

## THE EFFECT OF LIQUIDITY RISK AND NON PERFORMING FINANCING (NPF) RATIO TO COMMERCIAL SHARIA BANK PROFITABILITY IN INDONESIA

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### ABSTRACT

The purpose of this study is to collect, process, and analyze data related to the level of liquidity and profitability of Sharia Commercial Bank in Indonesia. The population in this study consists of 10 Sharia Commercial Banks in Indonesia in the period 2014-2016. The method used in this research is descriptive and verification. Independent variables are measured by liquid asset to total asset ratio (LTA), ratio of liquid assets to deposit (LAD) and ratio of financing to deposit (FDR). While the dependent variable is measured by return on assets (ROA). Data analysis method used in this research is multiple regression. The result of this research indicates that variable of LTA and LAD have positive effect to profitability, while FDR variable and NPF variable have negative effect to profitability. The LTA LAD, FDR and NPF variables have a significant effect on profitability.

Keywords: Risk Liquidity, Non Performing Financing Ratio, Profitability

### Introduction

The bank is a financial intermediary institution that channel funds from the excess funds to parties who need funds at the specified time (lukman dendawijaya, 2009: 14). In performing its function as an intermediary institution, the bank bases its business activities on public trust. In addition, the bank functions for the development of national economy in order to improve the mapping, economic growth and national stability (Malayu SP.Hasibuan 2005: 4). The Bank plays an important role in stimulating the national economy because banks are collectors of funds from surplus units and credit distributors to deficit units, effective and productive saving places for communities, and to facilitate payments for all sectors of the economy (Malayu SP, Hasibuan 2005: 3). Islamic banks were originally formed as a response from a group of Muslim banking economists and practitioners seeking to accommodate the insistence of the various parties who wanted to have financial transaction services implemented in line with the moral and shariah principles of Islam. It is therefore founded on philosophical grounds as well as practice. Philosophically, because of the prohibition of taking usury in financial transactions and non-financial. Practically, because the interest-based or conventional banking system contains weaknesses. Given the importance of the function and role of sharia banking in Indonesia, the sharia banks need to improve their performance in order to create a sharia banking system that is healthy and efficient. Profitability is the most appropriate indicator to measure the performance of a bank (Sofyan, 2002). The higher the profitability of sharia banks, the better the bank's performance. The performance of Islamic banks can be judged from various variables taken from the financial statements of Islamic banks. These financial statements generate a number of financial ratios that can help users of financial statements in assessing the performance of Islamic banks. Table 1.1 below presents the average development of Shariah Commercial Bank Financial ratios in Indonesia over the period 2014-2016.

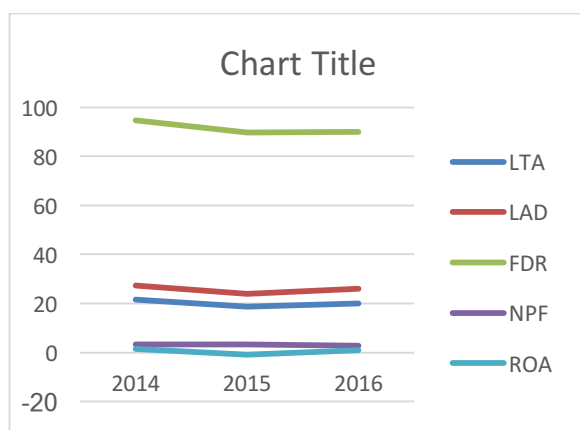


Table 1.1 Islamic Banks Financial Ratios 2014-2016

Tahun	2014	2015	2016
LTA	21,476	18,68	20,087
LAD	27,286	23,962	25,995
FDR	94,586	89,704	89,964
NPF	3,215	3,301	2,695
ROA	1,326	-0,792	0,822

From the table above shows that;

- When viewed from Liquid asset to total assets (LTA) fluctuations rose by 21.476% in 2014, while in 2015 decreased by 18.68% and increase again in 2016 by 20.087%, another case with the ROA ratio increased in 2014 by 1.326%, the decline in 2015 amounted to - 0.792 and up again in 2016 of 0.822%, from the LTA ratio can be seen sharia banks experience cash conditions that are small so that the bank difficulty earning a profit (Antariksa, 2005).
- When viewed from Liquid asset to Deposit (LAD) fluctuation rose 27, 286% in 2014, while in 2015 decreased by 23.962% and increase again in 2016 by 25.995% Another case with ROA ratio increased by 2014 by 1.326% the decrease in 2015 amounted to - 0.792 and up again in 2016 of 0.822%, this is not in accordance with the theory that the greater the ratio of

LAD then the liquidity position in a bank will be high resulting in low levels of profitability. Since the liquidity position of the bank has increased, it can be said that the ratio of LAD has a negative relationship to profitability (muhammad, 2005).

- FDR decline from 2014 -2015 followed by a decrease in ROA, only in 2015 a decrease in FDR followed by a negative ROA which means a loss occurs, this is not consistent with the theory that explains the higher financing deposits ratio (FDR), the higher the funds are channeled into Third Party Funds (DPK), large third party funds (DPK), the income of bank Return on Asset (ROA) is increasing (Antariksa, 2005). In order to obtain optimum FDR, the bank still has to maintain Non Performing Financing or bank soundness that influence the achievement of bank profit, if seen from FDR table at 85% - 110%, the bank in this case can be said to perform its function as intermediation (intermediary) with good (Kasmir, 2003), FDR with a certain range able to keep the NPF from 2014 to 2016 well but from the table seen profit decreased even loss in 2015.
- The NPF ratio from 2014 -2016 did not decrease significantly but the ROA of 2014-2015 has decreased. The above is not compatible with the theory that the higher the NPF (above 5%) the bank is unhealthy and the high NPF decreases the profit which will be accepted by sharia banks. The higher Non Performing Financing (NPF) of financing in Islamic banking indicates that the bank is not professional in the management of its financing, and gives an indication that the level of risk of providing financing at the bank is quite high. (muhammad, 2005).

Based on the phenomenon mentioned above, it should be investigated about liquidity management, NPF to profitability. So this research takes the title "The Effect of liquidity ratio, NPF to Profitability of Sharia Bank in Indonesia".

## Literature review

### LIQUIDITY RISK

Managing liquidity is a top priority of a financial institution and the issue of liquidity is a matter of day-to-day operations in the banking world. Liquidity is one of the factors that determine the success or failure of banking. Based on Bank Indonesia Regulation number 5/8 / PBI / 2003, the risk is the potential occurrence of an event that can cause bank losses while liquidity can be interpreted as the ability of banks to meet the obligations immediately or before maturity (Antariksa, 2005). The liquidity aspect assessment shows the bank's ability to manage adequate levels of liquidity in order to fulfill its obligations in a timely manner and to meet other needs. The Bank should also be able to manage its activities efficiently in the sense that the bank can reduce the high cost of liquidity management and at any time the bank can liquidate its assets quickly with minimal losses (SE BI Intern, 2004). The inability of banks to meet their liquidity needs can have an impact on the emergence of bank loss or bankruptcy. Therefore, liquidity risk management becomes important to maintain the viability of the banking system.

### MEASUREMENT OF LIQUIDITY RISK

Liquidity aspect can be measured by using liquidity ratio, such as financing deposit ratio (FDR), Liquid Asset to Deposit (LAD) and Liquid asset to Total Asset (LTA). Financing to Deposit Ratio (FDR) is a ratio that compares financing with third party funds or deposits. FDR has an influence on profitability because the greater this ratio indicates the greater the financing that will affect the increase in income. Increased profit, then profitability proxies with Return on Assets (ROA) will also increase. Liquid Asset to Deposit (LAD) is a ratio showing the ability of banks to repay deposits of depositors with the most liquid assets held by banks. A high LAD ratio indicates low liquidity risk, but bank profitability is also low as banks do not manage their funds optimally to generate profits. Liquid asset to Total Assets (LTA) is the ratio used to measure how much of an existing liquid assets of total assets owned (Space, 2005). LTA ratio has an influence on profitability, because if the cash available in a bank is too large, indicating inefficient management of the bank in carrying out its activities that will affect the low profitability.

### MEASUREMENT OF PROFITABILITY

Profitability can be measured by the Return on Asset (ROA) ratio. ROA is the most comprehensive accounting parameter in measuring banking performance (Iqbal, 2001) and becomes an indicator of bank's efficiency and management capability in generating profit from its operational activities. ROA is calculated based on the ratio of net profit before tax and total assets, and become an indicator of efficiency and ability of bank management in generating profit from its operational activities.

### THE EFFECT OF LTA (LIQUID ASSET TO TOTAL ASSET) ON PROFITABILITY

The LTA ratio is one measure of liquidity risk used to measure how much of an existing liquid asset of total assets owned by the bank (Antariksa, 2005). The high ratio of LTA, indicating the greater availability of the amount of assets that are ready to be converted into cash and show a fairly good bank liquidity. However, the more cash that is idle in the bank because it is not used for operational causes the bank to lose the opportunity to earn profit and the condition will ultimately affect the low level of profitability (Machmud and Rukmana, 2010). Thus it can be interpreted that the higher the LTA ratio the lower the profitability. Research on sharia banking about the influence of liquidity risk to profitability done by Antariksa (2005) and Machmud and Rukmana (2010) shows that LTA ratio negatively affect profitability, hence can be derived research hypothesis as follows:  
Hypothesis 1: Ratio LTA negative effect on the level of profitability.

### THE EFFECT OF LAD (LIQUID ASSET TO DEPOSIT) ON PROFITABILITY

The ratio of LAD is a ratio that aims to measure the ability of a bank to repay deposits of depositors using the most liquid assets owned by the bank. According to Davis (2008) in Hua Shen et al (2009), banks can avoid liquidity risk by having sufficient proportion of liquid assets that can be used to meet immediate or pre-due needs. Currently there are many instruments available that can be used by Banking to meet the funding needs of customers who want to withdraw their funds in the form of cash and other immediate needs (Antariksa, 2005), including sharia banking, although financial instruments used to meet the needs of limited liquidity because it must meet the requirements of sharia. Therefore, liquidity is a problem that many faced by sharia banking (Noraini, 2012). However, the excess of liquid assets indicates that the bank is inefficient in exploiting its funds so that it can affect the profit gain and adversely affect profitability. Thus, the higher the LAD the lower the profitability, meaning that

LAD has a negative effect on profitability. The results of research on banking on the influence of liquidity risk to profitability conducted Hua Shen et al (2009) showed that the ratio of LAD has a significant negative effect on profitability. From the framework of previous thought and research, it can be derived the research hypothesis as follows:

Hypothesis 2: Ratio LAD negative effect on the level of profitability

#### THE EFFECT OF FDR (FINANCING TO DEPOSIT RATIO) ON PROFITABILITY

According to Muhammad (2005) Financing to Deposit Ratio (FDR) is how much third party funds are released for financing or credit. In the conventional bank itself FDR known as LDR (Loan to Deposit Ratio). A high FDR ratio indicates a low bank liquidity and leads to high liquidity risk, as the amount of funds needed for financing or lending is growing. Significant financing means banks manage most of their funds in the form of financing / credit, which means that the revenue-sharing income / interest from financing / credit also increases and it automatically makes the bank profitability will increase. While the low FDR ratio shows the bank is less productive. A study of sharia banking that tests FDR on profitability conducted by Antariksa (2005) shows that FDR has a negative effect on profitability. This is likely due to the disbursed financing does not provide a big advantage for the Hypothesis 3: There is a positive influence of FDR (Financing to Deposit Ratio) on profitability in sharia banking.

#### THE EFFECT OF NON PERFORMING FINANCING (NPF) ON PROFITABILITY

NPF is one of the health indicators of asset quality, the higher the NPF (above 5%) the bank is unhealthy and the high NPF decreases the profit to be received by the sharia bank. Then the higher Non Performing Financing (NPF) of financing contained in Islamic banking shows that the bank is not professional in the management of financing, as well as providing an indication that the level of risk on the bank financing is quite high in line with the high NPF faced by banks that affect the profitabilias the bank itself. The implications for the bank as a result of the occurrence of problem financing / NPF among others will result in loss of opportunity to gain profit from financing provided, thus reducing the profitability and adversely affect the profitability of banks. If the value of customer financing scores is low it will have a high NPF impact, this will ultimately lead to lower profitability of sharia banks. The level of Non-performing Financing (NPF) will automatically affect profitability, the higher the NPF the profitability will be lower and vice versa, if the NPF is lower then profitability will be higher.

Hypothesis 4: Ratio NPF negative effect on the level of profitability.

#### Research Methods

Population which is the object of this research throughout the Islamic banks in Indonesia .By way of obtaining the data, the type of data in this study are secondary data . The secondary data obtained from the publication by the relevant agencies such as the Bank Indonesia and Islamic banks in the sample is browsing through the website of the agencies (Sugiyono, 2008). Analysis of the data obtained in this study will be using the program SPSS with Regression analysis method.

#### Results and discussion

Table 1.2 Regression Result

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.229270	2.710052	-0.453597	0.6540
LTA	1.072381	0.282789	3.792166	***0.0008
LAD	0.563927	0.325150	1.734357	*0.0952
FDR	-1.109375	0.399278	-2.778456	**0.0102
NPF	-1.563209	0.429418	-3.640293	***0.0012
R-squared	0.478692			
Adjusted R-squared	0.395283			
F-statistic	5.739073			
Prob(F-statistic)	***0.002031			

Interpretation :

$$ROA = -1,23 + 1,07LTA + 0,56LAD - 1,11FDR - 1,56NPF + e$$

\*, \*\*, \*\*\* : Signifikan in  $\alpha$  10%, 5%, 1%.

Adj. R Square : 39,5% Independent variables in the study were able to explain the variation of ROA as much as 39.5%, the remaining 60.5% is explained by other variables outside the research model.

**Hypothesis 1** if the LTA rises by 1 then the ROA of the company also rises by 1.072. So the LTA positively affects the ROA. The LTA ratio positively affects ROA

The linkage of LTA ratio with the level of profitability, can be explained that the greater the amount of assets available in a bank, the more liquid the bank. But the liquidity of a bank will result in low profitability. From the test results diketahui that LTA

variable has a positive and significant impact on the level of profitability. Test results at the bank sharia proves that the higher the LTA the higher the profitability of the bank. This is probably due to the sharia bank is able to maximize its liquid assets to gain profitability. This result is not in accordance with the theory between liquidity and profitability, which explains that the more liquid a bank then the level of profitability will decrease. However, these results are supported by research conducted by (Antariksa, 2005), (Guspiati, 2008) and (Nugraheani, 2014).

**Hypothesis 2** if the LAD nail of 1 then ROA also increased by 1.072, so LAD positively affect the ROA. The ratio of LTA positively affect the ROA

The linkage of LTA ratio with the level of profitability, can be explained that the greater the amount of assets available in a bank, the more liquid the bank. But the liquidity of a bank will result in low profitability. From the test results note that the LTA variable has a positive and significant impact on the level of profitability. This result is not in accordance with the theory between liquidity and profitability, which explains that the more liquid a bank then the level of profitability will decrease. But these results are supported by research conducted by (Antariksa, 2005) and (Guspiati, 2008). The results are not in accordance with the study by (Nugraheni, 2014) testing proves that LAD in Islamic banks have a significant negative effect on ROA.

**Hypothesis 3** if the FDR goes up by 1, the ROA will decrease by 1.109, so FDR negatively affects the ROA. The ratio of FDR negatively affects ROA

he higher the FDR of a sharia commercial bank, not a benchmark bank to obtain high profitability. From the data available on the FDR is quite good because according to the standards used Bank Indonesia is 85% to 110%. But an increase in FDR followed by a decrease in ROA is not in line with the theory of the increase in FDR can mean the channeling of funds to the financing of the larger the profit will increase (Pudji, Teguh Mulyono, 2010) should be with the increased FDR banks should be able to perform its function as a party intermediation well or manage the funds collected from the community to then be channeled in the form of financing which will increase the bank's income in the form of bonuses or profit sharing, which means the profit of Islamic banks also increased. The results are consistent with Antariksa (2005) but not in accordance with the results of the study (Nugraheni, 2014) shows that FDR has a positive and significant effect on profitability, which means the greater the financing distributed, the profitability will increase.

**Hypothesis 4** if NPF rises by 1, then RO will decrease by 1.56, so NPF negatively affects ROA. NPF ratio negatively affects ROA

In other words, the smaller the NPF will have an impact on the increase in ROA (Ismah Wati 2012) The level of health financing (NPF) influence the achievement of bank profits If a bank NPF conditions are high will result in lost opportunities to obtain revenue from financing provided and increase the cost provisioning of earning assets. The higher the NPF will lower the bank profitability. The results of this study is supported by the results of research adi setiawan (2009) and siti Nurkhosidah (2009) which shows the NPF results have a negative effect.

### Conclusions

The ratio of LAD and LTD positively affect the ROA, This result is not in accordance with the theory between liquidity and profitability, which explains that the more liquid a bank then the level of profitability will decrease. The liquidity of sharia banks on average is very low then in generating profitability is also very low. While the FDR negatively affects the ROA, the higher the FDR of a sharia commercial bank, not a benchmark bank to obtain high profitability. A high FDR ratio indicates a low bank liquidity and leads to high liquidity risk, as the amount of funds needed for financing or lending is growing. Significant financing means banks manage most of their funds in the form of financing, which means that revenue-sharing from financing also increases and it automatically makes bank profitability increase, but high FDR research results in lower profits. This means the incapacity of sharia banks in managing their financing. The ratio of NPF negatively affects the ROA means that the ratio of NPF of sharia banks is high but the profitability of sharia banks has decreased.

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