

### Liquidity Determinants of Sharia Commercial Banks in Indonesia

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#### ABSTRACT

This research aims to determine whether the Capital Adequacy Ratio (CAR), Return on Assets (ROA), Return On Equity (ROE) and Firm Size partially and simultaneously affect liquidity as stated by the Financing to Deposit Ratio (FDR). This type of research is quantitative with a descriptive approach. The data analysis technique used SPSS 22 software. The tests in this study were the classical assumption test, multiple regression analysis, and hypothesis testing. The results showed that partially the Capital Adequacy Ratio (CAR), Return on Assets (ROA), and Return On Equity (ROE) had no effect on the Financing to Deposit ratio (FDR) while Firm Size partially had a negative and significant effect on Financing. to Deposit ratio (FDR). Simultaneously, Capital Adequacy Ratio (CAR), Return on Assets (ROA), Return On Equity (ROE), and Firm Size have a joint and significant influence on the Financing to Deposit ratio (FDR).

# Keywords : Capital Adequacy Ratio; Return on Assets; Return On Equity; Firm Size; Financing to Deposit Ratio.

#### **INTRODUCTION**

Sharia Financial Institutions have a definition based on the National Sharia Council as institutions that create Islamic financial products that have obtained approval for their operational activities (DSN MUI, 2003). Banking is a financial institution that in the conduct of its business relies on the trust of the people. Meanwhile, sharia banking is a bank that uses sharia principles which are currently being of interest to the people of Indonesia, which in every activity must be based on sharia principles. Sharia Bank itself is divided into Sharia Commercial Banks and Sharia Rural Banks.

Sharia Commercial Banks is a bank based on Islamic principles in its operational activities to provide services for payment activities. Islamic banks first appeared in this country through Bank Muamalat Indonesia in 1992. For conventional banks that want to do business with Islamic principles, they are required to create a Sharia Business Unit which only works with Islamic principles. Based on Sharia Banking Statistics data as of December 2020, Sharia Commercial Banks consists of 14 types of Sharia Commercial Banks and Sharia Business Unit consists of 20 types of Sharia Business Unit. Seeing the number of Islamic banks that are increasing every year shows that Islamic banks also deserve to be considered as an institution engaged in the financial sector in this country.

The increasing needs of the community have also made Islamic banks continue to innovate to provide the best results to the community. This is because banking performance and



stability can affect the level of public trust. The stability of banking performance is inseparable from banking liquidity which is an indicator that affects the health of a bank, so it is important to know the condition of liquidity in the bank (Ush, Titis and Wardani, 2018). For each bank, the liquidity requirements vary depending on the size of the bank.

The problem of liquidity management is a problem that must be resolved in terms of fulfilling a company's financial interests (Ichsan, 2013). So it can be said that liquidity is the bank's expertise to carry out its obligations, in this case it is a short-term obligation. This is because one of the causes of bankruptcy is that the bank's liquidity interests cannot be fulfilled on its own.

At the beginning of 2020 the world was hit by an outbreak, namely Covid-19, which hit the whole world, including our country. The extraordinary condition of the Covid-19 pandemic has this impact that can suppress the competitiveness of Islamic banks so that people divert their money to conventional banks. Broadly speaking, the obstacles faced by Islamic banks during the Covid-19 period were liquidity problems and problematic financing ratios. Another obstacle is the incomplete liquidity in the industrial world. Some of these banks can feel excessive liquidity while the rest feel difficulties. So there needs to be a procedure that regulates liquidity evenly in the industrial world.

The FDR ratio can be used to assess liquidity in a bank. Because in Sharia only use the word financing in its operational activities, never use the word credit. This is because in Sharia principles it is stated that financing is the procurement of fees that come from bank agreements with other groups that are given financing for a certain period of time in the form of compensation for the provision of products or profit sharing in connection with the procurement of costs (Adawiyah and Azifah, 2020).

Capital Adequacy Ratio (CAR), both long and short periods, has a positive and significant impact on the Financing to Deposit Ratio (FDR) as the liquidity ratio in Islamic banks in Indonesia (Fathurrahman and Rusdi, 2019).

In this case, ROA has a negative and significant effect on FDR, so it can be said that the smaller ROA will not have an effect on decreasing financing, but will have an effect on reducing liquidity itself, in this case FDR (FDR) (Ervina and Ardiansari, 2016).

According to (Santoso and Sukihanjani, 2012) ROE has a negative and significant effect on liquidity. meaning that when liquidity has decreased, ROE will increase. So that you can see how to get a net profit, ROE is needed to show the capability of bank management in managing existing equity. And according to (Iqbal, 2012) bank size has a positive and significant effect on liquidity.

# LITERATURE REVIEW

#### Liquidity

(Mardiyanto, 2009) states that liquidity is used to calculate the capability of an agency to meet its short-term debt according to its time, settling long-term debt is included in the grace period. So it can be related that what is meant by liquidity in a bank is the capability of the bank for each period in terms of meeting short-term debt if the client asks for it. Meanwhile, according to (Kasmir, 2014) liquidity is a ratio that shows the company's capability to meet its debts in a short time.



A company can be said to be liquid if it is able to settle short-term debt or long-term debt. Conversely, when a company is unable to settle its debt in a short time or its debt for a long time, the following company is said to be illiquid.

In terms of liquidity calculations, banks can take advantage of the Financing to Deposit ratio (FDR). By using FDR, the credit application for the client is to what extent the bank can find out, which in the end the bank is able to fulfill its responsibilities related to the depositor's request in terms of withdrawing money that has been used by the bank for financing.

#### **Capital Adequacy Ratio (CAR)**

According to (Ush, Titis and Wardani, 2018) CAR is a ratio where one of its functions is a measure of equity capacity in increasing ownership of bank assets that can create effects. So the greater the CAR ratio, then it can be said when the bank has sufficient equity so that it can be used as liquid funds. Meanwhile, according to (Kasmir, 2014) CAR is a comparison of the above ratios by comparing the liquidity ratio to RWA with recommendations from the government. Then the conclusion is obtained from the explanation above CAR is a ratio that shows the expertise of banks to calculate the readiness of the bank's equity in supporting assets that can create an effect for the bank.

#### **Return on Assets (ROA)**

Return on Assets (ROA) is stated (Kasmir, 2014) is a ratio that describes the results of the amount of assets used by the company. Meanwhile (Munawir, 2011) ROA is part of the profitability ratio used to see how far the company is able to create profits from all costs used for the company's operations. So it can be concluded that ROA is the ratio used by a bank to assess its ability to generate profits.

#### **Return On Equity (ROE)**

Return on Equity (ROE) is used to calculate the income presented to company owners for the equity that has been invested in the company. So that when the income received is greater, the ownership of investors in the company is getting better (Kasmir, 2014). So the higher the ROE, the better. So it can be interpreted that the one who owns the company is in a better position, and vice versa.

#### **Firm Size**

Firm Size is the size of a company that can be measured by the number of assets or the size of the company's assets by using the calculation of the logarithmic value of total assets (Hartono, 2008). Meanwhile, according to (Santoso, Murni and Nugrahining, 2012) the size of a bank is the same as the size of the company, which means a size that can be grouped into the size of the company based on various rules, namely: total assets, log size, stock market value, and so on.

So it can be concluded that Firm Size is the value of the size of the company which can be observed from the number of assets, the number of sales, the amount of profit, which in turn has an effect on the company's social ability and realizes the company's goals.



#### **METHODS**

The author uses the SPSS 22 application in analyzing data. Data analysis begins with doing descriptive statistical analysis, classical assumption test, then multiple linear regression test, and the last is hypothesis testing. With data consisting of monthly financial reports of 14 banks from 2018 - 2020 with a sample size of 36.

#### RESULTS AND DISCUSSION Results Multiple Linear Regression Analysis

Table 1 Multiple Linear Regression Analysis         Coefficients <sup>a</sup>							
-	Unstandardized Coefficients		Standardized Coefficients	_			
Model		В	Std. Error	Beta	t	Sig.	
1	(Constant)	5.600	.416	-	13.461	.000	
	CAR	.015	.081	.039	.181	.857	
	ROA	.010	.013	.154	.764	.451	
	ROE	.007	.004	.379	1.739	.092	
	FirmSize	099	.035	530	-2.837	.008	

a. Dependent Variable: FDR

Seeing table 1 above, the equation formula can be made below: Y = 5.6 + 0.015X1 + 0.01X2 + 0.007X3 - 0.099X4

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

	Model Summary <sup>b</sup>						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate			
1	.535 <sup>a</sup>	.286	.194	.01525			
a. Predictors: (Constant), FirmSize, ROE, ROA, CAR							

Table 2 Coefficient of Determination (A directed  $D^2$ )

b. Dependent Variable: FDR

From table 2, the results of the coefficient of determination obtained Adjusted  $R^2$  value of 0.194, which means that 19.4% CAR, ROA, ROE, and Firm Size have an effect on FDR. While the remaining 80.6% was influenced by other variables not mentioned in this study.



#### Partial Test (t test)

Coefficients <sup>a</sup>							
		Unstandardized Coefficients		Standardized Coefficients			
Model		В	Std. Error	Beta	t	Sig.	
1	(Constant)	5.600	.416		13.461	.000	
	CAR	.015	.081	.039	.181	.857	
	ROA	.010	.013	.154	.764	.451	
	ROE	.007	.004	.379	1.739	.092	
	FirmSize	099	.035	530	-2.837	.008	

**A D** 

a. Dependent Variable: FDR

From Table 3 above, it is known that the t value for each independent variable. Next, look for the t table value with k = 5, n = 36, then df = n-k (36 - 5 = 31) in order to obtain t table = 2.039. So it can be concluded that the t test results are as follows:

- 1. CAR, with a t-count value of 0.181 < t table of 2.039 and a significance level of 0.857 > 0.05, CAR has an influence on FDR.
- 2. ROA, with a t value of 0.764 < t table of 2.039 and a significance level of 0.451 > 0.05, so ROA has no effect on FDR.
- 3. ROE, with a t value of 1.739 < t table of 2.039 and a significance level of 0.092 > 0.05, ROE has no effect on FDR.
- 4. Firm Size, with a t value of -2.837 > t table of 2.039 and a significance level of 0.008 < 0.05, Firm Size has a negative and significant effect on FDR.

## Simultaneous Test (F test)

Table 4 Simultaneous Test   ANOVA <sup>a</sup>							
Model		Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	.003	4	.001	3.103	.029 <sup>b</sup>	
	Residual	.007	31	.000			
	Total	.010	35				

a. Dependent Variable: FDR

b. Predictors: (Constant), FirmSize, ROE, ROA, CAR

From Table 4 above, it is known that the F value is calculated with a significance value. Then the next step is to look for the F table with the value df1 (n1) = k - 1 = 4 and df2 (n2) = n - k = 31 with a significance level of 0.05, then the F table is 2.68. Furthermore, F count is worth



3.103> F table is worth 2.68 and a significance value is 0.029 <0.05. So it can be concluded that the variables CAR, ROA, ROE, and Firm Size have a simultaneous and significant influence on the FDR variable.

#### Discussion

#### The effect of CAR on FDR

Based on the statistical results through the partial test shown by the t test, it is known that the t value is 0.181 < t table is 2.039 and the significance level is 0.857 > 0.05, so CAR has no effect on FDR. So that the results are according to research (Surya and Muslikhati, 2019), namely that CAR does not have a significant effect on sharia commercial banks liquidity. This is known from the relationship between FDR and CAR, which when financing increases, FDR also increases while the funds collected are small, it will result in a low CAR, which means that to deal with lack of funds, CAR is used.

#### Effect of ROA on FDR

Based on the statistical results using the t test, it can be seen that the t value is 0.764 < t table is 2.039 and the significance level is 0.451 > 0.05, so it can be interpreted that ROA has no effect on FDR. This is in line with (Afkar, 2017) which states that ROA has no effect on liquidity. From the conclusion of the analysis, it shows that the relationship between ROA and liquidity as proxied by FDR does not influence each other. This result is reinforced by the existence of a circular issued by Bank Indonesia No.3 / 30 / DPNP dated December 14, 2001 which shows that profitability and liquidity are part of whether a bank is healthy or not, which has their respective levels. When ROA increases, it will not indirectly increase liquidity, and vice versa. This is because the size of each ratio has no effect.

#### **Effect of ROE on FDR**

Based on the statistical results using the t test it can be seen that the t value is 1.739 < t table is 2.039 and the significance level is 0.092 > 0.05, so it can be interpreted that ROE has no effect on FDR. The results of this analysis are in line with what has been done (Afkar, 2017) where the ROE results have no effect on liquidity. From the above analysis, it shows that the profitability stated through ROE has no effect on liquidity. This is because liquidity does not have a direct relationship with the profits received by Islamic banks. Seen from the meaning of liquidity, it is the ratio between the total financing issued by TPF that has been received, which in the end the liquidity fulfillment is based on the total funds that can be received.

#### **Effect of Firm Size on FDR**

Based on the statistical results for the t test, it is known that the t value is -2.837 > t table is 2.039 and the significance level is 0.008 < 0.05, so the Firm Size variable has a negative and significant effect on FDR. The supporting result is research (Santoso, Murni and Nugrahining, 2012), namely the size of the bank has a positive effect on liquidity. Based on this research, it can be assumed that for the company's assets when the bigger the assets, the better the liquidity and vice versa



#### CONCLUSION

From the results that have been obtained, the conclusion is that partially the Capital Adequacy Ratio (CAR), Return on Assets (ROA), and Return On Equity (ROE) have no effect on the Financing to Deposit ratio (FDR) while Firm Size partially has an effect negatively and significantly on the Financing to Deposit ratio (FDR). Simultaneously, Capital Adequacy Ratio (CAR), Return on Assets (ROA), Return On Equity (ROE), and Firm Size have a significant influence on the Financing to Deposit ratio (FDR).

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