# The Influence of Non-Performing Financing (NPF) and Return on Assets (ROA) Against Linkage Multifinance at Sharia Commercial Bank in Indonesia

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Abstract: This study aims to determine the effect of Return on Assets (ROA) and the influence of Non Performing

> Financing (NPF) on the linkage. The population in this study was the sharia bank registered in Bank Indonesia during the period of 2008-2017 using guarterly financial report data. As the sample of research was 13 sharia banks throughout Indonesia that met the criteria. The analysis technique used was multiple regression using STATA 13 program. The research methodology used was a quantitative approach with the type of associative research. Quantitative research is a more focused numerical data analysis (number) that is processed by using statistical methods. While associative is research by explaining the relationship between variables x with variable y. Result obtained from all sharia banks was a relationship between ROA with two-way linkage of 0.019 and 0.031, while NPF has one-way effect 0.166 and 0.26, with a probability value smaller than  $\alpha$  0.05 sharia bank in Indonesia correlation between ROA and NPF to linkage. The result

> on ROA and NPF should considered for decision to provide linkage program and information for investor to invest in sharia bank.

# INTRODUCTION

serve as financial intermediaries connecting the surplus spending unit of the community to be returned to the community in the form of loans. Banking plays an important role to stimulate economic growth through disbursement in the form of working capital loans and investment loans. Both types of loans are productive loans that can provide a direct multiplier effect for the economy. Community access to financial institutions is one of the keys to the optimal functioning of the financial system. If the community can utilize financial services easily, it will encourage an increase in capital turnover. That way, financial institutions can implement equity capital in society, which will then encourage economic growth.

In its development, there are many commercial banks with sharia principles that implement Linkage Program, including Bank Syariah Mandiri, Bank Muamalat, BNI Syariah, Bank Danamon Syariah,

and so forth. According to Johan Arifin, the implementation of the Linkage program is a strategy aimed at empowering small and medium enterprises through the involvement of the financial industry. They channel it to the Linkage agency in an area capable of reaching UMKM to remote areas. For Bank Syariah Mandiri, starting from June 2012 there is an internal regulation that prohibits the channeling of Linkage Program to BPR.

At a glance the impression from customers both Linkage agencies and end users about the implementation of Linkage Program is very helpful. The economy in remote areas can increase and the welfare of society also increases. Basically, linkage financing uses a muḍārabah contract that requires a high trust between the fund owner and the fund manager. In addition, profit sharing should be in the form of an agreed ratio/percentage. In muḍārabah the profit is called the profit-sharing ratio because the amount of profit to be received by the owner of the fund and the fund manager cannot be known with certainty, because the amount of profit to be

received depends on the profit generated. Linkage multifinance is a linkage financing program that is done between the sharia bank with sharia financial institutions. In the current developments, there are indications that NPF and ROA can affect the number of linkage multifinance. In the world of sharia banking, this factor is inseparable from the high level of financing and the quality of bank assets reflected in the NPF level. Troubled financing remains a daunting for sharia banking. Moreover, experience proves that one of the causes of the economic crisis is the high level of NPF. The high NPF, particularly the stalled financing, contributed substantially to the poor performance of banks at the time. NPF is one indicator of whether or not a healthy Bank. That way, if a banking has a high NPF level then sharia banking will be more careful by reducing the amount of linkage financing. In addition to NPF, it is also indicated that ROA can affect the number of linkage multifinance. ROA is the company's ability to generate profit at the level of income between fund providers and fund managers. Seeing the importance of the influence of NPF and ROA on various Islamic banking transactions such as the linkage multifinance, the researchers are interested to conduct research with the title "Influence NPF and ROA Results Against Linkage Multifinance at Sharia Commercial Bank in Indonesia".

# 2 LITERATURE REVIEW

# 2.1 Forms of Partnership in Linkage Multifinance

Linkage programs are partnership financing. So, Islamic banks issue financing to the real sector indirectly. This partnership with 3 (three) forms, namely channeling, executing, and joint financing. Channeling is financing provided by Islamic public banks to cooperative customers / KJKS / BMT and BMT who act as agents who do not have the authority to decide on financing unless obtaining a power of attorney from a commercial bank. Records in Commercial Banks as financing for BMT customers, while the data on BMT is off balance sheet. Executing is financing provided by the Shari'ah commercial banks to cooperatives/KJKS/ BMT in the framework of financing to be distributed to BMT customers, where cooperatives/ KJKS/BMT have the authority to decide on financing to MSMEs. Listing at Sharia commercial banks as financing to BMT customers, while recording in cooperatives as loans to BMT customers. Joint financing is joint financing by sharia commercial banks and cooperatives against cooperative members. The authority to decide on financing is with BUS/UUS and KJKS/BMT. Recording of outstanding credit for commercial banks and cooperatives is as much as the portion of financing to members of cooperatives.

# 2.2 Effect of Financial Performance (ROA and NPF) on Linkage Multifinance

According to Bangun Ika Haryanto, in Islamic finance and banking journals, when a bank experiences problems in linkage financing, the profits that should be obtained by the bank will decrease. The reduced level of bank profits will have an impact on decreasing income which can affect the bank's financial performance. Because financial performance has an important meaning in an effort to maintain its long-term survival, because financial performance shows whether the business entity has good prospects in the future. Thus every business entity will always try to improve its financial performance, because the higher the level of financial performance of a business entity, the survival of the business entity will be more guaranteed. According to Harahap (2010: 305) Return On Assets (ROA) describes asset turnover measured from sales. The greater this ratio, the better and this means that assets can spin faster to gain profits. In addition to the financial performance, the higher the NPF (above 5%), the bank is declared unhealthy because the high NPF causes a decrease in profits to be received by the bank (Popita, 2013).

#### 3 RESEARCH METHODS

The method used is quantitative. Quantitative approach aims to determine whether the ROA and NPF variables affect each other against linkage multifinance, and whether there is a long-term relationship or short-term ROA and NPF to linkage multifinance. The variables are arranged into a model estimated using granger causality analysis and cointegration, then will be described. The research approach used in this research is quantitative approach. The population in this study is existing sharia commercial banks in Indonesia. Based on sharia banking statistics as of December 2017 with 13 sharia banks. The sample in this study was taken by purposive sampling. Data analysis techniques were processed and analyzed using the program strata 13. Operational definition:

ROA = Annual Report Islamic banking statistics agency, Ratio scale in percent

NPF = Non Performing Financing, an indicator of the annual Islamic Banking statistics report, Ratio scale in percent Linkage = Financing program for sharia commercial banks to cooperative / KJKS / BMT and BMT customers, annual report indicators and evaluation, Ratio scale in *mudharabah* agreement.

#### 4 RESULTS AND DISCUSSION

# 4.1 Stationary Test (Unit Root Test)

Table 4.1: Stationary Test Results.

Dickey-fuller test for unit root		Value T-statis	Value T-statistics and critical values			
Interpolated dickey-fuler						
	Test Statistics	19 Critical Value	59 Critical Value	109 Critical		
				Value		
Linkage	-6.635	-3.655	-2.961	-2.613		
NPF	-9.274	-3.655	-2.961	-2.613		
ROA	-2.898	-3.655	-2.961	-2.961		

Mackinnon approximate p-value for z (τ)=0.0000

Table 4.1 shows the stationary test results on the degree level. The test results show stationary data at critical values of 1%, 5%, and 10%, all variables have met the stationary criteria because the resulting

t-statistic value is more negative than the critical value of 5%

# 4.2 Optimum Lag Determination

Table 4.2: Optimal lag length.

Lag	LL	LR	df	p //	FPE	AIC	HQIC	SBIC
0	-288.42				919.921	15.3379	15.3939	15.4674
1	-237.975	100.89	9	0.000	104.095	13.1555	13.3406	14.6444 *
2	-226.339	23.274*	9	0.006	91.5537*	13.0179*	13.3399*	13.9224

Endogenous: Linkage, NPF,ROA

The second stage in the VAR analysis is the determination of the optimum lag. The determination of the number of lags in the VAR model is determined on the information criteria recommended by the smallest value of Final Prediction Error (FPE), Akaike Information

Exogenous: cons

Criterion (AIC), Schwars Criterion (SC), and Hannan-Quinn (HQ). The stata program has given the star clues to the lag set as the optimum lag. Table 4.2 shows that almost all stars are in lag 2. lag 2 is defined as the optimum lag and is used at all stages in the VAR analysis.

## 4.3 Cointegration Test

Table 4.3: Cointegration Test Results.

Vecrank Linkage,NPF,ROA, Lag							
Johansen tests for cointegrations							
Trend: constant	Trend: constant Number of obs = 38						
Sample: 2 -40							
Maximum rank				Trace statistics	59		
					critical		
	parms	LL	Eigenvalue		value		

0	3	-283.49754		37.4714	28.88
1	8	-273.4222	0.58360	17.3206	15.42
2	11	-267.10756	0.42253	4.6914	3.76
3	12	-255.761888	0.19451		

From the results of table 4.3 can be seen in the cointegration test using Johansen Test, obtained results that ROA, NPF and Linkage cointegrated in the long term, which is indicated by trace statistic> critical value 5%. The value of the trace statistic of the trace test is 37.4713, 17.3206, 4.6913 greater than the critical value of 28.88, 15.42, 3.76 which means that in the system there is one cointegrated

equation. This shows that in the three variables (ROA, NPF and linkage) on Islamic bank in Indonesia in the period 2008-2017 there is a long-term relationship or cointegrated.

# 4.4 Causality Test

Tabel 4.4: Causality Test results.

Equation	Excluded	Chi2	Df	Prob>chi2
ROA	LINKAGE	7.916	2	0.019
LINKAGE	ROA	7.916	2	0.031
NPF	LINKAGE	6.96	2	0.166
LINKAGE	NPF	6.96	2	0.026

From the table above, it can be explained that the relationship between Granger Causality is a variable with a probability value less than  $\alpha$  0.05 shows that there is a relationship between ROA and two-way linkage of 0.019 and 0.031, this shows ROA to linkage is related, so every profit obtained by Islamic commercial banks has increased assets, capital, and the number of customers will increase linkage financing in the linkage for the financial institutions sector, while linkage has a greater influence because of the financing factor there is also a Sharia commercial bank linkage program which is given to the financial institution sector in the form of coaching so it will also improve financial performance. This is the link between return on assets on the improvement of funds and linkage.

On the other hand, NPF affects one direction 0.166 and 0.26. when there are non-performing loans, the financing will be funded to provide funds is also not smooth, besides that the ability of bank partners in managing funds and profits is certainly not related to the policy of the sharia commercial banks themselves because commercial banks are the only linkage financing providers. Linkage is one form of real sector financing in banks.

## 5 CONCLUSIONS

The results show that ROA has a two-way relationship with linkage, whereas the NPF has a one-way relationship with the linkage. This shows that there is a link between return on assets on the improvement of funds and linkage, then every profit that is obtained by Islamic commercial banks has an increase in assets, capital, and the number of customers will increase linkage financing in the financial institution sector if the linkage also provides large financing to the financial institutions sector, while linkage has a greater influence on ROA because in addition to the financing factor the Sharia Commercial Bank linkage program given to the financial institution sector in the form of coaching will also improve financial performance. This shows that there is a link between return on assets on the improvement of funds and linkage.

The results of the NPF variable causality test affect Linkage. when there are non-performing loans, the financing will be stalled so that the linkage program to provide funds is also not smooth, besides that the ability of bank partners (financial institutions) in managing funds and profits is certainly not related to the policy of the sharia commercial banks themselves because commercial banks are the only linkage financing providers.

Linkage is one form of real sector financing in banks.

The number of finance linkage finance is not only influenced by economic motives such as NPF and ROA, but also influenced by other factors not included in the study. We recommend that more research needs to be done on variables that can affect the number of financing linkage finance companies.

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