

## WHAT DRIVES BANK MUAMALAT INDONESIA'S PROFIT? AN INTERVENING ANALYSIS WITH NON-PERFORMING FINANCING VARIABLE

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### ABSTRACT

Bank Muamalat Indonesia, the first Islamic bank in Indonesia, experienced a major problem: the high number of non-performing financing ratios. Increased problematic financing can lead to a decrease in profitability. Thus, the formulated purpose of this research is to see the condition of the increasing non-performing financing ratio in mediating the effect of the financial and macroeconomic performance ratio variables on the decline in profitability. This study used quarterly data on CAR, FDR, inflation, BI interest rates, NPF, and ROA of Bank Muamalat Indonesia from 2013 - 2020. Path analysis was used as the analysis tool. The results of this study indicate that FDR has a significant positive effect. NPF significantly negatively affects ROA, and CAR, inflation, and BI interest rates do not affect ROA. In addition, CAR has a significant negative effect on NPF, BI interest rates have a significant positive effect on NPF, and FDR and BI interest rates do not affect NPF. Meanwhile, the NPF variable can mediate the effect of CAR on ROA. Meanwhile, the NPF could not mediate the effect of FDR, inflation, and BI interest rates on ROA. It is expected that Bank Muamalat Indonesia will conduct periodic and comprehensive reviews with increasingly stringent financing selective, measurable planning in investment management, and restructuring of non-performing financing so that financial performance will improve.

**Keywords:** Financial Ratio; Halal Finance; Islamic Bank

### INTRODUCTION

Indonesia's banking world has adopted two systems: the conventional system and the sharia system. Islamic banking is a bank that, in the process, refers to sharia principles, meaning a bank based on Islamic sharia provisions in its operational activities, especially regarding the procedures for muamalah in Islam (Mawaddah, 2015). Bank Muamalat Indonesia is a pioneer of Islamic banking in Indonesia, which was established in 1991, then carried out its functional activities in May 1992. The profit-sharing system for customers is carried out in Bank Muamalat Indonesia's business activities to achieve profit. In addition, the bank's prudence when undergoing bank business operational guidelines or the Prudential Banking principle becomes Bank Muamalat Indonesia to meet the qualifications of a healthy bank and good bank performance (Ummah & Suprpto, 2015).

Bank Muamalat Indonesia posted a net profit of Rp. 10.02 billion in 2020. This figure decreased 38.6% from profit in 2019 of Rp. 16.32 billion and the lowest profit received in at least the last 15 years achieved by Bank Muamalat Indonesia. Bank Muamalat Indonesia's ROA is the lowest among other Islamic banks. When compared to other Islamic banks, the profit calculated by ROA at Bank Muamalat Indonesia was low in 2014 and the lowest from 2015 to 2020; this can be seen in table 1 below:

**Table 1. The ROA comparison of Indonesia Islamic Banking (percentage)**

Bank/Year	2016	2017	2018	2019	2020
BNI Syariah	1,44	1,31	1,42	1,82	1,33
Syariah Mandiri	0,59	0,59	0,88	1,69	1,65
BRI Syariah	0,95	0,51	0,43	0,31	0,81
BCA Syariah	1,1	1,2	1,2	1,2	1,1
BTPN Syariah	8,98	11,19	12,37	13,58	7,16
Muamalat	0,22	0,11	0,08	0,05	0,03

With the lowest profit, it can be seen that Bank Muamalat Indonesia is experiencing a decline in performance, which harms its financial performance. Bank Muamalat has continued to experience a decline in financial performance since 2014, which is marked by a large NPF ratio that even touched more than 7% in 2015, increasing operating expenses, and declining capital so that in recent years it was reported that it was threatened to close (Wibisono & Wahyuni, 2017).

This research is expected to be an input and evaluation material for Islamic banking, especially Bank Muamalat Indonesia, in making decisions in the financial sector to maximize company performance. It can be a reference for the banking industry in Indonesia, especially Islamic banking, to increase profitability. The purpose of this study is to determine the effect of the Capital Adequacy Ratio (CAR), Financing to Deposit Ratio (FDR), Inflation, and BI Interest Rates on Return on Assets (ROA) through Non-Performing Financing (NPF) as an intervening variable.

## **LITERATURE REVIEW**

Signaling theory, or the so-called signal theory, comes from Michael Spence in 1973, which states that companies use financial information to signal to the market with superior performance. Companies with good and profitable performance will provide positive information (Bini et al., 2010). Several theories that explain the relationship between profitability and capital structure are signal theory (Alkhazaleh & Almsafir, 2014).

The implications of this theory are based on how an Islamic bank should signal users of financial statements, thus encouraging Islamic banks to manage their assets efficiently. The more efficient the asset management of Islamic banks, the fewer resources can be utilized properly, creating value and generating maximum profits. This narrative will reduce the capital of Islamic banks but will increase income because they are competent in managing their assets efficiently and will obtain a greater Return on Assets (ROA) (Azhari, 2019).

Signal theory explains that companies need to provide information to external parties related to financial statements because there is asymmetric information between companies and outside parties. Islamic commercial banks can maximize company performance by reducing asymmetric information by sending signals to external parties through financial information. The level of profitability can be reflected in good company performance reports to improve the performance of Islamic commercial banks (Yusuf, 2017).

The good performance depicted in the financial statements is a signal or indication that Islamic banks are operating well. External parties will respond well to positive signals because market reactions depend on basic signals from Islamic banks. Therefore, Islamic banks must continue to send signals both to customers and the public to gain trust and security for funds collected in Islamic banks by customers (Triyani, 2018).

## **HYPOTHESIS**

The state of capital owned by the bank is referred to as the CAR value. An increase in the capital accompanied the increase in the CAR value earned. Hence, the banking system was resilient in overcoming the risks of financing and productive assets and providing more flexible financing to third parties. This increase impacts revenue acquisition and is followed by an increase in profitability (Wardana & Widyarti, 2015). It is concluded that CAR positively influences ROA. This theory is in line with the statement from Stiawan (2009) and Zulifah & Susilowibowo (2014) that CAR has a significant positive relationship to bank ROA. Thus, the increase in CAR will be followed by an increase in ROA. However, the findings from Yundi (2017) state that CAR has a significant negative effect on profitability as measured by ROA. Capital Adequacy Ratio (CAR) influences the Return on Assets (ROA) of Bank Muamalat Indonesia (Hypothesis 1).

The FDR value, considered a healthy ratio, is in the range of 80 percent to a maximum of 90 percent based on the Indonesian Islamic Banking Association. If a bank only disburses 75 percent of the total funds collected, it has an FDR ratio of 75 percent. On the other hand, if the FDR value is above 100 percent, it can be said that it has exceeded Asbisindo's ideal limit Wardana & Widyarti (2015). On the other hand, the high FDR increased the distribution of third-party funds; the increase in the distribution of third-party funds increased the profitability obtained by the bank (C. T. Putri & Heykal, 2013). It is concluded that FDR had a positive effect on ROA. This theory is under the statement of Stiawan (2009) and Zubaidah & Hartono (2019) that FDR has a positive and significant influence on ROA. So, if there is an increase in FDR, it will be accompanied by increased profitability. However, a study by Wibisono & Wahyuni (2017) suggests that FDR significantly negatively affects ROA. Financing to Deposit Ratio (FDR) influences the Return on Assets (ROA) of Bank Muamalat Indonesia (Hypothesis 2).

An increase in bank spending on salary costs will be accompanied by an increase in inflation, which hurts profitability. Meanwhile, when the economy is in a bad state, there is a high chance of default on the financing provided so that it can reduce bank profitability (K. R. Putri, 2009). It can be said that an increase in inflation will have an impact on a decrease in ROA. This theory is in line with the statement of Fatma (2019) and Raharjo et al., (2020) that inflation has a significant negative relationship to the profitability of Islamic banks (ROA). Thus, if inflation increases, it will be accompanied by a decrease in profitability. However, according to Sahara (2013), there are results that inflation has a significant positive relationship with ROA. Non-Performing Financing (NPF) influences the Return on Assets (ROA) of Bank Muamalat Indonesia (Hypothesis 3).

Savings interest rates that have increased due to rising BI interest rates can cause profitability to decline. When savings interest rates increase, Islamic banks are affected by a decrease in third-party funds caused by funds being transferred to conventional banks from Islamic banks. Depositors prefer to save their funds in conventional banks due to an increase in savings interest rates. Because the profit-sharing rate in Islamic banks is lower than the interest rate of return, Islamic banks will experience a decrease in income from reduced third-party funds. The profitability of Islamic banks will be affected by the increase in interest rates at conventional banks because third-party funds are reduced, so there is a decrease in the amount of financing disbursed from the pool of funds (Swandayani & Kusumaningtyas, 2012). It can be said that the BI interest rate harms ROA. This statement aligns with Sahara (2013) and Zulifah & Susilowibowo (2014) that the BI interest rate has a significant negative relationship with profitability. However, the results of Dhani's research (2020) show that the BI interest rate has a significant positive effect on profitability. Inflation influences the Return on Assets (ROA) of Bank Muamalat Indonesia (Hypothesis 4).

The financial ratio that is closely related to the high credit risk that occurs in banks is the NPF. Credit risk is a failure to pay that is likely to occur. The higher the bank's NPF, the higher the financing risk. Thus, the higher the NPF of the bank, the lower the profitability. The trigger for this is the increase in fees paid by banks, namely the higher cost of reserves required for productive assets (Rivai & Arifin, 2010). It can be said that NPF has a negative effect on profitability. This theory also aligns with Stiawan's (2009) and Dhani's (2020) statement that NPF has a significant negative relationship with bank profitability. However, Zulifah & Susilowibowo (2014) found that NPF had a significant positive effect on ROA. BI rate influences the Return on Assets (ROA) of Bank Muamalat Indonesia (Hypothesis 5).

For banks that experience an increase in the capital adequacy ratio, a bank will be careful in providing financing to depositors. Those are because the increase in the capital adequacy ratio will be followed by lower fees provided by the bank, which will impact banks experiencing non-performing financing (Asnaini, 2015). It can be concluded that CAR has a negative effect on NPF. This theory is in line with the statements of Auliani & Syaichu (2016) and Sari (2020) that CAR has a significant negative effect on non-performing financing (NPF). Thus, an increase in CAR will be followed by a decrease in NPF. However, Poetry & Sanrego's (2011) research results explain that CAR significantly positively affects NPF. Capital Adequacy Ratio (CAR) influences the Non-Performing Financing (NPF) of Bank Muamalat Indonesia (Hypothesis 6).

If the bank lent almost all of its funds, it reflects an increased FDR. It means that the number of funds used for financing increases FDR and a higher risk of non-performing financing (Rosidah, 2017). Based on those explanation, it is concluded that FDR positively affects NPF. This theory is per the statement of Firmansyah (2014) and Agustiniingsih et al., (2017) that FDR has a significant positive relationship with non-performing financing. So, it is concluded that an increase will also follow the increase in FDR in NPF. However, Poetry & Sanrego (2011) stated that FDR significantly negatively affected NPF. Financing to Deposit Ratio (FDR) influences the Non-Performing Financing (NPF) of Bank Muamalat Indonesia (Hypothesis 7).

The definition of inflation is a macroeconomic indicator that influences the country's economy. An increase in inflation will slow down the economy and then affect the financial sector in banks. One thing that affects the financial sector is the increase in non-performing financing (Priatmadja, 2011). It is concluded that inflation positively affects the NPF. This theory follows the statements of Agustiniingsih et al., (2017) and Manafe (2017) that inflation has a significant positive effect on the NPF. So, an increase in inflation will accompany an increase in NPF. However, Firmansyah (2014) stated that inflation significantly negatively affects non-performing financing (NPF). Inflation influences the Non-Performing Financing (NPF) of Bank Muamalat Indonesia (Hypothesis 8).

An increase in BI interest rates will lead to an increase in lending rates and deposit rates. The risk of non-performing loans will increase if banks increase loan interest rates because it is increasingly difficult for debtors to bear interest expenses. The risk of not competing for the results of third-party funds in Islamic banks can arise when BI interest rates are high. In overcoming this, the maximum duration can be set by Islamic banks by considering several things, such as current profits and estimates of future changes that apply to financing distribution (Sugiharto et al., 2019).

When BI interest rates increase and impact increasing lending rates for conventional banks, it results in profit margins that are increasingly competitive with conventional banks so that Islamic banking benefits. The distribution of financing is affected when the profit margins of Islamic banks become more competitive. The opportunity for non-performing financing will be high if there is an increase in financing channeling (Sugiharto et al., 2019). It is concluded that the BI interest rate positively influences the NPF. This theory is by studies by Ardana (2017) and Febrianti (2015), which state that the BI interest rate has a significant positive relationship to non-performing financing (NPF). However, according to Sari (2020), the results showed that the BI interest rate significantly negatively affected the NPF. BI rate influences the Non-Performing Financing (NPF) of Bank Muamalat Indonesia (Hypothesis 9).

If there is an increase in financing, it will increase the total Risk Weighted Assets, which also means it will reduce the capital adequacy (CAR); therefore, if increased financing results in an increased ROA, the car's value will decrease CAR (Auliani & Syaichu, 2016). This theory is related to the statement from Asnaini (2015) regarding the correlation of CAR with NPF, which states that CAR has a significant negative effect on non-performing financing. Meanwhile, according to Stiawan (2009), regarding the effect of CAR on ROA, CAR has a significant positive effect on bank profitability. It is concluded that NPF can mediate CAR's relationship to the profitability level (ROA). Non-Performing Financing (NPF) can mediate the influence of Capital Adequacy Ratio (CAR) on the Return on Assets (ROA) of Bank Muamalat Indonesia (Hypothesis 10).

The low level of FDR indicates a lack of financing distribution in Islamic banking. However, the high level of FDR suggests that banks have excess funds that must be disbursed immediately in the form of financing. Due to increased financing, there is a positive correlation between FDR and NPF and an increase in the risk of non-performing financing. If non-performing debt rises, profitability will suffer (Suprianto, 2020). This statement relates to Firmansyah (2014) who found that FDR significantly positively affects non-performing financing (NPF). Meanwhile, according to Zubaidah & Hartono (2019), FDR has a significant positive effect on ROA. NPF is said to be capable of mediating the effect. It is said that NPF can mediate the effect of FDR on the level of profitability (ROA). Non-

Performing Financing (NPF) can mediate the effect of the Financing to Deposit Ratio (FDR) on Return on Assets (ROA) of Bank Muamalat Indonesia (Hypothesis 11).

The negative impact on the economy can be felt due to inflation. If there is an uncontrolled increase in inflation, it will result in irregular economic activities and become sluggish. It has resulted in a decrease in public interest in saving, production, and investment. Thus, the profitability of Islamic banks is affected. The increase in inflation resulted in a decrease in the ability of debtors to meet credit installments (Wibowo & Syaichu, 2013). This theory is related to a statement from Agustiningsih et al., (2017) regarding the relationship between inflation and NPF, which shows a positive and significant effect. Meanwhile, according to Fatma (2019), regarding the effect of inflation on ROA, the results show a significant negative effect. It is concluded that NPF can mediate inflation's effect on the profitability level (ROA). Non-Performing Financing (NPF) can mediate the effect of inflation on the Return on Assets (ROA) of Bank Muamalat Indonesia (Hypothesis 12).

The risk of not competing for the results of third-party funds in Islamic banks can occur if BI interest rates are high. When BI interest rates increase and credit interest rates in conventional banks, it results in profit margins that are increasingly competitive with conventional banks so that Islamic banking benefits. The distribution of financing is affected when the profit margins of Islamic banks become more competitive. The opportunity for non-performing financing will be high if there is an increase in financing channeling (Sugiharto et al., 2019).

Less efficient bank performance can be reflected through a high NPF. Instead, efficient bank performance is reflected by a low NPF. A lower NPF in a bank has the capability of distributing its funds. Therefore, the profitability obtained increases (Priantana & Zulfia, 2011). This theory is related to the statement from Febrianti (2015) that the BI interest rate has a significant positive effect on the NPF. Meanwhile, Sahara (2013) shows results that the BI interest rate significantly negatively affects ROA. It can be said that the NPF can mediate the relationship between BI interest rates and the level of profitability. Non-Performing Financing (NPF) can mediate the effect of BI interest rates on the Return on Assets (ROA) of Bank Muamalat Indonesia (Hypothesis 13).

## METHODS

The study used a quantitative approach that is a scientific method because it has fulfilled the basic scientific requirements, namely objective, concrete, rational, measurable, and structured (Al Kanzu & Soesanto, 2016). Secondary data is used with a population of all quarterly financial report data of Bank Muamalat Indonesia published for 8 (eight) years from 2013 to 2020. The sampling technique is saturated sampling, which uses the entire population group as a sample. Another term for a saturated sample is a census, meaning the entire population group is the sample (Sugiyono, 2012). The data analysis method used was the Classical Assumption Test, Hypothesis Testing, and Path Analysis.

Furthermore, based on the path analysis method, the equations of the research model in this study were formulated. The following is the equation (Equation 1) of the influence model between the independent variable and the intervening variable used. Meanwhile, the equation model (Equation 2) that aims to explain the relationship between the independent variable and the intervening variable to the dependent variable.

$$Z_t = \beta_0 + \beta_1 X_{1,t} + \beta_2 X_{2,t} + \beta_3 X_{3,t} + \beta_4 X_{4,t} + \epsilon_t \quad (1)$$

Explanation:

- $Z$  : Non-Performing Financing (NPF)
- $\beta_0$  : Constanta
- $\beta_1 - \beta_4$  : Coefficient of Independent Variables
- $X_1$  : Capital Adequacy Ratio (CAR)
- $X_2$  : Financing to Deposit Ratio (FDR)

$X_3$  : Inflation  
 $X_4$  : Bi Rate  
 $\epsilon$  : Error term  
 $t$  : Time

$$Y_t = \alpha_0 + \alpha_1 Z_t + \alpha_2 X_{1,t} + \alpha_3 X_{2,t} + \alpha_4 X_{3,t} + \alpha_5 X_{4,t} + \epsilon_t \quad (2)$$

Explanation:

$Y$  : Return on Assets (ROA)  
 $\alpha_0$  : Constanta  
 $\alpha_1$  : Coefficient of Intervening Variable  
 $Z$  : Non-Performing Financing (NPF)  
 $\alpha_2 - \alpha_5$  : Coefficient of Independent Variables  
 $X_1$  : Capital Adequacy Ratio (CAR)  
 $X_2$  : Financing to Deposit Ratio (FDR)  
 $X_3$  : Inflation  
 $X_4$  : Bi Rate  
 $\epsilon$  : Error term  
 $t$  : Time

## RESULTS

### Classical Assumption Test Result

In table 2, the normality test results are obtained with the Jarque-Bera value in the ROA equation 1.635609 and 1.038981 in the NPF equation and with probability values greater than 0.05, namely 0.441400 and 0.594824. Therefore, it can be concluded that the data of the independent variable and dependent variables' data are normally distributed or have met the normality test. Furthermore, for the heteroscedasticity test, the results obtained in the ROA and NPF regression models are the Prob value. F of 0.2169 and 0.4729 during the Prob value. Chi-Square of 0.2527 and 0.4016 or greater than the significance value of 0.05 so that it can be concluded that the variables in both regression models are free from heteroscedasticity symptoms.

Meanwhile, in the autocorrelation test, the results for the Durbin-Watson stat value in the ROA and NPF equations were 1.981110 and 1.793236, respectively. Then, referring to the Durbin-Watson table using five independent variables ( $k = 5$ ) with a sample size of 32 ( $n = 32$ ), the dU values are 1.8187 and 1.7323. Based on the results of dU, the values obtained are  $1.8187 < 1.981110 < 2.1813$  and  $1.7323 < 1.793236 < 2.2677$ , so that  $dU < d < 4-dU$ , which means that there are no positive or negative autocorrelation symptoms in the regression model. As for the results of the multicollinearity test, it can be seen from table 3; it can be seen that the value of Centered VIF on all independent variables of the ROA and NPF equations is smaller than 10. So it can be concluded that there is no multicollinearity in the independent variables in the regression model.

### Hypothesis Test Results

Based on the hypothesis that has been built and the regression results in table 3, the regression model from testing the dependent variable ROA and NPF can be written in the following formula:

$$Y(\text{ROA}) = -0.306196 - 0.216434 (\text{NPF}) - 0.030697 (\text{CAR}) + 0.016457 (\text{FDR}) + 0.023643 (\text{Inflasi}) + 0.108971 (\text{BI\_Rate}) \quad (3)$$

$$Z(\text{NPF}) = 11.55243 - 0.416202 (\text{CAR}) - 0.049769 (\text{FDR}) - 0.309175 (\text{Inflasi}) + 0.546224 (\text{BI\_Rate}) \quad (4)$$

**Table 2. Summary of Classical Assumption Test**

Type of Tests	Detailed Test	NPF equation	ROA Equation
Normality Test	Jarque-Bera	1.038981	1.635609
	Probability	0.594824	0.441400
Heteroskedasticity Test	Prob. F(20,11)	0.4729	0.2169
	Prob. Chi-Square(20)	0.4016	0.2527
Auto-correlation Test	Durbin-Watson stat	1.793236	1.981110
	dU	1.7323	1.8187

Source: Author Analysis (2021)

**Tabel 3. Multiple linier regression results (NPF and ROA Equations)**

Variables	ROA Equation			NPF Equation		
	Coefficient	Prob.	Centered VIF	Coefficient	Prob.	Centered VIF
C	-0.306196	0.6309	N/A	11.55243	0.0001	NA
NPF	-0.216434	0.0000	1.434781	-	-	-
CAR	-0.030697	0.4103	1.632253	-0.416202	0.0240	1.347040
FDR	0.016457	0.0040	1.667287	-0.049769	0.0617	1.461550
INFLASI	0.023643	0.6645	1.256411	-0.309175	0.2710	1.200270
BI_RATE	0.108971	0.0541	2.145274	0.546224	0.0466	1.847524
R-squared			0.797053			0.303029
Prob(F-statistic)			0.000000			0.038921

Source: Author Analysis (2021)

The coefficient of determination or R-Squared in this study's multiple linear regression test is 0.79 in the ROA equation and 0.30 in the NPF equation, according to the regression results in table 3. It means that the independent variable can explain 79 percent of variations in the ROA equation's dependent variable, while variations in variables outside the study explain the remaining 21 percent. In the NPF equation, the independent variable can explain 30% of the variation in the dependent variable, and variations in variables outside the study explain the remaining 70%.

Based on the regression test results, the Prob F-statistic value is 0.000000 in the ROA equation and 0.038921 in the NPF equation. This means that the probability value is  $< 0.05$ , which concludes that all independent variables simultaneously or together can affect the dependent variable in the ROA and NPF equations.

According to the regression test results in table 3, the probability value of the CAR variable in the ROA equation is 0.4103 ( $>0.05$ ), indicating that the CAR variable has no effect on ROA. The NPF equation's probability is 0.0240 or ( $>0.05$ ) with a negative coefficient, indicating that the CAR variable has a negative and significant effect on the NPF. Furthermore, the probability value of the FDR variable in the ROA equation is 0.0040, which is less than 0.05, indicating that the FDR variable has a positive and significant effect on ROA. In the NPF equation, however, the probability of FDR is 0.0617 ( $>0.05$ ), indicating that the FDR variable has no effect on the NPF. The probability value of the NPF variable is 0.0000 ( $<0.05$ ) with a negative coefficient, implying that the NPF variable has a negative and significant effect on ROA.

Meanwhile, the probability value of the inflation variable is 0.6645 in the ROA equation ( $>0.05$ ), which means that the inflation variable does not affect ROA. At the same time, the probability of inflation in the NPF equation is 0.2710 ( $>0.05$ ), so the inflation variable does not affect the NPF. Furthermore, the probability value of the BI Rate variable is 0.0541 in the ROA equation ( $>0.05$ ), which means that the BI Rate variable does not affect ROA. In contrast, the probability of the BI Rate in the NPF equation is 0.00466 or ( $<0.05$ ) with a positive coefficient, so the BI Rate variable has a positive and significant effect on the NPF.

**Tabel 4. The Model of Path Analysis**

Variables	Coeff. X on Y (p1)	Coeff. X on Z (p2)	Coeff. Z on Y (p3)	Std. Error X on Z (Sp2)	Std. Error Z on Y (Sp3)	Indirect effect (p2p3)
CAR	-0.030697	-0.416202	-0.21643	0.17407	0.03684	0.090080
FDR	0.016457	-0.049769	-0.21643	0.02553	0.03684	0.010772
Inflation	0.023643	-0.309175	-0.21643	0.27512	0.03684	0.066916
BI Rate	0.108971	0.546224	-0.21643	0.26185	0.03684	-0.118221

**Source: Author Analysis (2021)**

Based on the calculation results using the Sobel test (Table 4), the calculated t value is 2.1875488682, or it can be said to be greater than the t table value with a significance level of 0.05 or 5 percent 2.055529. It indicates that the effect of the CAR variable on ROA mediated by NPF has a significant effect. So, it can be concluded that NPF can mediate the effect of CAR on ROA. Based on the calculation results using the Sobel test, the calculated t value is 1.826596874, or it can be said to be smaller than the t table value with a significance level of 0.05 or 5%, namely 2.055529. It indicates that the effect of the FDR variable on ROA mediated by NPF has no significant effect. So, it can be concluded that NPF cannot mediate the effect of FDR on ROA.

Furthermore, based on the calculation results using the Sobel test, the calculated t value is 1.0886599068, or it can be said to be smaller than the t table value with a significance level of 0.05 or 5%, namely 2.055529. It indicates that the effect of the inflation variable on ROA mediated by NPF has no significant effect. So, it can be concluded that the NPF cannot mediate the effect of inflation on ROA. Based on the calculations using the Sobel test, the calculated t value is -1.9409208642, or it can be said to be smaller than the t table value with a significance level of 0.05 or 5%, namely 2.055529. It indicates that the effect of the BI interest rate variable on ROA mediated by the NPF has no significant effect. So, it can be concluded that the NPF cannot mediate the effect of BI interest rates on ROA.

## DISCUSSION

### **The Influence of Each Capital Adequacy Ratio (CAR), Financing to Deposit Ratio (FDR), Non-Performing Financing (NPF), Inflation, and BI Rate on Return on Assets (ROA)**

The CAR variable does not affect the profitability (ROA) of Bank Muamalat Indonesia, so H1 is rejected. The insignificant relationship between CAR and ROA is caused by the bank's imbalance in investment and distribution of good quality funds so that the CAR level does not have a major influence on the profitability obtained by the bank even though the bank has a high capital or CAR level. In contrast, The FDR variable has a positive and significant effect on the profitability (ROA) of Bank Muamalat Indonesia, so H2 is accepted. The higher the FDR level, it will be followed by higher financing disbursed compared to the total third-party funds. If the financing disbursed by the bank is getting bigger, it will also be followed by the greater profitability (ROA) of Bank Muamalat.

Furthermore, the NPF variable has a negative and significant effect on the profitability (ROA) of Bank Muamalat Indonesia, so H3 is accepted. High non-performing financing will be reflected in a high level of NPF so that it will impact the larger financing reserves. With the increase in financing reserves, the bank's operating income will decrease, impacting the decline in bank income as proxied by ROA. In contrast, the inflation variable does not affect the profitability (ROA) of Bank Muamalat Indonesia, so H4 is rejected. Bank Muamalat, as a sharia bank, does not adhere to an interest-based system that also increases when inflation occurs, so Bank Muamalat is relatively able to survive when inflation occurs. So, when there is high inflation, the public will trust Bank Muamalat more than conventional banks because conventional banks will increase interest rates to offset the inflation rate.



On the other hand, the variable BI Rate does not affect the profitability (ROA) of Bank Muamalat Indonesia, so H5 is rejected. The insignificant relationship between BI interest rates and ROA is caused by Bank Muamalat's operational activities, which do not apply a certain interest rate system to the use of its product prices. Therefore, the effect of changes in BI interest rates on Bank Muamalat's ROA does not have a significant effect.

#### **The Influence of Each Capital Adequacy Ratio (CAR), Financing to Deposit Ratio (FDR), Inflation, and BI rate on Non-Performing Financing (NPF)**

The CAR variable has a negative and significant effect on the NPF of Bank Muamalat Indonesia, so H6 is accepted. The higher the level of capital adequacy caused by the increase in own capital and other sources of capital from outside the bank will increase the ability of Bank Muamalat to bear the risk of any financing provided or risky productive assets to reduce the level of Bank Muamalat's NPF. Therefore, one of the most important factors in accommodating the risk of loss is the capital adequacy ratio, especially in accommodating the risk of non-performing financing.

In contrast, the FDR variable does not affect the NPF of Bank Muamalat Indonesia, so H7 is rejected. It is due to the liquidity of Bank Muamalat, which does not significantly affect the level of non-performing financing. It is because FDR only explains the bank's ability to utilize funds collected from the public and channeled into financing to make a profit, which remains the bank's obligation in the long term. Short to return the funds to customers who at any time withdraw their funds. Furthermore, the inflation variable does not affect the NPF of Bank Muamalat Indonesia, so H8 is rejected. Bank Muamalat does not use an interest-based but a profit-sharing system in its operational activities to reduce the NPF level due to inflation. In addition, Bank Muamalat as a sharia bank can be classified as merchant/commercial banking and investment banking. Therefore, Bank Muamalat's NPF level does not increase when inflation occurs.

On the other hand, the variable BI Rate has a positive and significant effect on the NPF of Bank Muamalat Indonesia, so H9 is accepted. It happens because when BI rates increase, it will also be followed by an increase in conventional bank lending rates. In this situation, debtors tend to look for lower interest rates when making loans. The debtors will choose another option, namely financing or lending to Islamic banks, which have a lower cost of funds compared to conventional bank interest, which is high due to the increase in the BI Rate. It will trigger an increase in the demand for Bank Muamalat financing, which will also be followed by the potential for an increase in non-performing financing which is getting higher.

#### **How Non-Performing Financing (NPF) mediates the Influence of each Capital Adequacy Ratio (CAR), Financing to Deposit Ratio (FDR), Inflation, and BI rate on Return on Assets (ROA)**

The NPF can mediate the effect of CAR on ROA, so H10 is accepted. It happens because Bank Muamalat is unable to maintain its capital adequacy, so it is unable to accommodate the risk of losses that occur due to non-performing financing. In this situation, additional capital injections are needed to serve as a buffer to anticipate losses in the event of excessive bank financing or credit growth, which could disrupt financial system stability. However, the NPF could not mediate the effect of FDR on ROA, so H11 was rejected. The FDR is a ratio that describes a bank's ability to utilize and rely on the financing provided as a source of liquidity to repay depositors who withdraw funds. Thus, customers have the confidence to remain as depositors at Bank Muamalat in the long term, which will impact the profits obtained by Bank Muamalat.

Furthermore, the NPF cannot mediate the effect of inflation on ROA, so H12 is rejected. There is a contract or contract made from the beginning by the customer with Bank Muamalat so that fluctuating inflation will not affect the customer's commitment to repay Bank Muamalat. In addition, payments made by customers to Bank Muamalat are fixed from the beginning to the end of the agreement, so the number of installments to be paid will not increase. Thus, the profits obtained by Bank Muamalat will continue to be maintained. Meanwhile, The NPF could not mediate BI Rate's effect on ROA, so H13 was

rejected. When interest rates are low, more customers will take out loans at Bank Muamalat, and the increasing number of loans will increase the profits to be obtained by Bank Muamalat. Thus, the NPF cannot mediate the effect of BI interest rates because if interest rates are in a low position, the risk of non-performing financing is also lower.

## CONCLUSION

The conclusions of research results related to ROA are 1) CAR has no effect on the ROA of Bank Muamalat Indonesia because of the imbalance of investment made with the distribution of good quality funds; 2) FDR has a significant positive effect on the ROA of Bank Muamalat Indonesia because of the high financing provided so that it also increases profitability; 3) NPF has a significant negative effect on ROA of Bank Muamalat Indonesia because of the large number of financing reserves that reduce operating income; 4) Inflation does not affect the ROA of Bank Muamalat Indonesia because in operational activities it does not use the interest system which also increases when inflation occurs; 5) The BI interest rate has no effect on ROA at Bank Muamalat Indonesia in 2013 - 2020 because in operational activities it does not apply a certain interest rate system on the use of product prices so that changes in the BI Rate do not have an impact on profitability.

Furthermore, the conclusions related to the NPF are; 1) CAR has a significant negative effect on Bank Muamalat Indonesia's NPF because the high capital adequacy ratio can reduce the risk of non-performing financing; 2) FDR does not affect the NPF of Bank Muamalat Indonesia because the bank can control the funds that have been distributed and the liquidity status is still at a reasonable limit; 3) The inflation variable does not affect Bank Muamalat Indonesia's NPF due to the use of a profit-sharing system in operational activities that can reduce the NPF level due to inflation; 4) BI interest rates have a significant positive effect on Bank Muamalat Indonesia's NPF due to the high probability of non-performing financing due to increased demand for financing due to the increase in conventional bank lending rates.

Meanwhile, the conclusions related to the results of the intervening analysis are: 1) NPF can mediate the effect of CAR on Bank Muamalat Indonesia's ROA because banks cannot maintain capital adequacy. So, banks are unable to accommodate the risk of losses due to non-performing financing; 2) NPF is unable to mediate the effect of FDR on ROA. Bank Muamalat Indonesia is confident of remaining a depositor in the long term; 3) NPF cannot mediate the effect of inflation on Bank Muamalat Indonesia's ROA due to the existence of fixed contracts and instalments. So that inflation does not affect customer commitments in fulfilling their obligations; 4) NPF cannot mediate the effect of BI interest rates on the ROA of Bank Muamalat Indonesia because if interest rates are low, the risk of non-performing financing is also lower.

For further research, it is better to add other variables that have a greater influence on the dependent variable (ROA) and the intervening variable (NPF) to provide better results, especially in mediating the influence of independent variables on the dependent variable or profitability. In addition, it is better to use a longer sample size by increasing the research period to get more accurate research results. For the government, it is necessary to intervene continuously in saving Bank Muamalat from the current problems by providing capital injections that can help reduce the NPF level and issuing policies that can assist the restructuring process of troubled financing.

For Bank Muamalat Indonesia, it is necessary to conduct periodic and comprehensive reviews to reduce the level of non-performing financing. So, the profitability can increase by selectively tightening financing, especially in the commodity sector, measurable planning in investment management, increasing financing reserves, and restructuring non-performing financing. Thus, the financial performance of Bank Muamalat can improve again.

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