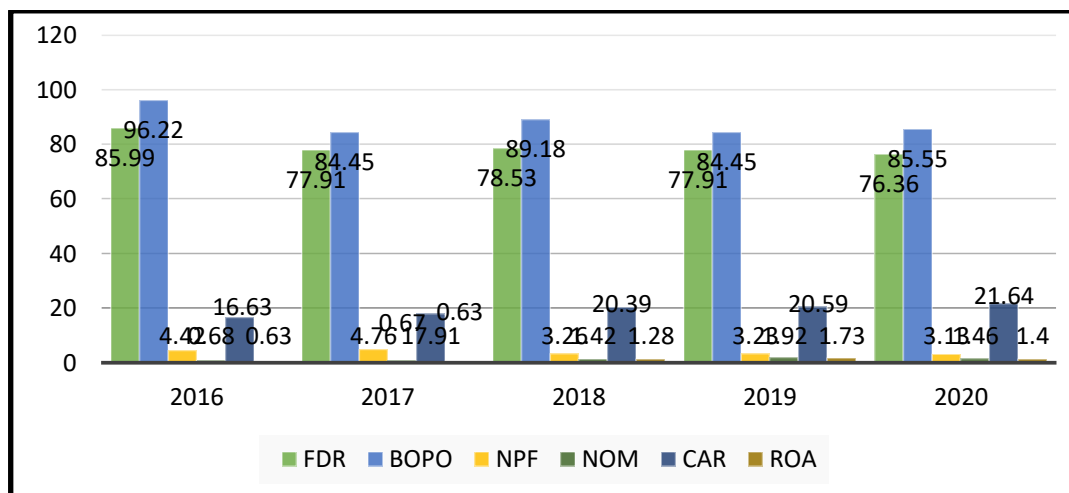
Source : Processed Data (2022)

Given the increasingly complex risks faced by banks, It's important to assess the bank's health. This measurement aims to monitor the Bank's ability to manage the funds it collects. In general, banking performance assessment uses 5 aspects of assessment, one of which is CAMEL (Capital, Asset, Management, Earning, Liquidity). All five are measured by financial ratios (Gonawan & Evriani, 2022).

There are various kinds of Financial Ratios used in financial performance, for example, the Profitability Ratio, ROA or

“Return on Assets”; Liquidity Ratio, FDR or “Financing Deposit Ratio”; Solvency Ratio with CAR or “Capital Adequacy Ratio”; Efficiency Ratio, BOPO or “Operating Costs to Operating Income”; Earning Asset Quality Ratio, NPF or “Non Performing Financing”; and Rentability Ratio, namely NOM or “Net Operating Margin”. These ratios provide simple information related between posts, making it easier and faster to assess the health of the Bank and its performance (Putri, 2015).

Graph 1. Calculation of ROA, CAR, NOM, NPF, BOPO and FDR of Islamic Commercial Banks 2016 – 2020



Source : Processed Data (2022)

According to what we know from experience, financial ratios each year experience changes and deviations from various theories that discuss the relationship between CAR, NPF, NOM, BOPO and FDR to ROA. In 2017, CAR increased by 1.28% but ROA was the same as the previous year,

namely 0.63%. In 2020 when CAR increased by 1.05% to 21.64%, ROA decreased by 0.33% to 1.40%.

The above phenomenon contradicts the theory which states that CAR has a positive influence on ROA, the theory which states that if CAR increases, ROA will also

increase and vice versa. Research conducted by (Aprilia Nur Azizah dan Gusganda Suria Manda, 2019) is in accordance with the above phenomenon, that ROA is unaffected by CAR. While research from (Alaamsah et al, 2021) is in accordance with the theory that CAR has a positive influence on ROA.

In 2017 when NOM decreased by 0.01%, ROA was the same as the previous year at 0.63%. This also runs counter to the idea that NOM influences ROA positively; that is, the idea that as NOM grows, so does ROA, or vice versa. Study from (Hidayat et al, 2021) consistent with the aforementioned phenomenon, the data show that NOM increases ROA. While the research tested by (Hanafia & Karim, 2020) the results are in accordance with the theory that in terms of ROA, NOM is beneficial.

In 2017 when NPF rose by 0.34%, ROA was similar to the previous period at 0.63%. In 2020 when NPF decreased by 0.1%, ROA also decreased by 0.33%. This is contrary to the theory which states that NPF adversely impacts ROA, the theory that if NPF increases, ROA will decrease. Research conducted by (Hanafia & Karim, 2020) the results are in accordance with the above phenomenon, NPF has a positive effect on ROA. While the study tested by (Syachreza & Mais, 2020) the results are in accordance with the theory that NPF adversely impacts ROA

In 2017 when BOPO fell by 11.77%, ROA was similar to the previous period at 0.63%. In 2018 when BOPO increased by 4.73%, ROA also increased by 0.65%. This refutes the assumption that BOPO adversely impacts ROA, the theory that if BOPO increases, ROA will decrease. Research conducted by (Yusriani, 2018) the results are in accordance with the above phenomenon, that BOPO has a positive influence on ROA. While the study tested by (Wibisono & Wahyuni, 2017) the results are in accordance with the theory that BOPO adversely impacts ROA.

In 2017 when FDR fell by 8.08, ROA was the same as the previous year at 0.63%. While in 2019 when FDR fell by 0.62%,

ROA actually increased by 0.45%. This contradicts the hypothesis that FDR exerts a beneficial impact on ROA, the theory that if FDR goes up, ROA will also go up or vice versa. Research conducted by (Rohansyah, 2021) The results align with the aforementioned phenomenon, specifically that FDR adversely impacts ROA. While the research tested by (Wibisono & Wahyuni, 2017) The results align with the idea that FDR positively impacts ROA.

The conclusion is that every actual phenomenon does not always match the existing theory. Comparison of CAR, NOM, NPF, BOPO and FDR which is uncertain from 2016 - 2020 and the existence of this research gap, further research is needed to carry out an analysis of the effect of CAR, NOM, NPF, BOPO and FDR on ROA in "Islamic Commercial Banks". Based on this case, the author determines to further deepen the above problems with his research entitled "The Effect of Financial Performance on Profitability at Islamic Commercial Banks in Indonesia for the Period 2016 - 2020".

LITERATURE REVIEW

Research conducted by (Azizah and Manda, 2019) is in accordance with the above phenomenon, that CAR has no effect on ROA. Meanwhile, research tested by (Alaamsah et al, 2021) is in accordance with the theory that CAR has a positive effect on ROA.

Research conducted by (Hidayat et al, 2021) the results are in accordance with the above phenomenon, namely NOM has a positive negative effect on ROA. Meanwhile, research tested by (Hanafia & Karim, 2020) the results are in accordance with the theory that NOM has a positive effect on ROA.

Research conducted by (Hanafia & Karim, 2020) the results are in accordance with the above phenomenon, NPF has a positive effect on ROA. Meanwhile, research tested by (Syachreza & Mais, 2020) the results are in accordance with the theory that NPF has a negative effect on ROA. Research conducted by (Yusriani, 2018) results are in accordance with the phenomenon above, that

BOPO has a positive effect on ROA. While the research tested by (Wibisono & Wahyuni, 2017) the results are in accordance with the theory that BOPO has a negative effect on ROA. Research conducted by (Rohansyah, 2021) the results are in accordance with the phenomenon above, namely FDR has a negative effect on ROA. While the research tested by (Wibisono & Wahyuni, 2017) the results are in accordance with the theory that FDR has a positive effect on ROA.

RESEARCH METHOD

This study employs quantitative research methods. The research data source

uses secondary data obtained through quarterly financial reports published on each bank's website as well as OJK. The data used starts from the time span 2016 - 2020. The population chosen by the author is 14 BUS registered with the OJK.

The technique used to take samples in the following research is using purposive sampling, which is a method that takes samples based on several considerations (Sugiyono, 2017). According to the criteria listed above, 9 banks can be taken as samples, as listed in the following table:

Table 2. List of Research Samples

No	Bank Umum Syariah di Indonesia
1.	Bank Muamalat Indonesia
2.	Bank Victoria Syariah
3.	BRI Syariah
4.	Bank Panin Dubai Syariah
5.	Bank Syariah Bukopin
6.	BTPN Syariah
7.	Bank Aceh Syariah
8.	BCA Syariah
9.	Bank Aladin Syariah

Source : Processed Data (2022)

This research employs a quantitative data analysis technique utilizing secondary data. The data analysis software employed in this study is Eviews 10. The employed methodologies include descriptive statistics, panel data regression analysis, multiple linear regression, classical assumption testing, and hypothesis testing.

RESULT AND DISCUSSION

Descriptive Statistics Test

Descriptive statistical analysis tools describe data through numerical representations, tables, and graphs, facilitating informed decision-making for researchers (Rijali, 2018) .

Table 3. Descriptive Statistical Test Results ROA, CAR, NPF, NOM, BOPO and FDR

	ROA	CAR	NPF	NOM	BOPO	FDR
Mean	1.954058	0.369111	4.216667	0.041611	94.05650	93.52690
Median	0.590000	0.210000	3.205000	0.245000	94.09500	88.79500
Maximum	17.23000	3.460000	46.55000	35.96000	217.4000	506.6000
Minimum	-11.02000	0.010000	0.000000	-53.06000	40.36000	0.090000
Std. Dev.	4.529015	0.530106	5.940323	8.784504	24.33575	54.01593
Skewness	0.910233	3.963520	4.745624	-1.807090	2.413410	5.039799
Kurtosis	5.331323	19.06104	30.22342	13.78058	11.82745	35.17249
Jarque-Bera	65.61872	2405.961	6233.989	969.6243	759.1657	8525.005
Probability	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Sum	351.7304	66.44000	759.0000	7.490000	16930.17	16834.84
Sum Sq. Dev.	3671.644	50.30126	6316.452	13812.99	106009.0	522272.1
Observations	180	180	180	180	180	180

Source : Processed Data (2022)

The table above indicates that the minimum value of the ROA variable is -11.02. Shows that Bank has not maximized its ability to earn high profits so that it experiences losses. While the maximum value of ROA is 17.23. This shows that the Bank has maximized its ability to earn high profits. The mean is 1.954058 with a standard deviation value of 4.529015.

In the CAR table, the maximum value is 3.46 and the min score is 0.01. For the mean score of 0.369111 with a standard deviation score of 0.530106. We can know that the average value of CAR is below the standard set by BI which is 8%. This shows that the Islamic commercial banks in this study have not been optimal in overcoming losses caused by assets that generate risk.

The NPF table indicates a minimum score of 0.00 and a maximum score of 46.55. The average is 4.216667, accompanied with a standard deviation of 5.940323. The average score is below the 5% standard established by BI. This suggests that the Islamic commercial banks examined in this study have failed to effectively handle their problematic financing.

The greatest value in NOM is 35.96, while the minimum score is -53.06. The mean is 0.041611, while the standard deviation is 8.784504. The BOPO table's score value is 217.4, while the minimum

score is 40.36. The mean is 94.05650, with a standard deviation of 24.33575.

The FDR table shows that the maximum value is 506.6 while the minimum value is 0.09. The mean is 93.52690 with a standard deviation score of 54.01593. This study shows that Islamic commercial banks are quite good at channeling financing from all total funds obtained from third party funds so as to maximize the Bank's profit income.

Model Selection Test

Chow Test

The Chow test is a method used to determine the suitability of either the "Common Effect Model" or the "Fixed Effect Model". The decision about the mentioned hypothesis can be determined by calculating the F statistic and comparing it to the F critical value or by examining the probability value $\alpha = 5\%$ (0.05). If the F statistic from the F table or the p-value is less than 0.05, it can be concluded that "the null hypothesis (H_0) is rejected", indicating that the FEM is the most appropriate method to adopt. If the F count is less than the F table or the probability value exceeds 0.05, it concludes that " H_0 is accepted", indicating that the most suitable model employed in this research is the CEM (Caraka & Yasin, 2017).

Table 4. Chow Test Results

Redundant Fixed Effects Tests

Equation: FEM

Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	354.846786	(8,133)	0.0000
Cross-section Chi-square	456.665103	8	0.0000

*Source : Processed Data (2022)***Hausman Test****Table 5. Hausman Test Results**

Correlated Random Effects - Hausman Test

Equation: REM

Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	58.364137	5	0.0000

Source : Processed Data (2022)

The Hausman test is a methodological approach employed to determine the suitability of either the FEM or the REM. The following test is to observe whether there is a random effect on panel data (Caraka & Yasin, 2017). When prob. > 0.05 means “H0 is accepted” while the model specified is REM, the opposite when prob. cross-section random > 0.05 means “H0 is rejected” and the model specified is FEM.

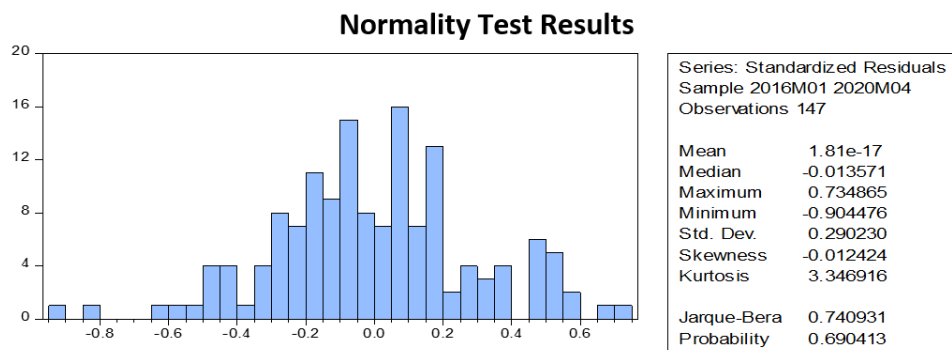
From the Chow and Hausman test results, it was found that the most appropriate test for this study was the FEM test.

Classical Assumption

Examination Prior to validating the regression model, this regression meeting must first satisfy the classical assumption test, as the outcomes of this test will serve as a predictive tool.

Normality Test

The normality test is employed to assess if the residual values are regularly distributed. An effective regression model has regularly distributed residuals (Asfihan, 2021).

Graph 2. Normality Test Result*Source of data processed (2022)*

The table indicates a probability of 0.05 ($p > 0.05$), leading to the conclusion that the residuals in this investigation are “normally distributed”.

Multicollinearity Test

The multicollinearity test assesses the interrelationship among independent variables. A significant correlation among the independent factors undermines the link between the independent variables and the dependent variables (Budi et al, 2024).

Table 6. Multicollinearity Test Results

	CAR	NPF	NOM	BOPO	FDR	ROA
CAR	1.000000	-0.252503	-0.107985	0.427817	0.037171	0.322916
NPF	-0.252503	1.000000	-0.315481	0.277015	0.111641	-0.422391
NOM	-0.107985	-0.315481	1.000000	-0.753495	-0.393500	0.675093
BOPO	0.427817	0.277015	-0.753495	1.000000	0.307877	-0.572137
FDR	0.037171	0.111641	-0.393500	0.307877	1.000000	-0.257354
ROA	0.322916	-0.422391	0.675093	-0.572137	-0.257354	1.000000

Source : Processed Data (2022)

The table above indicates that the correlation coefficient between independent variables is below 0.9 ($p < 0.09$), signifying the “absence of multicollinearity” in this study's data.

Heteroscedasticity Test

This test is utilised in order to recognize whether there is an unsimilar comparison between residues to other residues (Asfihan, 2021).

Table 7. Heteroscedasticity Test

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	1.417019	Prob. F(5,141)	0.2217
Obs*R-squared	7.033180	Prob. Chi-Square(5)	0.2182
Scaled explained SS	45.80770	Prob. Chi-Square(5)	0.0000

Source : Processed Data (2022)

The table indicates a probability value of 0.21 ($p > 0.05$). The probability value exceeds 0.05, indicating the “absence of heteroscedasticity.”

Autocorrelation Test

The autocorrelation test assesses the correlation between a given period t and the preceding period ($t - 1$). In regression analysis, it is assessed if the independent variable influences the dependent variable, as a result, it is not recommended that there

is a relationship between observations of monitoring data in advance (Asfihan, 2021).

The table above stated the asymp. Sig. (2-tailed) is 0.90 which is > 0.05 , indicates that “there is no autocorrelation problem”.

Multiple Linear Regression Analysis

The results of the estimate test for the selected model, based on the data analyzed by Panel Data Regression, indicate the FEM, while the interpretation is:

Table 8. Run Test Result

	Resid
Test Value ^a	0.73 ^b
Cases < Test Value	146.0000
Cases > = Test Value	1.000000
Total Cases	147.0000
Number of Runs	3.000000
Z	0.117000
Asymp. Sig. (2-tailed)	0,900000

Source : Processed Data (2022)

Table 9. FEM Test Result

Variabel	Coefficient	Std. Error	t-Statistic	Prob.
ROA	10.04806	0.326523	30.77291	0.0000
CAR	4.940257	0.206800	23.88904	0.0000
NPF	-0.023542	0.015431	-1.525654	0.1295
NOM	-0.007199	0.008047	-0.894574	0.3726
BOPO	-0.102254	0.003139	-32.57339	0.0000
FDR	-0.006111	0.001042	-5.865599	0.0000
Effects Specification				
Cross-section fixed (dummy variabels)				
R-squared	0.988644	Mean dependent var	1.131907	
Adjusted R-squared	0.987534	S.D. dependent var	2.723565	
S.E. of regression	0.304084	Akaike info criterion	0.547364	
Sum squared resid	12.29808	Schwarz criterion	0.832167	
Log likelihood	-26.23126	Hannan-Quinn criter.	0.663083	
F-statistic	890.7162	Durbin-Watson stat	0.755499	
Prob(F-statistic)	0.000000			

Source : Processed Data (2022)

The equation for the multiple linear regression model is derived from the table above with the coefficient of the CAR (X1) is 4.940257, and the NPF (X2) is -0.023542, the NOM (X3) is -0.007199, the BOPO (X4) is -0.102254 and the FDR (X5) is -0.006111. Thus, $ROA = 10.04806 + (4.940257CAR) + (-0.023542NPF) + (-0.007199NOM) + (-0.102254 BOPO) + (-0.006111FDR) + e$

Effect of CAR on ROA

The table indicates that the t-statistic for CAR is 23.88904, with a probability value of 0.0000. Consequently, t-count (23.88904) exceeds t-table (1.97361), and the probability value (0.0000) is less than 0.05. Therefore, “H1 is accepted”, and “H0 is rejected”, signifying that the CAR variable

positively influences the ROA of Islamic commercial banks on a partial basis.

These results align with prior theory; if the CAR variable increases, the Bank's profitability will likewise rise, as the total capital held by the Bank escalates, leading to an increase in income. If a bank's capital adequacy ratio declines, its capacity to make profits will diminish, thus lowering profitability. The findings of this investigation align with the studies conducted by (Alaamsah et al, 2021) which results state that CAR variable affects ROA.

Effect of NPF on ROA

Then the t-statistic score of NPF is -1.525654 and the probability score is 0.1295 so that the t-count (1.525654) < t-table

(1.97361) and the prob. score (0.1295) > (0.05), then “H₀ is accepted” and “H₁ is rejected” which indicates partially the NPF has no effect on ROA.

The data indicates that the non-performing financing condition at Islamic Commercial Banks from 2016 to 2020 is within a healthy range, since the average NPF value for this time is 4.26%, which is below the 5% threshold specified in SEBI no.9/24/DPBs of 2007. Islamic Commercial Banks must effectively manage problematic finance to prevent severe disruptions to their operations. The findings of the aforementioned investigation align with the study conducted by (Syachreza & Mais, 2020) shows NPF has a negative effect on ROA.

Effect of NOM on ROA

Then for the t-statistic score of NOM it is -0.894574 and the probability score is 0.3926 so that the t-count (0.894574) > t-table (1.97361) and the prob. score (0.3926) > (0.05), then “H₀ is accepted” and “H₁ is rejected”, which means partially the NOM has no effect on ROA.

This matter contradicts the prior assumption that NOM positively influences ROA. The absence of impact of NOM on ROA suggests that Islamic Commercial Banks have exercised caution in extending finance or credit, thereby preserving the quality of their productive assets, so that changes in interest rates and asset quality can actually generate profits. Because good credit quality can increase net interest income so that it can increase profit before tax. The results of the following research are in line with the research conducted (Hidayat et al., 2021) that NOM has no effect on ROA.

Effect of BOPO on ROA

Then the t-statistic value of BOPO is -32.57339 and the probability value is 0.0000 so that the t-count (32.57339) > t-table (1.97361) and the prob. value (0.0000) < (0.05), then H (0) is rejected and H 1 is

accepted, which means that partially the BOPO variable has a negative effect on ROA.

The following matter is in line with the previous theory, namely if BOPO increases, profitability actually decreases, because if the operational expenses of the bank increase, it can cause a decrease in profitability. Conversely, if BOPO decreases, the Bank can better cope with operational expenses and maximize its ability to generate profits. The results of the following research are in line with the research conducted (Wibisono & Wahyuni, 2017) namely BOPO has a negative influence on the ROA of Islamic commercial banks.

Effect of FDR on ROA

Finally, the t-statistic value of FDR is -5.865599 and the probability value is 0.0000 so that the t-count (5.865599) > t-table (1.97361) and the prob. value (0.0000) < (0.05), then H (0) is rejected and H 1 is accepted, which means that partially the FDR variable has a negative effect on ROA.

The following is not in accordance with the previous theory, that FDR has a positive effect on ROA. Related to this matter, Islamic banking pours financing to customers by looking at the 5C principle which consists of Character (personality), Capacity (repayment skills), Collateral (guarantee), Capital (capitalization), and Condition (atmosphere and situation). So that the increase in the number of loans given is not always offset by an increase in profits, but on the contrary, when loans are given, profits decrease because the number of loans is converted more in the form of bank assets. The results of this research are in line with the research attempted (Rohansyah, 2021) that FDR has a negative influence on ROA.

Research findings indicate that the combined variables of “CAR, NPF, NOM, BOPO, and FDR” have an effect on the ROA of Islamic commercial banks. The CAR variable, when analyzed in isolation, exhibits a substantial positive impact on ROA. The NPF and NOM variables do not significantly

affect the ROA of these institutions. Moreover, both the BOPO and FDR variables demonstrate a substantial negative impact on the ROA of Islamic commercial banks.

CONCLUSION

From the research carried out, the results obtained are that the CAR (*Capital Adequacy Ratio*) variable has an effect on the ROA variable of Sharia Commercial Banks, this is because if the bank's capital increases, the bank will be increasingly able to finance its operational activities. The NPF (*Net Performing Margin*) variable has no effect on the ROA variable of Sharia Commercial Banks, this is because problematic financing at Sharia Commercial Banks is still relatively healthy and the Bank can still handle problematic financing. NOM (*Net Operating Margin*) variable has no effect on the ROA variable of Sharia Commercial Banks, this is because the Bank continues to maintain the quality of its assets in order to generate profits. The BOPO variable (Operating Expenses and Operating Income) influences ROA, this is because operational expenses at Sharia Commercial Banks can reduce the profitability obtained. The FDR (*Financing to Deposit Ratio*) variable has a negative effect on the ROA variable of Sharia Commercial Banks, this is because the financing provided is in the form of bank assets.

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