

## WHAT MOST INFLUENCE ON NON-PERFORMING LOAN IN INDONESIAN ISLAMIC COMMERCIAL BANKS?

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### **Abstract**

Problem financing arises because of the customer's failure to fulfill his obligations. So it has an impact on the profitability of the bank. The research objective is to examine factors that affect non-performing loans at Islamic commercial banks. These factors include, operating costs to operating income, interest rates/ BI Rate, Financing to Deposit Ratio, and the inflation. The sample used in this study was Islamic commercial banks exchange 2011-2020. Data analysis techniques using multiple linear regression. The study results inform an influence between the predictor variables and the response variables based on functions in the model. The variables that affect non-performing loans significantly only Operating Cost to Operating Income (BOPO). And 3 other variables Inflation, BI Rate, FDR have no significant effect on NPF, but simultaneously all dependent variables affect the Independent variable. Therefore banking authorities need to control Operating Cost to Operating Income so as not to disturb the profitability.

**Keyword.** Factors , Islamic commercial banks, , Multiple linear regression, Non-performing loans.

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### **1. INTRODUCTION**

The presence of Islamic banking is one of the manifestations of the needs of the community based on sharia principles. Islamic banking as an intermediary institution in the collection and distribution of funds, also has an important role in supporting the stability of the financial system as a whole. This in turn will make a significant contribution to the achievement of medium-long term price stability. More deeply, the application of the principle of profit sharing that is mutually beneficial to the community and banks by prioritizing aspects of fairness in transactions, ethical investments, prioritizing the values of togetherness and brotherhood in production, and avoiding speculative activities in financial transactions makes Islamic banking an alternative banking system that is credible and in demand by all groups of Indonesian society.

Based on the OJK survey since 2008 the progress of Islamic banking development has been very impressive (OJK, 2008). The average asset growth is more than 65% per year in the last five years, with details of achieving the asset target of Rp. 50 trillion and industrial growth of 40%, phase II in 2009 made Indonesian Islamic banking the most attractive Islamic banking in ASEAN, with the achievement of target assets of Rp. 87 trillion and industrial growth of 75%. Phase III in 2010 made Indonesian Islamic banking the leading Islamic banking in ASEAN, with asset target achievement of Rp. 124 trillion and industry growth of 81% (OJK, 2010). In the last ten years, from 2011 to September 2021, Islamic banking assets have continued to experiencing growth with an increasing trend which reached 646 trillion rupiah (OJK, 2021). Next the Financial Services Authority (OJK) also noted that: Islamic banking assets amounting to Rp 686.29 trillion in April 2022. This realization grew 12.71 percent year on year (Republika, 2022).

The surge in the development of Islamic banking is not accompanied by risk minimization. OJK assesses that the risks faced by financial services financial institutions are still at a fluctuating but manageable level. The proof is that there are still many problems with disbursing funds, such as financing problems, in Indonesia. The non-performing financing problems in Islamic banks in Indonesia have a fluctuated NPF ratio over the recent years. In 2014, it was 4.34% and decreased to 3.03% in 2013. In the next year, it increased to 3.49% but decreased at the end of 2017 by 2.11%. However, in March 2018, it increased by 2.46%, and in 2019 it increased by 2.5 percent gross and 1.2 percent net throughout 2019. Meanwhile, as of December 2020, it increased by 3.13% and continued to increase to 3.29% as of March 2021 (OJK, 2021). From these results it can be seen that there is a profitability ratio to financial performance, it is necessary to analyze the financial situation from year to year (AAOIFI, 2020).

Furthermore, in looking at the condition of the development of Islamic banking, as a banking regulator in Indonesia, Bank Indonesia has determined one of the non-performing loan ratio criteria (Shonhadji, 2020). Banks are considered to have potential difficulties that could jeopardize their business continuity when banks have a non-performing loan ratio of more than 5% (five percent) of total loans. A decline in bank credit quality is a significant cause of financial fragility in the banking services sector (Ahmad & Bashir, 2013; Kartikasary, Marsintauli, Serlawati, & Laurens, 2020; Shonhadji, 2020; Tarchouna, Jarraya, & Bouri, 2017). Non-Performing Financing indications can be seen from account behavior (account attitudes), financial statement attitudes, business activity attitudes, customer attitudes, and macroeconomic attitudes (Chalid & Bella, 2021).

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Research on the analysis and successful handling of non-performing financing has received the attention of several researchers. Among the indicators used are legal and HR aspects (Mutawali, Rodoni, & Said, 2019), External internal factors and the pandemic period (Chalid & Bella, 2021; Fakhrunnas, Nugrohowati, Haron, & Anto, 2022), internal factor (Muhammad, Suluki, & Nugraheni, 2020), deposit ratio (Permataningayu & Mahdaria, 2019), determinant analysis (Munifatussa, 2020), Islamic Prime Bank (Asiyah, Nasir, & Ahsan, 2019), Natural Uncertainty Contracts (Afkar, Chandrarin, & Pirmaningsih, 2020), Profit-Loss Sharing Financing Contract (Afkar, 2018), musyarakah and murabahah financing (Aiman & Sutrisno, 2020), Bank efficiency (Setiawan & Sherwin, 2017), Effect macro and micro (Damanhur, Albra, Syamni, & Habibie, 2018), Bank size, CAR and BOPO (Suryanto, 2015), macroeconomic and bank level (Vatansever & Hepser, 2015), Factor analysis of GDP, interest rates and exchange rates (Shonhadji, 2020), mortgage (Hasanah, Septiarini, & Filianti, 2020). The success of the analysis is widely applied in general banking or conventional banking.

This study is different from previous research. The purpose of this research to analyzes effect of NPF on the financial profitability of Islamic commercial banks from 2011-2020 through *Financing to Deposit Ratio* (FDR), Inflation, Operating Cost to Operating Income (BOPO), BI Rate. The variables of FDR, Inflation, BOPO and BI rate are interesting to be studied as factors that affect NPF, because it is known in 2011-2020 in the quarterly financial statements of Islamic Commercial Banks, experiencing fluctuating changes. In 2011 inflation reached a value of 3.79% and increased by 4.3% in 2012 but in 2013 and 2014 inflation again increased by 8.38% and 8.36%, respectively. In 2011 the NPF was 1.91% in 2018 around 2.3%. For FDR in 2011, which was 83.24%, it increased in 2013 and 2014 by 95% and 91%, respectively. Meanwhile, the BOPO in 2011 amounted to 88%, an increase in 2014 which was 95.48% but in 2020 it decreased by 88.29%.

### **Inflation Against Non-Performing Financing**

Inflation is an overall increase in the amount of money that must be paid (the value of the monetary unit of calculation) for goods/commodities and services (Shonhadji, 2020). On the other hand, if what happens is a decrease in the value of the monetary unit of calculation for goods/commodities and services, it is defined as deflation (Karim, 2007). Inflation factors include the level of aggregate expenditure that exceeds the company's ability, the desire to get the goods needed, an increase in wages from employees (Wijoyo, 2015). High and continuous inflation will have a negative impact on individuals and society, savers, creditors/debtors and producers as well as on economic activity as a whole. Inflation has a negative effect on Non

Performing Financing, which means that when inflation occurs, the level of Non Performing Financing will decrease (Ali, 2016). This happens because when viewed from the side of the debtor will benefit. When inflation occurs, the demand for goods increases, so that it will increase its production and it will be easier to repay the financing. The relationship between inflation and bad credit occurs in changes in people's purchasing power, which will decrease because the level of real income also decreases if inflation occurs.

### **H1: Inflation affects problematic financing**

#### **BI Rate Against Non-Performing Financing**

Bank Indonesia defines the interest rate as a policy interest rate that reflects the monetary policy stance or stance set by Bank Indonesia and announced to the public. Interest rates are implemented in monetary operations conducted by Bank Indonesia through liquidity management in the money market to achieve monetary policy operational targets (Rustik, 2016). Changes in interest rates will be responded differently by entrepreneurs and investors. The increase in interest rates is good information for investors to get profits in the form of savings and time deposits. Nafik said that there is a positive relationship between interest rates and the supply of savings funds. In contrast to entrepreneurs who get their business capital from bank loans, an increase in interest rates is bad information for entrepreneurs (Najiatun, M Sanusi, 2019). This is because high interest rates can increase the costs that must be paid to banks. This condition can affect the ability to pay debts to banks. The ability to pay debts due to an unhealthy economy can increase the Non-Performing Financing of Islamic banking. So that the proposed hypothesis is:

### **H2: BI Rate Affects Financing Problems**

#### **FDR (Financing to Deposit Ratio) Against Non-Performing Financing**

Financing to Deposit Ratio (FDR) is a ratio to measure how far the bank's ability to pay all public funds and own capital by relying on credit that has been distributed to the public (Joseph, 2017). The higher the funds disbursed by Islamic banks in the form of financing, the higher the ability of Islamic banks to provide loans (Munifatussa, 2020). This has an impact on increasing income, so that the profits of Islamic banks are increasing. However, if the financing disbursed by Islamic banks is low, it can be said that the liquidity level of Islamic banks is too high so that this creates pressure on bank revenues in maintaining idle cash (Kartikasary et al., 2020). Haifa & Wibowo (2015) in his research found the Financing to Deposit Ratio (FDR) had a positive and significant effect on Non-Performing Financing. This

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means that the high value of FDR means that there is a high distribution of financing. High financing can reduce the quality of the financing because the bank will be considered too easy to channel the funds. So that the more financing issued by the bank, the greater the risk of non-performing financing. So that if there is non-performing financing, the bank must bear the loss and in the end the bank will need additional capital to cover the loss.

### **H3: FDR affects problematic financing**

#### **Operating costs to operating income (BOPO) Effects on non-performing loans (NPF)**

*Non Performing Financing* it can be interpreted that the quality of financing is in the substandard, doubtful and loss category (Munifatussa, 2020). Previous research also informed that the decline in credit quality and non-performing loans are related to operating costs to operating income (BOPO). Banking operating income consists of interest income and other operating income. The ratio of operating costs to operating income (BOPO) can be interpreted as operating income received by the bank due to its efforts to streamline operational costs. If bank revenues are created, the NPF level will be deficient. Research conducted by Barus & Erick (2016) states that BOPO has a positive effect on NPF. This finding is supported by research conducted by F & Achsani (2021) with the efficiency of banking institutions, especially cost efficiency, it will obtain an optimal level of profits, increase the number of funds disbursed, more competitive costs, improved services to customers, security, and the banking system (Afkar, 2018). With reasonable cost efficiency, the smaller the operating cost to operating income ratio, the smaller the problematic conditions, or vice versa. Kartikasary et al. (2020) and Shonhadji (2020) said in their research that operating costs operating income ratio influenced non-performing loans.

### **H4: Operating costs operating income ratio effects on non-performing loan**

## **2. RESEARCH METHODS**

The population used in this study is Islamic commercial bank from for the period 2011-2020. In comparison, the technique used for sampling in this study is purposive sampling and obtained a sample of 5 Islamic Commercial Banks in Indonesia, namely PT. Bank Muamalat Indonesia, PT. BCA Syariah, PT. BNI Syariah, PT. BRI Syariah, PT. Bank Mega Syariah. This research used the ordinary least square (OLS) method to see the effect of independent variables on the dependent variable (Ghozali, 2013). The steps used in measuring the model in this study include conducting a validity test, reliability test, classical assumption test, F difference test, determination coefficient test (R-Square), and T difference test. Data analysis was performed

using the Statistical Package for the Social Sciences (SPSS) software tool. Simple linear regression analysis was used to analyze the factors that influence non-performing loans (NPF), which are then referred to as dependent variables. The independent variables in this study are inflation, BI Rate, FDR and BOPO. OLS regression research model as follows:

$$NPF = \beta_0 + \beta_1 \text{Infl} + \beta_2 \text{BIR} + \beta_3 \text{FDR} + \beta_4 \text{BOPO} + \epsilon$$

NPF : Non-performing loans

INFL : Annual average inflation rate

BIR : Average BI Interest Rate

FDR : Financing to Deposit Ratio

BOPO : Operating costs to operating income

### 3. RESULT AND DISCUSSION

#### 3.1. RESULT

##### Multicollinearity Test

The Multicollinearity test aims to test whether the regression model found a correlation between independent variables (independent). A good regression model should not occur correlation between independent variables.

**Table 3.1**  
**Multicollinearity Test and VIP**

Coefficients <sup>a</sup>							
Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.	Collinearity Statistics Tolerance VIF
	B	Std. Error	Beta				
1 (Constant)	-7,933	3.348			-2,369	.022	
INFLATION	-.010	.127	-.015		-.079	.937	.411 2.434
BIRATE	.138	.213	.129		.645	.522	.381 2,625
FDR	-.032	.024	-.199		-1,330	.190	.677 1,477
BOPO	.133	.032	.525		4.167	.000	.952 1.050

a. Dependent Variable: NPF

Based on the results of multicollinearity test as seen in Table 3, it can be concluded that there is no correlation between independent variables in the regression model or multicollinearity does not occur. This conclusion was drawn because the tolerance values for the models have tolerance which were greater than 0.1 and based on VIF values which are smaller than 10. In more detail, the inflation variable has a tolerance value of 0.411 and a VIP

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value of 2.434, the BI Rete variable has a tolerance value 0.381 and VIP value 2.625, the FDR variable has a tolerance value of 0.677 and a VIP value of 1.477, the BOPO variable has a tolerance value of 0.952 and a VIP value of 1.050. Overall VIP score is less than 10.00.

### Heteroscedasticity Test

The heteroscedasticity test aims to test whether in the regression model there is an inequality of variance from the residuals of one observation to another. A good regression model is Homoscedasticity or heteroscedasticity does not occur. To detect the presence or absence of heteroscedasticity by looking at the plot graph between the predicted value of the dependent variable (ZPRED) and the residual SRESID.

**Table 3.2**  
**Heteroscedasticity Test (Glejser)**

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.730	1.849		-.395	.695
	INFLATIO	.048	.070	.153	.687	.496
	N					
	BIRATE	.030	.118	.058	.252	.802
	FDR	.007	.013	.097	.560	.578
	BOPO	.008	.018	.063	.427	.672
a. Dependent Variable: ABS_RES						

Based on the table 4 the significance value (sig.) for the inflation variable is 0.496, the BI Rate variable is 0.802, the FDR variable is 0.578, the BOPO value is 0.672 so it can be concluded that heteroscedasticity does not occur. Thus, all independent variables are free from testing classical assumptions so that they do not need to be excluded from the regression model.

### Normality Test

Normality test aims to determine whether in the regression model, confounding or residual variables have normal distribution. In principle, normality can be detected by looking at the spread of data (points) on the diagonal axis of the graph or by looking at the histogram of the residuals. Table 4 shows the results of the normality test, that the significance value of Asymp.Sig (2-tailed) is 0.200, greater than 0.05. then the data is normally distributed.

**Table 3.3****Kolmogorov-Smirnov . normality test**

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		50
Normal Parameters, b	mean	.0000000
	Std. Deviation	1.19667915
Most Extreme Differences	Absolute	.057
	Positive	.056
	negative	-.057
Test Statistics		.057
asympt. Sig. (2-tailed)		.200c,d
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		
d. This is a lower bound of the true significance.		

**Autocorrelation Test**

The autocorrelation test aims to test whether in the linear regression model there is a correlation between the error of the intruder in the t period and the error of the intruder in the t-1 period (before). A good regression model is a regression that is free from autocorrelation. Table 6 below shows the Asymp.Sig (2-tailed) value of 0.123 which is greater than 0.05, so it can be concluded that there are no symptoms or problems with autocorrelation.

**Table 3.4****Autocorrelation Test With Runt Test**

Runs Test	
Unstandardized Residual	
Test Value	.03169
Cases < Test Value	25
Cases >= Test Value	25
Total Cases	50
Number of Runs	12
Z	-4.001
asympt. Sig. (2-tailed)	.123
a. median	

**Linearity Test**

Table 7 below shows the results of the Deviation from Linearity sig. is 0.956 greater than 0.05, it can be concluded that there is a significant linearity relationship between non-performing loans and inflation variables, Bi Rate, FDR, and BOPO.



**Table. 5**  
**Linearity Test**

ANOVA Table			Sum of Squares	df	Mean Square	F	Sig.
NPF * BIRATE	Between Groups	(Combined)	4.656	7	.665	.284	.957
		linearity	1,130	1	1,130	.482	.491
		Deviation from Linearity	3,526	6	.588	.251	.956
	Within Groups		98.476	42	2,345		
	Total		103.131	49			

This section presents the results of data analysis based on observing a number of variables used in the regression model. A good regression model is appropriate if it fulfills several assumptions. After fulfilling the classical assumptions that exist, then a variable is feasible to be used for the purpose of predicting other variables. The regression model that can predict the dependent variable based on the input of the independent variable is a regression model that meets the assumption of normality and does not occur multicollinity, autocorrelation and heteroscedasticity.

Table 1 shows the t-test result of the equation model of the factors that affect non-performing loans (NPF). The t-test is used to test whether an independent variable affects the dependent variable. Based on the output in the table, it is found that BOPO affect non-performing loan (NPF).

**Table 3.6**  
**Summary of regression analysis**

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-7,933	3.348		-2,369	.022
	INFLATION (X1)	-.010	.127	-.015	-.079	.937
	BI RATE (X2)	.138	.213	.129	.645	.522
	FDR (X3)	-.032	.024	-.199	-1,330	.190
	BOPO (X4)	.133	.032	.525	4.167	.000
a. Dependent Variable: NPF (Y)						

The following is information about the multiple regression equations that influence the variable Inflation (X1), BI Rate (X2), FDR (X3), BOPO (X4) partially (alone) on the NPF variable (Y), while the regression equation in this study is:

$$NPF = a + i \text{ Infl} + 2 \text{ BIR} + 3 \text{ FDR} + 4 \text{ BOPO} + i$$

$$Y = a + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4$$

$$Y = 7.933 + 0.010 + 0.138 + 0.032 + 0.133$$

### Adjusted R2

The coefficient of determination (R2) basically measures how far the model's ability to explain the variation of the dependent variable. The coefficient of determination is between zero and one. A small Adjusted R2 value means that the ability of the independent variables in explaining the variation of the dependent variables is very limited. In general, the coefficient of determination for cross section data is relatively low because of the large variations between each observation. Many researchers recommend the Adjusted R2 value when evaluating which regression model is best. The adjusted R2 value can go up or down if an independent variable is added to the model. From the computational results of research data using SPSS software, the Adjusted R2 statistical parameters are obtained as follows:

**Table 3.7**

#### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.565a	.320	.259	1,249

a. Predictors: (Constant), BOPO (X4), FDR (X3), INFLATION (X1), BI RATE (X2)

Standard errors in parentheses. \*\*\* p < 0.01, \*\* p < 0.05

The test criteria performed were: 1. Accept H0 and reject H1 if Sig (α) > 0.050 2. Reject H0 and accept H1 if Sig (α) < 0.050.

Based on the value of the statistical parameter adjusted R2, the dependent variable (NPF) is influenced by the variation of the independent variable, the coefficient of determination or Adjusted R Square is 0.259. The magnitude of the coefficient of determination is 26% This number means that the variable inflation (X1), BI rate (X2), FDR (X3) and BOPO (X4) have an effect on NPF (Y) by 32% while the rest (100% -26% = 74%) is influenced by other variables not examined in this study.

### Hypothesis Testing

Table 8 Anova provides information that the value of the significance (Sig.) in the F test is  $0.001 < 0.05$ , so as the basis for decision making in the F test it can be concluded that inflation (X1), BI Rate (X2), FDR (X3), BOPO (X4) simultaneously or together -same effect on NPF (Y) significantly.

**Table 3.8**  
**Anova Test F**

ANOVA <sup>a</sup>					
Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	32,961	4	8,240	5.285	.001b
Residual	70.170	45	1,559		
Total	103.131	49			

a. Dependent Variable: NPF (Y)

b. Predictors: (Constant), BOPO (X4), FDR (X3), INFLATION (X1), BI RATE (X2)

A healthy bank provides benefits for monetary policy in Indonesia. The health of a bank is of interest to the owner and manager of the bank, the public who use bank services and Bank Indonesia as the supervisor and supervisor of the bank. Bank health conditions greatly affect the level of public confidence in financial institutions. (Suhartono et al., 2017). However, various conditions in maintaining bank health are sometimes unpredictable. One of them is credit conditions that are not as expected due to a disaster that causes the debtor to lose his property so that he cannot pay installments to the bank. The condition of the analysis carried out by the bank is not quite right which causes not knowing what will happen to the condition of the debtor in the future. As well as the existence of collusion between bank officials and debtors, the character of the debtor.

Analysis of the factors that influence the increase in NPF is one strategy in maintaining the health of the bank. This study finds inflation as a factor which has no effect on the level of Non Performing Financing. This means that partially in the 2011-2020 period when inflation has increased or decreased, it does not significantly affect the level of Non-Performing Financing for Islamic Banking in Indonesia. This research is in line Shonhadji, (2020) and Ginting, (2017) that inflation is not a relatively important variable because the highest inflation occurred in 2014 of 8.36%, and the lowest inflation was 2.93% in 2019, but during 2014 -2019, the average inflation was 4.03%. This inflation is due to inflation that occurred in that period was still classified as low inflation ( $< 10\%$ ). It has affected the financial stability of banks, especially non-performing loans. The policy of Bank Indonesia is to continue to oversee

the banking sector to implement the precautionary principle in providing credit. Bank Indonesia established policies to focus on maintaining and overseeing the implementation of the intermediation function in each bank so that credit can be channeled under credit assessments, monitoring usage, and credit guarantees (Kasmir, 2014). This research is different from Barus & Erick, (2016) who found that inflation had a significant positive effect on bank NPF. These findings support research that the higher inflation, the lower the NPF. And different from research Suryanto (2015) which concludes that inflation has a positive effect on NPF. The reason, this can happen because increase in selling prices, so that people limit consumption and producers as debtors will have difficulty in repaying credit. So that the risk of non-performing loans will increase. With a fixed income, rising prices will further burden people's lives so that the ability to repay loans or financing will decrease and lead to a high risk of credit or non-performing loans. In addition, inflationary conditions cause people to experience financial difficulties so that people who will borrow credit are reduced for fear of not being able to pay off their debts.

BI Rate or in this study using the Interest Rate has no effect on the level of Non Performing Financing. This means that the BI Rate or interest rates partially do not affect the level of Non-Performing Financing for Islamic Banking in Indonesia. This study is in line with the findings Ayu, Kumala, Putu, & Suryantini, (2015) that the BI Rate has no effect on credit risk in banking companies listed on the Indonesia Stock Exchange (IDX). The direction of the influence of the BI Rate on the NPF is negative, this means that the BI Rate has an effect on the decline in the NPF. This finding is different from Haifa & Wibowo, (2015); Muhammad et al., (2020); Shonhadji, (2020) and Suryanto, (2015) Ginting, (2017) that interest rates show a positive and significant sign. This shows a unidirectional relationship between interest rates and the NPF ratio. In other words, the higher the interest rate, the higher the NPF ratio of various economic sectors. High bank interest rates can reduce the ability of debtors from economic sectors to repay their loans. The inability of debtors from various sectors of the economy to repay their loans will lead to an increase in banking NPF.

The FDR factor in this study has no effect on the level of Non Performing Financing. This means that partially in the 2011-2020 period when FDR has increased or decreased, it does not significantly affect the level of Non-Performing Financing for Islamic Banking in Indonesia. This finding is in line with Rosidah, (2017) that FDR has no effect on NPF this is due to the slowing down of third party funds disbursed so that the NPF becomes small, the slowdown in the distribution of funds is due to the precautionary principles applied in Islamic banking in determining prospective debtors who can actually maintain the credit funds distributed.

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The BOPO factor in this study affects the level of Non Performing Financing. This means that partially in the 2011-2020 period when the BOPO has increased or decreased significantly affects the level of Non-Performing Financing of Islamic Banking in Indonesia. However, overall or jointly Inflation, BI Rate, FDR and BOPO have an effect on Non-Performing Financing. The findings are in line with Shonhadji, (2020) that the higher the BOPO means the lower efficiency of the bank's management. It can be concluded that BOPO affects NPL. This result is supported by Barus & Erick, (2016); Isnaini, Sahara, & Nursyamsiah, (2019), which states that BOPO influences non-performing loans.

## 4. CONCLUSION

Based on the results of multiple linear regression tests that have been carried out regarding the effect of the variable Inflation, BI Rate, FDR, BOPO on the NPF of Islamic Commercial Banks in Indonesia in 2011-2010, it was found that inflation had no effect on the level of Non-Performing Financing. This means that partially in the 2011-2020 period when inflation has increased or decreased, it does not significantly affect the level of Non-Performing Financing for Islamic Banking in Indonesia. BI Rate or in this study using the Interest Rate has no effect on the level of Non Performing Financing. This means that the BI Rate or interest rates partially do not affect the level of Non-Performing Financing for Islamic Banking in Indonesia. FDR does not affect the level of Non-Performing Financing. This means that partially in the 2011-2020 period when FDR has increased or decreased, it does not significantly affect the level of Non-Performing Financing for Islamic Banking in Indonesia. BOPO affects the level of Non Performing Financing. This means that partially in the 2011-2020 period when the BOP has increased or decreased significantly affects the level of Non-Performing Financing of Islamic Banking in Indonesia. However, overall or jointly Inflation, BI Rate, FDR and BOPO have an effect on Non-Performing Financing. This means that partially in the 2011-2020 period when the BOP has increased or decreased significantly affects the level of Non-Performing Financing of Islamic Banking in Indonesia. However, overall or jointly Inflation, BI Rate, FDR and BOPO have an effect on Non-Performing Financing. This means that partially in the 2011-2020 period when the BOP has increased or decreased significantly affects the level of Non-Performing Financing of Islamic Banking in Indonesia. However, overall or jointly Inflation, BI Rate, FDR and BOPO have an effect on Non-Performing Financing.

This study has limitations using only 4 variables. Suggestions for further research to conduct more in-depth analysis by adding other variables such as government policies, macro and micro economics, write-offs of credit impairment losses (CKPN) and political costs, and a more extended observation period to obtain more accurate research results. As well as

limitations in the research method used is simple regression analysis so that the results obtained are less varied. Subsequent studies can use other statistical tests that aim to see the model's consistency in this study. In addition, long panel data will further strengthen findings and strengthen variables that affect the non-performing loan. Research implication is that banking authorities need to exercise credit control by applying risk management to loans and regulating the quality of profitable bank earning assets. Banks also need to improve the quality of credit guarantees that can be sold quickly so that banks' collateral assets can be used to reduce the risk of non-performing loans.

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