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# DETERMINANTS OF ISLAMIC BANK PROFITABILITY: THE CASE OF ISLAMIC COMMERCIAL BANKS IN INDONESIA

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#### **ABSTRACT**

Profitability is an assessment of a company's financial performance that reflects the efficiency and effectiveness of the company's performance. This study aims to analyze the role of NPF in mediating the effect of FDR and BOPO on the profitability (ROA) of Islamic banks. This study uses 11 Islamic Commercial Banks in Indonesia by purposive sampling technique. The test was carried out by the PLS (Partial Least Square) method with the SmartPLS program. Based on the evaluation results, the structural model, this research model has a value of 0.752, which means that this model has a relevant predictive value. The results of PLS analysis prove that FDR does not affect ROA, BOPO and NPF have a negative effect on ROA, FDR has a negative effect on NPF, and BOPO has a positive impact on NPF. And based on the results of the analysis of the mediation effect test, it proves that NPF partially mediates the relationship between FDR and BOPO on ROA. The implementation of this research is that to increase the profitability of Islamic banks; companies should be able to channel financing effectively and maintain efficiency by controlling operational costs to reduce the NPF level of Islamic banks.

Keywords: Efficiency; Financial Performance; Financing; Profitability

#### INTRODUCTION

Global Islamic Finance Report 2019 (GIFR) ranks Indonesia first in the Global Islamic Financial Market. Indonesia was ranked sixth in 2018. Indonesia managed to record a score of 81.93 on the 2019 Islamic Finance Country Index (IFCI). The expansion of Islamic banking has begun to bear fruit. This is evident from the share of Islamic banks in the banking industry which has reached 6.01% as of October 2019 according to data from the Financial Services Authority (OJK) or reached IDR 513 trillion. Besides, the performance of Islamic banking has shown a significant increase, reflected in increasing capital and profitability (SPS, 2019). Thus the performance of Islamic banks is significantly influenced by financial performance (Setyawati et al., 2017).

The performance of Islamic banks is the most important thing because the banking business is a business of trust, so the bank must show its credibility so that people make many transactions at the bank, one of which is increasing profitability. The increase in the profit of Islamic banks affects the profit-sharing rate for shareholders and affects the results given to depositors of funds (DPK). Besides, it is also important in the national or global economy, so supervision from time to time is needed to maintain the bank's health (Thalassinos et al., 2015). The role of banks in economic stability and growth by contributing to increasing the efficiency of allocation and utilization of funds in the economy (Al-Omar & Al-Mutairi, 2008; Suryanto & Ridwansyah, 2016).

Profitability is one of the financial ratios to measure the effectiveness of management as a whole which is aimed at the size of the level of profits that the company receives (Aisyah, 2015). One of the indicators used to measure profitability is ROA (Return on Assets). Many research results on the determinants of the profitability of Islamic banks, especially from internal factors, namely FDR (Finance to Deposit Ratio), NPF (Non-Performing Financing), and BOPO (Operational Expenses to Operating Income) (Iqbal et al., 2012); (Windriya, 2014); (Amelia, 2015); (Lindasari & Pangestuti, 2016); (Yusuf, 2017). However, several research results show the opposite, namely the variables FDR, BOPO, and NPF do not have a significant effect on ROA (Said & Ali, 2016); (Amelia, 2015); Ayu Lestari & Armayah, 2016; Tristiningtyas & Mutaher, 2016; Lindasari & Pangestuti, 2016; Simatupang & Franzlay, 2016; Arumingtyas, 2017).



Apart from the inconsistencies in the research results on the variables that affect profitability, this study will also examine the indirect effect by determining the NPF variable as an intervening variable. As for the basis for the detection of intervening variables is, as the research results show that the FDR variable affects NPF (Tristiningtyas & Mutaher, 2013; Vanni & Rokhman, 2018; Kuswahariani et al. 2020), and the BOPO variable also affects NPF (Kuswahariani et al. 2020). And this is the renewal of research compared to previous studies.

#### **HYPOTHESIS**

Profitability is one of the financial ratios to measure the effectiveness of management as a whole which serves by the size of the level of profits that the company gets (Aisyah, 2015). One of the formulas used to measure profitability is ROA (Return on Assets). Many research results on the determinants of the profitability of Islamic banks, especially from internal factors. The FDR ratio is the ratio of financing to third-party funds received by Islamic banks; the higher the FDR, the higher the company's profit (assuming Islamic banks can channel financing effectively, so the risk of bad financing will be small). The higher the FDR ratio, the higher the profit of Islamic banks (Windriya, 2014; Lindasari & Pangestuti, 2016; Arumingtyas, 2017. Therefore, the first hypothesis of this study is:

H1: FDR Variable effect on ROA

BOPO ratio is the ratio between total operating expenses and total operating income, which is calculated per position. If the BOPO ratio of a sharia bank in one year has decreased from the previous year, then the bank's operations will be more efficient. And vice versa, if the BOPO ratio of Islamic banks in one year has increased from the previous year, then the bank's operations will be increasingly inefficient. So there is a strong relationship between costs and profitability (Iqbal et al., 2012; Sriyana, 2015; Windriya, 2014; Simatupang & Franzlay, 2016; Tristiningtyas & Mutaher, 2016). So the second hypothesis of this study is:

H2: BOPO Variable effect on ROA

NPF ratio compares the amount of disbursed financing with the collectability level, which is problematic financing compared to the total paid funding by Islamic banks. The higher the NPF ratio, the effect on the level of profit obtained by Islamic banks (Tristiningtyas & Mutaher, 2013; Windriya, 2014; Pravasanti, 2017; Arumingtyas, 2017). So the third hypothesis of this study is:

H3: NPF Variable effect on ROA

Besides, several factors cause the high NPF ratio, namely FDR (Tristiningtyas & Mutaher, 2013; Vanni & Rokhman, 2018; Kuswahariani et al., 2020). The more financing is distributed, the higher the risk of problem financing (assuming that the financing analysis process and financing risk management are not optimal, so insufficient funding will be increased). Then the fourth hypothesis of this study is:

H4: FDR Variable effect on NPF

The second factor that causes a high NPF ratio is BOPO (Kuswahariani et al., 2020), which is that the higher the company's operating expenses, the higher the percentage margin or ratio set by Islamic banks in financing products, and this can affect the risk of default on customers financing. Then the fifth hypothesis of this study is:

H5: BOPO Variable effect on NPF

Based on the research results that underlie the third to fifth hypotheses, this is the basis for determining the sixth and seventh hypotheses in this study, namely:

H6: NPF variable mediates the effect of FDR on ROA

H7: NPF variable mediates the effect of BOPO on ROA

## **METHODS**

This research is descriptive quantitative research (Sugiyono, 2017). The population in the study was 13 Islamic Commercial Banks in Indonesia. Then the sample is determined by purposive sampling technique, as many as 11 samples. Islamic bank financial report data used



is annual data, namely the years 2011–2019, with 99 data. Furthermore, the data were analyzed using the PLS technique (Partial Least Square). The following is the definition of operational variables:

**Table 1. Definition of Operational Variables** 

Variabel	Definition	Measurement
FDR	The ratio measures the ability of banks to meet short-term financial obligations.	$FDR = \frac{Financing}{Deposit}$
ВОРО	Ratios that can provide an assessment of the company's efficiency	$BOPO = \frac{Operating Expenses}{Income Expenses}$
NPF	The ratio for assessing non-performing financing	$NPF = \frac{Non Performing Financing}{Financing}$
ROA	Profitability ratios that can assess the company's ability to earn a profit from the assets used	$FDR = \frac{Return}{Asset}$

Source: Data Processed (2021)

#### **RESULTS AND DISCUSSION**

# **Descriptive Statistics**

The final result of descriptive statistics:

Table 2. Descriptive statistics

Variable	Mean	Median	Min	Max	Standard	Excess	
					Deviation	Kurtosis	
FDR	99.739	90.500	46.080	424.930	48.883	25.195	
BOPO	96.732	92.290	47.600	217.400	25.118	9.364	
NPF	2.302	1.960	0.000	4.970	1.548	-1.186	
ROA	0.418	0.800	-20.130	6.930	3.097	21.570	
Sample Size	: 99						
Indicators	: 4						

Indicators : 4
Missing Values: 0

Source: Smart-PLS 3.0 Output

# **Inferential Analysis**

This study uses a variance-based or component-based approach model with the Partial Least Square (PLS) method. In the PLS structural model, the relationship between latent variables is the inner model, while the measurement model is the outer model.

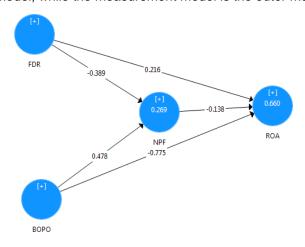


Figure 1. Result of PLS Analysis Source: Smart-PLS 3.0 Output



#### Structural Model Evaluation

This structural model evaluation is carried out to measure how the predictive model is good for the research model.

Table 3. Algorithm-R Square

Variable	R Square
NPF (Y1)	0.269
ROA (Y2)	0.660

Source: Smart-PLS 3.0 Output

Value of *predictive – relevance* is obtained by the formula:

$$Q^2 = 1 - (1 - R1^2)(1 - R2^2)....(1 - Rp^2)$$

$$Q^2 = 1 - (1 - 0.269) (1 - 0.660) = 0.752$$

 $Q^2 = 0.752$ 

The above results show a predictive value - relevance of 0.752; this value is> 0. It means that 75.2% of the variation in the ROA variable is explained by the variables used in the model. 24.8% explained by other variables outside the model. With these results, it is concluded that this model has a relevant predictive value.

# Partial Least Square (PLS) Analysis

The PLS analysis results can be seen in the Path Coefficients:

Table 4. Result of Path Coefficients PLS Method

	Original Sample	Sample Mean	Standard	T Statistics	P Values
	(OS)	(M)	Deviation	( O/STDEV)	
FDR → ROA	0.216	0.185	0.210	1.025	0.153
$BOPO \rightarrow ROA$	-0.775	-0.814	0.103	7.518	0.000
$NPF \rightarrow ROA$	-0.138	-0.127	0.074	1.873	0.031
$FDR \rightarrow NPF$	-0.389	-0.349	0.192	2.029	0.021
BOPO → NPF	0.478	0.495	0.076	6.248	0.000

Source: Smart-PLS 3.0 Output

#### **Mediation Effect Test**

The results of the media effect test can be seen in the results of the specific Indirect Effects:

**Table 5. Specific Indirect Effects** 

	Original	Sample	Standard Deviation	T Statistics	Р		
	Sample (OS)	Mean (M)	(STDEV)	( O/STDEV)	Values		
$FDR \rightarrow NPF \rightarrow ROA$	0.054	0.051	0.039	1.674	0.045		
$\begin{array}{c} BOPO \to NPF \to \\ ROA \end{array}$	-0.066	-0.061	0.035	1.866	0.031		
NOA							

Source: Smart-PLS 3.0 Output

#### H1: FDR variable effect on ROA

Based on table 4, the *T-Statistics* value of the FDR variable is 1.025 <1.64, meaning that the FDR variable does not have a significant effect on ROA. Then the *Financing model to Deposit Ratio* has a significant effect on profitability which is unacceptable. Thus Hypothesis 1 is rejected.

#### H2: BOPO variable effect on ROA

Based on table 4, the T-Statistics value for the BOPO variable is 7.518> 1.64, and the Original Sample value is negative at -0.775, meaning that the BOPO variable has a significant negative effect on ROA. The higher the operating costs, the lower the level of profitability. Islamic Bank. Thus Hypothesis 2 is accepted.



#### H3: NPF variable effect on ROA

Based on table 4, the T-Statistics value for the NPF variable is 1.873> 1.64, and the Original Sample value is negative at -0.138, meaning that the NPF variable has a significant negative effect on ROA. The higher the financing problem, the lower the level of profitability. Islamic Bank. Thus Hypothesis 3 is accepted.

#### H4: FDR variable effect on NPF

Based on table 4, the T-Statistics value for the FDR variable is 2.029> 1.64, and the Original Sample value is negative at -0.389, meaning that the FDR variable has a significant negative effect on NPF. The greater the amount of disbursed financing, the lower the problem financing. Thus Hypothesis 4 is accepted.

#### H5: BOPO variable effect on NPF

Based on table 4, the T-Statistics value of the BOPO variable is 6,248> 1.64, and the Original Sample value is positive of 0.478, meaning that the OEO variable has a significant positive effect on ROA. Higher operational costs can increase problematic financing in Islamic banks. Thus Hypothesis 5 is accepted.

#### H6: NPF variable mediates the effect of FDR on ROA

Based on table 4, the variable T-Statistics value of the indirect effect is 1,674 <1.64, which is no indirect effect between the FDR variable on ROA through NPF. Then the NPF model mediates the effect of FDR on profitability unacceptable. Thus Hypothesis 6 is accepted.

#### H7: NPF variable mediates the effect of BOPO on ROA

Based on table 5, the variable T-Statistics value of the indirect effect is 1,866> 1.64, an indirect effect between the FDR variable on ROA through NPF. Then the NPF model mediates the effect of BOPO on profitability is acceptable. Thus Hypothesis 7 is accepted. Implementation of the results of this study shows that the profitability of Islamic banks is influenced by the variables of FDR, OEOI, and NPF, either directly or indirectly. It can be used as a guide for Islamic banks, efforts to control the distribution of financing, operational costs, and financing problems to maintain financial performance from profitability. The result from the research theorists model explains that FDR affects the profitability of Islamic banking directly or NPF effect partially. And BOPO affects the profitability of Islamic banks directly or through NPF effects. This study also confirms that lowering the NPF can increase the profitability of Islamic banks.

## **CONCLUSION**

Based on the research objectives, problem formulation, and research results with the discussion that has been described that FDR has no significant effect on profitability directly. However, indirectly has a positive effect on the profitability of Islamic banks through NPF. It means a lot of Islamic banking distribute financing with an effective process. They have a low NPF level. It will increase Islamic banking profit. So NPF proved to be partially a mediating relation between FDR and ROA Islamic banking. And BOPO has a significant negative effect on profitability directly and indirectly. Islamic banks can make it efficient by reducing operating costs. It will increase the profit of Islamic banks called now. Indirectly low operating expenses of Islamic banks will reduce the NPF level and later increase the yield of Islamic banks. So NPF proved to be partially a mediating relationship between BOPO and ROA Islamic banking.

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