

THE INFLUENCE OF ROA AND THIRD PARTY FUNDING ON SHARIA COMMERCIAL BANK FINANCING FOR THE 2015-2022 PERIOD

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Abstract

Penelitian ini bertujuan untuk menganalisis pengaruh Return on Assets (ROA) dan Dana Pihak Ketiga terhadap pemberayaan Bank Umum Syariah dalam rentang waktu 2015-2022. Metode yang digunakan adalah Autoregressive Distributed Lag (ARDL) untuk mengetahui pengaruh jangka pendek dan jangka panjang variabel independen terhadap variabel dependen. Data yang digunakan berupa data time series. Dari Pengujian diperoleh hasil bahwa ROA tidak berpengaruh signifikan terhadap pemberayaan, sedangkan DPK berpengaruh signifikan terhadap pemberayaan. Hasil penelitian ini diharapkan dapat memberikan pemahaman yang lebih mendalam mengenai faktor-faktor yang memengaruhi pemberayaan bank umum syariah di Indonesia.

Kata Kunci : DPK, ROA, Pemberayaan

Abstract

This research aims to analyze the influence of Return on Assets (ROA) and Third Party Funds on Sharia Commercial Bank financing in the 2015-2022 period. The method used is Autoregressive Distributed Lag (ARDL) to determine the short-term and long-term influence of the independent variable on the dependent variable. The data used is time series data. From the testing, the results obtained were that ROA does not have a significant effect on financing, while DPK has a significant effect on financing. It is hoped that the results of this research will provide a deeper understanding of the factors that influence sharia commercial bank financing in Indonesia.

Keywords :TPF, ROA, Financing.

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A. Introduction

The general definition of an Islamic bank is a bank whose operations are based on Islamic sharia principles. Other terms used to refer to Islamic Bank entities other than Islamic Bank itself, namely Interest-Free Bank, Usury-Free Bank (Lariba Bank), and Sharia Bank (Sharia Bank). Sharia commercial banks are financial institutions that provide various banking products and services with sharia principles or Islamic law as the basis for their operations. This bank operates in compliance with sharia provisions, such as the prohibition of usury (interest), the prohibition of speculation, and the principles of fairness in financial transactions. The products and services offered by sharia commercial banks include financing, savings, investment and other banking services, all of which are in accordance with sharia principles.

Financing broadly means financing, namely funding issued to support planned investments, whether carried out by yourself or carried out by someone else. In a narrow sense, it defines funding provided by financing institutions, such as Islamic banks, to customers. In financial institutions such as banks, there are two factors that influence the decision to allocate financing, namely external factors and internal factors. To evaluate a company's internal conditions, banks often use financial reports and various financial ratios. These internal factors also play a role in determining the amount of financing provided. Several financial ratios that are commonly used to assess a company's internal condition include the Capital Adequacy Ratio (CAR) as an indicator of bank capital, Return of Assets (ROA) as a measure of profitability, and the Financing to Deposit Ratio (FDR) as a reflection of bank liquidity. Apart from financial ratios, internal company factors that also have an influence are Third Party Funds (DPK).

One of the factors that influences financing is ROA. Return on Assets (ROA) is a ratio to measure management's success in generating overall profits by comparing profit before tax with total assets. The greater the Return on Assets (ROA) of a bank, the greater the profits achieved by the bank and the better the bank's position from the use of assets. Research conducted by Ayu Yuningsih & Akhsyim Afandi (2014) as well as research conducted by Muhlisin, & Dawam (2021) The results show that ROA has an effect on financing. However, it is different from previous research, research conducted by Sherly Yolanda & Ariusni (2019) as well as research conducted by Rizki Dwi Haryanti, Titin Agustin Nengsih, and Bambang Kurniawan (2022) shows that ROA has no effect on financing.

Apart from ROA, Third Party Funds (DPK) also influence financing at Sharia Commercial Banks. Third Party Funds are defined as customer funds channeled to banks which are the largest assets owned by Islamic banks. As a financial institution, funds are the main problem for every bank. Without sufficient funds, the bank cannot do anything or in other words the bank will not function at all. The higher the Third Party Funds owned by a sharia bank, the greater the amount of funds the bank will distribute to the public in the form of financing. Research conducted by Rizki Dwi Haryanti, Titin Agustin Nengsih and Bambang Kurniawan (2022) and other research conducted by Rifqi Khuamirotun Nafis & Heri Sudarsono (2021) shows that third party funds have a significant influence on financing. Meanwhile, research conducted by Linda Sri Anisa & Fifi Afiyanti Tripuspitorini (2019) and research conducted by Debbi Chyntia Ovami & Ayu Azillah Thohari (2018) shows that DPK has a negative effect on financing.

Based on previous research and the differences in research results, research on financing is interesting to research again. This research was conducted with the aim of determining the influence of ROA and Third Party Funds on Sharia Commercial Bank Financing for the 2015-2022 period.

B. Research methods

This research is quantitative research with the analysis method used is Autoregressive Distributed Lag (ARDL). The number of samples involved in this research was 32, which is quarterly data published by the Financial Services Authority from 2015 to 2022. The sampling method was carried out using a purposive sampling technique, which is a sample collection technique with certain considerations.(Sugiono, 2014).

The data collection technique is carried out by collecting Sharia Commercial Bank Financial Reports for 2015-2022. This research uses independent variables in ROA and DPK research and financing as dependent variables. The analysis steps are descriptive statistical testing, stationarity testing, optimum lag testing, cointegration testing, short-term testing, and long-term testing.

C. Results and Discussion

1. Descriptive statistics

Table 1.
Descriptive statistics

	PMBY	ROA	DPK
Mean	9.1578132.208125	8.035938	
Median	9.2400002,265000	8.130000	
Maximum	14.450002.730000	13.45000	
Minimum	5.2200001.650000	4.100000	
Std. Dev.	2.5783780.306441	2.628030	
Skewness	0.230719-0.2772200.246777		
Kurtosis	2.1237211.864697	2.146756	
Jarque-Bera	1.3077202.128424	1.295494	
Probability	0.5200350.345000	0.523223	
Sum	293.050070.66000	257.1500	
Sum Sq. Dev.	206.08892.911087	214.1028	
Observations	32	32	

1. Financing, based on the results above, financing has a mean value of 9.15% while the maximum value is 14.45% and the resulting minimum value is 5.22%
2. ROA, based on the results above, ROA has a mean value of 2.20% while the maximum value is 2.737 and the resulting minimum value is 1.26%
3. DPK, based on the table above, DPK has a mean value of 8.03% while the maximum value is 13.45% and the resulting minimum value is 4.10%

2. Stationarity Test

Stationarity testing is carried out using the unit root test, which is a data test to determine whether the data used in a study is stationary or not. The test that is often used in this unit root test is the Augmented Dickey – Fuller (ADF) test

or the Phillips-Peron test. Both indicate the existence of a unit root as a null hypothesis. Root unit testing results with Eviews 9.

Costing Stationarity Test

Table 2.
Stationarity Test

		t-Statistics	Prob.*
Augmented Dickey-Fuller test statistics		-3.640011	0.0125
Test critical values:	1% levels	-3.737853	
	5% level	-2.991878	
	10% levels	-2.635542	

*MacKinnon (1996) one-sided p-values.

a. ROA stationarity test

Table 3.
Stationarity Test

		t-Statistics	Prob.*
Augmented Dickey-Fuller test statistics		-8.096080	0.0000
Test critical values:	1% levels	-3.670170	
	5% level	-2.963972	
	10% levels	-2.621007	

*MacKinnon (1996) one-sided p-values.

DPK Stationarity Test

Table 4.
Stationarity Test

		t-Statistics	Prob.*
Augmented Dickey-Fuller test statistics		-6.520606	0.0000
Test critical values:	1% levels	-3.670170	

5% level	-2.963972
10%	
levels	-2.621007

*MacKinnon (1996) one-sided p-values.

In this stationarity test, all variables are stationary at the first difference level. Then we will continue with optimum lag testing.

3. Optimum Lag Test

Table 5.
Model Optimum Lag

Variables	Coefficient	Std. Error	t-Statistics	Prob.*
PMBY(-1)	0.483490	0.136613	3.539126	0.0015
ROA	0.164929	0.160745	1.026030	0.3143
DPK	0.210920	0.125277	1.683627	0.1042
DPK(-1)	0.334661	0.157996	2.118160	0.0439
C	0.222493	0.405676	0.548451	0.5881
R-squared	0.995001	Mean dependent var	9.284839	
Adjusted R-squared	0.994232	SD dependent var	2.517157	
SE of regression	0.191171	Akaike info criterion	-0.324605	
Sum squared resid	0.950207	Schwarz criterion	-0.093317	
Log likelihood	10.03138	Hannan-Quinn Criter.	-0.249211	
F-statistic	1293,781	Durbin-Watson stat	2.084496	
Prob(F-statistic)	0.000000			

*Note: p-values and any subsequent tests do not account for model selection.

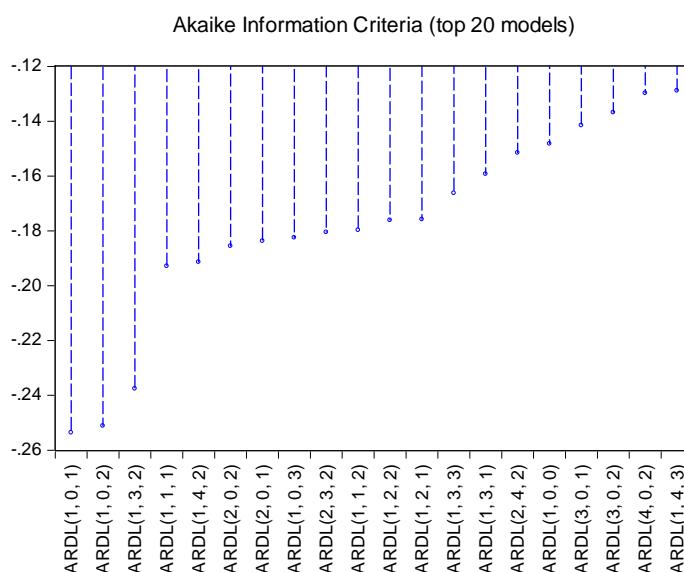
Based on these results, it can be concluded as follows:

1. The PMBY(-1) variable has a positive and significant influence on sharia commercial bank financing in the current period with a probability level of 0.0015. This shows that sharia commercial bank financing in the previous period had a positive effect on financing in the current period.
2. The ROA and DPK variables do not have a significant influence on sharia commercial bank financing in the current period, with probability levels of

0.3143 and 0.1042 respectively. This shows that Return on Assets (ROA) and Third Party Funds (DPK) do not have a significant effect on sharia commercial bank financing.

3. The DPK(-1) variable has a positive and significant influence on sharia commercial bank financing in the current period with a probability level of 0.0439. This shows that Third Party Funds in the previous period had a positive effect on financing in the current period.
4. Constant (C) does not have a significant influence on sharia commercial bank financing in the current period, with a probability level of 0.5881. Thus, the results of the analysis show that the financing variables of Islamic commercial banks in the previous period (PMBY(-1)) and Third Party Funds in the previous period (DPK(-1)) have a positive and significant effect on financing of Islamic commercial banks in the current period. Meanwhile, Return on Assets (ROA) and Third Party Funds (DPK) do not have a significant effect on sharia commercial bank financing.

Figure 1.
Graphics Optimum Lag



From the results above, the Best Model Value is obtained, namely (1,0,1) 1 represents Financing, 0 represents ROA, and 1 represents DPK.

4. Cointegration Test

The cointegration test was carried out with the Bounds test to test the existence of a long-run association in the selected ARDL model. The results of this Bounds test will focus more on the Fstatistic value. The F-statistic value will be compared with the Pesaran critical value at the 5% level, which has also been provided by Eviews 9. If the F-statistic has a value that exceeds the Upper Bounds value then the null hypothesis which states that there is no long-run association is rejected, which means variables in research move together in the long term.

Table 6.
Cointegration Test

Statistical Tests	Value	k
F-statistic	6.523399	2

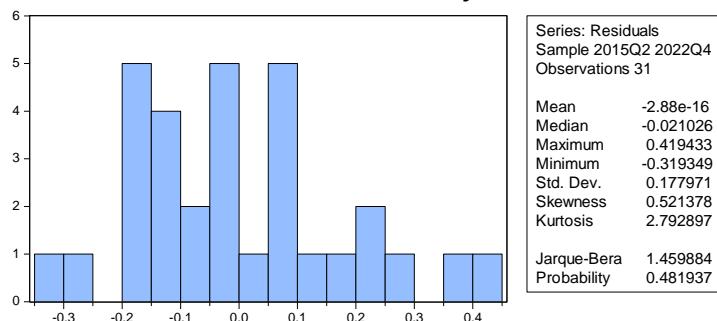
Critical Value Bounds		
Significance	I0 Bound	I1 Bound
10%	3.17	4.14
5%	3.79	4.85
2.5%	4.41	5.52
1%	5.15	6.36

The results above show that the F statistic value is 6.523. And the I1 Bound value at the 5% significance level is 4.85. This proves that the two variables in this research, namely ROA and DPK, cointegrate in the long term or it could be said that the two variables move together in the long term. This shows that there is cointegration in the model.

5. Classic assumption test

Normality test

Figure 2
Normality test



Based on the results of the normality test, it can be seen that the probability value is 0.481, this value is greater than the significance value, namely 5% or 0.05. So it fails to reject H_0 and it can be concluded that the residuals are normally distributed.

Multicollinearity Test

Table 7
Multicollinearity Test

Correlation	PMBY	ROA	DPK
PMBY	1,000000		
ROA	-0.496806	1,000000	
DPK	0.993058	-0.534549	1,000000

In this study, the results of multicollinearity testing show that the correlation value -0.534549 is smaller than 0.8, it can be concluded that there is no multicollinearity problem.

Autocorrelation Test

The autocorrelation test was carried out on the research model using the Breusch-Godfrey Serial Correlation LM Test with the following results:

Table 8.
Autocorrelation Test

F-statistic	0.090747	Prob. F(2.24)	0.9136
Obs*R-squared	0.232671	Prob. Chi-Square(2)	0.8902

It can be seen in the output results above where the Obs*R-squared value is 0.8902. This value is greater than 0.05 (5%), so it shows that H0 is accepted, meaning that the research model used does not have autocorrelation.

Heteroscedasticity Test

Table 9.
Heteroscedasticity Test

F-statistic	0.802234	Prob. F(4.26)	0.5349
Obs*R-squared	3.405703	Prob. Chi-Square(4)	0.4924
Scaled explained			
SS	2.147610	Prob. Chi-Square(4)	0.7086

The results of these calculations showThe Prob value (Obs*R -Square) is 0.4924 > 0.05, so it fails to reject H0 and it is concluded that heteroscedasticity does not occur.

6. Short Term Testing

Table 10.
Short Term Model

Variables	Coefficiet	Std. Error	t-Statistics	Prob.
D(ROA)	0.164929	0.160745	1.026030	0.3143
D(DPK)	0.210920	0.125277	1.683627	0.1042
-				
CointEq(-1)	0.516510	0.136613	-3.780824	0.0008
Cointeq = PMBY - (0.3193*ROA + 1.0563*DPK + 0.4308)				

From the short-term model above, the following equation is obtained:

$$\begin{aligned} D(PMBY) &= 0.164929*D(ROA) + 0.210920*D(DPK) - 0.516510*cointEqD(PMBY) \\ &= 0.164929*D(ROA) + 0.210920*D(DPK) - 0.516510*(PMBY - (0.3193*ROA(-1) + 1.0563*DPK(-1) + 0.408)) \end{aligned}$$

Short Term t Test

1. D(ROA), The results of short-term testing obtained a t-statistic value of 0.314, which is greater than the significance value of 0.05. So from these results, H0 fails and it can be concluded that ROA does not have a significant effect on financing.
2. D(DPK), the results of short-term testing obtained a value of 0.104, which is a value greater than the significance of 0.05. So it fails to reject H0 and it is concluded that DPK does not have a significant effect on financing.
3. CointEq(-1), the results of short-term testing obtained a value of 0.0008, which is smaller than the significance value, namely 0.05. So reject H0 and conclude that CointEq(-1) has a significant effect on financing.

7. Long Term Model

Table 11
Long Term Model

Variables	Coefficien			
	t	Std. Error	t-Statistics	Prob.
ROA	0.319315	0.277909	1.148992	0.2610
DPK	1.056285	0.036640	28.828838	0.0000
C	0.430764	0.806832	0.533895	0.5979

$$\begin{aligned} PMBY &= 0.483490459397*PMBY(-1) + 0.164929035479*ROA + \\ &0.210920332086*DPK + 0.334661198015*DPK(-1) + 0.222493467565 \end{aligned}$$

1. ROA, from the test results above, the Prob (t-statistic) value is 0.2610, this value is greater than the significance value, namely 0.05, so it fails to reject H0 and it is concluded that ROA has no significant effect on financing
2. DPK, from the test results, the Prob (t-statistic) value is 0.00000, this value is smaller than 0.05, so reject H0 and it is concluded that DPK has a significant effect on financing.

D. Conclusion

Based on the results of variable testing using ARDL above, it can be concluded as follows:

a. Return on Assets (ROA)

From short term testing ROA does not have a significant effect on financing. Likewise, in the long-term test, ROA also has no effect on financing.

b. Third Party Funds (DPK)

From the short-term test results, DPK does not have a significant effect on financing. Meanwhile, in the long-term test, DPK has a significant influence on financing.

Researchers found several limitations in the research conducted, both in terms of variables and the time period studied. In this study, researchers only used two independent variables to determine their effect on the dependent variable. So, it is still felt that it does not provide maximum research results. It is hoped that this research can be followed up by subsequent research in order to produce a more consistent study.

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