

Analysis of the Effect of Mudharabah Financing, Musyarakah Financing, Capital Adequacy Ratio, and Non-Performing Financing on Banking Performance with Qardhul Hasan as a Control Variable (Case Study of Sharia Commercial Banks in Indonesia 2013-2017)

Mike Ayu Alfiyah¹, Ekaningtyas Widiastuti², Sudarto³

¹Department of Management, Faculty of Economics and Business, Jenderal Soedirman University, Purwokerto, Indonesia

*Corresponding author: mikeayualfiyah9@gmail.com

Abstract

This research entitled “Analysis of the influence of Mudharabah Financing, Musyarakah Financing, Capital Adequacy Ratio (CAR), and Non Performing Financing (NPF) on Banking Performance with Qardhul Hasan as Control Variable (Case Study in Sharia Commercial Banks in Indonesia 2013-2017)”. The purpose of this research is to analyze the influence of Mudharabah Financing, Musyarakah Financing, CAR, and NPF against Banking Performance with Qardhul Hasan as Control Variable, and to know the variables that have a dominant influence on Banking Performance in sharia commercial banks that were recorded in the Financial Services Authority in 2013-2017. The population of this reserch is sharia commercial banks that was listed on the Financial Services Authority in 2013-2017. Total population is 13, and using purposive sampling 8 samples were obtained. Type of this research is quantitative research are associative with panel data regression analysis techniques. Based on the results of the analysis, it is found that Mudharabah Financing does not affect Return On Assets. Musyarakah Financing does not affect Return On Assets. Capital Adequacy Ratio has no effect on Return On Assets and Non Performing Financing has a negative effect on Return On Assets. The implication of this research is that banks are expected to pay more attention to the level of capital adequacy and management of problematic financing to increase the level of profitability.

Keywords: Mudharabah Financing, Musyarakah Financing, Capital Adequacy Ratio, Non Performing Financing

INTRODUCTION

Banking is an important sector in a country's economy. The financial condition of a country is influenced by the banking system, including Indonesia. Indonesia has two types of banks when viewed from its principles, namely sharia banks and conventional banks. Sharia banks are financial institutions whose main business is collecting funds from the public and providing financing and other services in payment traffic and money circulation whose operational activities are based on sharia principles (Sudarsono, 2008:27). Conventional banks are banks that collect funds from the public and distribute them to parties who lack funds in order to improve the standard of living of many people.

The development of sharia banking in Indonesia began with the establishment of Bank Muamalat Indonesia on November 1 1991 as the first sharia bank in Indonesia. Issuance and enactment of Law no. 21 of 2008 on July 16 2008 concerning Sharia Banking further increases the existence of sharia banking in Indonesia (Dahlan, 2012:91). In 2013 the number of sharia banking office networks increased by 327 offices from the previous year. Of this number, 253 offices are a new office network from the Sharia Commercial Bank (BUS), 73 offices are a new office network for the Sharia Business Unit (UUS), and 1 office is a new office network for the Sharia Rural Bank (BPRS).

From 2014 to 2017 mudharabah and musyarakah financing continued to increase with an average increase in each financing of 5.9% for mudharabah financing and 26.4% for musyarakah financing. Even though murabahah financing is the most dominant financing and most sought after by customers, researchers do not use it as a research variable. This is because murabahah financing is almost the same as credit offered by conventional banks, namely using *payment terms*, although taking profits from murabahah financing is based on *mark up* not flowers.

The crisis that occurred in 2008 was the impact of conditions in which the banking sector in various countries had levels *leverage* the high, good *aton balance sheet* nor *off balance sheet* which then erodes the quality of bank capital. Therefore, a document was prepared "*Basel III: Global Regulatory Framework for More Resilient Banks and Banking System*" published by *Basel Committee on Banking Supervision* (BCBS) in December 2010. In line with the objectives for which it was prepared "*Basel III: Global Regulatory Framework for More Resilient Banks and Banking System*" Bank Indonesia issued Bank Indonesia Regulation Number 3/21/PBI/2011 concerning the obligation to provide minimum capital for commercial banks stating that each bank is required to provide minimum capital of 8% of risk-weighted assets, which is then proxied by the Capital Adequacy ratio or *Capital Adequacy Ratio* (CAR). If a bank does not comply with this regulation, Bank Indonesia will place the bank under special supervision from Bank Indonesia (Triasdini, 2010).

In carrying out its functions, there are several risks that banks must face, one of which is the risk of bad financing, or what is often called *Non Performing Financing* (NPF). NPF is a comparison between total problematic financing and total financing provided by the bank to customers/debtors. The smaller the NPF value (below 5%), the smaller the risk of problematic financing faced by the bank (Zuhdi, 2016).

The main goal of every company in running a business is to increase the value of the company, including sharia commercial banks. One way that can be used to increase company value is maximizing profits. The financial analysis tool used to measure overall management effectiveness as indicated by the size of the profit/profit obtained from sales and investments made is the profitability ratio. The better the profitability ratio, the better the company's performance in gaining profits (Fahmi, 2011:68).

One of the financing products without *mark up* and the profit sharing offered by Sharia Commercial Banks is *qardhul hasan* financing. *Qardhul Hasan* financing has similarities with the program *Corporate Social Responsibility* (CSR), namely as a form of corporate

social responsibility to the community. The aim of qardhul hasan financing is to improve the bank's image, increase community loyalty, and foster community empowerment (Purwadi, 2014). Qardhul Hasan and CSR financing also have differences in their funding sources. Based on the Decree of the Minister of State-Owned Enterprises Number KEP-236/MBU/2003, it is stipulated that every company is required to set aside profits after tax of 1% to 3% to carry out CSR programs. This states that the source of CSR funds comes from after-tax profits set aside, while the source of qardhul hasan funds comes from fines, non-halal income, infaq, and shodaqoh.

The results of research conducted by Wicaksana (2011) state that mudharabah financing has a significant effect on the level of profitability of Sharia Commercial Banks. Chalifah and Sodik (2015) stated that mudharabah financing has a positive and significant influence on ROA. Rahman and Rochmanika (2012) stated that mudharabah financing has a negative effect on the profitability of Sharia Commercial Banks.

The results of research conducted by Wicaksana (2011) state that musyarakah financing has a significant effect on the level of profitability of Sharia Commercial Banks. Chalifah and Sodik (2015) stated that musyarakah financing has a significant negative influence on the ROA variable. Siswanti (2015) stated that musyarakah financing has a significant positive effect on profitability (ROA).

The results of research conducted by Masood and Ashraf (2012) state that CAR has a positive effect on ROA, but not significantly. Mokoagow and Fuady (2015) stated that CAR has a significant positive effect on ROA of Sharia Commercial Banks. Zarrouket *al.* (2016) stated that CAR has a positive and significant effect on ROA of Sharia Commercial Banks. Wibowo and Syaichu (2013) stated that CAR does not have a significant influence on ROA of Sharia Commercial Banks.

The results of research conducted by Pratiwi (2012) show that NPF has a negative and significant effect on ROA of Sharia Commercial Banks. Wibowo and Syaichu (2013) stated that NPF does not have a significant influence on the ROA of Sharia Commercial Banks. Amelia (2015) states that partial NPF does not have a significant effect on ROA of Sharia Commercial Banks. The results of research conducted by Sabri and Sweis (2016) show that CSR has a positive and significant effect on ROA of Sharia Commercial Banks. The research results of Nistantya (2010) state that CSR influences profitability as proxied by ROA. Meanwhile, Winardi's (2013) research results show that CSR does not affect financial performance as proxied by ROA.

Based on this description, it can be concluded that there are differences in results from previous research regarding the relationship between mudharabah financing, musyarakah financing, CAR, and NPF on ROA. Therefore, the author will conduct research again regarding the relationship between the variables mudharabah financing, musyarakah financing, CAR, and NPF on ROA.

FORMULATION OF THE PROBLEM

The formulation of the problem in this research is as follows:

1. Does mudharabah financing have an effect on *Return On Asset (ROA)* of sharia commercial banks?
2. Does musyarakah financing have an effect on *Return On Asset (ROA)* of sharia commercial banks?
3. is *Capital Adequacy Ratio (CAR)* has an effect on *Return On Asset (ROA)* of sharia commercial banks?
4. is *Non Performing Financing (NPF)* has an effect on *Return On Asset (ROA)* of sharia commercial banks?
5. What is mudharabah financing, musyarakah financing, *Capital Adequacy Ratio (CAR)*, and *Non Performing Financing (NPF)* has an effect on *Return On Asset (ROA)* of Islamic commercial banks with qardhul hasan as a control variable?

RESEARCH HYPOTHESIS

H1: Mudharabah financing has a positive effect on *return on asset*

H2: Musyarakah financing has a positive effect on *return on asset*

H3: *Capital Adequacy Ratio* positive influence on *return on asset*

H4: *Non Performing Financing* negative effect on *return on asset*

RESEARCH METHODS AND DATA ANALYSIS TECHNIQUES

Types of research

This research is included in the type of quantitative research in associative form, namely research expressed in statistical numbers and aims to determine the relationship between two or more variables (Sugiyono, 2006:11)

Research Population and Sample

Population is a generalized area consisting of subjects/objects that have certain quantities and characteristics determined by researchers to be studied and then conclusions drawn (Sugiyono, 2018). The population in this research is Sharia Commercial Banks in Indonesia in 2013-2017. According to Sugiyono (2018) the sample is part of the number and characteristics of the population. Sample selection was carried out using the method *purposive sampling*. *Purposive sampling* namely the technique of determining samples with certain considerations and certain criteria (Sugiyono, 2018).

The sample selection criteria used in this research are as follows:

1. Sharia Commercial Bank registered with the Financial Services Authority in 2013-

- 2017.
2. Sharia Commercial Bank which published complete annual financial reports for 2013-2017.
3. Complete data for each variable is available for 2013-2017.

Based on sampling method *purposive sampling* on, The sample for this research was 7 banks with a total of 35 observations.

Data Types and Sources

The data used in this research is secondary data obtained from the financial reports of each Sharia Commercial Bank from 2013-2017 which are available on the website of each Sharia Commercial Bank.

Data Collection Techniques

Data collection techniques in this research used documentation and literature study techniques. Data collection using documentation techniques was taken from financial reports published by each Sharia Commercial Bank. Data collection using library study techniques was carried out by studying various literature related to the research problem, both in print and electronic media.

Classical Assumption Test Data Analysis Techniques

Normality test

The purpose of the normality test is to test whether in the regression model, confounding variables or *residual* has a normal distribution or not. The simple statistical test used to test normality in this research is the Jarque-Bera Test. According to Widarjono (2009:49) the Jarque-Bera statistical test uses calculations *skewness* and kurtosis. If the probability value $JB > 0.05$ or the value $JB < chi-square$ then the data is normally distributed.

Heteroscedasticity Test

The purpose of the heteroscedasticity test is to test whether in the regression model there are equal variances from the residuals of one observation to another or not. A good regression model is homoscedasticity, that is, if the variance from the residual from one observation to another is constant (Ghozali, 2009:37). To determine whether there is a heteroscedasticity problem in this research, the White test was carried out. If value *chi-square* count $<$ critical value *chi-square* or the probability value is > 0.05 then there is no heteroscedasticity problem.

Multicollinearity Test

The purpose of the multicollinearity test is to test whether in the regression model a high correlation is found between the independent variables (Ghozali, 2009:25). In this research, the multicollinearity test was carried out by testing the partial correlation (*r*) between independent variables. If the correlation coefficient is > 0.80 then there is multicollinearity in the model. On the other hand, if the correlation coefficient is < 0.80 then

the research model does not contain elements of multicollinearity (Widarjono, 2009:106).

Autocorrelation Test

The purpose of the autocorrelation test is to test whether in the linear regression model there is a correlation between errors *residual* in period *t* with errors in the previous period. If there is correlation, then an autocorrelation problem occurs (Ghozali, 2009:79). To test autocorrelation in this study, the Durbin-Watson Test was carried out.

Multiple Regression Analysis

Multiple Regression Analysis Model 1 (Without Control Variables)

The independent variables in this model are Mudharabah Financing, Musyarakah Financing, *Capital Adequacy Ratio* (CAR), and *Non Performing Financing* (NPF), while the dependent variable is *Return On Asset* (ROA). The panel data regression model equation is as follows:

$$Y_{it} = a + \beta_1 MDB_{it} + \beta_2 MSY_{it} + \beta_3 CAR_{it} + \beta_4 NPF_{it} + \varepsilon_{it}$$

Information:

Y_{it}	= <i>Return On Asset</i>
a	= Constant
$\beta_1, \beta_2, \beta_3, \beta_4$	= Regression coefficient for each independent variable
MDB_{it}	= Mudharabah financing
MSY_{it}	= Musharaka financing
CAR_{it}	= <i>Capital Adequacy Ratio</i>
NPF_{it}	= <i>Non Performing Financing</i>
ε_{it}	= <i>Error</i>

Multiple Regression Analysis Model 2 (With Control Variables)

Model 2 is used to analyze the influence of mudharabah financing, musyarakah financing, *Capital Adequacy Ratio* (CAR), and *Non Performing Financing* (NPF) against *Return On Asset* (ROA) by adding qardhul hasan as a control variable in the research model. The panel data regression equation model is as follows:

$$Y_{it} = a + \beta_1 MDB_{it} + \beta_2 MSY_{it} + \beta_3 CAR_{it} + \beta_4 NPF_{it} + \beta_5 QH_{it} + \varepsilon_{it}$$

Information:

Y_{it}	= <i>Return On Asset</i>
a	= Constant
$\beta_1, \beta_2, \beta_3, \beta_4$	= Regression coefficient for each independent variable
MDB_{it}	= Mudharabah financing
MSY_{it}	= Musharaka financing
CAR_{it}	= <i>Capital Adequacy Ratio</i>
NPF_{it}	= <i>Non Performing Financing</i>
QH_{it}	= Qardhul hasan
ε_{it}	= <i>Error</i>

Panel Data Regression Model Selection Method

F Statistical Test

The F test or Chow test is used to find out whether the panel data regression technique without dummy variables is better than the panel data regression model *Fixed Effect*. If the probability value $F \geq 0.05$ means H_0 accepted, then the model chosen is *common effect*. However, if the probability value $F < 0.05$ means H_0 rejected, then the model chosen is *fixed effect*.

Test Long Range Multiplier

Test Long Range Multiplier used to find out whether the OLS method is better than the model *Random Effect*. If the LM probability value is ≥ 0.05 , it means H_0 accepted, then the model chosen is *common effect*. However, if the LM probability value is < 0.05 , it means H_0 rejected, then the model is selected *random effect*.

Hausman test

The Hausman test is used to test whether the model *random effect* better than the model *fixed effect*. If the probability value *Chi-Square* ≥ 0.05 means H_0 accepted, then the model chosen is *random effect*. However, if the probability value *Chi Square* < 0.05 means H_0 rejected, then the model is selected *fixed effect*.

Hypothesis test

Coefficient of Determination (R^2)

The coefficient of determination measures how far the model's ability to explain variations in the dependent variable. Mark R^2 . A small value indicates that the ability of the independent variables to explain variations in the dependent variable is limited. Mark R^2 which is close to one indicates that the independent variables provide almost all the information needed to predict variations in the dependent variable (Ghozali, 2009:15). The formula used to calculate the coefficient of determination is as follows:

$$R^2_{adj} = \frac{R^2}{N - P - 1} = P(1 - R^2)$$

Information:

R^2 = Coefficient of determination

P = Number of independent variables

N = Sample size

Simultaneous Significance Test

The F statistical test is used to show whether all the independent variables in the model together or simultaneously have an influence on the dependent variable (Ghozali, 2009:16). To calculate the F value, you can use the following formula:

$$F = \frac{R^2/(k - 1)}{(1 - R^2)/(n - k)}$$

Information:

F = Calculated F value

R^2 = Coefficient of Determination

k = Number of variables

n = Number of observations (samples)

If $F_{count} > F_{table}$ ie $F_{\alpha}(k - 1, n - k)$, then the null hypothesis is rejected. Where $F_{\alpha}(k - 1, n - k)$ is the critical value of F at the significance level α and degrees of freedom (df) of the numerator ($k - 1$) and degrees of freedom (df) of the denominator ($n - k$).

Statistical Test t

The t statistical test is used to show the influence of one independent variable on the dependent variable by assuming that the other independent variables are constant (Ghozali, 2009:17). To calculate the t value, you can use the following formula:

$$t = \frac{b_1}{se(\beta_1)}$$

Information:

t = Calculated t value

b_1 = Parameter coefficient

$se(\beta_1)$ = *Standard error* parameter coefficients

The significance level in this research is 5%. The hypothesis to be tested is as follows:

H_0 : There is no influence between the independent variables on the dependent variable.

H_a : there is a positive or negative influence between the independent variable on the dependent variable.

Hypothesis testing criteria:

If the calculated t value $>$ critical t value or significance value $<$ 0.05 then H_0 rejected or H_a accepted, which means the independent variable has a significant positive or negative effect on the dependent variable. However, if the calculated t value $<$ critical t value or significance value $>$ 0.05 then H_0 accepted or H_a rejected, which means the independent variable has no effect on the dependent variable.

RESULTS AND DISCUSSION

Data analysis

Panel Data Regression Selection Method

Model 1 (No Control Variables)

F Statistical Test

The F statistical test or Chow test is used to determine whether the panel data regression technique is used *common effect* better than *fixed effect*. Table 1 shows that the probability value is $0.0011 < 0.05$, then H_0 is rejected and the model *fixed effect* selected.

Table 1. Results of Regression Analysis of Model 1 Chow Test Data

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

Effects Test	Statistic	d.f.	Prob.
Cross-section F	4.870683	(7,28)	0.0011
Cross-section Chi-square	31.858299	7	0.0000

Source: *Output* Eviews 10 data analysis

Hausman test

The Hausman test is used to test whether the model *random effect* better than *fixed effect*. Table 2 shows a probability value of $0.0072 < 0.05$, so H_0 rejected and model *fixed effect* selected.

Table 2. Results of Regression Analysis of Hausman Test Data Model 1

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	14.023313	4	0.0072

Source: *Output* Eviews 10 data analysis

Model 2 (With Control Variables)

F Statistical Test

Table 3 shows that the probability value is $0.0011 < 0.05$, so H_0 is rejected and the model *fixed effect* selected.

Table 3. Results of Regression Analysis of Chow Test Data Model 2
Redundant Fixed Effects Tests
Equation: Untitled
Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	4.947928	(7,27)	0.0011
Cross-section Chi-square	33.016041	7	0.0000

Source: *Output* Eviews 10 data analysis

Hausman test

Table 4 shows that the probability value is $0.0291 < 0.05$, so H_0 is rejected and the model *fixed effect* selected.

Table 4. Results of Regression Analysis of Hausman Test Data Model 2
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	12.447934	5	0.0291

Source: *Output* Eviews 10 data analysis

Classic assumption test

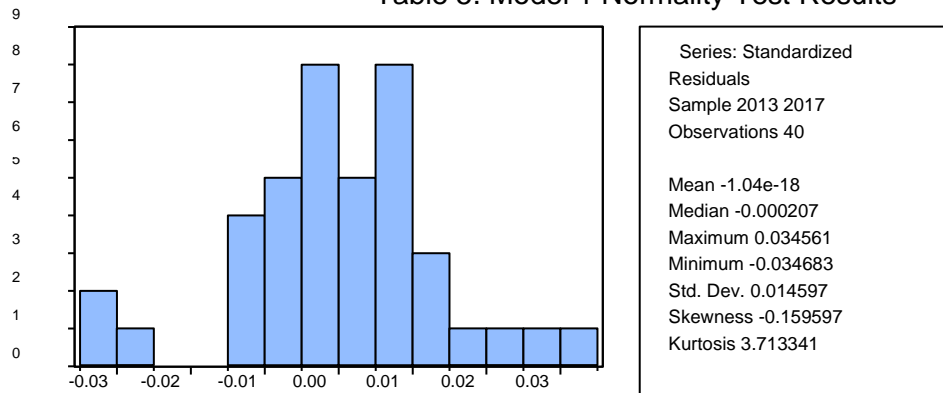
Model 1 (No Control Variables)

Normality test

Based on table 5, the Jarque-Bera value is 1.017902 which is smaller than the value *chi-square*

table with $df=n-1$ and a confidence level of 0.95, namely 54.572. Apart from that, the probability value is $0.601126 > 0.05$, so it can be concluded that the research data is normally distributed.

Table 5. Model 1 Normality Test Results



Source: *Output Eviews 10 data analysis*

Multicollinearity Test

Table 6 shows that the correlation between independent variables is no more than 0.80, so it can be concluded that the research data is free from multicollinearity problems.

Table 6. Independent Variable Matrix Results for Model 1

	LN_MDB	LN_MSJ	CAR	NPF
LN_MDB	1.000000	0.768914	-0.148014	-0.224856
LN_MSJ	0.768914	1.000000	-0.251163	0.090377
CAR	-0.148014	-0.251163	1.000000	-0.609177
NPF	-0.224856	0.090377	-0.609177	1.000000

Source: *Output Eviews 10 data analysis*

Autocorrelation Test

Table 7 shows that the Durbin-Watson value of 1.905593 is located between the upper limit (du) of 1.721 and (4-du) of 2.279, so the autocorrelation coefficient is equal to zero, which means that this research data is free from autocorrelation problems.

Table 7. Durbin-Watson Model 1 Test Results

Cross-section fixed (dummy variables)			
R-squared	0.678652	Mean dependent var	-0.000590
Adjusted R-squared	0.552408	S.D. dependent var	0.025750
S.E. of regression	0.017228	Akaike info criterion	-5.041287
Sum squared resid	0.008310	Schwarz criterion	-4.534623
Log likelihood	112.8257	Hannan-Quinn criterion.	-4.858093
F-statistic	5.375715	Durbin-Watson stat	1.905593
Prob(F-statistic)	0.000154		

Source: *Output Eviews 10 data analysis*

Heteroscedasticity Test

Table 8 shows that value *Obs*R-squared* is 6.725477, and the chi-square probability value is 0.1511 > 0.05, so it can be concluded that this research data is free from heteroscedasticity problems.

Table 8. Heteroscedasticity Test Results for Model 1

Heteroskedasticity Test: White

F-statistic	1.768558 Prob. F(4,35)	0.1573
Obs*R-squared	6.725477 Prob. Chi-Square(4)	0.1511
Scaled explained SS	25.99512 Prob. Chi-Square(4)	0.0000

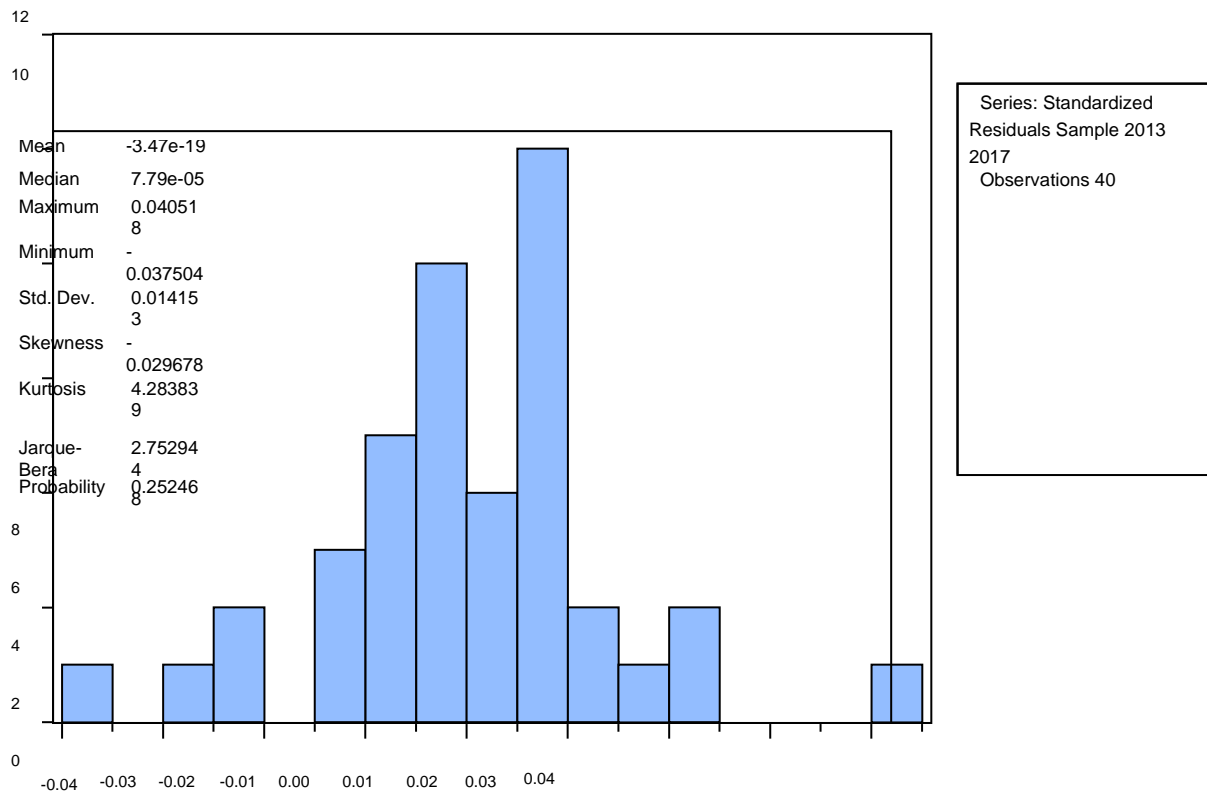
Source: *Output* Eviews 10 data analysis

Model 2 (With Control Variables)

Normality test

Based on table 9, the Jarque-Bera value of 2.752944 is smaller than the chi-square value of the table with $df=n-1$ and a confidence level of 0.95, namely 54.572. Apart from that, the probability value is 0.252468 > 0.05, so it can be concluded that the research data is normally distributed.

Table 9. Model 2 Normality Test Results



Source: *Output* Eviews 10 data analysis

Multicollinearity Test

Table 10 shows that the correlation between independent variables is no more than 0.80, so it can be concluded that the research data is free from multicollinearity problems.

Table 10. Independent Variable Matrix Results for Model 2

	LN_MDB	LN_MSJ	CAR	NPF	QH
LN_MDB	1.000000	0.768914	-0.148014	-0.224856	0.223358
LN_MSJ	0.768914	1.000000	-0.251163	0.090377	0.070917
CAR	-0.148014	-0.251163	1.000000	-0.609177	-0.014849
NPF	-0.224856	0.090377	-0.609177	1.000000	0.019206
QH	0.223358	0.070917	-0.014849	0.019206	1.000000

Source: *Output* Eviews 10 data analysis

Autocorrelation Test

Table 11 shows that the Durbin-Watson value of 1.991863 is located between the upper limit (du) of 1.786 and (4-du) of 2.214, so the autocorrelation coefficient is equal to zero, which means that this research data is free from autocorrelation problems.

Table 11. Durbin-Watson Model 2 Test Results

Cross-section fixed (dummy variables)

R-squared	0.697928	Mean dependent var	-0.000590
Adjusted R-squared	0.563674	S.D. dependent var	0.025750
S.E. of regression	0.017009	Akaike info criterion	-5.053149
Sum squared resid	0.007812	Schwarz criterion	-4.504263
Log likelihood	114.0630	Hannan-Quinn criterion.	-4.854689
F-statistic	5.198565	Durbin-Watson stat	1.991863
Prob(F-statistic)	0.000185		

Source: *Output* Eviews 10 data analysis

Heteroscedasticity Test

Table 12 shows that value *Obs*R-squared* is 7.157041, and the chi-square probability value is 0.2092 > 0.05, so it can be concluded that this research data is free from heteroscedasticity problems.

Table 12. Heteroscedasticity Test Results for Model 2

Heteroskedasticity Test: White

F-statistic	1.481836	Prob. F(5,34)	0.2215
Obs*R-squared	7.157041	Prob. Chi-Square(5)	0.2092
Scaled explained SS	25.18264	Prob. Chi-Square(5)	0.0001

Source: *Output* Eviews 10 data analysis

Multiple Regression Analysis

Model 1 (No Control Variables)

The results of statistical calculations for model 1 panel data regression can be seen in table 13.

Table 13. Results of Model 1 Panel Data Regression Analysis

Dependent Variable: ROA
 Method: Panel Least Squares
 Date: 03/27/19 Time: 12:01
 Sample: 2013 2017
 Periods included: 5
 Cross-sections included: 8
 Total panel (balanced) observations: 40

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LN_MDB	0.013300	0.007187	1.850574	0.0748
LN_MSY	-0.007188	0.007239	-0.992928	0.3292
CAR	0.193688	0.096544	2.006212	0.0546
NPF	-1.324209	0.363481	-3.643128	0.0011
C	-0.152400	0.228658	-0.666496	0.5105

Source: *Output Eviews 10 data analysis*

Based on the calculation results in table 13, the model 1 panel data regression equation can be created as follows:

$$ROA = -0,152400 + 0,013300MDB_{it} - 0,007188MSY_{it} + 0,193688CAR_{it} - 1,324209NPF_{it}$$

Model 2 (With Control Variables)

The results of statistical calculations for model 2 panel data regression can be seen in table 14.

Table 14. Results of Model 2 Panel Data Regression Analysis

Dependent Variable: ROA
 Method: Panel Least Squares
 Date: 03/27/19 Time: 12:03
 Sample: 2013 2017
 Periods included: 5
 Cross-sections included: 8
 Total panel (balanced) observations: 40

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LN_MDB	0.012084	0.007156	1.688621	0.1028
LN_MSY	-0.005717	0.007235	-0.790128	0.4363
CAR	0.169823	0.097040	1.750028	0.0915
NPF	-1.286798	0.360007	-3.574367	0.0013

QH	0.000406	0.000309	1.312634	0.2004
C	-0.160286	0.225842	-0.709725	0.4840

Source: *Output* Eviews 10 data analysis

Based on the calculation results in table 14, the model 2 panel data regression equation can be created as follows:

$$ROA = -0,160286 + 0,012084MDBit - 0,005717MSYit + 0,169823CARit - 1,286798NPFit + 0,000406QHit$$

Hypothesis test

Model 1 (No Control Variables)

Coefficient of Determination (R^2)

Table 15. R-squared Test Results Model 1

R-squared	0.678652	Mean dependent var	-0.000590
Adjusted R-squared	0.552408	S.D. dependent var	0.025750
S.E. of regression	0.017228	Akaike info criterion	-5.041287
Sum squared resid	0.008310	Schwarz criterion	-4.534623
Log likelihood	112.8257	Hannan-Quinn criterion.	-4.858093
F-statistic	5.375715	Durbin-Watson stat	1.905593
Prob(F-statistic)	0.000154		

Source: *Output* Eviews 10 data analysis

Mark *R-squared* amounting to 0.678652 indicates that the variation in changes in ROA (Y) can be explained jointly by the Mudharabah Financing (X1), Musyarakah Financing (X2), CAR (X3), and NPF (X4) variables of 67.86% while 32 The remaining 14% is influenced by other variables not studied.

Simultaneous Significance Test

Table 16. Simultaneous Significance Test Results for Model 1

R-squared	0.678652	Mean dependent var	-0.000590
Adjusted R-squared	0.552408	S.D. dependent var	0.025750
S.E. of regression	0.017228	Akaike info criterion	-5.041287
Sum squared resid	0.008310	Schwarz criterion	-4.534623
Log likelihood	112.8257	Hannan-Quinn criterion.	-4.858093
F-statistic	5.375715	Durbin-Watson stat	1.905593
Prob(F-statistic)	0.000154		

Source: *Output* Eviews 10 data analysis

Mark *prob(F-statistic)* equal to $0.000154 < 0.05$ or F-calculated value (5.375715) > F-table (2.87) so that H_0 is rejected. This means that the independent variables (Mudharabah

Financing, Musyarakah Financing, CAR, and NPF) jointly influence the *Return On Assets* Sharia Commercial Banks 2013-2017.

Statistical Test t

Table 17. Statistical Test Results for Model 1

Dependent Variable: ROA
 Method: Panel Least Squares
 Date: 03/27/19 Time: 12:01
 Sample: 2013 2017
 Periods included: 5
 Cross-sections included: 8
 Total panel (balanced) observations: 40

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LN_MDB	0.013300	0.007187	1.850574	0.0748
LN_MSJ	-0.007188	0.007239	-0.992928	0.3292
CAR	0.193688	0.096544	2.006212	0.0546
NPF	-1.324209	0.363481	-3.643128	0.0011
C	-0.152400	0.228658	-0.666496	0.5105

Source: *Output* Eviews 10 data analysis

The explanation of the t statistical test presented in table 17 is as follows:

- 1) Mark *probability* Mudharabah Financing variable (LN_MDB) is 0.0748 > 0.05, then H1 is rejected. This means that partially Mudharabah Financing has no effect on Return On Assets of Sharia Commercial Banks.
- 2) Mark *probability* Musyarakah Financing variable (LN_MSJ) is 0.3292 > 0.05, so H2 is rejected. This means that partially Musyarakah Financing has no effect on Return On Assets of Sharia Commercial Banks.
- 3) Mark *probability* variable *Capital Adequacy Ratio* (CAR) is 0.0546 > 0.05, then H3 is rejected. This means partially *Capital Adequacy Ratio* has no effect on Return On Assets Sharia Commercial Bank.
- 4) Mark *probability* variable *Non Performing Financing* (NPF) is 0.0011 < 0.05, then H4 is accepted. This means partially *Non Performing Financing* negative effect on Return On Assets Sharia Commercial Bank.

Model 2 (With Control Variables)

Coefficient of Determination (R^2)

Table 18. R-squared Test Results Model 2

R-squared	0.697928	Mean dependent var	-0.000590
Adjusted R-squared	0.563674	S.D. dependent var	0.025750
S.E. of regression	0.017009	Akaike info criterion	-5.053149
Sum squared resid	0.007812	Schwarz criterion	-4.504263

Log likelihood	114.0630	Hannan-Quinn criterion.	-4.854689
F-statistic	5.198565	Durbin-Watson stat	1.991863
Prob(F-statistic)	0.000185		

Source: *Output Eviews 10 data analysis*

Mark *R-squared* amounting to 0.697928 indicates that the variation in changes in ROA (Y) can be explained jointly by the variables Mudharabah Financing (X1), Musyarakah Financing (X2), CAR (X3), and NPF (X4) as well as Qardhul Hasan (X5) as control variables amounted to 69.79% while the remaining 30.21% was influenced by other variables not studied.

Simultaneous Significance Test

Table 19. Simultaneous Significance Test Results for Model 2

R-squared	0.697928	Mean dependent var	-0.000590
Adjusted R-squared	0.563674	S.D. dependent var	0.025750
S.E. of regression	0.017009	Akaike info criterion	-5.053149
Sum squared resid	0.007812	Schwarz criterion	-4.504263
Log likelihood	114.0630	Hannan-Quinn criterion.	-4.854689
F-statistic	5.198565	Durbin-Watson stat	1.991863
Prob(F-statistic)	0.000185		

Source: *Output Eviews 10 data analysis*

Mark *prob(F-statistic)* equal to $0.000185 < 0.05$ or *F-calculated value* ($5.198565 > F\text{-table}$ (2.64)). This means that the independent variables (Mudharabah Financing, Musyarakah Financing, CAR, and NPF) jointly influence the *Return On Assets Sharia Commercial Bank 2013-2017* with Qardhul Hasan as a control variable.

Statistical Test t

Table 20. Statistical Test Results for Model 2

Dependent Variable: ROA
Method: Panel Least Squares
Date: 03/27/19 Time: 12:03
Sample: 2013 2017
Periods included: 5
Cross-sections included: 8
Total panel (balanced) observations: 40

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LN_MDB	0.012084	0.007156	1.688621	0.1028
LN_MSU	-0.005717	0.007235	-0.790128	0.4363
CAR	0.169823	0.097040	1.750028	0.0915
NPF	-1.286798	0.360007	-3.574367	0.0013
QH	0.000406	0.000309	1.312634	0.2004
C	-0.160286	0.225842	-0.709725	0.4840

Source: *Output Eviews 10 data analysis*

The explanation of the t statistical test presented in table 20 is as follows:

- 1) Markprobability Mudharabah Financing variable (LN_MDB) is $0.1028 > 0.05$, so H1 is rejected. This means that partially Mudharabah Financing has no effect on *Return On Assets* Sharia Commercial Bank with Qardhul Hasan as a control variable.
- 2) Markprobability Musyarakah Financing variable (LN_MSU) is $0.4363 > 0.05$, so H2 is rejected. This means that partially Musyarakah Financing has no effect on *Return On Assets* Sharia Commercial Bank with Qardhul Hasan as a control variable.
- 3) Markprobability variable *Capital Adequacy Ratio* (CAR) is $0.0915 > 0.05$, then H3 is rejected. This means partially *Capital Adequacy Ratio* has no effect on *Return On Assets* Sharia Commercial Bank with Qardhul Hasan as a control variable.
- 4) Markprobability variable *Non Performing Financing* (NPF) is $0.0013 < 0.05$, then H4 is accepted. This means partially *Non Performing Financing* negative effect on *Return On Assets* Sharia Commercial Bank with Qardhul Hasan as a control variable.
- 5) The probability value of the Qardhul Hasan (QH) variable is $0.2004 > 0.05$, meaning that Qardhul Hasan partially has no effect on *Return On Assets* of Sharia Commercial Banks.

DISCUSSION

The Effect of Mudharabah Financing on ROA

The results of this research prove that mudharabah financing has no effect on *return on asset*, meaning that the size of the financing distributed by sharia commercial banks in the form of mudharabah contracts does not affect *return on asset*. Mudharabah financing is a sharia banking product with the principle of profit sharing with different levels of profits and losses between the bank and its customers. The management of mudharabah financing carried out by sharia banks is still not optimal, so that mudharabah financing cannot make a significant contribution to profit generation. This is proven by the occurrence of losses (negative ROA) experienced by several sharia commercial banks even though mudharabah financing increases every year. This is what causes mudharabah financing to have no effect on *return on asset*.

The results of this research are different from the results of research conducted by Wicaksana (2011) which states that mudharabah financing has a significant effect on the level of profitability of Sharia Commercial Banks. Chalifah and Sodik (2015) state that mudharabah financing has a positive and significant influence on ROA, and Rahman and Rochmanika (2012) state that mudharabah financing has a negative effect on the profitability of Sharia Commercial Banks.

The Effect of Musyarakah Financing on ROA

The results of this research state that musyarakah financing has no effect on *return on asset* sharia commercial bank. This means that the level of financing distributed by sharia commercial banks in the form of musyarakah contracts does not affect the level of financing distributed by sharia commercial banks *return on asset*. Musyarakah financing is a sharia banking financing product with a profit sharing principle where profits and losses are divided proportionally based on the proportion of capital provided between the bank and the customer. Financing in the form of musyarakah contracts is usually carried out for medium and long-term contracts so that musyarakah financing has not made a significant contribution to profit generation. This causes musyarakah financing to have no effect on *return on asset*.

The results of this research are different from the results of research conducted by Wicaksana (2011) which states that musyarakah financing has a significant effect on the level of profitability of Sharia Commercial Banks, Chalifah and Sodik (2015) which states that musyarakah financing has a significant negative effect on the ROA variable, and Siswanti (2015) which states that musyarakah financing has a significant positive effect on profitability (ROA).

Influence *Capital Adequacy Ratio* to ROA

The results of this research prove that *capital adequacy ratio* has no effect on *return on asset* sharia commercial banks, meaning that the level of capital adequacy owned by sharia banks does not affect the *size return on asset*. Bank Indonesia regulations which require every bank to provide a minimum capital of 8% mean that every bank always tries to ensure that its CAR complies with the provisions. This is proven by the fact that there are no banks that have a CAR below 8%, and the smallest CAR value in this study was 11%. Even though a bank has large capital, if the bank in question cannot use it effectively to earn profits then this large capital cannot affect the bank's level of profitability.

The results of this research are in accordance with the results of previous research conducted by Wibowo and Syaichu (2013) stating that CAR does not have a significant influence on ROA of Sharia Commercial Banks.

Influence *Non Performing Financing* to ROA

The results this research state that *non performing financing* negative effect on *return on asset*, meaning that the higher the risk of problematic financing faced by sharia commercial banks, the smaller it is *return on asset*. On the other hand, the lower the risk of problematic financing faced by sharia commercial banks, the greater it is *return on asset*. NPF shows the ability of bank management to manage problematic financing distributed by the bank to its customers. High levels of problematic financing will make it increasingly difficult for banks to make a profit, this is because customers are unable to fulfill their obligations to the bank. This causes NPF to have a negative effect on *return on*

asset.

The results of this research support the results of previous research conducted by Pratiwi (2012) which stated that NPF had a negative and significant effect on ROA of Sharia Commercial Banks.

CONCLUSION

Based on the results of this research, it can be concluded that:

- 1) Mudharabah Financing, Musyarakah Financing, *Capital Adequacy Ratio*, and *Non Performing Financing* simultaneously influence *Return On Asset* Sharia Commercial Banks 2013-2017 with value *adjusted R²* amounting to 68.02%,
- 2) Partial Mudharabah financing does not have a positive effect on *Return On Asset* Sharia Commercial Banks in 2013-2017,
- 3) Partial Musyarakah Financing has no positive effect on *Return On Asset* Sharia Commercial Banks 2013-2017,
- 4) *Capital Adequacy Ratio* partially has no positive effect on *Return On Asset* Sharia Commercial Banks 2013-2017,
- 5) *Non Performing Financing* partially has a negative effect on *Return On Asset* Sharia Commercial Banks 2013-2017, and Mudharabah Financing, Musyarakah Financing, *Capital Adequacy Ratio*,
- 6) *Non Performing Financing* simultaneously influence *Return On Asset* Sharia Commercial Bank 2013-2017 with Qardhul Hasan as a control variable. The amount of value *adjusted R²* namely 66.11%.

BIBLIOGRAPHY

- Aditya, M. R. (2016). Pengaruh Pembiayaan Mudharabah dan Pembiayaan Musyarakah Terhadap Tingkat Profitabilitas Bank Umum Syariah Periode 2010-2014. *Jurnal Profita Edisi* 4. Diakses dari <http://journal.student.uny.ac.id/ojs/index.php/profita/article/viewFile/5640/5386>
- Aini, N. (2013). Pengaruh CAR, NIM, LDR, NPL, BOPO, dan Kualitas Aktiva Produktif terhadap Perubahan Laba. *Dinamika Akuntansi, Keuangan, dan Perbankan*. 2. 14-25. Diakses dari <https://www.unisbank.ac.id/ojs/index.php/fe9/article/view/2104>
- Ali, Z. (2010). *Hukum Perbankan Syariah*. Jakarta: Sinar Grafika.
- Amelia, E. (2015). Financial Ratio and Its Influence to Profitability in Islamic Banks. *Journal of Islamic Economics*. VII. 229-240. Diakses dari <http://journal.uinjkt.ac.id/index.php/igtishad>
- Anshori, A. G. (2009). *Hukum Perbankan Syariah (UU No. 21 Tahun 2008)*. Bandung: PT Refika Aditama.
- Antonio, M. S. (2001). *Bank Syariah dari Teori ke Praktik*. Jakarta: Gema Insani.
- Ariefianto, M. D. (2012). *Ekonometrika Esensi dan Aplikasi dengan Menggunakan EViews*. Jakarta: Erlangga.
- Ashraf, O. M. (2012). Bank-specific and macroeconomic profitability determinants of Islamic banks. *Qualitative Research in Financial Markets*. 4. 255-268. Doi: 10.1108/17554171211252565.
- Asiyah, B. N. (2015). *Manajemen Pembiayaan Bank Syariah*. Yogyakarta: Kalimedia. Astuti, D. (2004). *Manajemen Keuangan Perusahaan*. Jakarta: Ghalia Indonesia.
- Aulia Fuad Rahman, R. R. (2012). Pengaruh Pembiayaan Jual Beli, Pembiayaan Bagi Hasil, dan Rasio Non Performing Financing terhadap Profitabilitas Bank Umum Syariah di Indonesia. Tersedia dari <http://ejournal.uin-malang.ac.id/index.php/ekonomi/article/view/1768>
- Bank Indonesia. (2006). Peraturan Bank Indonesia Nomor 8/21/2006 tentang Penilaian Kualitas Aktiva Bank Umum yang Melaksanakan Kegiatan Usaha Berdasarkan Prinsip Syariah. Jakarta.
- _____. (2006). Surat Edaran Bank Indonesia Nomor 17/19/DPUM tentang Perubahan atas Surat Edaran Bank Indonesia Nomor 15/35/DPAU tanggal 29 Agustus 2013 perihal Pemberian Kredit atau Pembiayaan oleh Bank Umum dan Bantuan Teknis dalam Rangka Pengembangan Usaha Mikro, Kecil, dan Menengah. Jakarta.
- Basir, C. (2009). *Penyelesaian Sengketa Perbankan Syariah di Pengadilan Agama & Mahkamah*

Syar'iyah. Jakarta: Kencana.

Dahlan, A. (2012). *Bank Syariah Teori, Praktik, Kritik*. Yogyakarta: Teras. Dendawijaya, L. (2005). *Manajemen Perbankan*. Bogor: Ghalia Indonesia.

Dewan Syariah Nasional Majelis Ulama Indonesia. (2001). Fatwa DSN-MUI Nomor 19/DSN-MUI/IV/2001 tentang Al-qardh. Jakarta.

Edhi Satriyo Wibowo, M. S. (2013). Analisis Pengaruh Suku Bunga, Inflasi, CAR, BOPO, NPF terhadap Profitabilitas Bank Syariah. *Diponegoro Journal of Management*. 2. 1-10. Diakses dari <https://ejournal3.undip.ac.id/index.php/djom/article/view/2651>

Ela Chalifah, A. S. (2015). Pengaruh Pendapatan Mudharabah dan Musyarakah Terhadap Profitabilitas (ROA) Bank Syariah Mandiri Periode 2006-2014. Tersedia dari <http://journal.stainkudus.ac.id/index.php/equilibrium/article/view/1270>

Eugene F. Brigham, J. F. (2001). *Manajemen Keuangan*. Jakarta: Erlangga. Fahmi, I. (2011). *Analisis Kinerja Keuangan*. Bandung: Alfabeta.

Fuady, S. W. (2015). Faktor-Faktor yang Mempengaruhi Profitabilitas Bank Umum Syariah di Indonesia. *Jurnal EBBANK*. 6. 33-62. Diakses dari <http://ebbank.stiebbank.ac.id/index.php/EBBANK/article/view/64>

Ghozali, I. (2009). *Ekonometrika Teori, Konsep, dan Aplikasi dengan SPSS 17*. Semarang: Badan Penerbit Universitas Diponegoro.

Hajer Zarrouk, K. B. (2016). Is Islamic bank profitability driven by same forces as conventional banks? *International Journal of Islamic and Middle Eastern Finance and Management*. 9. 46-66. Doi: 10.1108/IMEFM-12-2014-0120.

Harjito, M. d. (2010). *Manajemen Keuangan*. Yogyakarta: EKONISIA. Kasmir. (2002). *Dasar-Dasar Perbankan*. Jakarta: PT RajaGrafindo Persada.

Muhammad. (2005). *Sistem & Prosedur Operasional Bank Syariah*. Yogyakarta: UII Press.

Niode, N. N. (2016). Pengaruh CAR, Pembiayaan, NPF, dan BOPO terhadap ROA Bank Umum Syariah di Indonesia Periode 2010-2015. Tersedia dari <http://eprints.undip.ac.id/49660/>

Nistantya, D. S. (2010). Pengaruh Corporate Social Responsibility terhadap Profitabilitas Perusahaan.

Tersedia dari <http://eprints.uns.ac.id/4978/1/176411002201108271.pdf> Otoritas Jasa Keuangan. (2015). *Statistik Perbankan Syariah Desember 2014*. Jakarta.

_____. (2018). *Statistik Perbankan Syariah Desember 2017*. Jakarta.

Pratami, W. A. (2011). Analisis Pengaruh Dana Pihak Ketiga (DPK), Capital Adequacy Ratio

(CAR), Non Performing Financing (NPF) dan Return On Asset (ROA) terhadap Pembiayaan pada Perbankan Syariah. Tersedia dari <http://eprints.undip.ac.id/32445/>

Pratiwi, D. D. (2012). Pengaruh CAR, BOPO, NPF dan FDR terhadap Return On Asset (ROA) Bank Umum Syariah. Tersedia dari <http://eprints.undip.ac.id/35651/>

Purwadi, M. I. (2014). Al-Qardh dan Al-Qardhul Hasan sebagai Wujud Pelaksanaan Tanggung Jawab Sosial Perbankan Syariah. *Jurnal Hukum IUS QUIA IUSTUM*. 21. 24-42. Diakses dari <http://www.jurnal.uui.ac.id/IUSTUM/article/view/4543>

Riyadi, S. (2004). *Banking Assets and Liability Management*. Jakarta: Lembaga Penerbit Fakultas Ekonomi Universitas Indonesia.

Siswanti. (2015). Pengaruh Pembiayaan Murabahah, Pembiayaan Mudharabah, dan Pembiayaan Musyarakah terhadap Rentabilitas pada Bank Umum Syariah di Indonesia. Tersedia dari <http://eprints.unq.ac.id/11335/>

Sudarsono, H. (2008). *Bank dan Lembaga Keuangan Syariah*. Yogyakarta: EKONISIA. Sugiyono. (2006). *Metode Penelitian Bisnis*. Bandung: Alfabeta.

_____. (2012). *Statistika untuk Penelitian*. Bandung: Alfabeta.

Suliyanto. (2011). *Ekonometrika Terapan: Teori & Aplikasi dengan SPSS*. Yogyakarta: Andi.

Sumitro, W. (1997). *Asas-Asas Perbankan Islam dan Lembaga-Lembaga Terkait (BAMUI & Takaful) di Indonesia*. Jakarta: PT RajaGrafindo Persada.

Sweis, T. B. (2016). Effect of Corporate Social Responsibility on Profitability of Banks Working in Palestine (Case Study 2013-2014). *International Journal of Business Administration*, 7, 107- 114. Doi: 10.5430/ijba.v7n6p107

Triasdini, H. (2010). Pengaruh CAR, NPL, dan ROA terhadap Penyaluran Kredit Modal Kerja. Tersedia dari <http://eprints.undip.ac.id/23074/>

Wicaksana, D. F. (2011). Pengaruh Pembiayaan Mudharabah, Musyarakah dan Murabahah terhadap Profitabilitas Bank Umum Syariah di Indonesia. Tersedia dari <http://karya-ilmiah.um.ac.id/index.php/akutansi/article/view/16791>

Widarjono, A. (2009). *Ekonometrika Pengantar dan Aplikasinya*. Yogyakarta: EKONISIA.

Winardi, I. W. (2013). Pengaruh Pengungkapan CSR terhadap Kinerja Keuangan Bank yang Terdaftar di Bursa Efek Indonesia. *Jurnal Akuntansi Unesa*, 1-23. Diakses dari <https://jurnal mahasiswa.unesa.ac.id/index.php/jurnal-akuntansi/article/viewFile/2311/1427>

Zuhdi, H. (2016). Pengaruh Proporsi Dana Pihak Ketiga (PDPK), dan Non Performing Financing

Indonesian Journal of Islamic Business and Economics

Volume 05, No. 01, 2023

<http://jos.unsoed.ac.id/index.php/ijime>

(NPF) terhadap Profitabilitas pada Bank Umum Syariah Periode 2013-2014. Tersedia dari
<http://eprints.radenfatah.ac.id/1008/>