

# **THE DETERMINANT FACTORS OF PROFITABILITY ON SHARIA RURAL BANKS IN INDONESIA**

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## **ABSTRACT**

This research aimed to empirically examine the determinants of profitability of Sharia rural banks in Indonesia with quarterly period of time from 2014Q1 to 2018Q3. This research uses cross-sectional data of quarterly financial report and macroeconomic variables in Indonesia. The study is processed and analyzed quantitatively by using multiple regression. This research is using 8 Sharia rural banks in Indonesia with the total of 152 data used. The research reveals that inflation and NPF have no significant influence towards profitability of Sharia rural banks in Indonesia. While, the other four variables, GDP, CAR, FDR and OER are significantly influence the profitability of Sharia rural banks in Indonesia as much as 31.6%. In terms of variables, GDP, CAR and FDR are positively significant influence the profitability, while OER has negatively significant influence the profitability of Sharia rural banks in Indonesia.

*Keywords:* GDP, Inflation, CAR, FDR, NPF, OER, Profitability, Sharia Rural Bank

## **1. INTRODUCTION**

Banking is considered as the important and influential sectors for the economy of the country. In Indonesia, it started in 1983 when Bank Indonesia gave freedom to banks by set up interest rates. Indonesian banks in carrying out their functions are based on economic democracy and use the precautionary principle. Bank is determined as the business entity which collecting funds in the form of deposits and channel them in the form of credit and / or other forms with the aim to develop the living standard of the community (Otoritas Jasa

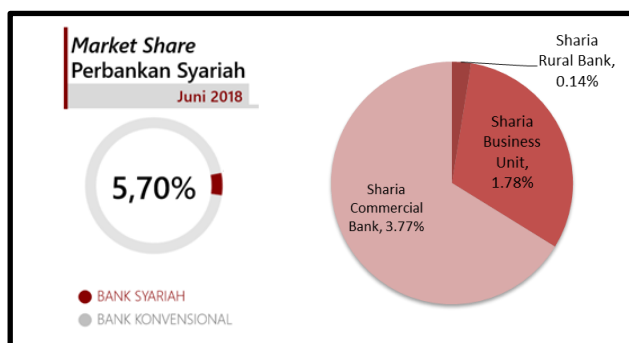
Keuangan, 2018).

In the year of 1990s, The Indonesian Ulema Council (MUI) established a working team with aim to form Islamic Banks in Indonesia. As the result of it, PT. Bank Muamalat Indonesia was established as the first Islamic bank in Indonesia on November 1, 1991 accordance to its establishment certificate and officially operated with an initial capital IDR 106,126,382,000 on May 1, 1992 (Laucereno, 2018). When the economic and monetary crisis occurred in 1997-1998, financial institutions such as banks experienced a difficult period due to high interest rates due to high inflation. During the economic crisis Islamic banks were not affected and still showed relatively better performance because Islamic banks did not refer to interest rates but profit sharing.

Accordance to Bambang Brodjonegoro, former of Finance Minister of Indonesia, there are several studies that say that Islamic banks have a stronger resistance to dealing with crises than conventional banks because Islamic banks tend to play “safe”. In every transaction in Islamic finance must be based on underlying assets, unlike the conventional banks that tend to be speculative (detikfinance, 2015).

Islamic finance in Indonesia has developed more than two decades since the operation of Bank Muamalat Indonesia, as the first Islamic bank in Indonesia. Even in global markets, Indonesia is among the top ten countries that have the largest Islamic financial index in the world. Accordance to the study by Rahman (2015) which The Test of Crisis Resilience to Islamic Banking in Indonesia with the Index Banking Crisis (IBC) for the period of 2006 to 2012 shows that Islamic finance system could give contributions toward the monetary condition of the country, which Islamic banks in Indonesia does not significantly influenced by the global crisis happened in 2006 to 2012.

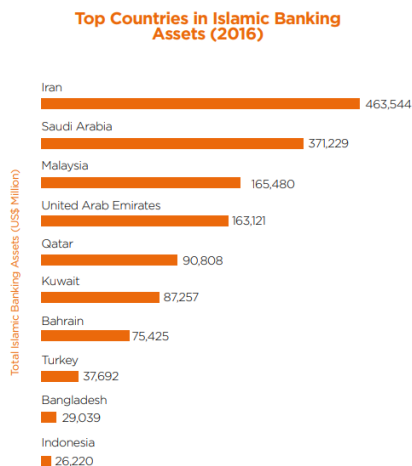
Figure 1.1 Market Shares of Islamic Banks in Indonesia



Source: Snapshot Perbankan Syariah Indonesia per June 2018

However, the growth of Islamic finance has not been able to keep up with conventional financial growth. This can be seen from the Islamic financial market share which is still 5.70% per June 2018 with 0.14% is from Sharia rural bank which is the lowest compared to Sharia commercial banks and Sharia business unit (Otoritas Jasa Keuangan, 2018).

Figure 1.2 Top 10 Countries in Islamic Banking Assets



Source: Thomson Reuters Islamic Finance Development Report, 2017

Moreover, by looking at the assets, Indonesia has the lowest Islamic banking assets compared to the top 10 countries in Islamic banking asset with only USD 26,220 Million. It is quite contrast to the fact that Indonesia has the most Muslim population in the world, which has more than 87% of the population or 222 million are Muslim (Muslim Pro, 2018).

Islamic bank is carrying out its business activities which align with Sharia principles. According with its type, it divided into three types of bank which are Sharia commercial bank, Sharia business unit and Sharia rural banks. In Indonesia as per July 2018, there are 13 Sharia commercial banks, 21 Sharia business units and 168 Sharia rural banks are operating. Meanwhile, Sharia rural banks have always decreases ROA in almost every year yet increasing its NPF at in almost every year (Otoritas Jasa Keuangan, 2017).

Table 1.1 Financial Ratios of Sharia Rural Bank

Financial Ratios of Sharia Rural Banks					
Ratio	2013	2014	2015	2016	2017
<b>CAR</b>	22.08%	22.77%	21.47%	21.73%	21.26%
<b>ROA</b>	2.79%	2.26%	2.20%	2.27%	2.41%
<b>ROE</b>	21.22%	16.13%	14.66%	16.18%	17.86%
<b>NPF</b>	6.50%	7.89%	8.20%	8.63%	10.40%

<b>FDR</b>	120.93%	124.24%	120.06%	114.40%	116.94%
<b>OER</b>	80.75%	87.79%	88.09%	87.09%	85.56%

Source: Sharia Banking Statistics, December 2017

The financial ratios of Sharia rural banks per 2013 to 2017, it was clearly stated that Sharia rural banks has decrease its performance since its ROA has decrease from 2013 to 2017 with only 2.41% even though it started to increase in 2015 but it did not significantly increase the performance. Furthermore, the NPF has increasing every year which exceed the regulation of Bank Indonesia which 5% of NPF ratio yet the FDR has more than 100% every year which means the growth of financing is faster than the growth of funding sources.

The growth and development of bank financial institutions in the economy is largely determined by the level of profit gained in its operational activities (Hidayati, 2014). Profitability is one of the significant components of the business including the banking world because it contributes to maintain destructive macroeconomic financial tremors through absorbing and contributes financially to stabilize the financial system (Ali & Maamor, 2018).

According to Hassan, K. by Riyadi (2014), in measuring the bank performance, there are two factors that influence profitability, which are internal factors and external factors. Internal factors include banks financing products, performance financing, assets quality and capital. External factors include market structure, banking regulation, inflation, interest rates and market growth rates (Riyadi & Yulianto, 2014). In this research, the researcher use both external factors and internal factors to analyze its influence toward the profitability of Sharia rural bank in Indonesia.

## **2. LITERATURE REVIEW**

### **2.1. Sharia Bank**

Banks are entities which collecting funds in the form of financing or in other words carry out the financial intermediary function. As stipulated in Law No. 10 of 1998, banks have the function of collecting and channelling public funds, as well as banking objectives to support national development. In the banking system in Indonesia there are two types of banking operational system, which are conventional banks and Islamic banks (Sharia banks). In accordance to Sharia Banking Law No. 21 of 2008, Sharia bank is bank that runs business according with the Sharia principles, or the principle of Islamic law that is regulated in the fatwa of the Indonesian *Ulema* Council (MUI) such as the justice and equality principles (*'adl wa tawazun*), benefits (*maslahah*), universalism (*alamiyah*), and does not contain *gharar*, *maysir*, *riba* (usury), *zalim* (cruel) and obscene (objects).

### **2.2. Sharia Rural Banks**

Sharia rural bank is carrying out their business activities based on Sharia policies which in

its activities are not providing the services in payment traffic. The legal form could be as limited liability company, cooperative or regional company (Article 2 PBI No. 6/17 / PBI / 2004). Accordance with the Law No. 21 of 2008 stated that sharia rural bank is a bank with Sharia system which its activities do not provide services in traffic payment. Sharia rural banks' business activities essentially are similar to the activities of the Sharia commercial banks, namely in the form of fund raising, distribution of funds, and activities in the service sector. What distinguishes it is that Sharia rural banks is not permitted to provide services in payment traffic, for example participating in clearing activities, collection, and curbing demand deposits.

### **2.3. *Macroeconomics***

Macroeconomics is the economy as a whole which has involve to the overall economic performance of the nation such as production growth, unemployed number, price increase by the inflationary, deficits of government, exports and imports level (OpenStax College, 2014). Additionally, according to (Andolfatto, 2008), there are 9 (nine) indicators of macroeconomic such as GDP, output and employment, unemployment, uncertainty and expectations, consumption and saving, capital and investment, money and inflation, fiscal policy, and growth and development.

#### **2.3.1 Gross Domestic Product**

GDP is considered as one of the most significant macroeconomic variables to represent profitability (Ali & Maamor, 2018). According to (Garin, et al., 2018) GDP can be calculated by using expenditure approach which based on expenditures incurred in given period.

#### **2.3.2 Inflation**

Accordance to the study by Amadeo in 2012, inflation is when the price's condition of most goods and services continue increasing and it may cause the decreasing of the standard of living cost as the effect of spending a lot of money to get the same amount of goods and/or services we bought previous time (Islam et al., 2017). The impact of inflation is not only on corporate's pricing but also has influence on bank customers and financial resources significantly (Ali & Maamor, 2018). In accordance to (Tennant, 2009), the change in CPI from preceding year is considered as inflation

### **2.4. *Financial Performance***

Financial performance is the barometer of the operation of the company. Financial performance can be used as the measurement of financial health of the company (Matar & Eneizan, 2018). To assess the financial performance, it can be done by analyzing the financial statement of the company to determine its stability, viability and profitability (Sultan, 2014).

#### **2.4.1 Capital Adequacy Ratio**

CAR shows how far all risk-bearing assets come from being financed from the own

capital fund of banks. It also to incur source of funds from outside the bank such as public funds, loans, etc. (Rahim, 2014). Capital adequacy ratio can be defined as an important parameter for judging the strength and soundness of the bank (Fatima, 2014).

#### **2.4.2 Financing to Deposit Ratio**

According to the study of Mohammed in (Amelia, 2015), FDR is released for financing Islamic banks to determine the third party funds. FDR is also can be used to measure the liquidity of the banks (Wahyu, 2016). In addition, to determine the bank performance in term of financing, the bank can use FDR as a tool (Nahar & Prawoto, 2017). FDR shows the capability of bank in paying bank the third party

#### **2.4.3 Non-Performing Financing**

NPF is one of the risks since the greater the amount of funding compared to the third party fund in a bank brings consequences of the greater the risk must be borne by the banks (Solihatun, 2014). In other words, NPF used as the measurement level of financing problems in Islamic banks (Amelia, 2015). According to (Nahar & Prawoto, 2017) NPF is the ratio to determine risk in financing of banks

#### **2.4.4 Operational Efficiency Ratio**

OER determines the bank's efficiency in carrying out its operations (Yogianta, 2013). Bank's efficient determined by the amount of OER, thus the higher OER, the greater inefficient operating cost of the bank. On the other hand, the lower OER ratio determines the better financial performance of banks (Amelia, 2015).

### **2.5. Profitability**

Profitability is the ratio used to see the company's ability to generate profits (Mawaddah, 2015). Profitability is one factor to assess performance of a company (Barus & Leliani, 2013). Profitability is defined as a condition produces financial gain or profit through exchange of potential risks (Ali & Maamor, 2018). The level of profitability of the bank is influenced by several factors both internal and external. Some of these factors are bank characteristics, macro indicators, taxation, financial structure, asset quality, capital and liquidity (Anto & Wibowo, 2012).

### **2.6. Research Gap**

The gap has found based on several aspects, which are the variables used, sample period, sample size and result. This research consists of GDP, inflation, CAR, FDR, NPF, and OER. While, Asadullah (2017) measured the profitability by using GDP, size, inflation, liquidity and exchange rate. Amelia (2015) was studied the financial performance to analyze the profitability. However, this study has presented both macroeconomics factors and financial performance to measure the profitability. It has different concern with Ashraf & Chowdhury (2015) which focused on risk management such as credit risk, liquidity risk also efficiency ratio and equity financing as its internal factors to observe the

profitability and Paulin & Wiryono (2015) with observes the ROA of Islamic banks using the internal factors such as NPF, OER, NIM, FDR, PPAP Compliance, NPA, EA, and LIQD.

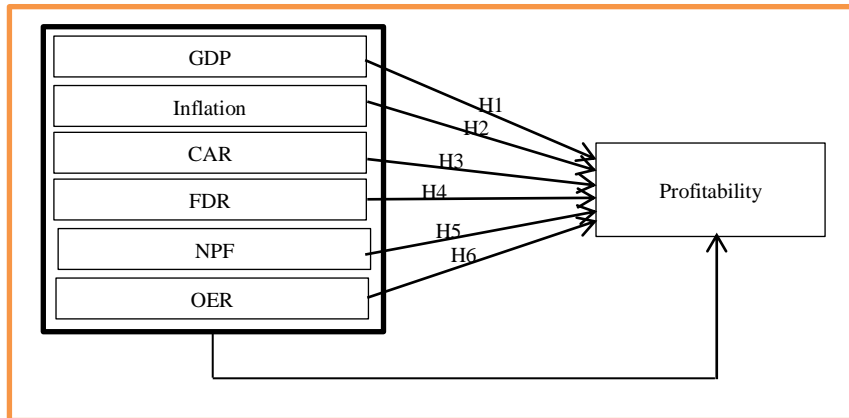
The result was discovered which each previous research has various differentiations such as the research held by Amelia (2015) shows CAR, NPF and FDR partially has no significant effect towards ROA. In addition, this research is containing the period of 2014Q1 to 2018Q3 which has the latest period. This in contrast with Asadulah (2017), that was used the yearly data from 2006 to 2015. Furthermore, most of the studies examined only for Sharia commercial bank to represent Sharia banks profitability. That being said, the researcher is motivated to run the study with more comprehensive by using Sharia rural bank as its concern.

### **3. RESEARCH METHODOLOGY**

This section is explaining the research framework and the hypothesis briefly to shows the temporary answer of this research and it follows with the research instrument, sample and data analysis method.

#### **3.1 Research Framework**

Figure 3.1: Research Framework



Source: Adjusted by Researcher, 2018

#### **3.2 Hypothesis**

Based on the figure 3.1 research framework, the hypotheses of this research are formulated as follows:

1.  $H_{01} : \beta_1 = 0$  or if probability t-statistics  $> \alpha$  then there is no significant partial influence of GDP towards profitability of Sharia rural banks in Indonesia.  
 $H_{a1} : \beta_1 \neq 0$  or if probability t-statistics  $> \alpha$  then there is a significant partial influence of GDP towards profitability of Sharia rural banks in Indonesia.

2.  $H_{02} : \beta_2 = 0$  or if probability t-statistics  $> \alpha$  then there is no significant partial influence of inflation towards profitability of Sharia rural banks in Indonesia.  
 $H_{a2} : \beta_2 \neq 0$  or if probability t-statistics  $> \alpha$  then there is a significant partial influence of inflation towards profitability of Sharia rural banks in Indonesia.
3.  $H_{03} : \beta_3 = 0$  or if probability t-statistics  $> \alpha$  then there is no significant partial influence of CAR towards profitability of Sharia rural banks in Indonesia.  
 $H_{a3} : \beta_3 \neq 0$  or if probability t-statistics  $> \alpha$  then there is a significant partial influence of CAR towards profitability of Sharia rural banks in Indonesia.
4.  $H_{04} : \beta_4 = 0$  or if probability t-statistics  $> \alpha$  then there is no significant partial influence of FDR towards profitability of Sharia rural banks in Indonesia.  
 $H_{a4} : \beta_4 \neq 0$  or if probability t-statistics  $> \alpha$  then there is a significant partial influence of FDR towards profitability of Sharia rural banks in Indonesia.
5.  $H_{05} : \beta_5 = 0$  or if probability t-statistics  $> \alpha$  then there is no significant partial influence of NPF towards profitability of Sharia rural banks in Indonesia.  
 $H_{a5} : \beta_5 \neq 0$  or if probability t-statistics  $> \alpha$  then there is a significant partial influence of NPF towards profitability of Sharia rural banks in Indonesia.
6.  $H_{06} : \beta_6 = 0$  or if probability t-statistics  $> \alpha$  then there is no significant partial influence of OER towards profitability of Sharia rural banks in Indonesia.  
 $H_{a6} : \beta_6 \neq 0$  or if probability t-statistics  $> \alpha$  then there is a significant partial influence of OER towards profitability of Sharia rural banks in Indonesia.

### ***3.3 Research Instrument***

This research is using quantitative method with secondary data. The data obtained financial reports of Sharia rural banks in Indonesia quarterly published by OJK and Bank Indonesia also BPS data portal. IBS SPSS Statistics 22 used in this research to generate the regression model.

### ***3.4 Sample***

The study is using 8 banks accordance to non-probability sampling with focus in purposive sampling that meets criteria as follow:

1. Sharia rural banks which has listed and published in Bank Indonesia and OJK
2. Sharia rural banks in Indonesia with minimum assets of IDR 100 Billion
3. Have provided its financial report in quarterly for the period of 2014Q1 to 2018Q3.

### ***3.5 Method of Data Analysis***

This research uses parametric statistical approach such as:

1. Descriptive statistics used to analyze data by describing the collected data as they are without intending to make conclusions that apply to the general or generalizations (Sugiyono, 2010).
2. Classical assumption test utilizes the multiple regressions or indeed any statistical technique



(William, 2015). There are several test used for classical assumption test which are normality test, heteroscedasticity test, autocorrelation test, and multicollinearity test.

3. Multiple regression analysis is financial econometric tools to describe and evaluate the relationship among a continuous outcome variable and one or multiple independent variables in one equation (Salam, 2008). The value of partial regression coefficient ( $X_1 - X_6$ ) holds an important role as the basic analysis in this research since it measures the marginal contribution of independent variable to dependent variable, by holding all other variables are remain the same (Schwert, 2010).
4. T-test has aim to analyze the partial influence between each of independent variables (coefficient) towards the dependent variable (Sarwono, 2006).
5. F-test analyzes whether there is a relationship between set of independent variables towards dependent variable simultaneously (Sarwono, 2006).
6. Coefficient determination determination measures how much the percentage of variation of independent variables which examined the dependent variables variation (Winarno, 2011).

## **4. ANALYSIS**

### ***4.1 Descriptive Statistic***

Descriptive analysis describe the features of a specific set of data by examining the mean, median, maximum, minimum and standard deviation for every variable within the research. According to the result of SPSS 22 by using 152 units of observation for every variables with 8 banks on quarterly basis; it concludes the explanations as below:

1. ROA to represent profitability as the dependent variables shows mean of 3.6217 with standard deviation of 2.15651. It indicates that the data mostly spread around  $2.15651 \pm 3.6217$ .
2. GDP as the independent variables shows mean of 0.0509 with standard deviation of 0.00380. It indicates that the data mostly spread around  $0.00380 \pm 0.0509$ .
3. Inflation as the independent variables shows mean of 1.0342 with standard deviation of 0.94496. It indicates that the data mostly spread around  $0.94496 \pm 1.0342$ .
4. CAR as the independent variables shows mean of 20.8944 with standard deviation of 14.22135. It indicates that the data mostly spread around  $14.22135 \pm 20.8944$ .
5. FDR as the independent variables shows mean of 91.7039 with standard deviation of 38.12872. It indicates that the data mostly spread around  $38.12872 \pm 91.7039$ .
6. NPF as the independent variables shows mean of 4.5932 with standard deviation of 3.40273. It indicates that the data mostly spread around  $3.40273 \pm 4.5932$ .
7. OER as the independent variables shows mean of 0.7561 with standard deviation of 0.48930. It indicates that the data mostly spread around  $0.48930 \pm 0.7561$ .

### ***4.2 Classical Assumption Test***

1. Normality Test

Normality test generally used to help the researcher to find out whether the variable used in the research is normally distributed or not (Sugiyono, 2010). P-p plot graph shows the data spreads around the diagonal line also it follows the diagonal line's direction.

2. Autocorrelation Test

Autocorrelation aims to clarify correlations in data collection among time series data in the same cross sectional unit on the same variable (Meko, 2013). The result of Durbin-Watson test is more than -2 but less than +2. It concludes that the test shows there is no tendency of the existence of autocorrelation in this regression model.

4. Multicollinearity Test

The multicollinearity test has objective to test the regression model if there is correlation between the independent variables (Ghozali, 2016). A good regression model which required to be analyzed is the absence of multicollinearity and it determined by its VIF value. All the 6 independent variable are not having multicollinearity problem in this regression model because of the value of VIF is less than 5.00.

### **4.3 Multiple Regression**

Multiple regression analysis result shows how much independent variable influences the dependent variable. The multiple regression equation can be formulated based on the regression coefficient of each independent variable as follows:

$$Y = -2.337 + 101.154 \text{ GDP} - 0.136 \text{ INF} + 0.038 \text{ CAR} + 0.023 \text{ FDR} - 0.083 \text{ NPF} - 2.024 \text{ OER}$$

(7)

### **4.4 Hypothesis Testing**

#### **4.4.1 T-Test**

T-test conducted to compare the probability value from t-statistics for every independent variable with the significance value of  $\alpha = 5\%$  or 0.05. Inflation and FDR have no significance influence toward profitability while the rest variables has significance influence toward profitability.

#### **4.4.2 F-Test**

F-test aims to analyze the relationship between set of independent variables toward dependent variable simultaneously (Sarwono, 2006). It shows the value of F is 12.623 with the significant value less than 0.05. It concludes,  $H_a$  is accepted and  $H_o$  is rejected.

#### **4.4.3 Coefficient of Determination**

Coefficient of Determination explained the variation of independent variables to examine the dependent variables. It shows that the adjusted R square is 0.316. It concluded that all the independent variables, which are GDP, inflation, CAR, FDR, NPF and OER 31.6% influences simultaneously towards profitability of Sharia rural banks in Indonesia. The rest of 68.4% is influenced by other variables which are not examined in this study.

### **4.5 Interpretation of Result**

### 1. Influence GDP towards Profitability.

The result shows the significant value of 0.037, the hypothesis is accepted. GDP has coefficient regression of 101.154 which indicates the increasing of GDP leads to the increasing in profitability. Amzal (2016) cited that GDP can be considered as the influencer of numerous factors relating to the supply and demand for loans and deposits which will have either positive or negative influence towards the level of bank's profitability.

The theory and this research result align with the previous research conducted Ali, Maamoor, Yaacob and Gill (2018) found that GDP is positively influencing the profitability of Islamic banks. The study explained that GDP is the macroeconomic indicators that commonly used to measure the total economic activity within the economy among other macroeconomics variable.

### 2. Influence Inflation towards Profitability

The result shows 0.389 of significant value means hypothesis is rejected. In accordance to (Ullah, 2016), inflation might cause the increasing of price while if the company has the expectation of general inflation to be higher in the future, the business activities could increase the prices without suffering a drop in demand for their output.

The result is consistent with the theory also the previous research of Chokri & Anis (2018) and Aslam et al., (2016) whose bot researches show that inflation statistically has no influence towards banks profitability. It also supported by (Asadullah, 2017) which believes that the true effects of macroeconomic will show its function when the economy system of country is develop, mature also establish.

### 3. Influence CAR towards Profitability.

The result shows the significant value of 0.003, the hypothesis is accepted. CAR has coefficient regression of 0.038 which indicates the increasing of CAR leads to the increasing in profitability. The theory by Kuncoro and Suhardjono in Amelia (2014), the capital adequacy ratio is the amount of equity capital which required to covering the risk of financial loss that might exist from cultivation of assets are risky. It leads to the greater of the CAR, the profit of banks will increase, vice versa.

The result is in line with the theory and the previous research by Amelia (2014) and (Medyawati & Yunanto, 2018) who concluded that CAR positively influences the profitability of Sharia banks. The results are supported with theory which states the higher the CAR, the stronger the bank's ability to bear the risk of any risky credit or productive assets. On the other words, the higher the capital adequacy to bear the risk of bad credit, so that the bank's performance is better, and can increase public confidence in the bank concerned which leads to increased profitability (Ubaidillah, 2016).

#### 4. Influence FDR towards Profitability.

The result shows the significant value of 0.000, the hypothesis is accepted. FDR has coefficient regression of 0.023 which indicates the increasing of FDR leads to the increasing in profitability. In accordance with the study of Mohammed in (Amelia, 2015), FDR is released for financing Islamic banks to determine DPK. The higher the FDR, the higher the funds channeled to DPK. Therefore, by channeling DPK, the bank's income is large then ROA will increase.

The result from previous research by Yusuf and Surjaatmadja (2018) align with the result of this research also with the theory. In accordance to the study of Wardana and Widayarti (2015), the higher FDR will lead to the higher of bank's profits. FDR value is the ratio to indicate the bank's effectiveness in distributing the financing. Hence, if the FDR value shows the percentage is too high, it will determine the riskier condition bank's liquidity, vice versa. Thus, it is affecting to the profits earned by the bank (Yusuf & Surjaatmadja, 2018).

#### 5. Influence NPF towards Profitability.

The result shows 0.094 of significant value means hypothesis is rejected. Cited from Solihatun (2014), NPF is one of the risks since the greater the amount of funding compared to the third party fund in a bank bring consequences of the greater the risk must be borne by the banks. On the other hand, there is PPAP value which considered could cover the financing problem of the bank.

The result of the previous study by by A munir and RZ Emdi (2017) indicated that NPF has negative significant effect toward ROA. The higher number of NPF will decrease the profitability of the bank so the lower ratio is the better performance of the bank. Meanwhile Amelia (2015), Paulin & Wiryono (2015) and Sutrisno (2016) are align with the result of this study which declared that NPF has no significance influence toward bank's profitability. It supported with the theory stated which the banks' profit can still be increase by the high of NPF since the bank is able to obtain the profit not only from the finance portfolio since PPAP could cover financing problem.

#### 6. Influence OER towards ROA.

The result shows the significant value of 0.000, the hypothesis is accepted. OER has coefficient regression of -2.024 which indicates the increasing of OER leads to the decreasing OER is the measurement of bank's operational efficiency. By achieving the efficiency of the bank, the bank must have the lowest level of OER by then will lead to the higher of profit earned by the bank (Nahar & prawoto, 2017).

The result is consistent with the research by Paulin and Wiryono (2015). Their studies found that OER has negatively influence the bank's profitability. In addition, the research of Sutrisno (2016) shows OER has negative significant influence toward profitability. In accordance with Yusuf and Surjaatmadja (2018), the smaller OER leads to the better bank's performance. Therefore, if OER is in high level, it indicates the bank's capability to manage the operational expense is lower by then the profit of banks would be decline (Nahar & Prawoto, 2017).

#### 7. Simultaneous influence of GDP, inflation, CAR, FDR, NPF, and OER toward Profitability

In accordance to the result of f-test, it has value less than 0.05 which indicates, the hypothesis is accepted. All independent variables are simultaneously influence the dependent variables. GDP, inflation, CAR, FDR, NFP, and OER are able to explain the variation of profitability by 31.6% while the rest of 68.4% is influence by other factors which are not examined in this research.

The result of adjusted r square shows the independent variables in this research are having weak capability to determine the dependent variable. The previous research by Rachmat and Komariah (2017) with the same dependent variable but focused on CAR, NPF and FDR as independent variables has 0.220 of adjusted r square value. Additionally, Ubaidillah (2016) has adjusted r square value of 11.60% with profitability as dependent value and CAR, FDR, NPF, PPAP, OER, share financing, and SBIS as independent variables. Furthermore, the research conducted by Aslam, Imanullah and Ismail (2016) with profitability as the dependent variable and has GDP and inflation as the independent variables shows the adjusted r square value 0.328.

## 5. CONCLUSION

From the analysing using IBM SPSS Statistics 22 series to analyze the data in descriptive statistics analysis, classical assumption test, multiple linear regression and hypothesis testing, it can be concluded:

1. From T-test result, significant influence partially for each independent variable towards dependent variable can be concluded as follows:
  - a. GDP has positive significant influence towards profitability of Sharia rural banks in Indonesia. The research found that the average of selected rural banks in this study has higher returns on assets when GDP is increasing. Therefore, it can be concluded that the increasing of GDP leads to the increasing of profitability.
  - b. Inflation has no significant influence partially towards profitability of Sharia rural banks in Indonesia.

- c. CAR has positive significant influence towards profitability of Sharia rural banks in Indonesia. The result shows selected Sharia rural banks in this study averagely has higher profitability if the CAR increases. It defines that the increasing of CAR leads to the increasing of profitability.
  - d. FDR has positive significant influence towards profitability of Sharia rural banks in Indonesia. This study examined the average of selected rural banks in this study has higher returns on assets when the FDR of the bank is increasing. Thus, it can be concluded that the increasing of FDR drags profitability of Sharia rural banks higher.
  - e. NPF has no significant influence partially towards profitability of Sharia rural banks in Indonesia.
  - f. OER is negatively significant influence profitability of Sharia rural banks in Indonesia. It shows the average of selected rural banks in this study has higher returns on assets when the OER of the bank is decreasing. Therefore, it determines the increasing of OER drags profitability of Sharia rural banks lower.
2. Simultaneously, GDP, inflation, CAR, FDR, NPF and OER are having significantly influence towards profitability which represents by ROA. The variation of determinant factors altogether can explain as much as 31.6% of the variation of profitability of Sharia rural banks in Indonesia. The remaining 68.4% influence factors are caused by the other variables not examined inside this study.
  3. After the independent variables being sorted based on its level of significant to dependent variable, GDP influences the dependent variable the most with the highest coefficient, followed by CAR, then FDR, lastly by OER. That said, GDP influences profitability the most explained partially by signaling theory.

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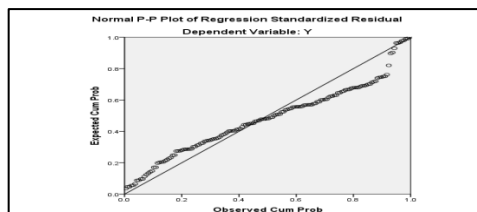
## 7. Appendix

### A.1. Descriptive Statistic Result

	Mean	Std. Deviation	N
Y	3.6217	2.15651	152
X1	.0509	.00380	152
X2	1.0342	.94496	152
X3	20.8944	14.22135	152
X4	91.7039	38.12872	152
X5	4.5932	3.40273	152
X6	.7561	.48930	152

Source: IBM SPSS Statistics 22

### A.2. Normality Test – P-P Plot



Source: IBM SPSS Statistics 22

### A.3. Autocorrelation Test

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.586 <sup>a</sup>	.343	.316	1.78361	1.745

a. Predictors: (Constant), X6, X2, X5, X4, X1, X3

b. Dependent Variable: Y

Source: IBM SPSS Statistics 22

*A.4. Multiple Regression Result*

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-2.337	2.441		-.957	.340
X1	101.154	47.942	.178	2.110	.037
X2	-.136	.158	-.060	-.864	.389
X3	.038	.013	.253	2.978	.003
X4	.023	.004	.398	5.147	.000
X5	-.083	.049	-.131	-1.685	.094
X6	-2.024	.445	-.459	-4.554	.000

a. Dependent Variable: Y

Source: IBM SPSS Statistics 22

*A.5. F-Test Result*

**ANOVA<sup>a</sup>**

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	240.948	6	40.158	12.623	.000 <sup>b</sup>
Residual	461.284	145	3.181		
Total	702.232	151			

a. Dependent Variable: Y

b. Predictors: (Constant), X6, X2, X5, X4, X1, X3

Source: IBM SPSS Statistics 22

*A.6. Coefficient of Determination Result*

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.586 <sup>a</sup>	.343	.316	1.78361	1.745

a. Predictors: (Constant), X6, X2, X5, X4, X1, X3

b. Dependent Variable: Y

Source: IBM SPSS Statistics 22