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THE EFFECT OF CREDIT RISK ON PROFITABILITY (A CASE STUDY ON INDONESIAN SHARIA COMMERCIAL BANK IN 2012-2016)

Aldilla Kurnia Dian Permata Sari
Universitas Gunadarma, Indonesia
aldillakurnia@gmail.com

Abstract

The background of the present study is reduced profitability among sharia commercial banks in 2012-2016. The present study aimed to determine 1) the description of credit risk measured by Non-Performing Loan (NPL), 2) description of profitability measured by Return on Asset (ROA), 3) the effect of credit risk on profitability. The research methods in the present study were descriptive and verification. The analysis technique was simple linear regression analysis. The research population was Sharia Commercial Bank Group in 2012-2016 which consisted of 13 companies. The sample was 12 Sharia commercial banks in 2012-2016 sampled using purposive sampling technique. The research result showed that the credit risk measured by Non-Performing Loan had negative effect on profitability measured by Return on Asset (ROA), meaning that if credit risk increased, the profitability level would decrease. Conversely, if the credit risk decreased, the profitability would increase.

Keywords: Credit Risk, Profitability, NPL, ROA

INTRODUCTION

A company which can maintain its survival in long term shows good future prospects. Therefore, every company should increase it profitability because profitability is the result of a series of asset policies and management, so profitability analysis is used to measure business efficiency and the profitability level of the bank. The higher the level of profitability of a business entity, the more assured the survival of the business entity (Herlina, Nugraha, and I. Purnamasari 2016:

31). Generally, the profit generated by company comes from sales and investment income. Essentially, profitability shows a company's efficiency (Kasmir, 2002:44).

Banking plays an important role in economic stability growth. When the economic sector weakens, one of the ways to restore economic stability is reforming the banking sector. In Article 1 of Law No. 10 of 1998, bank is a business entity which collects fund from the society in the form of deposit and distributes it to the society in the form of credit and or other forms in order to improve the standard of living of the general public. Banks in Indonesia can be classified into several types by function, ownership, status and pricing method. By its function, banks consist of Central Bank, Commercial Bank, and Rural Bank.

By its ownership, banks consist of Government-Owned Bank and Mixed Bank. BY status, banks consist of Foreign Exchange Bank and Non-Foreign Exchange Bank. Meanwhile, by pricing method, banks consist of Conventional and Sharia banks (Kasmir, 2012:22).

In its operations, bank also has the main purpose of reaching maximum level profitability. Profitability is the correct indicator to measure the performance of a bank (Syofyan, 2002). The measurement of profitability in the present study was Return on Assets (ROA). According to the Bank Indonesia Circular Letter No.13/24/DPNP dated 25 October 2011, ROA is the ratio of Earning Before Tax (EBT) to total asset.

ROA is important for bank because ROA is used to measure a company's effectiveness in generating profit using its assets. The average growth of Return on Asset of Indonesian banks is presented in Table 1 below:

Table 1 Growth of Return of Asset of Indonesian Banks in 2012-2016

Bank	**Year**				
	2012	**2013**	**2014**	**2015**	**2016**
Conventional Commercial Banks	3,11%	3,08%	2,85%	2,32%	2,36%
Sharia Commercial Banks	2,14%	2,00%	0,41%	0,49%	0,65%

Source: Statistics of Conventional and Sharia Banks in 2012-2016, processed data

Table 1 shows that the averages of conventional commercial banks and sharia commercial banks in Indonesia lowered. Although, they improved in 2015 and 2016, it wasn't significant. Sharia commercial banks also had lower profitability than conventional commercial banks. Lowering Return on Asset reflect unhealthy bank and survives in competitive economic condition.

$$ROA = \frac{earning\ \ before\ \ tax}{average\ \ total\ \ assets}\ x\ 100\%$$

Lowering return on asset value will affect investor's policy in withdrawing fund for investment, so disturbed business activities of bank will reduce income and profitability level. Reduced profitability will make a bank's profit ability in managing fund from asset to not be optimal.

One of the factors affecting profitability is Credit Risk. Olweny (2011:5) states that "Credit Risk is one of the factors affecting bank profitability".

This is in line with the study by Sufianand Habibullahin Syed, (2013:12) on the profitability of Chinese banking sector, which finds that "Credit Risk affects the profitability of State-Owned Enterprise commercial bank". Credit risk can be seen from Non-Performing Loan (NPL) ratio which is used to measure the ability of bank management in managing non-performing loan given by bank. The higher the Non-Performing Loan (NPL) ratio, the worse the bank credit quality, increasing the amount of non-performing loan and causing loss. Conversely, the lower the Non-Performing Loan (NPL), the higher the bank's profit or profitability (ROA). The purposes of the present study were to get information on:

1. Credit Risk of Sharia Commercial Banks
2. Profitability of Sharia Commercial Banks
3. The effect of Credit Risk on Profitability.

LITERATURE REVIEW

According to Rahcmat Firdaus and Maya Aryanti (2009:34), "Credit risk is a risk which may occur due to failure of returning some of the credit which is distributed and becomes non-performing credit, thus affecting bank income". According to Siamat (2012), credit risk or non-performing credit can be defined as loan which is difficult to settle due to intentional or due to external factor beyond the debtor's control.

Credit risk reflects some Non-Performing Loan (NPL). Dahlan Siamat (2012:174) states that "Non-Performing Loan (NPL) is a loan which is difficult to settle due to intentional or due to external factor beyond the debtor's control. Credit risk is one of the factors affecting bank profitability. Meanwhile, according to Masyudi Ali (2006:70), "The bigger the bank's credit risk, the greater the possibility that the bank's assets don't have the profit expected by the bank, and it will affect the return on asset value of the bank."

Similarly, the study by Sufian and Habibullahin Jurnal Syed (2013:12) states that "Credit risk affect profitability. This is supported by previous studies which find that Credit Risk (NPL) affects Profitability (ROA), i.e.: Herlina, Nugraha and I. Purnamasari (2016), Ahmad Buyung

(2009), Diana Puspitasari (2009), Anggrainy Putri (2011), Restiyana (2011), Hardiyanti (2012) and Zuldhika (2012).

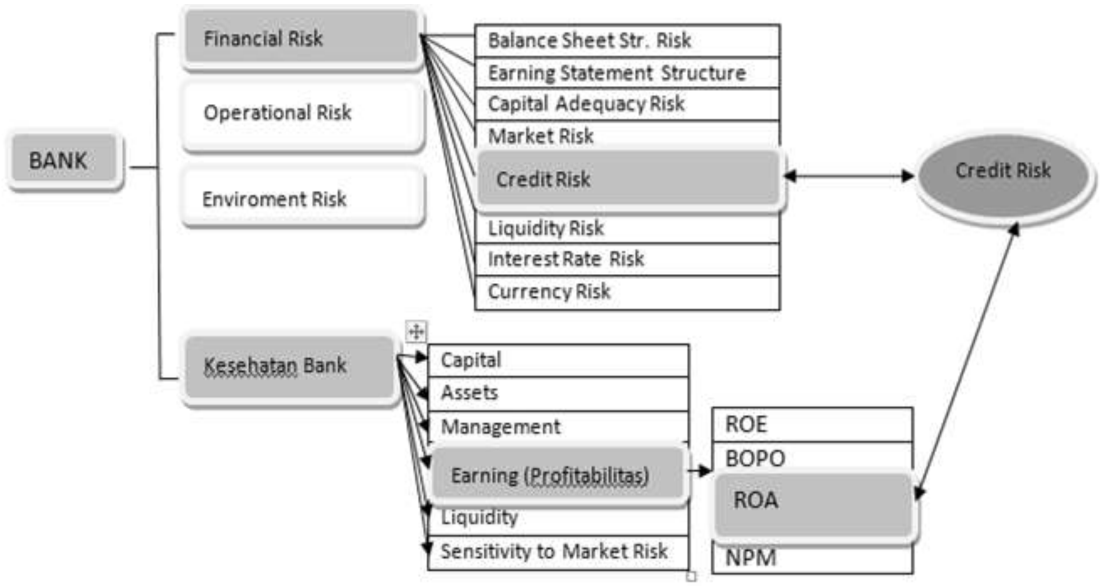

Figure 1 Framework of the Effect of Credit Risk on Profitability

Based on the framework, the research paradigm is described below.

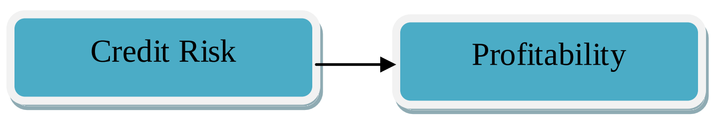

Figure 2 Research Paradigm of the Effect of Credit Risk on Profitability

The hypothesis to be examined in the present study was “Credit Risk negatively affects Profitability.”

RESEARCH METHOD

The research objects were Sharia Commercial Banks and the analysis unit was financial statement of each bank classified as Sharia Commercial Bank. Sharia commercial banks were selected as the research objects because base on Indonesian banking statistical report data, the profitability of sharia commercial banks increases, but insignificantly. It’s still below Conventional Banks and it should be addressed. Based on the research object, the effect of Credit Risk (NPL) on profitability of Sharia Commercial Banks in 2012-2016 are studied. The present study aimed to examine the effect of independent variable on dependent variable. The present study tried to explain the effect of credit risk (NPL) as variable X on profitability (ROA) among Sharia Commercial Banks in 2012-2016 as variable Y.

The research population was all sharia commercial banks in Indonesia which released financial statements of 2012-2016 period. Based on Indonesian Banking statistical data, the number of sharia commercial banks operating up to 2016 was 13 banks. The sampling technique was purposive sampling with the following criteria: 1) Banking company listed in Financial Service Authority (OJK). 2) Having annual financial statement during the observation period. Based on the criteria, companies which qualified and became samples in the present study were 12 companies. The data type used in the present study was secondary data from banking financial report of 2012-2016 from Indonesian Banking Statistics.

The data type used in the present study was documentary data. The data sources of the present study were secondary data from the website of each sharia commercial bank and financial report from Indonesian banking statistics data *www.ojk.co.id*.

Secondary data is research data source collected indirectly through mediating media (obtained and recorded by another party). The data is usually compiled evidence, note, historical report.

RESULTS AND DISCUSSION

The sample criterion was bank which released complete annual financial report of 2012-2016 consistent with the research variable. The sample in the present study was 12 banks.

Table 2 NPL Data of Sharia Commercial Bank in 2012-2016 (in %)

No	Name of the Bank	2012	2013	2014	2015	2016
1	Bank Mega Syariah	2.67	2.99	3.89	4.26	3.3
2	Bank BRI Syariah	2.09	3.26	3.65	3.89	3.19
3	Bank Bukopin Syariah	4.59	4.27	4.07	2.99	3.17
4	Bank BNI Syariah	2.02	1.86	1.86	2.53	2.94
5	Bank Muamalat	2.09	4.69	6.55	7.11	3.83
6	Bank Syariah Mandiri	2.82	4.32	6.84	6.06	4.92
7	Bank Jabar Banten	1.69	2.91	4.15	2.83	2.07
8	Bank BCA Syariah	0.1	0.1	0.1	0.7	0.5
9	Bank Victoria Syariah	3.19	3.71	7.1	9.8	7.31
10	Bank Maybank Syariah	2.49	2.69	5.04	35.15	43.99
11	Bank Panin Syariah	0.2	1.02	0.53	2.63	2.26
12	Bank Aceh Syariah	3.69	3.3	2.58	2.3	1.39

Table 3 ROA Data of Sharia Commercial Bank in 2012-2016 (in %)

No	Name of the Bank	2012	2013	2014	2015	2016
1	Bank Mega Syariah	3.81	2.99	3.89	4.26	3.3
2	Bank BRI Syariah	0.88	3.26	3.65	3.89	3.19
3	Bank Bukopin Syariah	0.55	4.27	4.07	2.99	3.17
4	Bank BNI Syariah	1.48	1.86	1.86	2.53	2.94
5	Bank Muamalat	1.54	4.69	6.55	7.11	3.83
6	Bank Syariah Mandiri	2.25	4.32	6.84	6.06	4.92
7	Bank Jabar Banten	2.46	2.91	4.15	2.83	2.07
8	Bank BCA Syariah	0.8	0.1	0.1	0.7	0.5
9	Bank Victoria Syariah	3.19	3.71	7.1	9.8	7.31
10	Bank Maybank Syariah	2.49	2.69	5.04	35.15	43.99
11	Bank Panin Syariah	0.2	1.02	0.53	2.63	2.26
12	Bank Aceh Syariah	3.69	3.3	2.58	2.3	1.39

Linearity Test

Table 4 Linearity Test Result

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.149	2	1.575	1.058	.387[b]
	Residual	13.396	9	1.488		
	Total	16.545	11			

a. Predictors: (Constant), NPL b. Dependent Variable: ROA

Table 4 shows that the ANOVA sig out value is 0.000<0.05, so that it's concluded that the data is linear.

Simple Regression Analysis

Table 5 Simple Linear Regression Estimation Result

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	.344	.872		1.029	.308
	NPL	-.136	.530	-.184	-7.223	.000

a. Dependent Variable: NPL

Table 5 shows the result of simple linear regression estimation. The regression equation of credit risk and profitability is as follows:

Y= a + bX

ROA= 0,344 - 0,136X

The regression equation means:

1. Constant a is 0.344, meaning that the regression cut the Y axis at 0.344, which is an estimated dependent variable value at X=0, or in other words, if there was no credit risk, the profitability of sharia commercial banks was 0.344.
2. The regression equation above shows that the value of b or regression coefficient of credit risk is negative (-). It shows negative effect of credit risk on profitability. It means that if credit risk increased, profitability decreased. Conversely, if credit risk decreased, profitability increased.
3. The regression coefficient of credit risk (NPL) is -0.036. It shows that every 1% increase of credit risk (assuming the other variable is constant) would reduce profitability by 0.036 times. The negative effect of NPL indicates that the higher the non-performing loan in bank credit management as shown by NPL, the lower the bank income level reflected by ROA.

F Test

Table 6 F Test Result

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	245.883	1	245.883	52.173	.000[a]
	Residual	273.346	58	4.713		
	Total	519.229	59			

a. Dependent Variable: ROA

b. Predictors: (Constant): NPL

Based on the result in Table 6, F count is 52.173, while F table from F Table with degree of freedom of 1 and degree of denominator of 58, as well as significance level of 0.05 is 4.007. Because Fcount>Ftable, i.e. 52.173 >4.007, H_0 was rejected. It shows that the alternative hypothesis that the regression equation model of the effect of credit risk on profitability was correct. Therefore, credit risk through linear regression equation model could be used to predict profitability.

t Test

Table 7 t Test Result

Coefficients[a]						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	.344	.872		1.029	.308
	NPL	-.136	.530	-.184	-7.223	.000

a. Dependent Variable: ROA

Based on the table above, t count is -7.223 and t table is -2.228, meaning –t count ≤ -t table (-7.223 ≤ -2.228), with probability value of (sig)= 0.000. Therefore, H_0 was rejected and H_a was accepted, meaning the significance level of credit risk (NPL) on profitability (ROA) is 0.000, smaller than significance level of 0.05, so credit risk affected profitability.

CONCLUSION

Summary

1. Description of credit risk measured by Non-Performing Loan (NPL) among sharia commercial banks shows that based on the result of hypothesis 1 test, among sharia commercial banks, NPL has significant negative effect on ROA which is shown by significance value smaller than 0.05, i.e. 0.00, so hypothesis 1 is accepted.
2. Description of profitability measured by Return on Asset (ROA) among sharia commercial banks shows that in 2012-2014 there was reduction and in20 there was an increase. It shows that sharia bank companies don't maximize their assets to get profit.
3. Credit risk has negative effect on profitability. It means that every increase of NPL will reduce bank profitability, while decreased or low NPL will increase bank profitability.

Research Limitations and Further Research

There are a few limitations to this study, including:

1. Limited research sample, i.e. sharia commercial banks which has annual financial reports from 2012-2016, totaling in 12 samples, and relatively short observation period, i.e. 5 years.
2. There are other variables which aren't used and have significant contribution to the profitability of banking companies.

The researcher believes there are many limitations in the present study, so future researchers of profitability should increase the research period and look for other indicators in the internal factors, i.e. bank size, liquidity, tax, capital, productivity growth, operating efficiency, non-traditional activities. The external factors are sector development, stock market development, GDP growth and inflation.

Suggestions

1. As credit risk measured by NPL distributed by sharia commercial banks increases, to anticipate rising non-performing loans, companies should reduce non-performing loans and substandard loans by selectively reviewing credit distribution, performing quarterly credit analysis, monitoring payment of interest and current principal of loan to reduce the risk of non-performing loans as much as possible.
2. Profitability shows bank productivity in making profit from total asset. Profitability can be increased by increasing productive assets by minimizing non-performing loans in the company. If a company's profitability is good, the public trust to the company will be high.
3. The research result shows that credit risk negatively affects profitability, so the author recommends bank companies to reduce the amount of non-performing loans (NPL) using prudential principle by considering collectability and increasing the usage of productive assets with higher amount of distributed credits to increase profit and affect bank profitability positively.

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