

# *The Effect of Financing to Deposit Ratio (FDR), Non Performing Financing (Npf), Profitability and Operational Cost of Operational Income (Bopo) on the Mudharabah Financing of Sharia Commercial Banks In Indonesia*

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**Abstract** — This study aims to (1) Test and analyze the effect of FDR on Mudharabah financing. (2) Test and analyze the effect of NPF on Mudharabah financing. (3) Test and analyze the effect of ROA on Mudharabah financing. (4) Test and analyze the effect of BOPO on Mudharabah financing. (5) Test and analyze FDR, NPF, ROA, BOPO on Mudharabah financing. The sampling technique used was purposive sampling. In this research it was obtained a sample of 10 Sharia Commercial Banks in Indonesia. The data analysis technique used was multiple linear regression while the hypothesis testing used was t-statistics to test the partial regression coefficients and F statistics. In addition, classic assumption tests were also performed which include normality test, multicollinearity test, heteroscedasticity test and autocorrelation test. The results of this study indicate that (1) FDR variable has no effect on Mudharabah financing. (2) NPF variable has no effect on Mudharabah financing. (3) ROA variable influences on Mudharabah financing. (4) BOPO variable influences Mudharabah financing. (5) Variable FDR, NPF, ROA, and BOPO simultaneously influence Mudharabah financing variables.

**Keywords:** FDR, NPF, ROA, BOPO, Mudharabah Financing

## *I. INTRODUCTION*

The development of the sharia banking system in Indonesia is carried out within the framework of a dual-banking system within the framework of the Indonesian Banking Architecture (API) to present alternative banking services that are increasingly complete to the people of Indonesia. The development of Islamic banking has increased sharply because the majority of the population in Indonesia is Muslim. In addition, also because in conventional banking there are activities that are

prohibited in Islamic law such as receiving and paying interest (usury). The development of sharia banking can be seen from the increase in the number of banks or offices that use sharia principles and an increase in the number of assets under management.

The characteristics of the sharia banking system that operates are based on the principle of profit sharing that provides an alternative banking system that is mutually beneficial to the community and banks, as well as highlighting aspects of fairness in transactions, ethical investment, promoting the values of togetherness and brotherhood in production, and avoiding speculative activities in financial transactions by providing a variety of banking products and services. With a more varied financial scheme, Islamic banking is a credible alternative to the banking system that can be sought after by all classes of Indonesian people without exception.

There are various types of financing at the Sharia Bank which are generally divided into three principles, namely the principle of profit sharing, rent or services, and the principle of buying and selling using contracts such as murabahah, salam, istisna. Until now, sharia banking is still dominated by the principle of buying and selling, especially with the murabaha contract. Murabaha is a sharia banking financing product that is carried out by taking the form of buying and selling (ba'i or sale). The dominance of murabaha financing compared to other types of financing is caused by several factors. In terms of supply of Syaria'h Bank, murabaha financing is considered to be more minimal risk compared to the type of profit sharing financing. In addition, the pre-determined return also makes it easier for banks to predict the benefits to be gained.

Funds distribution activities at conventional banks are known as loans. The provision of loans by banks consists of various types depending on the ability of the bank that distributes them. This is different from sharia banks that

do not recognize the term credit or loans, but in sharia banks there is a term of financing. Financing is an activity of an sharia bank in channeling funds to parties other than banks based on sharia principles. Fund distribution in the form of financing is based on the trust given by the owner of the fund to the user of the fund. The owner of the fund believes in the recipient of the funds, that the funds in the form of financing provided will definitely be paid. The recipient of the financing gets the trust of the financier, so that the recipient of the financing is obliged to return the financing he has received in accordance with the period agreed upon in the financing agreement. H. R. Daeng Naja (2011). The still low portion of profit sharing financing or the dominance of non-share financing, especially murabaha in sharia bank financing portfolios turned out to be a global phenomenon, included in Indonesia. This happened because there were several factors that could influence the amount of mudharabah financing. According to (Meydinawathi, 2007) said that in addition to the funds available in (DPK), the supply of bank credit is also influenced by the bank's perception of the debtor's business prospects and the condition of the banking itself, such as capital (CAR), the number of non performing financing (NPF), and *Financing to Deposit Ratio* (FDR). Suseno and Piter A (2003) in (Meydinawati, 2007) apply that the profitability factor or the level of profit reflected in *Return on Assets* (ROA) and BOPO also influences bank credit.

#### Financing Composition at Sharia Commercial Banks in 2014-2018 (In Billion Rupiahs)

Type of Agreement	2014	2015	2016	2017	2018
Mudharabah	5.930	6.841	7.715	10.506	10.389
Musyarakah	9.058	13.356	24.369	41.096	60.997

Source: OJK Statistical Data

The phenomenon of low profit-sharing based financing is an important issue that needs to be discussed and find the right solution. Low profit-sharing based financing tends to be a multi-dimensional problem that has occurred for a long time and tends not to change. The implication of the high non-profit financing is the formation of public perception that Islamic banks are almost no different from conventional banks (Ascarya and Yumanita, 2005).

## II. METHOD

The approach of this research used associative research with quantitative data types. Location of the study was conducted at commercial banks in Indonesia, with the official website of Bank Indonesia. In addition, the study population was a public Sharia Bank in Indonesia registered with Bank Indonesia. The population was 13 companies. Observations were made in early 2014-2018. The sample selection in this study was carried out using

the Purposive Sampling method, which is taking samples in accordance with the research objectives.

## III. RESEARCH FINDINGS

### Normality Test

### Multicollinearity Test

Model	Collinearity Statistics	
	Tolerance	VIF
1 (Constant)		
FDR (X1)	.958	1.044
NPF (X2)	.965	1.036
ROA (X3)	.880	1.136
BOPO (X4)	.875	1.143

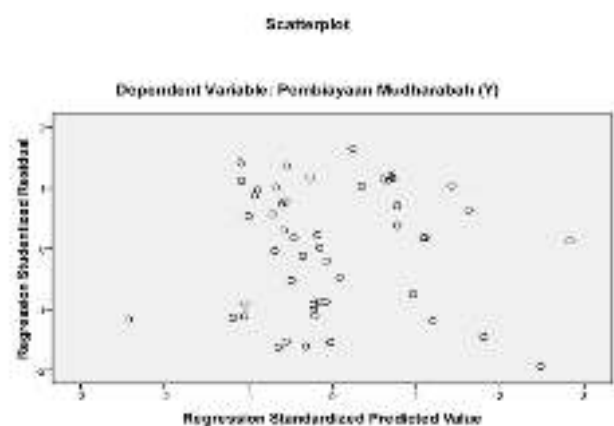
Based on the table above, the VIF value of FDR is 1.044, the VIF value of NPF is 1.036, the VIF value of ROA is 1.136 and the VIF value of BOPO is 1.143. It is known that all VIF values < 10. This means that there is no multicollinearity.

### Autocorrelation Test

Model	Durbin-Watson
1	1.638

Statistical values from the Durbin-Watson test that are smaller than 1 or greater than 3 indicate the occurrence of autocorrelation. Based on Table 4.8, the value of the Durbin-Watson statistics is 1.638. Note that because the Durbin-Watson statistical value is located **between 1 and 3, which is  $1 < 1.638 < 3$** , the non-autocorrelation assumption is fulfilled. In other words, no autocorrelation symptoms occur.

### Heteroscedasticity Test



Note that based on the picture above, there is no such clear pattern, and the points spread **above and below the number 0** on the Y axis, which can be said that there is no heteroscedasticity.

### Descriptive Statistical Analysis

	N	Minimum	Maximum	Mean	Std. Deviation
Mudharabah Financing (Y)	50	10.41	98.81	17.9898	25.23928
FDR (X1)	50	70.87	424.923	85.2307	18.68607
NPF (X2)	50	.00	43.99	5.4336	7.54123
ROA (X3)	50	-10.77	5.50	.8440	2.84567
BOPO (X4)	50	68.7	199.97	106.2356	36.66969
Valid N (listwise)	50				

### Multiple Linear Regression Analysis

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error			
1	(Constant)	-9.003	4.294		-2.097	.042
	FDR (X1)	.520	.601	.112	.865	.392
	NPF (X2)	.179	.192	.119	.928	.358
	ROA (X3)	.431	.186	.312	2.316	.025
	BOPO(X4)	1.778	.820	.293	2.169	.035

Based on the table above, obtained the multiple linear regression equation as follows.

$$Y = -9.003 + 0.520X_1 + 0.179X_2 + 0.431X_3 + 1.778X_4 + 1.928$$

### t-test

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error			
1	(Constant)	-9.003	4.294		-2.097	.042
	FDR (X1)	.520	.601	.112	.865	.392
	NPF (X2)	.179	.192	.119	.928	.358
	ROA (X3)	.431	.186	.312	2.316	.025
	BOPO (X4)	1.778	.820	.293	2.169	.035

Based on the t test results in Table 4.11 the results obtained are as described below:

#### 1. FDR Variable (X1)

It is known that coefficient value of FDR is 0.520. The known statistical value of t (t arithmetic) is | 0.865 | < t table | 2.01 | with the Sig of the FDR variable is 0.392 > 0.05, then the FDR has no significant effect on mudharabah financing.

#### 2. NPF Variable (X2)

It is known that the coefficient of NPF is 0.179. The known statistical value of t (t arithmetic) is | 0.928 | < t table | 2.01 | with the Sig of the NPF variable is 0.358 > 0.05, then the NPF has no significant effect on mudharabah financing.

#### 3. ROA Variable (X3)

It is known that coefficient value of ROA is 0.431. The known statistical value of t (t arithmetic) is | 2.316 | > t table | 2.01 | with the Sig

of the ROA variable is 0.025 < 0.05, then ROA has a significant effect on mudharabah financing.

#### 4. Variable BOPO (X4)

It is known that the coefficient value of BOPO is 1.778. The known statistical value of t (t arithmetic) is | 2.169 | > t table | 2.01 | the Sig of the BOPO variable is 0.035 < 0.05, then the BOPO has a significant effect on mudharabah financing.

### F test

### ANOVA<sup>b</sup>

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	41.723	4	10.431	4.445	.004 <sup>a</sup>
	Residual	105.600	45	2.347		
	Total	147.323	49			

a. Predictors: (Constant), BOPO (X4), NPF (X2), FDR (X1), ROA (X3)

b. Dependent Variable: Mudharabah Financing (Y)

### Coefficient of Determination Analysis (R<sup>2</sup>)

\* Coefficient of Determination

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.276	.276	.242	2.347

a. Predictors: (Constant), BOPO (X4), NPF (X2), FDR (X1), ROA (X3)

b. Dependent Variable: Mudharabah Financing (Y)

## IV. DISCUSSION

### 1. The effect of Financing to Deposit Ratio (FDR) on Mudharabah Financing

Testing the effect of the FDR variable on mudharabah financing by using the statistical test t obtained coefficient value which is 0.865 < t table 2.01 with a significance of 0.392 > 0.05. It means that this value is not significant at the 0.05 significance level. It shows that FDR has no significant effect on mudharabah financing. As for the FDR ratio decreasing every year does not affect mudharabah financing. In this study the results of t-test calculations indicate that the FDR variable has no effect on mudharabah financing. It means that the hypothesis stating that FDR has a positive effect and significant effect on mudharabah financing is not accepted.

### 2. The effect of (NPF) on Mudharabah Financing

Testing the effect of the NPF variable on mudharabah financing by using the t statistical test obtained a coefficient value of 0.928 < t table 2.01 with a significance of 0.358 > 0.05. This value is not significant at the 0.05 significance level which indicates that the NPF has no significant effect on financing mudharabah. Non-performing financing (NPF) is the risk of non-payment of financing channeled by Sharia commercial banks. If the NPF

has increased, murabahah financing channeled has decreased, and vice versa, that is if the NPF has decreased then the mudharabah financing channeled has increased. A high NPF level results in banks are experiencing difficulties and decreases in the soundness of banks. Therefore banks are expected to keep the NPF range within a reasonable level set by BI at a minimum of 5%. If the NPF level is above 5%, the bank should be more careful and reduce the disbursed financing. The caution of the bank in channeling financing makes the customer's demand go down because the customer feels the analysis process is taking too long.

### 3. The Effect of (ROA) on Mudharabah Financing

Testing the effect of the ROA variable on mudharabah financing by using the statistical test t obtained a coefficient value of  $2.316 > 2.01$  with a significance of 0.025. This value is significant at the 0.05 significance level which shows that ROA has a positive and significant effect on mudharabah financing. This means that the higher the ROA, the more mudharabah financing increases. ROA has a positive and significant impact on mudharabah financing, indicating that ROA in Sharia Commercial Banks has increased every year. Return on Assets (ROA) is a measure of the ability of bank management in obtaining overall profits. If the ROA of a bank is greater, then the greater also the level of profit achieved by the bank and the better the bank's position in terms of asset security.

### 4. The Effect of (BOPO) on Mudharabah Financing

From the testing effect of Operational Revenue Expense (BOPO) variable on mudharabah financing using the statistical test t, a significant value of  $2.169 > t$  table 2.01 was obtained with Sig from the variable BOPO  $0.035 < 0.05$ . Thus, BOPO has a significant influence on mudharabah financing. The results of this study are not in accordance with the theory which states that the smaller the BOPO or the bank's operational burden on income, will result in a higher level of bank efficiency as indicated by increased mudharabah financing. This is caused by the inconsistency between the increase or decrease in BOPO to the amount of mudharabah financing every month.

### 5. The effect of FDR, NPF, ROA, BOPO on mudharabah financing

Based on the F test it can be seen the F value of the table with  $df_1 = 4$ ,  $df_2 = 45$  and a significance level of 5% or 0.05 is 2.578. It is known that the calculated F value is  $4.445 > F$  table is 2.578 and the Sig value is  $0.004 < 0.05$ . Thus, FDR, NPF, ROA and BOPO together or simultaneously have a significant effect on mudharabah financing. That is because the high mudharabah financing each

year so that increasing funds in the bank's capital structure will certainly help the company's operational activities so that it is more productive. Mudharabah financing will have an impact on the increasingly available amount of funds that companies can use to carry out financing.

## V. CONCLUSION

### Conclusion

Based on data analysis and discussion of research results it can be concluded that:

1. Based on the results of simultaneous tests using the F test, it shows that the independent variables namely FDR (Deposits for Deposits Ratio), NPF (Non Performing Ratio), ROA (Return on Assets) and CAR (Capital Adequacy Ratio), simultaneously have a significant effect on mudharabah.
2. Based on the results of testing this research partially, it can be explained as follows:
  - a. Financing to Deposit Ratio (FDR) does not significantly influence mudharabah financing to the public of Bank Syariah Indonesia in the 2014-2018 period.
  - b. The Non Performing Ratio (NPF) variable has no significant effect on mudharabah financing to the public of Bank Syariah Indonesia in the 2014-2018 period.
  - c. Variable Return on Assets (ROA) significantly influences Sharia mudharabah commercial bank financing in Indonesia for the 2014-2018 period.
  - d. Operational Cost Variables Operational Revenues (BOPO) significantly influences mudharabah financing on the public Bank Syariah Indonesia in the 2014-2018 period.

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