The Effect of Capital Adequacy, Market Risk, Credit Risk, Operational Risk and Liquidity on the Profitability (Case Study on Sharia Banks Registered in OJK Period 2010-2019)

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ABSTRACT

Banking is a financial institution that has a role in the financial system in Indonesia. The existence of the banking sector becomes important because in carrying out life in the community involves services from the banking sector. Banking is an institution that has a strategic role as a financial intermediary (financial intermediary) between parties who have funds (surplus funds) with parties who need funds (deficit funds), as well as institutions that function to facilitate payment-traffic. The Islamic banking sector has not escaped in the role and dynamics of banking in Indonesia. However, its existence still needs to be questioned. One of the bank's health assessment efforts can be done through financial performance assessment. The financial performance of the bank can be seen from the profitability of the bank. This research aims to find out the health of Islamic banks in Indonesia using financial ratios. This study used data from 2010-2019 with 9 Islamic Banks sampled. Testing uses description analysis and regression. The results showed that NOM and BOPO had a significant influence on ROA in the Islamic banking sector in Indonesia.

Keywords: Bank Syariah, Profitability, financial performance, financial ratio, credit risk, Banking.

1. INTRODUCTION

Banking is a financial institution that has a role in the financial system in Indonesia. The existence of the banking sector becomes important because in carrying out life in the community involves services from the banking sector. Banking is an institution that has a strategic role as a financial intermediary between parties who have funds (surplus funds) with parties who need funds (deficit funds), as well as institutions that function to facilitate payment traffic. In addition, the bank is also an agent of trust where the bank bases its business activities on public trust, and as an agent of development where the bank serves as national economic development [26].

According to the Law No. 10 of 1998, banks are business entities that collect funds from the community and distribute to the community in the form of credit and other forms in order to improve people's standard of living. In terms of rewards or services for the use of funds, deposits or loans, banks

are distinguished into conventional banks and Islamic banks [34]. The difference between conventional banks and Islamic banks lies in the rewards that banks pay or receive to customers.

In conventional banks provide rewards in the form of interest while in Islamic banks the reward refers to Islamic law where the rewards received or paid by the customer depend on the agreement between the bank and the customer [67].

For banks that run their business using sharia principles do not recognize the term profit or interest in performing loan or storage services. In Islamic banks the services provided in accordance with sharia principles or Islamic teachings. The principles applied include financing based on the principle of profit sharing (mudharabah), financing based on capital participation (musyarakah), the principle of buying and selling goods by obtaining profits (murabahah), or the distribution of capital goods based on the principle of pure rent without choice (ijarah) or with the option

of transferring ownership of goods rented from the bank by other parties (ijarah wa iqtina).

Currently, the growth of banking in Indonesia is progressing rapidly. This happens to conventional banks and Islamic banks supported by Law No. 21 of 2008 on Islamic banking which provides a clearer operating foundation for Islamic banks. So it does not rule out the possibility that people using Islamic banks will be higher and able to increase the significance of the banking industry to support the stability of the national financial system [20].

Table 1. Development of Sharia Commercial Bank in 2019

Indicators	Sharia Commercial Bank
Credits	Rp 355 trillion/6,25%
DPK	Rp 416 trillion/6, 93%
Assets	Rp 350 trillion/4,92 %

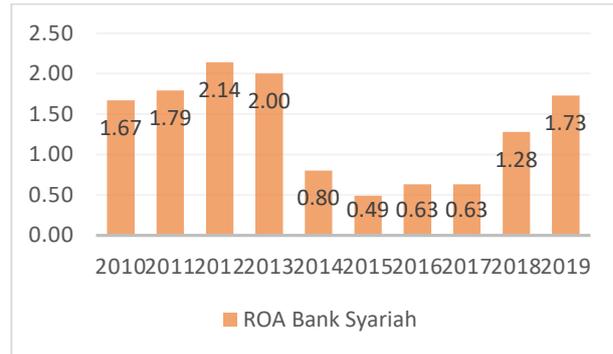Source: OJK (data processed, 2021)

Table 1 provides information on the development of Islamic banking as of 2019. According to credit indicators, Islamic banks amount to Rp 355 trillion or 6.25% of conventional banking. According to the indicators of the Third-Party Funds (DPK in Indonesia) the sharia law Rp 416 trillion at. While in terms of assets owned by Islamic banking amounted to 350 trillion or 4.92%.

One of the bank's health assessment efforts can be done through financial performance assessment. The financial performance of the bank can be seen from the profitability of the bank. Profitability or the ability to earn profits is a measure in the form of percentages used to assess the extent to which the company is able to generate profits at the level received by [38].

Banks that have high profitability show good financial performance. Profitability indicates the company's future prospect. In addition, the company's good financial performance will attract investors to invest in the company [6]. The measure of profitability used is Return on Assets (ROA). ROA is used because it is more representative in showing the measure of banking profitability. On the other hand, Bank Indonesia pays special attention to ROA compared to ROE because it prioritizes the profitability value of a bank as measured by assets that some of its funds come from community deposits [24]. ROA is important for banking because ROA is used to measure the effectiveness of companies in making profits by utilizing assets owned [17]. In addition, ROA is used to measure the ability of bank management in obtaining profits (pre-tax profits)

generated from the average total assets of the bank concerned. The greater the ROA, the greater the level of profit achieved by the bank so that the possibility of a bank in a troubled condition is smaller.

Figure 1. shows the movement of ROA in Islamic banks during 2010-2019. Significant declines occurred in 2013-2016. Then the upward trend of ROA occurred in 2018-2019. The OJK report in the Sharia Banking Statistics Book in 2019 reported a Sharia bank ROA of 1.73%.

Source: OJK (data processed, 2021).
Figure 1. ROA of Islamic Bank.

Continued with a discussion about the factors that affect ROA. In the study [43] several factors that can affect ROA such as CAR, BOPO, NPL, NIM and LDR. CAR is a financial ratio related to banking capital where the amount of capital of a bank will reflect the ability to carry out business activities efficiently or inefficiently.

According to research conducted by [25] using a sample of National Foreign Exchange-listed Private Commercial Banks on the Indonesia Stock Exchange that examined the influence of CAR, LDR, NIM on ROA resulted in the finding that CAR has a significant positive influence on ROA. Similar to the research conducted by [46] which conducted research on private commercial banks registered with the IDX which resulted in research that there was a significant positive influence on ROA.

In contrast to the results of the above research conducted by [1] using variables CAR, LDR, NPL against ROA in the banking sector in 2014-2018 resulted in the finding that CAR has a significant negative effect on ROA. Supported by research [53] that CAR has a negative and significant influence on ROA. But research conducted by [43] revealed that CAR has a negative and insignificant effect on ROA. This is in the bi provision that the bank has a car of at least 8% which results in the bank having to prepare a reserve fund for the minimum provision.

On the other hand, a bank must be prepared in the face of various events by taking all sources of market risk that can be controlled and prevent negative impacts that exceed the amount that can be borne by the bank's capital. Market risk includes risks due to changes in interest rates and exchange rates. Where interest rate risk is related to the movement of interest rates against the repricing gap between assets and pasiva. One indicator to measure market risk is to use the Net Interest Margin (NIM) proxy. This ratio illustrates the magnitude of the level of net interest income to the use of productive assets owned by banks. So, the increase in NIM means that interest income earned from the use of productive assets also increases the possibility of bank problems getting smaller [62]. This is in accordance with the theory of profit management efficiency where banks can utilize productive assets well will increase profitability. [63].

According to research [9] states that NIM has a significant positive influence on ROA in commercial banks in the IDX in 2012-2015. Supported by the results of research conducted by [8] which used a sample of research on commercial banks to go public in the period 2011-2014 stated that NIM has a positive and significant effect on ROA. [36] research found that NIM has a positive and insignificant effect on ROA. In contrast to the results of study [3] which used CAR variables, LDR, NIM to explain ROA variables resulted in the finding that NIM has a negative and significant influence on ROA.

According to research conducted by Nuryanto et al. [39] which tested CAR, LDR, NPL and BOPO shades against ROA in conventional banks that went public in 2014-2018 revealed that NPL has a negative and significant influence on ROA. The results are in line with research conducted by [14]. Research conducted by [10] states that NPL has a negative and insignificant relationship. In contrast to the results of study [65] which states that NPL has a positive and significant influence on ROA.

According to research conducted by [13] stated that BOPO has a negative and significant effect on ROA in the banking sector listed on the IDX. Supported by the results of research conducted by [20] revealed that the BOPO ratio has a negative and significant influence on ROA on Islamic Commercial Banks. Research conducted by Nugroho et al. [38] resulted in the finding that BOPO has a negative and unsuitable influence on ROA. A summary of previous studies is presented in Table 2 as follows:

Table 2 Research Gap

Research Gap	Issues	Researchers	Result	Context of Research
Differences in car research results on ROA	The higher the CAR, the better the financial performance of a company. CAR has a positive effect on ROA	(Irfan et al., 2019) (Rembet & Baramuli, 2020)	Positive and significant influence	BUSN Commercial Bank
		(Dini & Manda, 2020) (Hanafia & Karim, 2020)	The positive effect is insignificant	SOEs BUS dan BPRS
		(Abdurrohman, 2020) (Sudirgo & Stevani, 2019)	Negative and significant influence	Commercial Bank Commercial Bank
		(Pinasti & Mustikawati, 2018)	Negative influence is not significant	Commercial Bank
Difference in nim research results on ROA	The higher the NIM, the better the company's financial performance. NIM has a positive effect on ROA.	(Good & Taswan, 2019) (Avrita & Pangestuti, 2016)	Positive and significant impact	Commercial Bank Commercial Bank
		(Mismiwati, 2016)	Positive and insignificant effect	Rural Bank
		(Alaziz, 2020)	Negative and significant influence	Commercial Bank
Difference in NPL research results on ROA	The higher the NPL, the lower	(Nuryanto et al., 2020) (Dewi & Badjra, 2020)	Negative and significant influence	Commercial Bank Commercial Bank

the ROA. NPL negatively affects ROA.		(Christaria & Grace, 2016)	Negative and insignificant effect	Commercial Bank
		(Yusriani, 2018)	Positive and significant influence	SOEs
Differences in BOPO research results on ROA	The higher the BOPO will decrease the company's ROA. BOPO negatively affects ROA	(Dewi, 2018) (Hanafia & Karim, 2020)	Negative and significant influence	Commercial Bank BUS dan BPRS
		(Nugroho et al., 2019)	Negative effects are not significant	National Private Commercial Bank
		(Yusriani, 2018) (Nanda et al., 2019)	Positive and significant influence	SOEs Islamic Bank
		(Zulvia, 2020)	Positive and insignificant effect	Sharia General Tub
Differences in the results of LDR research on ROA	The higher the LDR, the better the company's financial performance. LDR positively affects ROA	(Dewi et al., 2015) (Dewi, 2018)	Positive and positive effects	Commercial Bank Commercial Bank
		(Sudirgo & Stevani, 2019)	The positive effect is insignificant	Commercial Bank
		(Risalah et al., 2018)	Negative and signific	Islamic Bank

			ant influence	
		(Rembet & Baramuli, 2020)	Negative effects are not significant	National Self-Commercial Bank

Based on the identification of previous research gaps and supported by the gap phenomenon that occurred in the research period, namely during 2010-2019, the researcher intends to conduct a study with the title "Capital Adequacy Influence, Market Risk, Credit Risk, Operational Risk and Liquidity on Bank Profitability (Case Study on Islamic Banks Registered with IDX and OJK Period 2010-2019)".

Problems

Based on the background of the problem and the gap of research, the formulation of the problem in this study is as follows:

1. Does CAR have a positive and significant effect on ROA on Islamic Banks?

2. Does NOM have a positive and significant effect on ROA on Islamic Banks?

3. Does NPF have a negative and significant effect on ROA on Islamic Banks?

4. Does BOPO have a negative and significant effect on ROA on Islamic banks?

5. Does FDR have a positive and significant effect on ROA in Islamic Banks?

Research objectives

Based on the formulation of the problem that has been explained, the purpose of this study is as follows:

1. To test and analyze whether CAR has a positive and significant ROA effect on Islamic Banks.

2. To test and analyze whether NOM has a positive and significant affection ROA on Islamic Banks.

3. To test and analyze whether NPF has a negative and significant effect on ROA on Islamic Banks.

4. To test and analyze whether BOPO has a negative and significant effect on ROA on Islamic Banks.

5. To test and analyze whether FDR has a positive and significant affection ROA in Islamic Banks.

2. LITERATURE REVIEW

Signalling Theory

Signalling theory is one of the pillar theories in financial management. Signal theory indicates an information asymmetry between company management and parties who have an interest in the information.

Signal theory explains why companies present information for capital markets. Signaling theory is a management behavior in the company's prospects for the future. Signal theory predicts what information a company will provide, how information will be provided and when information will be provided. [53].

One of the efforts to reduce asymmetric information is to provide information by the company on investment decisions of parties outside the company [48]. If the announcement is positive, the market will react when the time of the announcement is received and when market participants receive the information, market participants will interpret and analyze the information as good news or bad news.

Bank Sharia

According to Law No. 21 of 2008 on Islamic Banking Chapter 1 Article 1 Islamic Banking is everything that concerns Islamic banks and Sharia business units, covering institutions, business activities, as well as ways and processes in carrying out their business activities. According to the Financial Services Authority (OJK), Islamic banks are banks that carry out their business activities based on Sharia principles and by their types consist of Sharia Commercial Bank (BUS) and Sharia People's Financing Bank (BPRS). The main purpose of the establishment of a sharia-based financial institution is as an effort by Muslims to base all aspects of their economic life based on the Quran and Sunnah.

Islamic banking in carrying out its business activities based on sharia principles of Sharia democracy, and the principle of prudence. The purpose of Islamic banking is to support the implementation of national development in order to improve justice, togetherness, and equitable welfare of the people (ojk.go.id).

In accordance with the codification of Islamic banking products issued by Bank Indonesia, Islamic banking products in Indonesia are as follows:

1. Fund Raising Products

   a. Wadi'ah

Wadi'ah is a titipan. Wadi'ah can also be interpreted as pure titipan from one party to another, both as an individual and as a legal entity. Wadi'ah is divided into two, wadi'ah amanah and wadi'ah yad dhamanah. In wadi'ah the trust of funds deposited cannot be used or purely as titipan, while wasi'ah yad dhamanah funds from custody can be utilized. Wadi'ah yad dhamanah is what is used as an Islamic bank as a deposit or current account product.

   b. Mudharabah

In the collection of funds, Islamic banks are served as mudharib (fund managers) and savers or customers as fund owners (shahibul maal). The owner of the internal funds will shahibul maal entrust the funds 100% to the mudharib as a party who has the skill to manage funds (mudharrib). The revenue share of the management of these funds is divided in accordance with the ratio that has been agreed by both parties. Mudharabah consists of two types, namely mudharabah mutlaqah, namely mudharabah mutlaqah, which is a cooperation agreement between sahibul mall and mudharib is not limited to the specifics of business, place, and time while still justified within the limits of syara' law. Mudharabah muqayyadah, which is a cooperation effort that will be limited in accordance with the will of the shahibul mall, while in the form of the smoothed.

   c. Funds Distribution Products

The distribution of funds in Islamic banks in the form of financing will be mudharabah and musyarakah (with revenue sharing patterns), mudharabah and salam (with buying and selling patterns), and ijarah (with operational and financial rental patterns), as well as service-based complementary prosuk (phase-based service) such as qardh and other financial services.
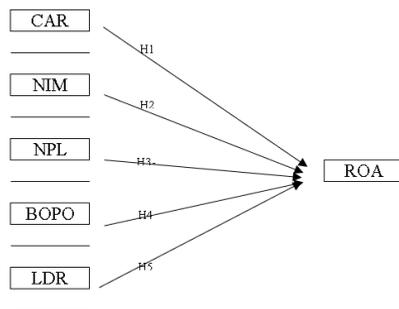
Banking Performance

The performance of a company is very beneficial for many interested parties such as investors, creditors, analysts, financial consultants, the government, and the management of the company itself [42]. On the other hand, performance is something that must be achieved by every company, because performance is used as a reflection of the management ability to manage its resources [22]. The performance of the company can be known through a variety of variables and indicators. The variable used as a performance

assessment is the financial statements of the company concerned.

In the financial statements there is information in the form of financial position and performance in the past that can be used as a reference in predicting future performance. Sourced from financial statements can be calculated a number of financial ratios used to measure financial performance. Financial performance is an important thing to be achieved by the company, because it gives an idea of the condition of a company, so that it can know the good bad of the situation [13]. One type of financial ratio analysis is by using CAMEL analysis.

Research Design

Based on the description that has been explained about the relationship between variables, it can be described to think about analyzing CAR, NOM, NPF, BOPO and FDR variables on financial performance in conventional banks and Islamic banks projected with ROA in figure 2 as follows:

Figure 2. Research Framework

Hypothesis

Based on the foundation of previous theories and research and the frame of mind described above, the research that will be used to test independent variables that affect the dependent variable in this study as follows:

H1: CAR has a positive and significant effect on ROA in the sharia bank sub-sector

H2: NOM has a positive and significant effect on ROA in the Islamic bank sub-sector.

H3: NPF has a negative and significant effect on ROA in the Islamic bank sub-sector.

H4: BOPO has a negative and significant effect on ROA in the Islamic bank sub-sector.

H5: FDR has a positive and significant effect on ROA in the Sharia bank sub-sector.

3. METHODS

Data Sample

The population of this study is all Sharia banks listed on the Indonesia Stock Exchange and the Financial Services Authority (OJK) which is 15 Islamic banks. Furthermore, the sample taken in this study is issuers in the banking sector registered with IDX and OJK in the period 2010-2019. Sample criteria for the following: 1) Banking companies registered with OJK in 2010-2019; 2) Islamic banking companies established before 2010. Thus the sample used in this study as many as 9 Islamic bank companies.

Variables

This study used ROA as a dependent variable. The reason ROA is used as a dependent variable in this study is because IT is used to measure the effectiveness of companies in making profits by utilizing assets owned [17]. High ROA shows that the bank use the assets it has well. ROA is formulated as follows:

$$\text{ROA} = \frac{\text{Earning Before Tax}}{\text{Total Assets}} \times 100\%$$

Independent variables are often referred to as free variables or variables X. The independent variables in this study are as follows:

1. Capital Adequacy Ratio (CAR)

CAR describes the company's ability to run business efficiently. This ability is related to the capital owned by the company. In addition, CAR demonstrates the ability to provide funds to bear the risk of any financing or risky productive assets [64]. This means that the higher the adequacy of capital to bear the risk [67]. The higher car will improve the performance of a bank [45]. The formula of CAR is:

$$\text{CAR} = \frac{\text{Capital}}{\text{WACC}}$$

2. Net Interest Margin (NIM)

NIM is a financial ratio that measures a bank's ability to generate net interest income to manage large productive assets [21]. The higher nim owned by the bank leads to an increase in net interest income on productive assets managed by the bank concerned, causing the profitability of the company to increase [16]. According to the Circular Letter of Bank Indoenesia Number 3/30/DPNP, the NIM ratio is as follows:

$$\text{NIM} = \underline{\text{Interest Earning}}$$

Earning Assets

3. Non-Performing Loan (NPF)

NPL is a ratio to measure the ability to ensure the risk of credit returns by debtors. NPL is used as one of the leading indicators in assessing a bank's performance. The higher this ratio, the worse the bank's credit quality and cause losses, conversely if the lower the NPL then the bank's profit or profitability will increase [8]. According to Bank Indonesia Circular Letter Number 3/30/DPNP, the NPL ratio is formulated as follows:

$$NPL = \frac{Bad\ Debt}{Total\ Credits}$$

4. Operating expenses to operating income (BOPO)

The BOPO ratio is used to measure the level of efficiency and ability of banks to control operating costs against their operating income [36]. The BOPO ratio is often referred to as the efficiency ratio. The greater the BOPO ratio owned by a bank shows the more inefficient the bank is in carrying out its operations. Banks that are increasingly ineffective in draining operating costs, the more likely the bank will be to suffer losses or bankruptcy.

$$BOPO = \frac{Operation\ Expenses}{Operation\ Incomes}$$

5. Loan to Deposit Ratio (LDR)

The ratio of LDR as a liquidity proxy is a comparison between credit and The Third-Party Funds (DPK). This ratio is used to assess the liquidity of a bank to funds by dividing the amount of credit provided by the bank against third party funds. The higher the LDR ratio the higher the liquidity level [52]. The higher LDR will increase the bank's assumed profit that the bank can channel credit well, so that the increase in bank profits can improve the bank's performance as well [8]. According to Bank Indonesia Circular Letter Number 3/30/DPNP, the LDR ratio is formulated as follows:

$$LDR = \frac{Total\ Credits}{Third\ Fund}$$

Data analysis technique

Data analysis method is a method used in processing data so that the results of the data will be obtained to be interpreted. The analytical tool used in this study is Eviews 10. The data analysis methods in this study are descriptive analysis, model determination, classical assumption test, Gooodness of Fit testing, multiple regression analysis, and hypothesis testing.

4. FINDINGS & RESULT

Descriptive statistics are used to describe ROA, CAR, NOM, NPF, BOPO, and FDR data as seen from average values, maximum values, minimum values, and standard deviation values. Table 3 Presents the results of descriptive statistics.

Table 3 Results of Descriptive Statistical Tests of Sharia Bank Sub-Sectors

	ROA	CAR	NOM	NPF	BOPO	FDR
Mean	0.907468	18.23481	4.353165	2.967468	90.88899	87.86899
Median	0.950000	16.31000	4.640000	2.940000	91.01000	90.10000
Maximum	3.480000	38.30000	15.49000	7.850000	109.6200	105.6600
Minimum	-1.120000	9.500000	0.050000	0.100000	47.60000	51.77000
Std. Dev.	0.642708	6.423595	3.145098	1.726669	7.817480	9.469203
Skewness	0.411539	1.157373	1.069397	0.419224	-2.196822	-1.138893
Kurtosis	5.479051	3.935456	5.084427	3.217657	13.89270	5.383844
Jarque-Bera	22.45955	20.51739	29.35929	2.469971	454.1022	35.78377
Probability	0.000013	0.000035	0.000000	0.290839	0.000000	0.000000
Sum	71.69000	1440.550	343.9000	234.4300	7180.230	6941.650
Sum Sq. Dev.	32.21969	3218.481	771.5481	232.5481	4766.813	6993.933
Observations	79	79	79	79	79	79

Compiled by: Author (2021)

The average ROA in the Islamic bank sub-sector is 0.907468. This shows that the average company in the Islamic bank sub-sector has a profit of 0.9% from the management of assets owned. The standard deviation value is 0.6427. This indicates that the distribution of data has a normal distribution because the average value is greater than the standard deviation value.

This type of research model uses regression panel data. Data panels are divided into three models, namely *common effect model, fixed effect model,* and random *effect model.* To determine the most appropriate model can be done with three tests, namely chow test, Hausman test, and multiplier Langrange test.

Here are the results of the chow test results in this study.

Table 4. Chow Test

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

Effects Test	Statistic	d.f.	Prob.
Cross-section F	5.033997	(7,66)	0.0001
Cross-section Chi-square	33.797719	7	0.0000

Based on the results of chow tests on Islamic bank sub-sectors shown in table 4 it can be known that the probability value of Cross-section Chi-square < α,

which is 0.000 < 0.05. This indicates that the H0 was rejected and the H1 accepted which means the best model used is the fixed effect model.

The next test is the Hausman test. If the Hausman test selected is a random effect model, then it is necessary to do the next test, namely the multiplier langrage test (LM). The Hausman test is a test that is done after doing the chow test. The Hausman test is used to determine the best model used, whether fixed effect model or random effect model. The Hausman test uses chi-square distribution. Here are the results of the Hausman test in this study.

Table 5. Hausman Test

Correlated Random Effects - Hausman Test
Equation: Untitled
Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	2.249677	5	0.8136

Based on the results of the Hausman test on the Islamic bank sub-sector shown in table 5 it can be known that the probability value of Chi-square > α, which is 0.8136 > 0.05. This indicates that H0 is accepted and H1 is rejected. This means that the model chosen is a *random effect model.* Thus, it is necessary to do the next test, namely the Lagrange multiplier test to choose the best model between common effect *models.* Or *a random effect model.*

Table 6. Langrage Multiplier Test

Null (no rand. effect) Alternative	Cross-section One-sided	Period One-sided	Both
Breusch-Pagan	20.79451 (0.0000)	3.032776 (0.0816)	23.82729 (0.0000)

Based on the langrage multiplier test in the sharia bank sub-sector showed the result that the Breusch-pagan value < α with a value of 0.000 < 0.05. The value means that H0 is rejected and H1 is accepted, so the most appropriate panel data estimation model used in the study is the random effect model.

Multiple regression analysis is an analytical method used to test hypotheses. Multiple regression analysis in this research is used to test the influence of CAR, NIM, NPL, BOPO and LDR on ROA. Regression model equation as follows:

$ROA = α + β1(CAR) + β2(NOM) + β3(NPF) + β4(BOPO) + β5(FDR) + e$

Table 7 Results of Sub-Sector Regression Test of Sharia Banks Registered in OJK

Dependent variable: ROA	
Variabel	Model
CAR	0,4153
	-0,0049
NIM	0,0364*
	0,0244
NPL	0,2321
	-0,0349
BOPO	0,0000*
	-0,0667
LDR	0,8036
	-0,0009
Intercept	0,0000
	5,6473
Observation Unit	79
Adjusted R-Square	0,826871

Based on table 7 it can be known that the magnitude of the influence of independent variables on dependent variables by looking at intercept values, can be formulated the results as follows:

ROA = 5,6473 – 0,0049 CAR + 0,0244 NIM - 0,0349 NPL - 0,0667 BOPO - 0,0009 LDR + e

The t test is essentially to determine the effect of independent variables on individual dependent variables. In this study the t test was used to determine the influence of CAR, NIM, NPL, BOPO and LDR variables on ROA variables indirectly. The t test is done by looking at the probability of the variable being tested. If the probability value (prob value) < 0.05, then H0 is rejected which means that the independent variable affects the dependent variable individually. If the probability value (prob value) > 0.05, then H0 is accepted which means that the independent variable has no impact on the dependent variable. The hypotheses in this study are as follows:

H0: individually has no effect on dependent variables

H1: individually affects dependent variables

The following is the output of the test results t on the sub-sector of Islamic bank banks.

Table 8 Result of Sub-Sector T-Test of Sharia Bank Register in OJK

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	5.647323	0.500205	11.29003	0.0000
NCAR	-0.004927	0.006010	-0.819791	0.4153
NNOM	0.025444	0.011912	2.136119	0.0364
NNPF	-0.034890	0.028922	-1.206338	0.2321
NBOPO	-0.066663	0.005143	-12.96204	0.0000
NFDR	-0.000919	0.003682	-0.249760	0.8036

Based on research and discussion in chapter four, it can be concluded that:

1. CAR has no effect on ROA in the sharia bank sub-sector.
2. NOM has a positive effect on ROA in the sharia bank sub-sector.
3. NPF has no effect on ROA in the sharia bank sub-sector.
4. BOPO negatively affects ROA in the sharia bank sub-sector.
5. FDR has no effect on ROA in the sharia bank sub-sector.

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