

# Indonesian Islamic Banking Performance Analysis

Erna Handayani<sup>1</sup> and Naelati Tubastuvi<sup>1</sup>

<sup>1</sup>Magister Management, Universitas Muhammadiyah Purwokerto, Banyumas-Indonesia

**Keywords:** Return on Assets, Capital Adequacy Ratio, Financing to Deposit Ratio, Non Performing Financing, Operating Expense to Operating Income Ratio, Net Operating Margin

**Abstract:** The performance of Islamic banking in Indonesia must be improved continuously so that it can be equivalent to conventional banking. Performance can be assessed from several bank health ratios. This study analyzes the effect of Capital Adequacy Ratio (CAR), Financing to Deposit Ratio (FDR), Non Performing Financing (NPF), Operating Expense to Operating Income Ratio (BOPO) and Net Operating Margin (NOM) towards Return on Assets (ROA). The study was conducted on 13 Islamic public banks registered at Indonesia Financial Service Authority (OJK) during 2012-2017 with multiple linear regression methods. Partially, the results of the study showed that CAR and BOPO have significant effect towards ROA, while CAR, FDR, NPF, BOPO and NOM have simultaneous effect on ROA.

## 1 INTRODUCTION

Public awareness of Islamic banking in Indonesia has increased after issuance of the Indonesian Ulama Council Fatwa (Fatwa MUI) Number 1 of 2004 concerning interest and usury. The development of Islamic banking continues to increase which can be seen from the growth in the number of Sharia Commercial Banks, Sharia Business Units and Islamic People's Financing Banks. Based on Indonesia Financial Services Authority statistics on Islamic banking at the end of 2017, there were 13 Sharia Commercial Banks, 21 Sharia Business Units and 167 Islamic People's Financing Banks.

Based on Indonesia Financial Services Authority data until August 2017, the total Indonesian Islamic financial assets (excluding Sharia Shares) reached Rp 1,048.8 trillion, which consisted of Sharia Banking assets of Rp 389.74 trillion, Sharia Non-Bank Financial Industry of Rp 99.15 trillion, and Markets Sharia capital of Rp. 559.59 trillion.

The total Indonesian Islamic financial assets is small compared to the total assets of the financial industry which reached Rp. 13,092 trillion. It showed that the market share of the Islamic finance industry only reached 8.01% of the total national market share. (Press Release: Sharia Financial Market Share, Indonesia Financial Services Authority, 2017).

Although the market share of the national banking and sharia finance industry still has not reached the expected level (seen from the market share data), in terms of the magnitude of Indonesian Islamic financial assets has reached the ninth largest position in the world with assets around USD 35.6 billion (in 2013). In addition, Indonesia has received recognition and appreciation from the international community together with the UAE, Saudi Arabia, Malaysia and Bahrain are considered to be in a position to offer lessons to other countries in the world for sharia finance development. The Indonesia Financial Services Authority also received the award as the best regulator in promoting Islamic finance (Indonesia Financial Services Authority, 2017).

Based on the data above, Islamic banking in Indonesia is required to continue improving the performance of its business in facing the challenges from both in international competition and an increase in the market share of domestic banking. In addition, a significant increase in profitability is needed for the development of the position of Islamic banking in Indonesia. Data from Indonesia Financial Services Authority (2017) which showed Islamic banking performance from its Return on Assets (ROA) is still in the range of 0.63-1.12%. This number still lags behind general conventional banking, which ranges from 2.35-2.50%.

The Government through Indonesia Financial Services Authority has made the direction of the Indonesian Islamic banking development which called the Sharia Banking Roadmap 2015-2019. This is proof that the government is starting to give more attention to the continuous growth of Islamic banking (Indonesia Financial Services Authority, 2017)

Another regulator, Bank Indonesia, has established a risk-based bank rating system contained in Bank Indonesia Regulation no. 1/13/2011 concerning the assessment of risk-based bank rating of commercial banks. In this regulation, banks are required to conduct a self-assessment of the health of banks with a risk-based approach (Risk based Bank Rating-RBBR) both individually and on a consolidated basis. The purpose of evaluating the risk-based bank rating is to obtain an overview of the health of the bank so that it can be used as an input for the bank in developing future business strategies and plans and improving weaknesses that could potentially disrupt the bank's performance. (Indonesian Bankers Association, 2015)

Assessment of the bank health level, both individual and consolidation with the assessment factors including:

1. Risk Profile
2. Good Corporate Governance (GCG)
3. Earning
4. Capital

The risk profile consists of credit risk, market risk, operational risk, liquidity risk, strategic risk, compliance risk, legal risk, reputation risk, and risk profile ranking. Good Corporate Governance (GCG) consists of structure, process, results and GCG ranking. Earning (Rentability) consists of performance, source, sustainability, and rentability ratings. Capital consists of adequacy, management and capital rating (Indonesian Bankers Association, 2015).

Banking performance will increase with a good level of health. Banking performance concerns the study of profitability. There are two ratios which are usually used to measure banking performance, namely Return on Assets (ROA) and Return on Equity (ROE).

Return on Asset as a benchmark for bank profitability is influenced by several factors including internal factors and external banking factors. Internal factors include capital risk, liquidity risk, credit risk and operational risk.

Based on the background above, this study tried to measure the effect of Capital Adequacy Ratio (CAR), Financing to Deposit Ratio (FDR), Non Performing Financing (NPF), Operating Expense to Operating Income Ratio (BOPO) and Net Operating Margin (NOM) towards Return on Asset (ROA).

This study was conducted on Islamic banking in Indonesia, especially Sharia Commercial Banks registered at Indonesia Financial Services Authority during 2012-2017.

## 2 THEORETICAL FRAMEWORK

Based on Circular Letter of Bank Indonesia No.6 / 23 / DPNP dated May 31, 2004 concerning the Risk-based Bank Rating System for Commercial Banks, there are eight indicators used to measure the level of profitability, namely return on assets, return on equity, net interest margin, operating expense to operating income, development of operating profit, composition of the portfolio of earning assets and diversification of income, application of accounting principles in revenue recognition, prospects for operating profit.

The ratio commonly used in measuring the level of rentability / profitability is ROA (Hery, 2016). ROA is a measurement of the bank's financial performance in obtaining profit before tax, which is generated from the total assets of the bank (Circular Letter of BI No.3 / 30 / DPNP December 14, 2001). ROA can be calculated by dividing profit after tax by total assets (Sartono, 2001).

Based on Circular Letter No.9 / 24 / DPBS / 2007 concerning the Sharia risk-based bank rating system, Bank Indonesia stipulates a minimum ROA of 1.26% or greater than 1.25% to determine the ROA for a health bank. So that the greater the ROA shows the bank's performance the better, because the rate of return is greater (Husnan, 1992). ROA as a reflection of the bank's financial performance is influenced by factors as follows:

### 2.1 Bank Capital

Assessment of capital factors includes an assessment of the level of capital adequacy and capital management. (Indonesian Bankers Association, 2016). There are several ratios used to monitor bank capital positions, one of which is Capital Adequacy Ratio (Indonesian Bankers Association, 2016). According to Bank Indonesia regulations, Capital Adequacy Ratio is a ratio that shows how much the bank assets containing risk (credit, participation, securities, bills on other banks) that are also financed from their own capital in addition to obtaining funds from outside sources. Capital Adequacy Ratio is obtained by dividing Capital with Risk Weighted Assets or RWA (Circular Letter of BI, 2011).

Based on the Indonesia Financial Services Authority Regulation Number 21 / POJK.03 / 2014 concerning about Minimum Capital Requirement for

Sharia Commercial Banks, the provision of minimum capital is determined as follows:

- a. 8% (eight percent) of Risk Weighted Assets for banks with a risk profile rating of 1 (one);
- b. 9% (nine percent) up to less than 10% (ten percent) of RWA for banks with a risk profile rating of 2 (two);
- c. 10% (ten percent) up to less than 11 (eleven percent) of RWA for banks with a risk profile rating of 3 (three); or
- d. 11% (eleven percent) to 14% (fourteen percent) of RWA for banks with a risk profile rating of 4 (four) or 5 (five).

The greater the CAR ratio, the bank has the potential to increase profits. In other words, CAR affects ROA. This has been proven by Kishori (2017), Anggreni, (2014), Shamki, Alulis and Sayari, (2016), Margaretha (2017), Chou and Buchdadi, (2016), Sukirmo (2016), Sudyanto (2010), Nahar and Prawoto, (2017), Kinanti, (2017), Amelia, (2015), Andhina Dyah Sulityowati, Noer Azam Achsan, (2017), Hantono, (2017), M, Ali and Habbe, (2012) and Bachri (2013). Meanwhile, some research showed different results and indicates that CAR does not have a significant effect on ROA (Sudyatno, 2013, and Wibowo and Syaichu, 2013).

## 2.2 Liquidity

Banks are very concerned about fulfilling their liquidity because the most important measure of public trust is about whether the bank can fulfill the withdrawal of funds made by the customers for their interests anytime. It is in addition to fulfill the conditions set by the monetary authorities and correspondent banks where banks maintain non-bank accounts (Ericson Leon Boy Sonny, 2007).

In the banking industry, the liquidity ratio is known as the Loan to Deposit Ratio. In Islamic banking, the term of loan is known as financing (Antonio, 2001). This ratio is known as Financing to Deposit Ratio (FDR). FDR is a ratio to measure the composition of the amount of financing provided compared to the amount of public funds and the capital used (Kasmir, 2012). The higher this ratio shows the lower the ability of bank liquidity because the amount of funds needed for financing is getting bigger (Dendawijaya, 2009).

Based on Financial Services Authority Regulation Number 3 / POJK.03 / 2016 concerning Islamic People's Financing Bank is setting the Financing to Deposit Ratio ranges from 78% -100%. If the FDR is under the standard set by Indonesia Financial Services Authority, it shows the lack of effectiveness of the bank in channeling its financing, so that there is a loss of opportunity for profit. If the FDR is more than 100%, the financing channeled exceeds the funds collected so that the bank will

experience a shortage of funds to fulfill its obligations. This high and low ratio indicates the level of liquidity of the bank, the higher the FDR number of a bank, described as a bank that is less liquid compared to banks that have a smaller ratio.

FDR is calculated from the amount of financing divided by third party funds (Muhammad, 2005). Several studies have examined the effect of liquidity (FDR) on profitability (ROA) with a significant effect that was carried out by Zakaria (2015), Farooq, Qasim and Asad, (2015), Malik et al., (2014), Chou and Buchdadi, (2016), Hantono, (2017) dan Sukirmo (2006), Kishori (2017), Andhina Dyah Sulityowati, Noer Azam Achsan, (2017) dan M, Ali and Habbe, (2012). Meanwhile, research from Pramuka, (2010) showed that FDR has no significant effect on ROA.

## 2.3 Credit Risk

Credit risk is also called financing risk. Financing risk is the risk due to the failure of the debtor and / or other parties in fulfilling the obligation to pay off financing at the bank. In financing activities, both commercial financing and consumption financing, there is a possibility that the debtor cannot fulfill the obligation to the bank for various reasons such as business failure, because the character of the debtor who does not have good faith to fulfill obligations to the bank, or indeed there is an error from the bank itself in the financing approval process (Indonesian Bankers Association, 2015).

Sharia Commercial Banks need to improve management of their financing risks so that the level of Non Performing Financing does not exceed the provisions of Indonesia Financial Services Authority. Financial Services Authority Regulation Number 3 / POJK.03 / 2016 concerning Islamic People's Financing Bank have set that the ratio of Non-Performing Financing is a maximum of 7% of total financing.

According to Bank Indonesia regulations in 2012, Non Performing Financing is calculated by adding all of KL, D, M Financing divided by total financing. The higher the NPF level of a bank, the lower the income that must be obtained. Vice versa, if the NPF level is low, the level of bank income will increase. Thus, increasing NPF is considered to have a significant effect on bank performance. Previous research that proved the significant effect of NPF towards ROA was found by Yoppy and Purbaningsih, (2014), Zakaria (2015), Anggreni, (2014), Amelia, (2015), Pramuka, (2010), Hantono, (2017), Wibowo (2013) and Bachri (2013), Nahar and Prawoto, (2017), Kinanti, (2017) and Sudyanto (2010). Whereas, previous research from M. Ali and Habbe, (2012) found that NPF has no significant effect on ROA.

### 2.4 Operational Risk

Operational risk is a risk that happens due to inadequate and / or non-functioning internal processes, human errors, system failures, or the presence of external problems that affecting bank operations (Ali, 2006). Operational risk is the risk of loss because the bank works inefficiently, uneconomically, ineffectively, not smooth, insecurely, and disorderly. Generally, bank failures are caused by operational risks. In the CAMEL approach, the measurement of operational risk is reflected in the BOPO ratio. The higher BOPO ratio indicates high operational risk (Hayati, 2017).

Financial Services Authority Regulation Number 3 / POJK.03 / 2016 concerning Islamic People's Financing Bank have set that the BOPO ratio (Operating Expense to Operating Income) is a maximum of 94% (Indonesian Bankers Association, 2015).

If a bank has BOPO more than the predetermined provisions, the bank is included in the inefficient category, because the higher the BOPO means that the increase in operational costs is greater than the increase in operating income so that the profit earned will eventually decreases. According to Suyanto, (2016), BOPO (Operating Expense to Operating Income) can be measured by dividing the operating expenses with operating income.

Previous research have showed that BOPO has effect towards the profitability (ROA) (Sudiyatno, 2013; Nahar and Prawoto, 2017; Amelia, 2015; Chou and Buchdadi, 2016; Sukirmo, 2006; Sudiyanto, 2016; Wibowo, 2013; M, Ali and Habbe, 2012; and Margaretha 2015). Meanwhile, research from Malik et al., (2014) showed that BOPO has no significant effect on ROA.

### 2.5 Net Operating Margin (NOM)

Net Operating Margin (NOM) is a ratio to assess the bank's profitability. NOM is calculated by dividing operating profit by the average of earning assets (Indonesian Bankers Association, 2016). Operating profit is annual net interest income deduced by annual operating expenses. Earning assets are assets that generate interest both on the balance sheet and on TRA. Average earning assets are calculated by adding the total productive assets positions from January to June divided by 6 (Indonesian Bankers Association, 2016). Banks are required to maintain a positive NOM value. The higher the NOM, the higher the bank's income generated by the bank's productive assets. The previous research supported the statement was the research from M. Ali and Habbe, (2012), Subandi (2013), Sudiyatno, (2013), Andhina Dyah Sulityowati, Noer Azam Achsan, (2017). However, the opposite results found by (Rindhatmono, 2005).

## 3 RESEARCH METHOD

This study uses secondary data in the form of financial statements of Islamic Commercial Banks presented by Indonesia Financial Services Authority website, ojk.go.id, during 2012-2017. Data is collected with time series, namely quarterly financial statements.

The analytical model used is multiple regression analysis model. The analysis technique that will be used in this study is multiple linear regression analysis. Multiple linear regression analysis measure the strength of the relationship between two or more variables, also shows the direction of the relationship between assumed to be random / stochastic which means it has a probabilistic distribution (Ghozali, 2016). In this study, a regression test was performed with an independent variable (x) towards the dependent variable (y). The multiple linear regression equation used are:

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

Where :

Y : Financial Performance (ROA)

i : Islamic Commercial Banks

t : Year

$\alpha$  : Constant/Intercept

$\beta$  : Regression Coefficient

X<sub>1</sub> : Capital Adequacy Ratio

X<sub>2</sub> : Financing to Deposit Ratio

X<sub>3</sub> : Non Performing Financing

X<sub>4</sub> : BOPO ratio (Operating Expense to Operating Income)

X<sub>5</sub> : Net Operating Margin

e : error

The hypothesis in this study are:

1. Capital with CAR indicators affects performance (ROA) in Sharia Commercial Banks in Indonesia during 2012-2017.
2. Liquidity Risk with the FDR indicator affects the performance (ROA) of Islamic Commercial Banks in Indonesia during 2012-2017.
3. Credit Risk with the NPF indicator affects the performance (ROA) of Islamic Commercial Banks in Indonesia during 2012-2017.
4. Operational risks with BOPO indicators affect performance (ROA) in Islamic Commercial Banks in Indonesia during 2012-2017.
5. Rentability with NOM indicators influences performance (ROA) in Islamic Commercial Banks in Indonesia during 2012-2017.

Before testing multiple linear analysis of the research hypothesis, it is necessary to test a classic

assumption first. The classic assumption test aims to find out and test the feasibility of the regression model used in this study. The classic assumption test consists of normality test, multicollinearity test, autocorrelation test, and heteroscedasticity test (Ghozali, 2016).

#### 4 ANALYSIS

Table 1 showed that the sig. value of normality test is 0.603. It was concluded that the normality assumption of research data was fulfilled because it was greater than 0.05. (Ghozali, 2016)

Table 1: Normality Test  
One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		215
Normal Parameters <sup>a</sup>	Mean	-.0389634
	Std. Deviation	.35537830
Most Extreme Differences	Absolute	.052
	Positive	.052
	Negative	-.027
Kolmogorov-Smirnov Z		.764
Asymp. Sig. (2-tailed)		.603

- a. Test distribution is Normal.
- b. Calculated from data.

Multicollinearity test results as shown in Table 2 obtained a Tolerance value of > 0.1, while the VIF value is < 10, meaning that there were no symptoms of multicollinearity (Suliyanto, 2011).

Table 2: Multicollinearity Test

Model	Collinearity Statistics	
	Tolerance	VIF
(Constant)		
CAR	.726	1.377
FDR	.829	1.206
NPF	.672	1.487
BOP	.511	1.955
O		
NOM	.684	1.463

Autocorrelation test results showed in table 3. indicates that the Durbin Watson value of 0.772 are found between -2 and 2, so it is concluded that there is no data autocorrelation (Santosa, 2012).

Table 3: Autocorrelation Test  
Model Summary<sup>b</sup>

Model	Std. Error of the Estimate	Durbin-Watson
1	.31112	.779

- a. Predictors: (Constant), NOM, CAR, FDR, NPF, BOPO
- b. Dependent Variable: ROA

Table 4. showed the results of Heteroscedasticity Test. The sig value for the independent variable is greater than 0.05, which means there is no heteroscedasticity (Suliyanto, 2011).

Table 4: Heteroscedasticity Test

Model	Standardized Coefficients	T	Sig.
	Beta		
(Constant)		-.631	.529
CAR	.052	.618	.537
FDR	-.063	-.786	.433
NPF	.092	1.059	.291
BOPO	.151	1.543	.125
NOM	.042	.483	.630

- a. Dependent Variable: abs\_res2

After all the classical assumption tests are carried out and resulted that all the data can be used, then multiple linear regression analysis is carried out. The following are the equations obtained from the test results:

$$ROA = 7,508 + 0.09CAR + 0,01FDR + 0,13 NPF - 0,076BOPO + 0,011NOM$$

The results showed that the value of ROA constant is 7.508. CAR regression coefficient is 0.09 indicating that a 1% increase from the CAR value will increase ROA by 0.09% assuming other variables remain. The result is similar with FDR, NPF and NOM. BOPO regression coefficient is - 0.076 which means that if there is a reduction in BOPO of 1%, it will increase the ROA by 0.076.

Table 5. showed the coefficient of determination test with the results of the Adjusted R Square value is 0.861. It means that 86.1% percent ROA can be affected by the simultaneous effect from independent variables namely CAR, FDR, NPF, BOPO and NOM, while the rest are influenced by other variables.

Table 5: Coefficient of Determination Test Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.930 <sup>a</sup>	.864	.861	.31112

a. Predictors: (Constant), NOM, CAR, FDR, NPF, BOPO

Table 6 showed the results of the F test where the results is 0,000 which means that all the independent variables simultaneously affect the dependent variable.

Table 6 Results of the F Test ANOVA<sup>a</sup>

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	128.548	5	25.710	265.614	.000 <sup>b</sup>
Residual	20.230	209	.097		
Total	148.778	214			

a. Dependent Variable: ROA

b. Predictors: (Constant), NOM, CAR, FDR, NPF, BOPO  
Coefficients<sup>a</sup>

CAR	.009	.002	.120	3.995	.000
FDR	.001	.001	.031	1.118	.265
NPF	.013	.017	.023	.733	.464
BOPO	-.076	.003	-.864	-24.221	.000
NOM	.011	.008	.047	1.525	.129

a. Dependent Variable: ROA

Table 7 showed the results of T test. It found that CAR results significantly affects ROA with a sig value of 0,000 > 0.05. The result is similar with the BOPO value. The sig. value of FDR, NPF and NOM are greater than 0.05, so they are not significant.

Hypothesis Test 1

The results of data analysis show that Hypothesis 1: CAR has a significant effect on ROA, supported. This result supports the opinion that with the addition of capital, banks have greater opportunities to increase profits. The results of hypothesis 1 are in line with previous researches from Kishori (2017), Anggreni, (2014), Shamki, Alulis and Sayari, (2016), Margaretha (2017), Chou and Buchdadi, (2016), Sukirmo (2016), Sudyanto (2010).

Hypothesis Test 2

The results of hypothesis 2 showed different results. The result showed that T test value of more than 0.05, which is 0.265, the conclusion of the FDR has no effect towards ROA. This result is the same as previous result by Pramuka, (2010). So, hypothesis 2 is not supported.

Hypothesis Test 3

The test of the effect of NPF towards ROA obtained a significant value of 0.464, it is concluded that hypothesis 3 is not supported. The result is supported by previous research from M, Ali and Habbe, (2012).

Hypothesis Test 4

Significant affect towards ROA is then obtained from BOPO. In general, effective costs will increase profits. So, hypothesis 2 is supported. The result is supported by previous researches from Sudyatno, (2013), Sudyatno, (2013), Amelia, (2015), Chou and Buchdadi, (2016), Sukirmo (2006), Sudyanto (2016), Wibowo (2013) and M. Ali and Habbe, (2012), Margaretha (2015).

Hypothesis test 5

Table 7: Showed the Results of T test

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	7.508	.298		25.173	.000

The result of t test showed that the value is 0.129, then hypothesis 4 is not supported. This result is supported by previous research from Ferdi Rindhatmono (2005).

## 5 CONCLUSION

The results showed that CAR and BOPO have a significant effect towards ROA, while FDR, NPF and NOM have no significant effect towards ROA. In the other hand, FDR, NPF and NOM have a simultaneous effect on ROA with a coefficient level of 86.1%. Based on 5 years' observation, other factors that affect ROA in Indonesian Islamic Banking still need to be explored. The significant effect of CAR and BOPO have been theoretically proven. However, it needs to be reexamined why FDR, NPF and NOM has no effect towards ROA. Based on existing theories, credit risk and liquidity risk are important for banks because during the period of 2012-2017 there were several Islamic banks that were in the early stages of developing and some were newly founded. It is because banks are still focused on aspects of capital and performance efficiency.

## REFERENCES

- Amelia, E. (2015) 'Financial Ratio And Its Influence To Profitability In Islamic Banks', (95), pp. 229–240.
- An dhina Dyah Sulityowati, NoerAzamAchsani and Tanti Novianti (2017) 'Analysis of Factors Affecting Profitability in XYZ Bank ( One of Commercial Bank in Indonesia )', 7(4), pp. 276–282.
- Anggreni, M. R. (2014) 'Pengaruh Dana Pihak Ketiga, Kecukupan Modal, Risiko Kredit Dan Suku Bunga Kredit Pada Profitabilitas', ISSN: 2302-8556 E-Jurnal Akuntansi Universitas Udayana, 1, pp. 27–37.
- Chou, T. and Buchdadi, A. D. (2016) 'Bank Performance and Its Underlying Factors : A Study of Rural Banks in Indonesia', 5(3), pp. 55–63. doi: 10.5430/afr.v5n3p55.
- Farooq, U., Qasim, M. and Asad, M. (2015) 'An Empricial Study on Impact Liquidity Risk Management on Firm Performance in the Conventional Banking of Pakistan', 17(2), pp. 110–118. doi: 10.9790/487X-1723110118.
- Hantono (2017) 'Effect of capital adequacy ratio (car), loan to deposit ratio (ldr) and non performing loan (npl) to return on assets (roa) listed in banking in indonesia stock exchange', International Journal of Education and Research, 5(1), pp. 69–80.
- Kinanti (2017) 'Influence Of Third-Party Funds, Car, Npf And Fdr Towards The Return On Assets Of Islamic Banks In Indonesia Risma Ayu Kinanti \*) Purwohandoko \*\*)', 14(2), pp. 135–143.
- M, M. S., Ali, M. and Habbe, A. H. (2012) 'Pengaruh rasio kesehatan bank terhadap kinerja keuangan bank umum syariah dan bank konvensional di indonesia', 1(1), pp. 79–86.
- Malik, M. F. et al. (2014) 'Interest Rate and Its Effect on Bank ' s Profitability', 4, pp. 225–229.
- Nahar, F. H. and Prawoto, N. (2017) 'Bank ' S Profitability In Indonesia : Case Study Of Islamic Banks Period 2008-2012', 18. doi: 10.18196/jesp.18.2.4043.
- Pramuka, B. A. (2010) 'Faktor-Faktor Yang Berpengaruh Terhadap Tingkat Profitabilitas Bank Umum Syariah', pp. 63–79.
- Rindhatmono, F. (2005) Profitabilitas Bank Pasca Merger Di Indonesia.
- Shamki, D., Alulis, I. K. and Sayari, K. (2016) 'Financial Information Influencing Commercial Banks Profitability', 8(6), pp. 166–174. doi: 10.5539/ijef.v8n6p166.
- Sudiyatno, D. P. dan B. (2013) 'Faktor-faktor yang mempengaruhi kinerja bank (studi empirik pada industri perbankan di bursa efek indonesia)', Jurnal Bisnis dan Ekonomi (JBE), 20(1), pp. 25–39.
- Suyanto, H. A. (2016) Pengelolaan BPR dan Lembaga Keuangan Pembiayaan Mikro. Yogyakarta: CV Andi Offset.
- Wibowo, E. S. (2013) 'Analisis pengaruh suku bunga, inflasi, car, bopo, npf terhadap profitabilitas bank syariah', Diponegoro Journal of Management, 2, pp. 1–10. Available at: <http://ejournal-s1.undip.ac.id/index.php/djom>.
- Yoppy, R. and Purbaningsih, P. (2014) 'The Effect of Liquidity Risk and Non Performing Financing ( NPF ) Ratio to Commercial Sharia Bank Profitability in Indonesia'. doi: 10.7763/IPEDR.