

P-ISSN: 2527-4163 E-ISSN: 2654-332X Vol. 9 No. 1 April 2024

# The Profitability of Indonesian Sharia Commercial Banks : Macro and Micro Economic's Effect

# Tika Dewi Tiarawati<sup>1</sup>, Rizky Nur Ayuningtyas Putri<sup>2</sup> Raden Mas Said State Islamic University, Surakarta<sup>12</sup>

Email: tikadewitiarawati@gmail.com<sup>1</sup>, rizky.nayuputri@staff.uinsaid.ac.id<sup>2</sup>

Abstract:

Financial performance is one measure of the success of Islamic banks in managing their operations well in order to obtain maximum profitability. This research aims to determine the influence of macroeconomic factors, namely Gross Domestic Product (GDP) and inflation. The influence of microeconomic factors, namely Non Performing Financing (NPF), Capital Adequecy Ratio (CAR), Financing to Deposit Ratio (FDR) on the profitability of Sharia Commercial Banks in 2018-2022. The sampling technique was purposive sampling and nine samples of Sharia Commercial Banks were obtained which were used in this research. Secondary data in this research was obtained from each bank's financial report data, Gross Domestic Product (GDP) data was sourced from the Ministry of Trade website, and inflation data was sourced from the Bank Indonesia website. The data analysis technique is a multiple linear regression analysis technique with data processing using the Eviews 10 application. Based on the partial test, the results show that Gross Domestic Product (GDP) has no effect on ROA, inflation has no effect on ROA, Capital Adequecy Ratio (CAR) has no effect on ROA, and Financing to Deposit Ratio (FDR) has no effect on ROA. Meanwhile, partially Non Performing Financing (NPF) has an effect on ROA. Simultaneously the variables Gross Domestic Product (GDP), inflation, Capital Adequecy Ratio (CAR), Financing to Deposit Ratio (FDR), and Non Performing Financing (NPF) influence ROA.

**Keywords:** 

Gross Domestic Product; Inflation; Non Performing Financing; Capital Adequacy Ratio; Financing to Deposit Ratio

Abstract:

Kinerja keuangan adalah salah satu tolak ukur keberhasilan bank syariah dalam mengatur operasionalnya dengan baik agar mendapatkan profitabilitas yang maksimal. Penelitian ini bermaksud untuk mengetahui pengaruh dari faktor makro ekonomi yaitu Gross Domestic Product (GDP) dan inflasi. Pengaruh faktor mikro ekonomi Non Performing Financing (NPF), Capital Adequecy Ratio (CAR), Financing to Deposit Ratio (FDR) terhadap profitabilitas Bank Umum Syariah tahun 2018-2022. Teknik pengambilan sampel berupa purposive sampling dan diperoleh sembilan sampel Bank Umum Syariah yang digunakan dalam penelitian ini. Data sekunder pada penelitian ini diperoleh dari data laporan keuangan masing-masing bank, data Gross Domestic Product (GDP) bersumber dari website Kemendag, dan data inflasi bersumber dari website Bank Indonesia. Teknik analisis data yaitu dengan teknik analisis regresi linear berganda dengan olah data menggunakan aplikasi Eviews 10. Berdasarkan uji parsial diperoleh hasil Gross Domestic Product (GDP) tidak berpengaruh terhadap ROA, inflasi tidak berpengaruh terhadap ROA, Capital Adequecy Ratio (CAR) tidak berpengaruh terhadap ROA, dan Financing to Deposit Ratio (FDR) tidak berpengaruh terhadap ROA. Sedangkan secara parsial Non Performing Financing (NPF) berpengaruh terhadap ROA. Secara simultan variabel

Gross Domestic Product (GDP), inflasi, Capital Adequecy Ratio (CAR), Financing to Deposit Ratio (FDR), dan Non Performing Financing (NPF) berpengaruh terhadap ROA.

Kata Kunci: GDP; Inflasi; NPF; CAR; FDR

Copyright (c) 2022 Tika Dewi Tiarawati, Rizky Nur Ayuningtyas Putri

## A. Introduction

Sharia banking is one of them institution finance that provides great influence to development economy<sup>1</sup>. Banks are institution intermediary between parties who have excess funds and parties who lack funds. So it can also be interpreted that the bank's task is to collect funds from the community and then distributed to community<sup>2</sup>. Sharia banks distribute funds to the community through financing<sup>3</sup>. In its operations, banks are divided into two types, namely conventional banks and sharia banks.

Sharia banking and sharia finance are sectors that contribute greatly to the country's development economy, so Islamic banking begins developed throughout Indonesia <sup>4</sup>. For support the development of sharia banking is needed appropriate handling and appropriate management<sup>5</sup>. Islamic banking is present to be solution to the problem of the relationship between interest and usury<sup>6</sup>. Sharia banking can develop supported by the awareness of the Indonesian Muslim community regarding economic activities in accordance with Islamic principles<sup>7</sup>. Apart from supporting the economy, sharia banking can also be used as an alternative to stop injustice that occurs to usury <sup>8</sup>. Sharia banks operate according to sharia, namely by prohibiting interest that the margin given is in the form of profit sharing<sup>9</sup>.

<sup>1</sup> Farid Ardyansyah and Dzakiyyatul Aqliyyah, "The Effect of GDP on Profitability Level of Return on Equity in Mandiri Sharia Banks in Indonesia," *Akuntabilitas: Jrnal Ilmi-Ilmu Ekonomi* 14, no. 02 (2021): 60–74, https://doi.org/10.35457/xxx©2019Akuntabilitas:JurnalIlmu-IlmuEkonomi.Semuahakciptadilindungiundang-un

undangTersediaonlinedihttps://ejournal.unisbablitar.ac.id/index.php/akuntabilitashttps://doi.org/10.35457/xxx.

<sup>&</sup>lt;sup>2</sup> Sumarmi Sumarmi, Imam Sopingi, and Tri Sudarwanto, "Pengaruh CAR, FDR, NPF, BOPO Dan BI Rate Terhadap Profitabilitas (Studi Pada PT.Bank Syariah Bukopin)," *JIES: Journal of Islamic Economics Studies* 1, no. 3 (2020): 126–133.

<sup>&</sup>lt;sup>3</sup> Ana Zahrotun Nihayah and Sri Walyoto, "Identification of Non Performing Financing Alteration Measured by Microeconomic Variable Sharia Banking," *Journal of Finance and Islamic Banking* 1, no. 1 (2018): 23–38.

<sup>&</sup>lt;sup>4</sup> Ardyansyah and Aqliyyah, "The Effect of GDP on Profitability Level of Return on Equity in Mandiri Sharia Banks in Indonesia."

<sup>&</sup>lt;sup>5</sup> Nur Rifai and Taufiq Wijaya, "Persepsi Masyarakat Non Muslim Terhadap Minat Menjadi Nasabah Bank Syariah," *Journal of Finance and Islamic Banking* 2, no. 1 (2019): 93–112.

<sup>&</sup>lt;sup>6</sup> Zulkifli Rusby, *Manajemen Perbankan Syariah* (Pekan Baru: Pusat Kajian Pendidikan Islam UIR, 2017).

<sup>&</sup>lt;sup>7</sup> DedyDwi Arseto, Yenni Arfah, and Saparuddin Siregar, "The Effect of Capital Adequacy Rasio (CAR) and Liquidity on Profitability of Islamic Comercial Banks in Indonesia for The 2015-2019 Period," *Jurnal Ilmiah Ekonomi Islam (JIEI)* 08, no. 01 (2022).

<sup>&</sup>lt;sup>8</sup> Muhammad Tho'in, "Effect of Financing to Deposit Ratio and Operational Efficiency on Profitability (ROA) with NPF as Intervening in Islamic Banks," *Jurnal Ilmiah Ekonomi Islam (JIEI)* 08, no. 02 (2022).

<sup>&</sup>lt;sup>9</sup> Wahyudin Priyono and Imanda Firmantyas Putri Pertiwi, "Pengaruh Makro Ekonomi Terhadap Profitabiltas Bank Umum Syariah Di Indonesia Tahun 2014-2018," *Journal of Finance and Islamic Banking* 2, no. 1 (2019): 72–92.

Bank performance measure can be seen based on level health of a bank, one of which can be seen from the bank's financial performance 10. Bank financial performance is the condition of a bank over a certain period of time related to collecting and distributing funds<sup>11</sup>. Financial performance is a method used to see the bank's ability to obtain maximum profits and to determine the bank's ability to manage its resources<sup>12</sup>. Bank financial reports are important in managing sharia banking performance<sup>13</sup>. The appropriate benchmark for assessing the level of performance of a bank is profitability. According to Kasmir (2011) profitability ratios are ratios used to see a bank's ability to achieve profitability<sup>14</sup>. In this research, to measure the level of profitability the author uses ROA as the dependent variable.

Many factors can influence profitability of Islamic banks, such as factor macro and micro economy. Macroeconomic factors can be seen, for example, based on Gross Domestic Product (GDP) and inflation calculations.

Tahun	GDP	INF
2018	5.17	3.13
2019	5.02	2.72
2020	-2.07	1.68
2021	3.70	1.87
2022	5.31	5.51

Table 1. GDP Growth and Inflation

Source: Ministry of Trade website

Gross Domestic Product (GDP) is a calculation of all goods and services produced by a country in a certain period of time. GDP is also said to be the total value added from the production of goods and services from a country at a certain time, usually within one year <sup>15</sup>. GDP movements per year 2018-2022 experienced fluctuating movements. According to Mankiw (2013) GDP is used to calculate income and expenditure in the economy in the form of goods and services, so that woth GDP we can see the economic growth of a country<sup>16</sup>. The higher the GDP value, it can be concluded that the economic condition of a country is getting better. If GDP grows, the economic condition of society will also experience good growth. In research conducted by Zahra

Muhammad Noval and Lisda Aisyah, "Analisis Pengaruh Dana Syirkah Temporer Dan Efisiensi Operasi Terhadap Profitabilitas Bank Syariah," *Jurnal Ilmiah Ekonomi Islam* 7, no. 1 (2021): 113–122.

<sup>&</sup>lt;sup>11</sup> Yulvista Galuh Kirana, Diyah Santi Hariyani, and Putri Oktovita Sari, "Pengaruh Makro Ekonomi Dan Mikro Ekonomi Terhadap Profitabilitas Pada BPR Syariah Di Indonesia," Business Management Analysis Journal (BMAJ) 4, no. 2 (2021): 174-186.

<sup>&</sup>lt;sup>12</sup> Sri Windarti Mokoagow and Misbach Fuady, "Faktor-Faktor Yang Mempengaruhi Profitabilitas Pada Bank Umum Syariah," Journal of Accounting and Digital Finance STIEBANK Yogyakarta 6, no. 1

<sup>&</sup>lt;sup>13</sup> R. A.E. Virgana, Mohamad Anton Athoillah, and Elis Ratna Wulan, "Information Analysis, Data Correlation: CAR, FDR, NPF, OER Against ROA of Eleven (11) Islamic Banks in Indonesia for 2013-2018," International Journal of Innovation, Creativity and Change 6, no. 7 (2019): 232–256.

Arseto, Arfah, and Siregar, "The Effect of Capital Adequacy Rasio (CAR) and Liquidity on Profitability of Islamic Comercial Banks in Indonesia for The 2015-2019 Period."

<sup>&</sup>lt;sup>15</sup> Rizky Nur Ayuningtyas Putri, TEORI EKONOMI MAKRO (Yogyakarta: Gerbang Media Aksara,

<sup>2022).

16</sup> Zahra Latifah, Ade Ali Nurdin, and Hazma Hazma, "Pengaruh Faktor Internal Dan Faktor Variah." Indonesian Journal of Eksternal Terhadap Profitabilitas Dengan Mediasi NPF Bank Umum Syariah," Indonesian Journal of Economics and Management 2, no. 1 (2021): 174–187.

Latifah, (2021) found the results that GDP had no effect on ROA. The results of this research are not in line with research conducted by Salman Nasution, et al (2022) which states that GDP has an effect on ROA.

Inflation is a continuous increase in the prices of goods and services over a certain period of time<sup>17</sup>. Inflation is also defined as a decrease in the value of the currency so that the price of goods increases 18. According to Keynes, inflation occurs because people's lifestyle levels do not match their economic capabilities, so that people's demand for a product will increase 19. In condition of inflation, the price of goods increases, production of goods increases, and product prices will increases. As a result, public demand for a product will decrease. Inflation has an influence on bank profitability, the impact of inflation is that interest rates will decrease, resulting in a decrease in people's interest in saving at banks. The presence of inflation has an effect on increasing operational costs which causes bank profitability to decrease 20. The inflation value during the Covid-19 pandemic, namely in 2020 it was at 1.68 %, different from 2019 which was at 2.72 %. The results of research conducted by Salman Nasution., et al (2022) stated that inflation influential to ROA.

Apart from macroeconomic factors, there are also microeconomic factors that influence profitability. The microeconomic factors in this research are NPF, CAR, and FDR. Non Performing Financing (NPF) is the ratio between problematic financing and total financing disbursed by sharia banks. The NPF rasio shows how the bank manages problematic financing. BI determines that the maximum NPF is 5% of the total financing provided by sharia banks<sup>21</sup>. NPF has an influence on bank profitability. The higher the NPF, the higher the bank's problematic financing. This can affect bank profitability, because if problematic financing is higher, the profit obtained by the bank will be smaller, and vice versa.

Capital Adequecy Ratio (CAR) is a ratio that shows the capital adequacy of Islamic banks. The CAR ratio describes the bank's ability to cover losses caused by a decrease in assets and looks at the bank's ability to provide funds for its operations. BI determines the CAR for banks at 8% of ATMR<sup>22</sup>. The CAR ratio describes the bank's ability to cover losses caused by a a decrease in assets and looks at the bank's ability to provide funds for its operations. A good CAR condition will influence the condition of the bank's financial performance. The CAR ratio has an influence on bank profitability. The higher the capital, the higher the bank's profitability because the banks capital

<sup>&</sup>lt;sup>17</sup> Putri. TEORI EKONOMI MAKRO.

<sup>&</sup>lt;sup>18</sup> Falentina Dwi Ariani, "Analisis Tingkat Profitabilitas Perbankan (Studi Kasus Pada PT Bank Pembangunan Daerah Jawa Timur Tbk Periode 2007-2014)," Jurnal Ilmiah Mahasiswa FEB 3, no. 2 (2015).

Putri, TEORI EKONOMI MAKRO.

Pini Hariyanti.

<sup>&</sup>lt;sup>20</sup> Soeharjoto and Dini Hariyanti, "Pengaruh Makro Ekonomi Dan Fundamental Perusahaan Terhadap Kinerja Perbankan Syariah Di Indonesia," Jurnal Akuntansi, Keuangan, dan Manajemen (Jakman) 1, no. 1 (2019): 1-8.

<sup>&</sup>lt;sup>21</sup> Oktaviani Alvita Kusumawati, Muhammad Tho'in, and Iin Emy Prastiwi, "Faktor Internal Yang Mempengaruhi Likuiditas Bank Syariah: Analisis Rasio Capital Adequacy Ratio (CAR), Dana Pihak Ketiga (DPK), Non Performing Financing (NPF)," Jurnal Ilmiah Ekonomi Islam 7, no. 2 (2021): 1107-

<sup>1116.
&</sup>lt;sup>22</sup> Sugeng Riadi, "The Effect of Third Parties Fund, Non Performing Loan, Capital Adequacy Ratio,

Non-Performing Loan, Capital Adequacy Ratio,

Non-Performing Expenses Operating Income Loan to Deposit Ratio, Return On Assets, Net Interest Margin and Operating Expenses Operating Income on Lending (Study in Regional Development Banks in Indonesia)," Proceedings of the International Conference on Industrial Engineering and Operations Management (2018): 1015–1026.

investment will also be higher. The results of research conducted by Ike Dwi Astuti and Nur Kabib (2021) in their research show that CAR has an effect on ROA, but research by Yuwita Ariessa Pravasanti (2018) shows that CAR has no effect on ROA.

Financing to Deposit Ratio (FDR) is a ratio used to see a bank's ability to repay short-term debt, give back to depositors, and provide credit at the right time to the public. The higher the FDR ratio, the more illiquid the bank is<sup>23</sup>. The FDR ratio has an influence on bank profitability. The more DPK funds the bank channels for financing, the greater the profitability the bank will obtain because the existing funds managed and distributed to the community will also be greater. The higher the FDR, the more illiquid the bank is because of the funds provided for financing. Ike Dwi Astuti and Nur Kabib (2021) in their research showed the results that FDR had no effect on ROA, but Yuwita Ariessa Pravasanti's research (2018) showed results that FDR had an effect on ROA.

Based on the explanation of the theoretical study above, the hypothesis in this research is:

H1: GDP has a significant effect on the profitability of Sharia Commercial Banks.

H2: Inflation has a significant effect on the profitability of Sharia Commercial Banks.

H3: NPF has a significant effect on the profitability of Sharia Commercial Banks.

H4: CAR has a significant effect on the profitability of Sharia Commercial Banks.

H5: FDR has a significant effect on the profitability of Sharia Commercial Banks.

### B. Research methods

The type of research in this research is quantitative research. Quantitative research is a research method used to analyze populations or samples based on interpreted data, data analysis is quantitative with the aim of testing existing hypotheses<sup>24</sup>.

Population in study this is all Sharia Commercial Banks registered with the OJK in 2018-2022. Deep sample study this determined with method *purposive sampling* that is method taking sample based on criteria that have been determined by the author <sup>25</sup>. The sample criteria for this research are Sharia Commercial Banks that have not carried out mergers since 2018-2022, Sharia Commercial Banks that have published annual financial reports since 2018-2022, and Sharia Commercial Banks that have complete financial ratio data required in the research. Based on the sample criteria above, nine Sharia Commercial Banks were obtained as samples in this research..

The data in this research is secondary data, namely annual financial report data from Sharia Commercial Banks for the 2018-2022 period. The data in this research comes from the official website of each bank, GDP data is obtained from the official website of the Ministry of Trade, and inflation data is obtained from the official website of Bank Indonesia.

The dependent variable (Y) is the variable that is influenced by the independent variable (X). The dependent variable in this research is Profitability which is proxied by ROA. The independent variable (X) is the variable that influences the dependent variable (Y). The independent variables in this research are macroeconomic factors represented by Gross Domestic Product (GDP) and inflation. Meanwhile,

**Jurnal Baabu Al-ilmi** Volume 9 No. 1 April Tahun 2024 | 25

<sup>&</sup>lt;sup>23</sup> Yuwita Ariessa Pravasanti, "Pengaruh NPF Dan FDR Terhadap CAR Dan Dampaknya Terhadap ROA Pada Perbankan Syariah Di Indonesia," *Jurnal Ilmiah Ekonomi Islam* 4, no. 03 (2018): 148–159.

<sup>&</sup>lt;sup>24</sup> Fuad Hasyim, *Statistika Terapan Untuk Bisnis Dan Keuangan* (Yogyakarta: Lintang Pustaka Utama, 2021).

<sup>&</sup>lt;sup>25</sup> Ibid.

microeconomic factors are represented by Non Performing Financing (NPF), Capital Adequecy Ratio (CAR), and Financing to Deposit Ratio (FDR).

The data analysis technique used is multiple linear regression analysis with testing equipment in the form of Eviews 10 software. The tests used in multiple linear regression analysis are the classical assumption test in the form of the multicollinearity test and the heteroscedasticity test. Meanwhile, to test the hypothesis using the t test, f test, and coefficient of determination test. The form of multiple linear regression in this research is:

$$Y = \alpha + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + \beta_5 X_{5it} + \varepsilon$$

Information:

Y = Return on Assets (ROA)

 $X_1 = \text{Gross Domestic Product (GDP)}$ 

 $X_2 = Inflation$ 

 $X_3$  = Non-Performing Financing (NPF)

 $X_4$ = Capital Adequacy Ratio (CAR)

 $X_5$  = Financing to Deposit Ratio (FDR)

 $\alpha = constant$ 

 $\beta$ 1,  $\beta$ 2,  $\beta$ 3,  $\beta$ 4,  $\beta$ 5 = coefficients multiple linear regression independent variable

#### C. Results and Discussion

There are three models in the panel data regression equation, namely the Fixed Effect Model (FEM), the Common Effect Model (CEM), and the Random Effect Model (REM). To find out which model is most appropriate to use, namely the Chow test, Hausman test, and Lagrange Multiplier test. Based on the tests carried out, in this research the most appropriate model to use is the FEM model.

## 1. Analysis Statistics Descriptive

Descriptive statistics are tests used to see a picture of the object under study and to make general conclusions <sup>26</sup>. The results of variable descriptive statistical tests are :

**Table 2. Statistics Descriptive** 

	ROA	GDP	INF	NPF	CAR	FDR
Mean	2.131556	3.426000	2.784000	1.555111	30.49311	83.41133
Median	1.200000	5.020000	3.030000	0.890000	24.30000	82.78000
Maximum	13.58000	5.310000	4.210000	4.950000	149.6800	196.7300
Minimum	-6.720000	-2.070000	1.560000	0.010000	12.35000	26.36000
Std. Dev.	3.652605	2.839319	0.960652	1.588959	21.17220	24.66482
Skewness	1.582844	-1.355107	0.118503	0.686806	4.127193	1.682824
Kurtosis	6.302373	3.027963	1.712162	2.008028	23.53755	11.65586
Jarque-Bera	39.23858	13.77382	3.215060	5.382785	918.6108	161.7216
Probability	0.000000	0.001021	0.200382	0.067786	0.000000	0.000000
Sum	95.92000	154.1700	125.2800	69.98000	1372.190	3753.510
Sum Sq. Dev.	587.0270	354.7163	40.60548	111.0907	19723.52	26767.54
_						
Observations	45	45	45	45	45	45

Source: Processing Results Eviews 10

<sup>&</sup>lt;sup>26</sup> Imam Ghozali, Aplikasi Analisis Multivariate Dengan Program SPSS, Dealapan. (Semarang: Badan Penerbit Universitas Diponegoro, 2016).

Based on table 2, the number of samples in this study was 45 data samples. Sample data from nine banks over a five year period. Based on the table above, it can be seen that the mean of profitability, namely the ROA variable, is 2.131556 or 2.1%, based on Bank Indonesia regulations, the BUS is in very healthy condition. The table above shows the mean GDP value of 3.426000 or 3.42% and the mean inflation of 2.784000 or 2.78%. In the table above it can also be seen that the mean value of the NPF variable is 1.555111 or 1.55%, which means it is in a very healthy condition. The CAR variable has a mean value of 30.49311 or 30.5%, which means it is in a very healthy condition. In the FDR variable, the mean value is 83.41133 or 83.4%, which means it is in a healthy condition.

# 2. Test Assumptions Classic

## a. Multicollinearity Test

Multicollinearity test is a test to determine the relationship between independent variables. A good regression model is when there is no relationship between the independent variables<sup>27</sup>. A variable is said to pass multicollinearity if the correlation coefficient value is smaller than 0.08.

**Table 3. Multicollinearity Test Results** 

	GDP	INF	NPF	CAR	FDR
				0.0380788312492773	
GDP	1	0.616230224029737	-0.07474222998871279	4	-0.2228417893109002
INF	0.616230224029737	1	-0.05408946129010616	0.1474131036422184	-0.1613957880124839
	-	-			
	0.0747422299887127	0.054089461290106			
NPF	9	16	1	-0.2868328739390356	0.3403331059473058
	0.0380788312492773	0.147413103642218			
CAR	4	4	-0.2868328739390356	1	0.01960613112480964
		-			
		0.161395788012483		0.0196061311248096	
FDR	-0.2228417893109002	9	0.3403331059473058	4	1

Source: Processing Results Eviews 10

Based on the results of the molticollinearity test above, the matrix values of the variables GDP, inflation, NPF, CAR, and FDR < 0.8. So it can be concluded that all independent variables in the research are free from multicollinearity.

## b. Heteroscedasticity Test

The Glejser-test is used to test whether there is heteroscedasticity by regressing each independent variable on the absolute value of the residual <sup>28</sup>. An independent variable is said to pass the heteroscedasticity test if the probability value is greater than 0.05.

**Table 4. Heteroscedasticity Test Results** 

28 Ibid.

<sup>&</sup>lt;sup>27</sup> Ibid.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.555837	0.794893	3.215321	0.0030
GDP	0.031513	0.057903	0.544230	0.5902
INF	-0.315991	0.169860	-1.860302	0.0724
NPF	-0.306495	0.201735	-1.519299	0.1388
CAR	-0.003453	0.008078	-0.427438	0.6720
FDR	-0.004023	0.007578	-0.530833	0.5993

Source: Processing Results Eviews 10

Based on the test results above, it shows that the probability value of the variables GDP, inflation, NPF, CAR, and FDR is > 0.05. So the data in this study is free from symptoms of heteroscedasticity or passes the heteroscedasticity test.

## 3. Equality Multiple linear regression

Regression model in study This that is:

$$Y = \alpha + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + \beta_5 X_{5it} + \varepsilon$$

Based on the FEM test results below, the multiple linear regression equation from this research is:

 $ROA = 2.19551637463 + 0.0876478344947*GDP + 0.0289646065487*INF + 0.8484156021*NPF + 0.0139655254363*CAR - 0.0262567750171*FDR + <math>\epsilon$ 

Based on the results of the regression test above, it can be seen that the constant value is 2.19551637463, which means that if the independent variable is constant then the ROA value is 2.19551637463. If the GDP variable increases by 1 unit, then ROA will increase by 0.0876478344947. If the inflation variable increases by 1 unit, ROA will increase by 0.0289646065487. Apart from that, if the NPF variable increases by 1 unit, ROA will increase by 0.8484156021. If the CAR variable increases by 1 unit, ROA will increase by 0.0139655254363. And if the FDR variable increases by 1 unit, ROA will decrease by 0.0262567750171.

### **Table 5. FEM Model Test Results**

Dependent Variable: ROA Method: Panel Least Squares Date: 11/28/23 Time: 18:27

Sample: 2018 2022 Periods included: 5 Cross-sections included: 9

Total panel (balanced) observations: 45

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C GDP INF NPF CAR	2.195516 0.087648 0.028965 0.848416 0.013966	1.518734 0.110631 0.324537 0.385437 0.015434	1.445623 0.792253 0.089249 2.201177 0.904876	0.1583 0.4342 0.9295 0.0353 0.3725
FDR	-0.026257	0.014479	-1.813383	0.0795

**Effects Specification** 

Cross-section fixed (dummy variables)					
R-squared	0.866092	Mean dependent var	2.131556		
Adjusted R-squared	0.809937	S.D. dependent var	3.652605		
S.E. of regression	1.592396	Akaike info criterion	4.017903		
Sum squared resid	78.60743	Schwarz criterion	4.579976		
Log likelihood	-76.40282	Hannan-Quinn criter.	4.227438		
F-statistic	15.42329	<b>Durbin-Watson stat</b>	2.719663		
Prob(F-statistic)	0.000000				

Source: Processing Results Eviews 10

## 4. Hypothesis testing

### a. t test

The t test is a test used to partially determine the relationship between two variables, namely variable X and variable  $Y^{29}$ . Based on the FEM test results in table 5 above, the t test shows the results:

#### 1. Influence of GDP on ROA

The GDP variable has a t-statistic of 0.792253 with a probability of 0.4342 > 0.05. This means that GDP has a positive and insignificant effect on ROA. So H1 is rejected.

## 2. Influence Inflation to ROA

The inflation variable with a t-statistic is 0.089249 with a probability of 0.9295 > 0.05. This means that inflation has a positive and insignificant effect on ROA. So H2 is rejected.

### 3. The influence of NPF on ROA

The NPF variable with a t-statistic of 2.201177 with a probability of 0.0353 < 0.05. This means that NPF has a positive and significant effect on ROA. So H3 is accepted.

## 4. The effect of CAR on ROA

<sup>29</sup> Ibid.

The CAR variable with a t-statistic of 0.904876 with a probability of 0.3725 > 0.05. This means that NPF has a positive and insignificant effect on ROA. So H4 is rejected.

### 5. The influence of FDR on ROA

The FDR variable with a t-statistic of -1.813383 with a probability of 0.0795 > 0.05. This means that FDR has a negative and insignificant effect on ROA. So H5 is rejected.

#### b. F test

The F test is a test used to see the effect of an independent variable on a dependent variable simultaneously or together<sup>30</sup>. Based on the FEM test results in table 6 above, the f test results obtained the calculated f value, namely f-statistic of 15.42329 > f table 2.455831, and a significance value of 0.0000 < 0.05, so the variables GDP, inflation, NPF, CAR, FDR together have an effect on ROA.

## c. Coefficient Test Determination ( $R^2$ )

The coefficient of determination is used to find out how much influence the independent variables in the research influence the dependent variable. Based on the FEM test results in table 6 above, the Adjusted R-squared value is 0.809937. This means that the variables GDP, inflation, NPF, CAR, and FDR influence ROA by 80.1% while the remaining 19.9% is influenced by other variables outside this research.

### 5. Discussion

#### a. The Influence of GDP on ROA

Based on the analysis results, it shows that the GDP variable has a t-statistic of 0.792253 with a probability of 0.4342 because the probability value is greater than 0.05, so H1 is rejected. This means that GDP has a positive and insignificant effect on ROA. Increasing Gross Domestic Product can increase people's income so that it can increase people's interest in saving. An increase in GDP also has an influence on the level of spending, public investment and demand for financing. This will increase the role of banks as funds channeling institutions so that bank profitability will also increase<sup>31</sup>. However, based on this research, GDP has no influence on the profitability of Sharia Commercial Banks, meaning that increasing GDP does not necessarily increase people's interest in saving even though people's income increases. The results of this research are in line with research conducted by Zahra Latifah, et al (2021) which shows that GDP has no effect on ROA.

### b. The Influence of Inflation to ROA

Based on the results of the analysis above, it shows that the inflation variable has a t-statistic of 0.089249 with a probability of 0.9295 because the probability value is greater than 0.05, so H2 is rejected. This means that inflation has a positive and insignificant effect on ROA. The sharia banking system does not use interest but instead uses a profit sharing system. This means that changes in inflation do not have a big impact on the profitability of Sharia Commercial Banks. The existence of inflation does not have an influence on ROA, it can also mean that Islamic banks have resistance to

3

<sup>30</sup> Ibid.

<sup>&</sup>lt;sup>31</sup> Latifah, Nurdin, and Hazma, "Pengaruh Faktor Internal Dan Faktor Eksternal Terhadap Profitabilitas Dengan Mediasi NPF Bank Umum Syariah."

inflation. The results of this research are in accordance with research from Sumarlin in 2016 which showed that inflation had no significant effect on ROA.

# c. The Influence of Non Performing Financing (NPF) on ROA

Based on the analysis results, it shows that the NPF variable has a t-statistic of 2.201177 with a probability of 0.0353 because the probability value is smaller than 0.05, so H3 is accepted. This means that NPF has a positive and significant effect on ROA. So it can be interpreted that an increase in NPF can have an effect on increasing the profitability of Islamic banks. Research from Toufan Aldian Syah (2018) also shows the results that NPF has a significant effect on ROA.

## d. The Influence of Capital Adequacy Ratio (CAR) to ROA

Based on the analysis results, it shows that the CAR variable has a t-statistic of 0.904876 with a probability of 0.3725. Because the probability is greater than 0.05, H4 is rejected. This means that NPF has a positive and insignificant effect on ROA. Changes in CAR that are getting higher and lower do not affect the level of profitability. This is because if the bank's capital is greater but the bank is unable to manage its capital well then the CAR cannot influence the increase in bank profitability. The results of this research are in accordance with research conducted by Erly Sherlitaa and Yuni Fenanda Utamib (2019) which obtained the results that CAR had no effect on ROA.

## e. The Influence of Financing to Deposit Ratio (FDR) to ROA

Based on the analysis results, it shows that the FDR variable with a t-statistic is -1.813383 with a probability of 0.0795 because the probability is greater than 0.05. So H5 is rejected. This means that FDR has a negative and insignificant effect on ROA. So increases and decreases in FDR have no effect on the profitability of Islamic banks. The results of this research are in accordance with research from Ike Dwi Astuti and Nur Kabib (2021)which states that **FDR** has no effect ROA. on

### D. Conclusion

Based on the results of this research regarding the influence of macro and micro economics on the profitability of Sharia Commercial Banks in Indonesia in 2018-2022. The hypothesis in this research which states that GDP, inflation, CAR, and FDR have an effect on ROA is rejected. Partially, the GDP variable has no effect on the ROA of Sharia Commercial Banks in 2018-2022. Partially, inflation has no effect on the ROA of Sharia Commercial Banks in 2018-2022. Partially, the CAR variable has no effect on ROA of Sharia Commercial Banks in 2018-2022 and the FDR variable partially has no effect on ROA of Sharia Commercial Banks in 2018-2022. The hypothesis in this research which states that NPF has an effect on ROA is accepted. The NPF variable partially influences the ROA of Sharia Commercial Banks in 2018-2022. Simultaneously, the variables GDP, inflation, NPF, CAR, and FDR influence the ROA Sharia of Commercial Banks in 2018-2022.

## **Bibliography**

Ardyansyah, Farid, and Dzakiyyatul Aqliyyah. "The Effect of GDP on Profitability Level of Return on Equity in Mandiri Sharia Banks in Indonesia." *Akuntabilitas : Jrnal Ilmi-Ilmu Ekonomi* 14, no. 02 (2021): 60–74. https://doi.org/10.35457/xxx©2019Akuntabilitas:JurnalIlmu-IlmuEkonomi.Semuahakciptadilindungiundang-

- undangTersediaonlinedihttps://ejournal.unisbablitar.ac.id/index.php/akuntabilitashttps://doi.org/10.35457/xxx.
- Ariani, Falentina Dwi. "Analisis Tingkat Profitabilitas Perbankan (Studi Kasus Pada PT Bank Pembangunan Daerah Jawa Timur Tbk Periode 2007-2014)." *Jurnal Ilmiah Mahasiswa FEB* 3, no. 2 (2015).
- Arseto, DedyDwi, Yenni Arfah, and Saparuddin Siregar. "The Effect of Capital Adequacy Rasio (CAR) and Liquidity on Profitability of Islamic Comercial Banks in Indonesia for The 2015-2019 Period." *Jurnal Ilmiah Ekonomi Islam (JIEI)* 08, no. 01 (2022).
- Ghozali, Imam. *Aplikasi Analisis Multivariate Dengan Program SPSS*. Dealapan. Semarang: Badan Penerbit Universitas Diponegoro, 2016.
- Hasyim, Fuad. Statistika Terapan Untuk Bisnis Dan Keuangan. Yogyakarta: Lintang Pustaka Utama, 2021.
- Kirana, Yulvista Galuh, Diyah Santi Hariyani, and Putri Oktovita Sari. "Pengaruh Makro Ekonomi Dan Mikro Ekonomi Terhadap Profitabilitas Pada BPR Syariah Di Indonesia." *Business Management Analysis Journal (BMAJ)* 4, no. 2 (2021): 174–186.
- Kusumawati, Oktaviani Alvita, Muhammad Tho'in, and Iin Emy Prastiwi. "Faktor Internal Yang Mempengaruhi Likuiditas Bank Syariah: Analisis Rasio Capital Adequacy Ratio (CAR), Dana Pihak Ketiga (DPK), Non Performing Financing (NPF)." *Jurnal Ilmiah Ekonomi Islam* 7, no. 2 (2021): 1107–1116.
- Latifah, Zahra, Ade Ali Nurdin, and Hazma Hazma. "Pengaruh Faktor Internal Dan Faktor Eksternal Terhadap Profitabilitas Dengan Mediasi NPF Bank Umum Syariah." *Indonesian Journal of Economics and Management* 2, no. 1 (2021): 174–187.
- Mokoagow, Sri Windarti, and Misbach Fuady. "Faktor-Faktor Yang Mempengaruhi Profitabilitas Pada Bank Umum Syariah." *Journal of Accounting and Digital Finance STIEBANK Yogyakarta* 6, no. 1 (2015): 33–62.
- Nihayah, Ana Zahrotun, and Sri Walyoto. "Identification of Non Performing Financing Alteration Measured by Microeconomic Variable Sharia Banking." *Journal of Finance and Islamic Banking* 1, no. 1 (2018): 23–38.
- Noval, Muhammad, and Lisda Aisyah. "Analisis Pengaruh Dana Syirkah Temporer Dan Efisiensi Operasi Terhadap Profitabilitas Bank Syariah." *Jurnal Ilmiah Ekonomi Islam* 7, no. 1 (2021): 113–122.
- Pravasanti, Yuwita Ariessa. "Pengaruh NPF Dan FDR Terhadap CAR Dan Dampaknya Terhadap ROA Pada Perbankan Syariah Di Indonesia." *Jurnal Ilmiah Ekonomi Islam* 4, no. 03 (2018): 148–159.
- Priyono, Wahyudin, and Imanda Firmantyas Putri Pertiwi. "Pengaruh Makro Ekonomi Terhadap Profitabiltas Bank Umum Syariah Di Indonesia Tahun 2014-2018." *Journal of Finance and Islamic Banking* 2, no. 1 (2019): 72–92.
- Putri, Rizky Nur Ayuningtyas. *TEORI EKONOMI MAKRO*. Yogyakarta: Gerbang Media Aksara, 2022.
- Riadi, Sugeng. "The Effect of Third Parties Fund, Non Performing Loan, Capital Adequacy Ratio, Loan to Deposit Ratio, Return On Assets, Net Interest Margin and Operating Expenses Operating Income on Lending (Study in Regional Development Banks in Indonesia)." *Proceedings of the International Conference*

- on Industrial Engineering and Operations Management (2018): 1015–1026.
- Rifai, Nur, and Taufiq Wijaya. "Persepsi Masyarakat Non Muslim Terhadap Minat Menjadi Nasabah Bank Syariah." *Journal of Finance and Islamic Banking* 2, no. 1 (2019): 93–112.
- Rusby, Zulkifli. *Manajemen Perbankan Syariah*. Pekan Baru: Pusat Kajian Pendidikan Islam UIR, 2017.
- Soeharjoto, and Dini Hariyanti. "Pengaruh Makro Ekonomi Dan Fundamental Perusahaan Terhadap Kinerja Perbankan Syariah Di Indonesia." *Jurnal Akuntansi, Keuangan, dan Manajemen (Jakman)* 1, no. 1 (2019): 1–8.
- Sumarmi, Sumarmi, Imam Sopingi, and Tri Sudarwanto. "Pengaruh CAR, FDR, NPF, BOPO Dan BI Rate Terhadap Profitabilitas (Studi Pada PT.Bank Syariah Bukopin)." *JIES: Journal of Islamic Economics Studies* 1, no. 3 (2020): 126–133.
- Tho'in, Muhammad. "Effect of Financing to Deposit Ratio and Operational Efficiency on Profitability (ROA) with NPF as Intervening in Islamic Banks." *Jurnal Ilmiah Ekonomi Islam (JIEI)* 08, no. 02 (2022).
- Virgana, R. A.E., Mohamad Anton Athoillah, and Elis Ratna Wulan. "Information Analysis, Data Correlation: CAR, FDR, NPF, OER Against ROA of Eleven (11) Islamic Banks in Indonesia for 2013-2018." *International Journal of Innovation, Creativity and Change* 6, no. 7 (2019): 232–256.