#### ANALYSIS OF THE INFLUENCE OF ASSET QUALITY, LIQUIDITY, AND CAPITAL ON PROFITABILITY (Empirical Study on Islamic Commercial Banks 2015-2019 period)

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Abstract: This study is to analyze whether there is an effect of Asset Quality, Liquidity, and Capital on Profitability. Objects taken for this research are Islamic Commercial Banks whose financial reports can be accessed and viewed by each official website of Islamic banks registered with the Financial Services Authority (OJK) for the period 2015 to 2019. This study uses 6 Islamic commercial banks with sample selection using purposive sampling method. The results of this study indicate that Asset Quality has a negative regression coefficient and a significant value smaller than alpha, so it can be said that Asset Quality has a significant effect on profitability. Meanwhile, liquidity has a negative regression coefficient with a significant value greater than alpha, so it can be said that liquidity has no significant effect on profitability.

*Keywords:* Non Performing Financing, Financing To Deposit Ratio, Capital Adequacy Ratio, Return On Assets.

#### 1. Introduction

Bank is basically an entity that collects funds from the public in the form of financing. In the banking system there are two kinds of operational systems, namely conventional banks and Islamic banks (Sharia Bank). In Islamic banking, financing is carried out based on Islamic principles and laws that do not contain *gharar*, *maysir*, usury, injustice and unlawful objects.

Currently, banking in Indonesia is entering a very competitive period of competition. This is due to the large number of banks operating in Indonesia, both operating locally and operating on an international scale. With increasingly competitive competition in the banking world, banks have begun to increase their competitive advantage to provide the best service to their customers through various banking products such as fund products, loan products or other service products (Rahmani, 2017).

Bank profitability is considered to be under pressure during the period 2014 to 2015 and is expected to continue in 2016. One of the consequences is that banking performance in the first quarter of 2015 slowed down compared to the previous period. Based on a report released by the Deposit Insurance Corporation (*LPS*) in early May 2015, credit growth and third party funds (*DPK*) declined in the two-month period. The trend of banking profit growth is also still declining (www.republika.co.id).

Asset quality in this study is related to NPF which reflects financing risk. The higher this risk indicates the quality of Islamic bank financing is getting worse. Financing management is very much needed by banks, considering that in Islamic banks the financing function is the

largest revenue contributor. An increase in NPF will result in a loss of opportunity to earn income from the financing offered, thus affecting profit and adversely affecting ROA.

This liquidity ratio states how far the bank's ability to repay the withdrawal of funds made by depositors by controlling the credit/financing provided as a source of liquidity. Liquidity also aims to assess the ability of a bank to maintain liquidity levels and prevent risks to liquidity that will arise. Low liquidity indicates that banks are less able to overcome the risk of default that has been distributed to the public in the future. This is because the lower the liquidity, the less reserve funds are available for customers who withdraw funds at any time (Furzah, 2019).

Capital is one of the important factors for banks in developing their business and can be used to overcome the risk of loss. CAR is a capital adequacy ratio, which means that the amount of own capital is required to cover the risk of losses arising from investing in risky assets as well as all fixed assets and bank inventories. The level of capital owned by a bank will affect public confidence in the bank's performance. If the CAR is low, it will lead to a decrease in public confidence which in turn reduces the bank's profitability. The greater the CAR, the greater the profitability of the bank, so the lower the possibility of problematic banks and public trust in banks will also increase (Chotijah & Fuadati, 2015). CAR is the capital adequacy ratio that serves to accommodate the risk of loss that may be faced by the bank. The higher the CAR, the better the bank's ability to bear the risk of any risk-weighted credit/productive asset (Rahmani, 2017).

According to Bank Indonesia, Return on Assets (ROA) is the ratio between profit before tax to total assets. The greater the Return on Assets, the better the financial performance, because the higher the rate of return. The purpose of using profitability ratios for the company, as well as for parties outside the company, are: (1) To measure or calculate the profit earned by the company in a certain period, (2) To assess the company's profit position in the previous year with the current year, (3) To assess the progress of the company profit from time to time, (4) To assess the amount of net profit after tax with own capital, (5) To measure the productivity of all company funds used both loan capital and own capital.

Meanwhile the benefits of the profitability ratios obtained are for: (1) Knowing the level of profit earned by the company in the period, (2) Knowing the company's profit position from the previous year to the current year, (3) Knowing the profit development from time to time, (4) Knowing the amount of net profit after tax with own capital, (5) Knowing the productivity of all company funds used both loan capital and own capital.

Table 1. KOA of Islanic Commercial Danks in 2015-2019							
			<b>ROA</b> (%)				Average
No	The Bank Name	2015	2016	2017	2018	2019	of ROA(%)
1	PT. Bank Aceh Syariah	2,83	2,48	2,51	2,38	2,33	2,51
	PT BPD Nusa Tenggara Bar	at					
2	Syariah	2,32	2,23	2,45	2,55	2,56	2,42
	PT. Bank Muamalat						
3	Indonesia	0,20	0,22	0,11	0,08	0,05	0,13
4	PT. Bank Victoria Syariah	-2,36	-2,19	0,36	0,32	0,05	-0,76
4	PT. Bank Victoria Syariah	-2,36	-2,19	0,36	0,32	0,05	-0,76

Table 1. ROA of Islamic Commercial Banks in 2015-2019

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5	PT. Bank BRI Syariah	0,77	0,95	0,51	0,43	0,31	0,59
6	PT. Bank Jabar BantenSyariah	0,49	0,63	0,63	0,54	0,60	0,58
7	PT. Bank BNI Syariah	1,43	1,44	1,31	1,42	1,82	1,48
8	PT. Bank Syariah Mandiri	0,56	0,59	0,59	0,88	1,69	0,86
9	PT. Bank Mega Syariah	0,30	2,63	1,56	0,93	0,89	1,26
10	PT. Bank Panin DubaiSyariah	1,14	0,37	-10,77	0,26	0,25	-1,75
11	PT. Bank Syariah Bukopin	0,79	-1,12	0,02	0,02	0,04	-0,05
12	PT. BCA Syariah	1,00	1,10	1,20	1,20	1,20	1,14
13	PT. Bank Tabungan Pensiunan NasionalSyariah	5,20	9,00	11,20	12,40	13,60	10,28
14	PT. Maybank SyariahIndonesia	-20,13	-9,51	5,50	-6,86		-7,75

Profitability (ROA) at Islamic Commercial Banks in Indonesia for the 2015-2019 period can be influenced by several factors, but in this study the aim is to analyze the effect of asset quality (NPF), liquidity (FDR), and capital (CAR) on profitability (ROA).

Based on the above background, the researchers are interested in conducting research with the title "Analysis of The Influence of Asset Quality, Liquidity, and Capital on Profitability (Empirical Study on Islamic Commercial Banks 2015-2019 period)."

# Literature review

#### **Agency Theory**

According to Muhyiddin (2007), the word *profit* in Arabic is *ribh*, meaning the results obtained from commerce or trade. The meaning of the word *ribh* is not far from what linguists say, namely *kasb* (profit). *Ribh* means additional that is generated from commerce. In other words, the additional capital generated through commerce after deducting costs.

The Islamic Fiqh Academy defines ribh as, "Additional to capital and not income, income or yield." The rate of ribh (profit) can be determined by determining the value of the project in money. The addition that is in the capital when the assessment and calculation is carried out is called *ribh* or profit.

The law in seeking profit through commerce is permissible in Islam. Even in Islam commerce is highly recommended with the aim of protecting capital so that it does not decrease or run out due to payments or other costs.

#### **Islamic Banking**

Banks are basically entities that collect funds from the public in the form of financing or in other words carry out financial intermediation functions. In the banking system in Indonesia, there are two kinds of banking operational systems, namely conventional banks and Islamic banks. According to Law No. 21 of 2008 concerning Islamic Banking, Islamic Bank or Sharia Banks are banks that carry out business activities based on sharia principles, or Islamic legal

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principles regulated in the fatwa of the Indonesian Ulema Council such as the principles of justice and balance (*'adl wa tawazun*), benefit (*maslahah*), universalism (naturalism), and does not contain *gharar*, *maysir*, usury, injustice and unlawful objects. In addition, the Sharia Banking Law also mandates Islamic banks to carry out social functions by carrying out functions such as baitul mal institutions, that is, receiving funds derived from zakat, infak, alms, grants, or other social funds and distributing them to waqf managers (*nazhir*) in accordance with the will of the waqf giver (*wakif*).

# **Objectives and Functions of Islamic Banking**

Islamic Banking in conducting its business activities is based on Sharia Principles, economic democracy, and the principle of prudence. Islamic Banking aims to support the implementation of national development in order to improve justice, togetherness, and equitable distribution of people's welfare. While the functions of Islamic banking are:

- 1. Islamic banks and UUS are required to carry out the function of collecting and distributing public funds.
- 2. Islamic banks and UUS can carry out social functions in the form of baitul mal institutions, namely receiving funds from zakat, infaq, alms, grants, or other social funds and channeling them to zakat management organizations.
- 3. Islamic banks and UUS can collect social funds originating from cash waqf and distribute them to waqf managers (*nazhir*) in accordance with the will of the waqf giver (*wakif*).
- 4. The implementation of social functions as referred to in paragraphs (2) and (3) is in accordance with the provisions of laws and regulations.

### **Asset Quality**

Asset quality according to Taswan (2010:64) is an investment or provision of bank funds that must be carried out based on prudential principles and comply with sharia principles. Bank management is required to assess, monitor and take anticipatory steps so that asset quality is always in a current state, quality assessment is carried out on earning assets. The asset used in assessing the asset quality factor is the Non Performing Financing (NPF) ratio. The higher the NPF, the smaller the ROA because of the company's earnings.

Asset Quality (FDR) can be calculated using the following formula:

 $NPF = \frac{Total \ Problem \ Financing}{Total \ Financing} \ x \ 100\%$ Source: (Dewi, 2010)

### Liquidity

Muhammad (2016: 430) explains that the liquidity ratio is a measure of a bank's ability to meet its short-term obligations. The level of liquidity of a bank reflects how far the bank's ability to manage its funds properly.

Meanwhile, according to Arifin (2012) bank liquidity is the bank's ability to meet its obligations, especially short-term obligations. From an asset perspective, liquidity is the ability

to convert all assets into cash. From a liability point of view, liquidity is the ability of a bank to meet its funding needs by increasing its liability portfolio. Liquidity (FDR) can be calculated by the following formula:

#### FDR = Total Financing Total Third Party Funds Source: (Dewi, 2010)

#### Capital

Capital is funds originating from bank owners or shareholders plus share premium and the results of its operations are derived from the bank's business activities. In this study, the Capital Adequacy Ratio (CAR) is a proxy for capital. Capital Adequacy Ratio (CAR) is a capital adequacy ratio whose purpose is to ensure that banks can cover losses that may arise as a result of their activities.

According to Arifin (2012:159) bank capital has three functions, namely:

- (1) As a buffer to cover operational losses and other losses.
- (2) As the basis for determining the maximum limit for granting credit (financing).
- (3) Capital is also the basis of calculation for market participants to evaluate the bank's relative ability to generate profits.

Capital Adequacy Ratio (CAR) is used to assess or find out how big the minimum capital requirement of a bank in running its business. The greater the CAR, the greater the profit on the bank.

Capital (CAR) can be calculated by the following formula:

$$CAR = \frac{Own Capital}{ATMR} \times 100\%$$
  
Source: (Dewi, 2010)

#### Profitability

Profitability is a ratio that describes the bank's ability to generate a profit. In this study, ROA is used as a measure of bank profitability. Return on Assets (ROA) is a ratio that describes a bank's ability to manage funds invested in all assets that generate profits (Muhammad, 2016). The greater the ROA of a bank, the greater the level of profit achieved by the bank so that it will increase the bank's profitability and the better the position of the bank in terms of asset use.

The profitability ratio according to Kasmir (2008) has goals and benefits not only for business owners or management, but also parties outside the company, especially parties who have a relationship or interest with the company.

Profitability (ROA) can be calculated by the following formula:

 $ROA = \frac{Profit After Tax}{Total Asset} \times 100\%$ Source: (Dewi, 2010)

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#### **Previous Research**

According to Ningsih et al. (2017) regarding the Effect of Capital, Asset Quality, Profitability and Liquidity on Profitability of Islamic Rural Banks (*BPRS*) in Indonesia shows that asset quality has a negative effect on profitability.

According to Widiyanti et al. (2015) regarding the Effect of Capital, Asset Quality, Liquidity, and Operational Efficiency on Profitability at PT Bank Syariah Mandiri and PT Bank Bri Syariah shows that liquidity has a positive and significant effect on profitability.

According to Rahmani (2017) regarding the Analysis of the Effect of Capital Adequacy Ratio (CAR) and Financing to Deposit Ratio (FDR) on Return On Assets (ROA) and Return On Equity (ROE) in Islamic Commercial Bank Companies in Indonesia, it shows that capital has a significant effect on profitability.

### Framework



Figure 1. Analysis of the Influence of Asset Quality, Liquidity, and Capital on Profitability

# Hypothesis

From the existing issue, the hypothesis below is a temporary answer and there must be evidence of its truth, then the formulation of the hypothesis in this study is formulated by looking at the relationship between existing variables, including:

H1 : Asset Quality (NPF) has a significant effect on profitability (ROA).

H2 : Liquidity (FDR) has no significant effect on profitability (ROA).

H3 : capital (CAR) has no significant effect on profitability (ROA).

# 2. Research Method

This research is a type of quantitative research using annual data from bank financial statements. Based on its characteristics, this research is included in associative research in the form of a causal relationship. The data used in this research is using secondary data. The

secondary data referred to in this study is the annual report of (Islamic Commercial Bank) BUS in Indonesia for the 2015-2019 period which has been published on the official website of each BUS. The population in this study were all BUS in Indonesia covering the 2015-2019 period. Purposive sampling method was used to select the sample in this study.

This research will be tested using multiple linear regression model to find out how the independent variables affect the dependent variable. Multiple linear regression analysis is a statistical test used to determine the effect of two or more independent variables on the dependent variable. Before testing the regression model, the classical assumption test must first be carried out in order to get good regression results. This study will examine the effect of Islamic banking asset quality using the ratio of Non Performing Financing (NPF), Financing to Deposit Ratio (FDR), and Capital Adequacy Ratio (CAR) on profitability using the ratio of Return On Assets (ROA).

#### 3. Results and Discussion

#### 3.1. Results

#### **Descriptive Statistics Test Results**

Descriptive statistical test is used to find out the descriptive on a data to see a research sample seen from the minimum value (lowest), highest value (maximum), average value (mean), and standard deviation of each research variable.

The results of the descriptive statistical research of this study are as follows:

	Descriptive Statistics				
					Std.
	Ν	Minimum	nMaximun	n mean	Deviation
Profitability	30	0.05	2.56	1.1057	0.77055
Asset Quality	30	0.04	4.97	1.9680	1.55538
Liquidity	30	71.87	100.87	83.5570	8.47416
Capital	30	12.00	38.30	22.0040	8.68038
Valid N (listwise)	30				

#### Table 2. Descriptive Statistical Test

Source: SPSS25 data processing results

Based on table 2, it is known that there are four variables, namely, (*Profitability, Asset Quality, Liquidity, and Capital*) with the same total period of 30. With the minimum value as the lowest value of the variable, the maximum value as the highest value of the variable, and the mean as the middle value of the variable. There is also a standard deviation of values in the data for each variable.

#### The following can be concluded that:

The profitability variable (ROA) has a minimum (lowest) value of 0.05% which comes from the profitability variable (ROA) of Bank Muamalat in 2019, this shows that Bank Muamalat in

2019 has the lowest ability to generate profitability (ROA). compared to other Sharia Commercial Banks. While the profitability variable (ROA) has a maximum (highest) value of 2.56% which comes from the profitability variable (ROA) of Bank NTB Syariah in 2019, this shows that Bank NTB Syariah has the highest ability to generate profitability (ROA). compared to other Sharia Commercial Banks. By looking at the average (mean) profitability (ROA) of 1, 1057, it can be concluded that the level of profitability (ROA) has a value that is quite above the standard set by Bank Indonesia, namely 0.05% (5%) that profitability has a fairly good condition in terms of profitability (ROA). Moreover, it has a standard deviation value of 0.77055.

The asset quality variable (NPF) has a minimum (lowest) value of 0.04% which comes from the asset quality variable (NPF) BCA Syariah in 2017, this shows that BCA Syariah in 2017 has the lowest ability to improve asset quality. (NPF). While the maximum value of asset quality (NPF) is 4.97% which comes from the asset quality (NPF) of BRI Syariah Bank in 2018. By looking at the value of the average (mean) asset quality (NPF) which is 1.9680, that statistically, the asset quality level (NPF) of Islamic Commercial Banks is within a safe limit or does not exceed 5% which has been determined by Bank Indonesia.

So it can be concluded that asset quality (NPF) has the ability to manage good management in overcoming the risk of non-performing loans. While the standard deviation value is 1.55538%, in this case the data from the asset quality variable (NPF) is said to be good because the value of the standard deviation is smaller than the average value (mean).

The liquidity variable (FDR) has a minimum (lowest) value of 71.87% which comes from the liquidity (FDR) of BRI Syariah Bank in 2017, where BRI Syariah Bank has the lowest liquidity value (FDR) compared to other Islamic Commercial Banks. So this shows that BRI Syariah Bank is lacking in the ability to channel credit. While the liquidity variable (FDR) has a maximum (highest) value of 100.87% which comes from the liquidity (FDR) of Bank NTB Syariah in 2015, which indicates that the level of lending at Bank NTB Syariah is better than other Islamic Commercial Banks. With an average value (mean) of 83.5570%, it can be concluded that statistically, from the liquidity level (FDR) of Islamic Commercial Banks in Indonesia, the standard is 80%, so that it can be said that Islamic Commercial Banks have been quite effective in extending credit to customers. And judging from the standard deviation of 8.47416% which means the value of the standard deviation is said to be good, because the value of the standard deviation is smaller than the average value (mean).

The capital variable (CAR) has a minimum (lowest) value of 12.00% which comes from the capital (CAR) of Bank Muamalat in 2015, this shows that Bank Muamalat in 2015 has the lowest ability in terms of capital compared to other Islamic Commercial Banks. While the capital variable (CAR) has a maximum (highest) value of 38.30% originating from BCA Syariah in 2019, which shows that BCA Syariah in 2019 has the highest capability in terms of capital compared to other Islamic Commercial Banks. With an average value (mean) of capital (CAR) of 22.0040% which statistically from the level of capital (CAR) at Islamic Commercial Banks has a value that is far from the standard and has been determined by Bank Indonesia, which is 8%, it can be concluded that Islamic Commercial Banks have good conditions in the application of capital because they have a standard deviation value of 8.68038% or the standard deviation value is smaller than the average value (mean).

#### **Classic Assumption Test Results**

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### **Data Normality Test Results**

This test is conducted to determine whether or not a data distribution is normal. If this assumption is violated, the statistical test becomes invalid for a small sample size (Furzah, 2019). The normality test in this study used the Kolmogorov-Smirnov value. The data can be said to be normal if the significant value is greater than 0,05.

The following is the data normality test table:

Sample Kolmogorov-Smirnov Test				
		standardized		
		Residual		
N		30		
Normal	Mean	0,0000000		
Parameters <sup>a,b</sup>	Std.	0,51623288		
	Deviation			
Most	Absolute	0,118		
Extreme	Positive	0,097		
Differences	Negative	-0,118		
Test Statistic	0,118			
Asymp. Sig. (	.200 <sup>c,d</sup>			

### Table 3. Normality Test based on Kolmogorov-Smirnov values

Based on the results of the Kolmogorov-Smirnov test in table 3, it shows that the value of Asymp. Sig. (2-tailed) of 0.200 or a value greater than 0.05. So it can be concluded that the residual value is normally distributed.

### **Multicollinearity Test Results**

The multicollinearity test is part of the classical assumption test in multiple linear analysis. The purpose of this test is to determine whether there is a strong relationship between the independent variable and the dependent variable. In the regression model, it is found that there is a correlation between the independent variables. A good regression model should not have a correlation in the independent variables. Based on the tolerance value, multicollinearity will not occur if the tolerance value is > 0.10. And vice versa if there is multicollinearity then the tolerance value is < 0.10. Likewise, the VIF value does not occur multicollinearity if the VIF value is < 10.00. On the other hand, if the VIF value is > 10.00 then multicollinearity occurs. One way to find out whether there is a strong relationship between variables is using the Tolerance and VIF (Variance Inflation Factor) methods.

The following is a multicollinearity test table:

Source: SPSS25 Data Processing Results

	Model	Collinearity Statistics			
	Widder	Tolerance	VIF		
1	(Constant)				
	Asset Quality	0,570	1,753		
	Liquidity	0,714	1,401		
	Capital	0,650	1,538		

#### **Table 4. Data Multicollinearity Test**

From the table above it can be concluded that:

- Asset Quality has a tolerance value of 0.570 or greater than 0.10 and a VIF value of 1.753 or less than 10.00, which means that there is no multicollinearity.
- Liquidity has a tolerance value of 0.714 or greater than 0.10 and a VIF value of 1.401 or less than 10.00, which means that there is no multicollinearity.
- Capital has a tolerance value of 0.650 or greater than 0.10 and a VIF value of 1.538 or less than 10.00, which means that there is no multicollinearity.

Based on the data above, it can be concluded that there is no correlation between the independent variables or there is no multicollinearity because the independent variable has a tolerance value greater than 0.10 and a VIF value less than 10.00.

#### **Heteroscedasticity Test Results**

The heteroscedasticity test is the result of the classical assumption test in the regression model. The aim is to test whether in the regression model there is an inequality of variance from the residuals from one observation to another. One of the requirements that must be met in a good regression model is the absence of heteroscedasticity symptoms. The way to prevent heteroscedasticity is to have a Significant value > 0.05. If the significant value < 0.05 then heteroscedasticity occurs. Symptoms or problems of heteroscedasticity result in an inaccuracy in the results of the regression analysis carried out.

The following are the results of the heteroscedasticity test:

Source: Data processed by SPSS25

	Coefficients <sup>a</sup>							
Μ	odel	t	Sig.					
1	(Constant)	-0.109	0.914					
	Asset Quality	-2,762	0.010					
	Liquidity	1.314	0.200					
	Capital	1,149	0.261					

#### **Table 5. Heteroscedasticity Test Results**

Source:	SPSS25	Processed	Data
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The results of the heteroscedasticity test show that the significant value of asset quality is 0.010 < 0.05, which means that there is heteroscedasticity. In contrast to asset quality, the significant value of liquidity is 0.200 > 0.05; capital 0.261 > 0.05. This means that there is no heteroscedasticity.

#### **Autocorrelation Test Results**

This autocorrelation test aims to test whether in the linear regression model there is a correlation between the confounding error in period t and the error in the previous period (t-1). To check whether there is an autocorrelation that will arise as a result of sequential observations and are related to each other, the method is to use the Durbin-Watson test (DW Test).

Here are the results of the autocorrelation test:

	Table 6. Watson's Durbin test							
	Model Summary <sup>b</sup>							
				Std. Error				
			Adjusted	of	Durbin-			
Model	R	R	R	the	Watson			
		Square	Square	Estimate				
1	$.742^{a}$	0,551	0,499	0,54520	0,686			

Source: SPSS25 Processed Data

The basis for making decisions for the Durbin-Watson test is with the following decision-making provisions:

- 1. If (4-d) <dl, it is concluded that there is a negative autocorrelation.
- 2. If (4-d)>du, it is concluded that there is no negative autocorrelation.
- 3. If dl<(4-d)<du, it can be concluded that the test is not convincing or that no decision can be made.

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Based on table 6, shows that the value of Durbin-Watson is 0.686. What will be compared with the significant table value is 0.05 (5%). The analysis of the autocorrelation test in this study is the dl value of 1.214, the du value of 1.650. With the number of independent variables k-3 and the number of data observations as much as 30. The results of the autocorrelation test are 4 - d > du, or it can be concluded that there is no negative autocorrelation.

### **Hypothesis Test Results**

# **Coefficient of Determination Test Results (R<sup>2</sup>)**

The coefficient of determination test  $(R^2)$  is a quantity or proportion that shows how many variations of a variable are able to explain the variation of a variable in the form of a percentage (%). The value of  $R^2$  can be said to be good if the value is above 0.5. Because the value of  $R^2$  is between 0 and 1.

The following is a table of the results of the coefficient of determination  $(R^2)$  test:

Table 7. Coefficient of Determination Test (R <sup>2</sup> )							
Model Summary							
				Std. Error			
			djusted R	of the			
Model	R	R Square	Square	Estimate			
1	.742 <sup>a</sup>	0,551	0,499	0,54520			

Source: data processed by SPSS25

The results of the coefficient of determination  $(\mathbb{R}^2)$  in table 7 show that the R Square value is 0.551 or 55.1%. So it can be concluded that asset quality, liquidity, and capital have an effect of 55.1% on profitability. While the remaining 44.9% can be influenced by other variables outside of the discussion model of this study.

### **F-Test Results**

The F test is the same as the simultaneous hypothesis test or it can also be called the ANOVA test. The assumption is a valid and reliable indicator, the variable has one independent variable. If the value of sig. < 0.05, or F count > F table, then there is an effect of independent variables (asset quality, liquidity, and capital) simultaneously on the dependent variable (profitability), on the other hand if F count < F table then there is no simultaneous effect of independent variables on dependent variable. The following is a table of results from the F test:

	ANOVA <sup>a</sup>						
N	Iodel	Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	9,490	3	3,163	10,642	.000 <sup>b</sup>	
	Residual	7,728	26	0,297			
	Total	17,219	29				

#### Table 8. F-test

Source: data processed by SPSS25

Based on table 8. the F-count value obtained a result of 10.642 with a significant value of 0.000 which is smaller than 0.05. There are also F-tables to be compared with F-count. The number of independent variables k = 3, with the number of samples = 30, with a significant level of 0.05 (5%), it can be calculated by the formula to find the F table;

F table = F(k; n-k) = F(3; 27) = 2,96

It can be concluded that the significant value is 0.000 < 0.05 or F-count 10.642 > 2.96 F-table, so there is a significant effect of the dependent variable (profitability) on the independent variables (asset quality, liquidity, and capital).

#### t-Test Results Statistic (t-Test)

The t-test is used to see how influential the independent variables (asset quality, liquidity, and capital) are on the dependent variable (profitability). Independent variables can be said to have an effect on the dependent variable if the value (sig) < 0.05 or t count > t table. And there is no effect of the independent variable on the dependent variable if the value (sig) > 0.05 or t count < t table. The following is a table of results from the t statistical test:

Table 9.	Statistical	t-test	(t-test)
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ĺ	Coefficients <sup>a</sup>								
		Unstandardized Coefficients		Standardized Coefficients					
N	Iodel	В	Std. Error	Beta	t	Sig.			
1	(Constant)	1,612	1,274		1,265	0,217			
	Asset	-0,292	0,086	-0,590	-3,391	0,002			

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Quality					
Liquidity	-0,005	0,014	-0,058	-0,376	0,710
Capital	0,023	0,014	0,263	1,612	0,119

Source: data processed by SPSS25

Formula to find t-table;

T tabel =  $t(\alpha/2; n-k-1) = t(0,025; 26) = 2,056 / - 2,056$ 

Based on the analysis in table 9, the regression can be formulated as follows:

a) H1 : Asset Quality Ratio (NPF) to Profitability (ROA).

Asset quality has a t-count value of -3.391, while the t-table is 2.056 or -2.056. With the value of t count -3.391 > -2.056. And the significant value is  $0.002 < \alpha$  (0,05). Asset quality has a negative regression coefficient direction and has a significant effect on profitability. So it can be said that asset quality has a significant effect on profitability (ROA), then the first hypothesis (H1) is accepted.

H1: Asset Quality has a significant effect on Profitability.

b) H2 : Liquidity Ratio (FDR) to Profitability (ROA).

Liquidity has a t count value of -0.376, while the t table is 2.056 or -2.056. With t value - 0.376 < -2.056. And the significant value is  $0.710 > \alpha$  (0,05) and has a negative regression coefficient direction and has no significant effect on profitability. So that it can be said that liquidity has no significant effect on profitability (ROA), then the second hypothesis (H2) is rejected.

H2: Liquidity has no significant effect on profitability.

c) H3 : Capital Ratio (CAR) to Profitability (ROA).

Capital has a t-count value of 1.612, while the t-table is 2.056 or -2.056. With a t-count value of 1.612 < 2.056. And the significant value is  $0.119 > \alpha$  (0,05) and has a positive regression coefficient direction but has no significant effect. So it can be said that capital has no significant effect on Profitability (ROA), because it has no significant effect, the third hypothesis (H3) is rejected.

H3 : Capital has no significant effect on profitability.

# Multiple linear regression

Multiple regression in this study was used to determine the effect of NPF, FDR, and CAR on ROA. The purpose of this test is to determine the or absence of influence between two or more independent variables (X) on the dependent variables (variable Y).

The following is a table of multiple linear regression test results:

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Coefficients <sup>a</sup>										
		Unstanda	ardized	Standardized						
		Coefficients		Coefficients	t	Sig.				
			Std.Error							
Model		В		Beta						
1	(Constant)	1,612	1,274		1,265	0,217				
	Asset Quality	-0,292	0,086	-0,590	-3,391	0,002				
	Liquidity	-0,005	0,014	-0,058	-0,376	0,710				
	Capital	0,023	0,014	0,263	1,612	0,119				

# Table 10. Multiple Regression Test Results

Source: data processed by SPSS25

Based on the table above, the following multiple linear regression equation is obtained: Y =  $\alpha$  value, which is 1.612 + (-0.292) Asset Quality (NPF) - (-0.005) Liquidity (FDR) + 0.023 Capital (CAR).

The equation of the regression above is described as follows:

- a. The constant value is 1.612, which means that if the independent variable is considered = 0, then the value of the dependent variable (Profitability) is 1.612.
- b. The value of the NPF coefficient is -0.292, indicating that for every 1% addition to the NPF value, profitability will increase by -0.292 with the assumption that the other independent variables are constant.
- c. The value of the FDR coefficient is -0.005 indicating that for every 1% addition to the FDR value, profitability will increase by -0.005 with the assumption that the other independent variables are constant.
- d. The value of the CAR coefficient is 0.023, indicating that for every 1% addition to the CAR value, profitability will increase by -0.292 with the assumption that the other independent variables are constant.

### 3.2. Discussion

### Effect of Asset Quality (NPF) on Profitability (ROA).

The results of this study indicate that asset quality has a significant negative effect on profitability (ROA). Which means that the higher the ratio value of the NPF, the ROA value will decrease. It can be said that if the NPF condition in a bank gets higher, there will also be a lot of costs so that it can potentially cause losses to the bank. In addition to potential losses, the higher the NPF value, the worse the financing that occurs in Islamic banks, consequently making the amount of financing larger and problematic for the Islamic bank and may cause a loss to the bank.

The results of this study are also consistent with research conducted by Chotijah & Fuadati

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(2015), Pamungkas, (2016) that the results of the study are that NPF has a significant effect on ROA so that the hypothesis on Islamic banks is accepted.

#### Effect of Liquidity (FDR) on Profitability (ROA).

The results of this study indicate that Liquidity (FDR) has a positive and insignificant effect on profitability (ROA), which indicates that the company's Financing to Deposit Ratio (FDR) is not appropriate to be used as a reference in increasing profitability at a bank but not necessarily the liquidity value will be low too. It is possible that there are other interference that can affect the Financing to Deposit Ratio (FDR), one of which is the financing management of Islamic Banks. For example, Islamic banking management only focuses on long-term financing compared to collecting third party funds (DPK).

From the description above, it can be concluded that the higher the FDR in channeling its funds for financing, the higher the increase in profit. Liquidity research is aimed at assessing the ability of banks to maintain liquidity levels, including anticipation of liquidity ratios that will emerge.

#### Effect of Capital (CAR) on Profitability (ROA).

The results of this study indicate that capital has no significant positive effect on profitability. The high value of CAR can be said to be idle capital, or channeled to other sectors apart from financing. CAR itself is a ratio that is useful to see how much of all assets owned have risks (credit, claims from other banks, etc.) which are financed by their own capital. So when banks allocate more capital to protect assets that can contain risks, the portion for financing will also decrease, and vice versa for RWA reserves should not be too much so that the portion used for other financing will also increase.

The results of this study are also consistent with the research conducted by Widiyanti et al. (2015), which results from the study that CAR has a positive and insignificant effect so that the hypothesis is rejected.

#### 4. Conclusion

The main purpose of this study is to analyze whether there is an influence of Asset Quality (NPF), Liquidity (FDR), and Capital (CAR) on Profitability (ROA) at registered Islamic Commercial Banks and their financial statements published from the 2015-2019 period. The conclusions of the study are:

- 1. Asset quality (NPF) has a significant negative effect on profitability (ROA) in Islamic banks, which means that the higher the NPF ratio, the lower the ROA.
- 2. Liquidity (FDR) has an insignificant negative effect on Profitability (ROA) in Islamic Banks. These results indicate that increasing or decreasing FDR does not affect the amount of ROA.
- 3. Capital (CAR) has no significant positive effect on Profitability (ROA) in Islamic Banks. A high CAR will also hamper the ability of a bank to carry out its business, because the capital reserves used are getting bigger to cover losses that arise as a result of non-performing financing.

#### Suggestion

a) For Companies

Banks need to reconsider what factors can significantly affect the level of the amount of financing carried out so that they can obtain the desired or greater profit or profit while still applying prudence in order to attract customers and their funds will be invested in the bank. Furthermore, it is hoped that banks will be more selective in increasing profit sharing in order to minimize cost growths to have a positive effect on Islamic banks.

b) For Researchers

The data used for this study is five years and uses a period of per year. For further researchers, if they are interested in conducting research using the profitability ratio (ROA), it is better to add more other variables to be used as research material, and add another research period to the quarter instead of a year, so that the results that will be obtained are even better.

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