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CREDIT RISK MANAGEMENT IN FINANCIAL INSTITUTION: COMPARATIVE STUDY IN ISLAMIC AND CONVENTIONAL BANKING

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ABSTRACT

Credit and financing problems at conventional banks and Islamic banks are related to how businesses that have been financed by banks can be run, whether the loan recipient has actually run the business as stated in the contract or the business manager has been denied. The purpose of this study was to determine the differences in Non-Performing Loans in conventional banks and Non-Performing Financing of Islamic banks. Hypothesis testing techniques in this study used the first two choices of independent sample t-test if the data were normally distributed so the classical assumptions were tested first to ensure that the data used by researchers had a normal distribution and if the data were not normally distributed will use the Mann Whitney test to test the difference between Non Performing Loans and Non Performing Financing in Islamic commercial banks and conventional banks.. So the results of this study indicate that there are differences between PT. Bank Mandiri and NPF of PT Bank Syariah Mandiri, or it can be said there is a difference between ratios that indicate the the ability and strength of bank management in maintaining and managing loan risk or financing problems provided by PT. Bank Mandiri and PT Bank Syariah Mandiri.

Keyword: Non-Performing Loans, Non-Performing Financing, Islamic banking

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INTRODUCTION

Economic growth of a nation requires a pattern of regulation in processing economic resources that are available in a directed and integrated manner and utilized to improve the welfare of society (Singh, 2013). To regulate all economic resources from various sectors, we need a financial institution that regulates and connects all economic actors in terms of financial traffic. Banks are financial institutions that play an ideal role that is in connecting the interests of economic actors who are overfunded and those who are underfunded (Aduda, 2011).

Banks play an important role in boosting the national economy because "Banks are collector of funds from surplus units and channeling credit to deficit units", an productive and saving effective saving place for the society, as well as facilitating the flow of payments for many sectors of the business and economy. Main activities of banking institutions, both banks conventional and Islamic banks are raising funds and channeling funds, both in credit or financing to the people who need funds, both for investment, working capital and consumption (Anderson, 2010).

Bank as an intermediary institution is a fund storage institution for the public and also a fund security institution that has many functions. (Kaaya, 2013) describes the main function of banks is "to provide services to the public, both in the form of depositing funds and channeling funds to the public". Bank financial institutions channel their funds to the public in the form of productive and consumptive loans. For conventional banks, consumer loans are given to customers who lack funds by lending money to customers and returning them at certain times. Whereas in Islamic banks loans are given to customers who lack funds where the bank does not provide loans in the form of money but goods that are given to the customers (Krahnen, 2013).

Both conventional banks and Islamic banks have their respective regulations to determine and regulate lending and financing and other banking services carried out by these banks. However, "the rules must be guided by general banking regulations." 4 The lending system of conventional banks places more emphasis on the interest earned on debtors and the amount of loan repayments to be paid by debtors is "equal to the amount credit loans received along with the amount of credit interest determined by the bank ". So that the interest can be included in bank income and profits. If viewed in terms of sharia, then what is applied to conventional banks is including usury (Markowitz, 1952).

Meanwhile, the financing system applied to Islamic banks has several differences with the lending system applied to conventional banks. When there are debtors who borrow funds to Islamic banks, between the bank and the debtor will make an agreement at the beginning of the financing which is considered as a binding contract between the bank with prospective customers or prospective debtors (Kaplan, 2014). These agreements include the level of profit margins to be obtained by the bank and the loan debt repayment process by the customer. From the level of profit margins this is the bank's profit (Kithinji, 2010).

This difference is sometimes equalized by some people, where people only see that in conventional banks in the provision of consumer loan facilities use the interest instrument and in Islamic banks use the profit margin instrument in the provision of consumer loans. It is far from that in this fundamental difference that gives sufficient difference between conventional banks and Islamic banks in the provision of consumer loans, where from these differences then lead to differences in lending procedures between the two and the process of taking profits at conventional banks and Islamic banks that determine the orientation is in the corridor of Islamic principles (Dasah, 2012).

Loans and financing that have been channeled by the conventional and Islamic banks through the principles and rules of buying and selling and profit sharing to the public will potentially lead to problem loans. Credit and financing problems at conventional banks and Islamic banks are related to how businesses that have been financed by banks can be run, whether the loan recipient has actually run the business as stated in the contract or the business manager has been denied (Ogboi, 2013). Non-performing loans and financing can be seen from the level of non-performing loans called the ratio of NPLs at conventional banks and NPF in Islamic banking. While credit or financing is the largest asset as well as the largest source of income for banks. Meanwhile, the fragility of the banking sector is partly due to the large proportion of Non Performing Loans (Poudel, 2012).

Non-performing loans is the rate of return on loans given by depositors to banks, or we can say that NPLs and NPF can be referred to as non-performing loans (Chijoriga, 2011). The risk of bank losses due to non-current financing repayments will affect the income and profits received by the bank. In granting financing to customers by Islamic banks, providing financing based on buying and selling principles and profit sharing (Frank, dkk, 2014). The difference between NPL and NPF can be seen from the operational system of lending to conventional Bank Mandiri and lending to Bank Mandiri Syariah. The difference can be seen in the contract or agreement, and the mechanism of the two banks in obtaining profits. So then more in-depth research is needed to see the point of difference starting from the procedure up to the mechanism of the two banks in making a profit. Thus it is expected to increase public understanding and knowledge about conventional banks and Islamic banks.

METHODOLOGY

The basic concept of operational definition includes understanding to get the data to be analyzed with the aim of operationalizing research concepts into research variables and their measurement. According to (Fraser & Simkins, 2010) the operational variable is a definition given to the variable by giving or specifying the activities needed to measure the variable. The operational definitions used in this study are Non Performing Loans and Non Performing Financing.

Non Performing Loans are ratios that show the performance of bank management to mitigate loans risk provided by banks (García, 2013). NPL is calculated based on a comparison between the number of problem loans compared to the total loans. Non Performing Financing is financing that does not have good performance and is classified as substandard, doubtful and loss. NPF is calculated based on a comparison between the amount of problem financing compared to the total financing (Gatimu & Frederick, 2014). The formula is as follows (Jovanith, 2010):

NPL = (Number of Non-performing Loans) / (Total Loans) x 100%

NPF = (Amount of Troubled Funding) / (Total Funding provided) x 100%

Bank Indonesia (BI), as the central bank and banking supervisor in Indonesia, provides provisions for assessing the soundness of the Bank. One of BI's provisions regarding NPLs and NPFs is that Banks must have NPFs of less than 5%.

Hypothesis testing techniques in this study use the first two choices of independent sample t-test if the data is normally distributed so the classical assumptions are tested first to ensure that the data used by researchers have a normal distribution and if the data are not normally distributed will use the Mann Whitney test to test the difference between Non Performing Loans and Non Performing Financing in Islamic commercial banks and conventional banks.

RESULT

The object of research, or also called the focus of research chosen in this study is PT. Bank Mandiri and PT Bank Syariah Mandiri for the period 2010-2019. The data used in this study are secondary data in the form of annual financial reports or Annual Report of PT. Bank Mandiri and PT Bank Syariah Mandiri. Measurements were made using Non Performing Loans and Non Performing Financing. The number of samples used is 34 samples with details consisting of 17 NPL data of PT. Bank Mandiri for the period 2000-2019 and 17 NPF data of PT Bank Syariah Mandiri for the period 2010-2019.

Comparison of PT. Bank Mandiri and NPF PT Bank Syariah Mandiri

The following is NPL data from PT. Bank Mandiri and NPF of PT Bank Syariah Mandiri during the observation period, 2000-2016:

Tabel 1.

NPL of PT. Bank Mandiri and PT Bank Syariah Mandiri NPF for the period 2010-2016

Years	NPL of PT. Bank Mandiri	NPF of PT Bank Syariah Mandiri
2000	19,8 %	3,41 %
2001	2,7 %	2,11 %
2002	1,6 %	1,10 %
2003	1,8 %	2,32 %
2004	1,6 %	1,97 %
2005	15, 3 %	2,68 %
2006	5,9 %	4,64 %
2007	1,5 %	3,39 %
2008	1,1 %	2,37 %
2009	0,4 %	1,34 %
2010	0,6 %	1,29 %
2011	0,45 %	0,95 %
2012	0,37 %	1,54 %
2013	0,37 %	2,1 %
2014	0,44 %	2,3 %
2015	0,60 %	3,06 %
2016	0,85 %	3,9 %

Source: Annual Report, 2018

From the data above, it can be seen that both PT. Bank Mandiri and NPF PT. Bank Syariah Mandiri experienced fluctuating movements. NPL of PT. Bank Mandiri and NPF PT. Bank Syariah Mandiri does not consistently improve from year to year. If referring to the provisions of Bank Indonesia (BI) as the central Bank and banking supervisors in Indonesia who provide the provisions of the Bank's soundness rating measure regarding NPLs and NPFs, Banks must have a NPF of less than 5%. In the case of PT. Bank Mandiri and NPF PT. Bank Syariah Mandiri has an NPL and NPF value of more than 5%.

At PT. Bank Mandiri, NPLs exceed Bank Indonesia regulations or more than 5%, namely occurred in 2000 NPLs of 19.8%, 2005 NPLs of 15.3%, and 2006 NPLs of 5.9%. This shows that PT. Bank Mandiri experienced an inability to overcome problem loans consisting of loans classified as substandard, doubtful and loss in 2000, 2005, and 2006. While at PT. Bank Syariah Mandiri, NPF does not exceed Bank Indonesia regulations or less than 5% during the observation period from 2000 to 2016. This shows that PT. Bank Syariah Mandiri has the ability to overcome problem loans which consist of loans classified as substandard, doubtful and loss. Following are PT. Bank Mandiri and NPF PT. Bank Syariah Mandiri presented in the flowchart:

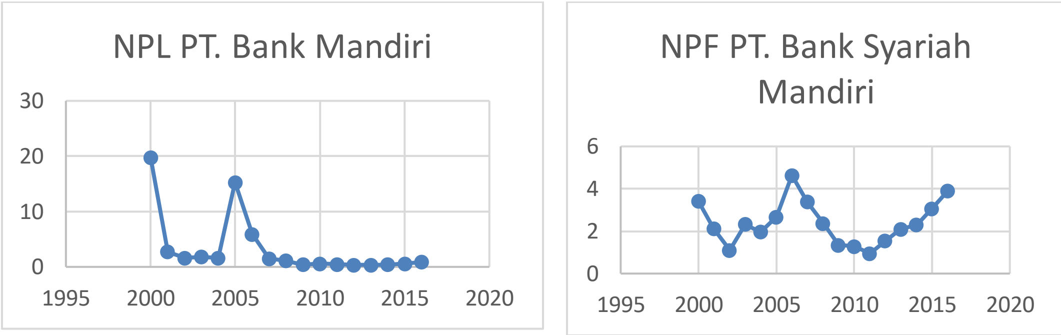

Figure 1
Existing NPL and NPF Respectively in the Banks Sample

If both NPL data of PT. Bank Mandiri and NPF PT. Bank Syariah Mandiri is compared in the form of a flowchart, the results are as follows:

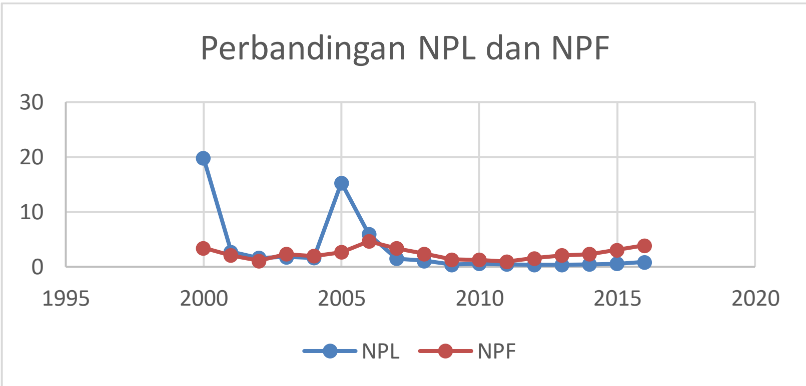

Figure 2
NPL and NPF Comparison in All Bank Samples

In the flowchart picture, the comparison of PT. Bank Mandiri and NPF PT. Bank Syariah Mandiri in 2000-2016 above can be seen that there are differences between PT. Bank Mandiri and NPF PT. Bank Syariah Mandiri in terms of consistency. NPF Flowchart PT. Bank Syariah Mandiri looks more stable than PT. Mandiri Bank. This is because in conventional banking, non-performing loans constitute the inherent risk and are always present in every bank lending. The risk is in the form of the inability of the debtor to repay the credit received, at the time promised earlier.

Bank internal factors, debtor internal factors, and external factors outside the bank and the debtor are the 3 main factors causing NPL. From the internal side of the bank, weaknesses in the bank's credit managers and pressure from third-party bank aggressiveness in lending, weak supervision systems, excessive interference from shareholders, inadequate guarantees and not covering credit, bad faith bank owners, management and bank employees (Loona & Zhong, 2014).

In terms of debtor unworthiness, the factors causing the occurrence of problem loans in banks are mis management, lack of knowledge and experience of business owners. According to Sutojo, external factors of banks and debtors that influence the possibility of NPLs are a decline in the state of the country's monetary economy, business, natural disasters, government regulations recession, devaluation, inflation, deflation, other monetary policies, rising interest rates on loans, changes in government policy in the real sector include the weakening of the national exchange rate against foreign currencies (Mohammad, 2014).

While the Islamic banking system has fundamental factors that can prevent the emergence of NPF from expanding, conventional banking systems provide greater opportunities for NPLs to occur. In terms of balance sheet assets, Islamic banks only recognize the word "financing" as their main activity, and do not lend money as conventional banks do. Lending money to Islamic banks is social, and does not interest. Commercial transactions are carried out through buying and selling with murabaha contracts, rents with akadijarah, and cooperation in running a form of business / business with mudharabah or musyarakah (Moti, dkk, 2012).

Funding may not contain usury, gharar and maysir. Usury or interest, which is fixed in advance regardless of whether the business is profitable or losers, clearly increases business risk. Greater risk will drive the emergence of NPLs. In lieu of interest, Islamic banks focus on gaining profits from transactions with their customers. The profits from the business are not fixed in advance, but depend on the actual nominal realization. In a muarabaha contract, for example, the bank buys the items needed, and then resells them to the customer at an additional price as the bank's profit. Customers can repay their purchases to the bank (Maidalena, 2014).

Normality test

The normality test is used to test how in the regression model, confounding or residual variables have a normal distribution. To test the normality of the data in this study used the analysis of the normality test using the Kolmogorov-Smirnov test. Kolmogorov Smirnov test is that if the significance value is below a tolerance of 0.05, it indicates that the data or research sample to be tested has a significant difference from standard normal data, so it can be said that the data is not normal. Conversely, there is no significant difference between the data or sample to be tested and standard normal data if the resulting significance value is above tolerance of 0.05, meaning the data tested is normal. Following are the Kolmogorov-Smirnov test results:

Tabel 2
One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		34
Normal Parameters:	Mean	0.0000
	Std. Deviation	0.5044
Most Extreme Differences:	Absolute	0.326
	Positive	0.326
	Negative	-0.256
Test Statistic		0.326
Asymp. Sig. (2-tailed)		0.193

Source: SPSS Test Results, 2019

The normality of a data can be detected by looking at the spread of point data on the diagonal axis of the normal plot graph, looking at the histogram graph of the residuals, or using the Kolmogorof-Smirnov non-parametric statistical test (K-S) with a significance level $\alpha = 0.05$. Can be interpreted as follows:

1) If the probability is> 0.05, then the data is normally distributed.

2) If the probability is <0.05 then the data is not normally distributed.

Based on the test results above, it can be seen the significance of 0.193. The resulting significance value is above 0.05, thus indicating that there is no significant difference between the data or sample that has been tested with standard normal data, or in other words the NPL data of PT. Bank Mandiri and NPF of PT Bank Syariah Mandiri were tested normally.

Uji Independent Sample T-Test

Test independent sample T-Test is used to find out whether or not there is an average difference, which is higher or lower between two groups of samples that have no relationship and usually the data that is processed or used is interval or ratio. This study is in accordance with the terms of the independent sample T-Test, which is to compare or test whether there is a difference in the average earnings management of two unrelated samples. The data used is PT. Bank Mandiri and NPF PT Bank Syariah Mandiri. The test uses a significance level 5%. If the significance value of the difference test is greater than 5% it means that there is no difference, but if it is taken 5% has a difference between the variables tested.

In the independent sample T-Test the sample is divided into two groups. Group A, namely PT. Bank Mandiri, while Group B is NPF of PT Bank Syariah Mandiri. The division of this group aims to show that PT. Bank Mandiri is different or not related to each other with NPF of PT Bank Syariah Mandiri. The following are the results of the independent sample T-Test:

Tabel 3

Group Statistics Test

Group	N	Mean	Std. Deviation	Std. Error Mean
1	17	3.2576	2.60086	1.35841
2	17	2.3806	1.03197	0.25029

Source: SPSS Test Results, 2019

The standard deviation value of the data in Group A is 2.60086 smaller than the average value of 3.2576. This shows that PT. Bank Mandiri in this study is equitable and there is no high difference between one data and the other data. The standard deviation value of the data in Group B is 1.03197 which is smaller than the average value of 2.3806. This shows that the distribution of NPF data of PT Bank Syariah Mandiri in this study is evenly distributed and there is no high difference between one data and the other data.

Tabel 4

Independent Samples Test

	Levene's Test for Equality of Variances		t-test for Equality of Means				
	F	Sig.	t	Df	Sig.(2-tailed)	Mean Difference	Std. Error Difference
Equal var assumed	2.431	0.203	0.0547	24	0.000	2.0613	11.7316
Equal var not assumed			0.0396	15.386	0.000	2.0613	9.9731

Source: SPSS Test Results, 2019

1. Homogeneity Test
   The results of the Levene's Test for Equality of Variances are used to see differences in variance (homogeneity). The testing criteria are:
   Sig. $p < 0.05$ = data is not homogeneous
   Sig. $p > 0.05$ = homogeneous data
   From the table above it appears that F = 2,431 and Sig. p = 0.203. Because Sig. p = 0.203 $p > 0.05$, it can be said that there is no difference in variance in PT. Bank Mandiri and NPF of PT Bank Syariah Mandiri or equal / homogeneous data.

2. *Equal variances assumed*
   If the data are homogeneous, then read the left lane Equal variances assumed. Conversely, if the data is not homogeneous, then read the left lane Equal variances not assumed. Because the data in this study are homogeneous, the next interpretation reads the left lane of the Equal variances assumed. From the table above it can be seen that the value of t arithmetic 0.0547> 0.05, meaning that there is a difference in the NPL of PT. Bank Mandiri and NPF PT Bank Syariah Mandiri.
3. Sig. (2-tailed) Test
   Basic testing criteria as follows:
   a. If the probability of sig (2-tailed)> 0.05, then H0 is accepted or H1 is rejected
   b. If the probability of sig (2-tailed) <0.05, then H1 is accepted or H0 is rejected
   From the results of the independent sample T-test, the left lane Equal variances assumed above shows that the Sig. (2-tailed) 0,000 <0.05. According to the basis of decision making in the independent sample T-Test, it can be concluded that H0 is rejected, H1 is accepted ,. This means that there are differences between Group A and Group B. So the results of this study indicate that there are differences between PT. Bank Mandiri and NPF of PT Bank Syariah Mandiri, or it can be said there is a difference between ratios that indicate the ability and strength of bank management in maintaining and managing loan risk or financing problems provided by PT. Bank Mandiri and PT Bank Syariah Mandiri.

Difference in Profit Management Levels in Islamic Banks and Conventional Banks.

The results of this study answer the H1 hypothesis: There are differences between earnings management in Islamic commercial banks and conventional banks, accepted. This is because according to existing theories, the financial performance of national banks has begun to improve since the economic crisis that occurred in 1997. Banks have started to generate profits and have begun to increase the amount of credit extended to the public. The application of the provisions of the ratio of non-performing loans (Non Performing Financing or Non Performing Financing) below 5% issued by Bank Indonesia made the banks try to meet these provisions (Nikolaidou & Vogiazas, 2014).

Non-performing loans, some experts say, are conditions when the customer is financially unable to pay part or all of his debt to the bank as promised and as stated in the previous agreement that has been made between the parties, the bank and the customer. Non-performing loans according to Bank Indonesia regulations are loans classified as Sub-standard, Doubtful, and Bad.

This ratio shows that the ability of bank management in eliminating non-performing loans provided by banks. Non Performing Loans are ratios that show the ability and strength of bank management in maintaining and managing loan risk or financing problems provided by banks. NPL is calculated based on a comparison between the number of problem loans compared to the total loans (Nkusu, 2011).

Non Performing Loans is a percentage between non-performing loans and the number of loans extended. Non-performing loans represent the risks contained and are always present in every channeling of credit by banks. The risk is in the form of the inability of the debtor to repay the credit he received, at the time previously promised. Non-performing loans can cause problems, not only to banks as lenders, but also to credit-receiving debtors, because these credits must somehow be resolved, and can even harm the banking world and the stability of the national economy on a large scale.

Looking back at the Bank Indonesia Dictionary, it states that Non Performing Loans or Non Performing Financing is a condition of non-performing loans in the form of customer loans or other parties at the bank, then these conditions are classified in three group sequences, namely substandard, doubtful and loss. The term NPL is for commercial banks, while the NPF is for Islamic banks. Non Performing Financing or, like conventional Non Performing Loans of banks, arises because of problems that occur in the process of financing approval in the internal bank, or after financing has been granted. However, NPF and NPL occur in different systems.

The sharia banking system has a fundamental factor that can hold the NPF from expanding; however, the conventional banking system provides a greater opportunity for NPLs to occur. The fundamental factors underlying the transaction are as follows. In terms of balance sheet assets, Islamic banks only recognize the word "financing" as their main activity, and do not lend money as conventional banks do. Lending money to Islamic banks is social, and does not interest. Commercial transactions are carried out through buying and selling with murabaha contracts, rents with akadijarah, and cooperation in running a form of business / business with mudharabah or musyarakah.

In seeing problem loans and problem financing in conventional banks and Islamic banks, the ratio is NPL for conventional banks and NPF for Islamic banks. The terms in the ratio of problem loans and problem financing are distinguished by language, namely Loans which means debt or credit, and Financing which means financing. However, it needs to be investigated more deeply besides the use of the term, is there anything that distinguishes the NPL and NPF when viewed from the types of credit conventional banks and Islamic banks. NPL and NPF, according to the grantor, are different ratios based on their fundamental assessment. Therefore, this research is very important to be carried out as empirical evidence that there is a fundamental difference between NPL and NPF.

CONCLUSION

The results of this study can be drawn several conclusions, namely, based on the results of the normality test with Kolmogorof-Smirnov (K-S), it can be seen a significance of 0.193. Significance that is above 0.05 indicates that there is no significant difference between the data to be tested with standard normal data, or it can be interpreted that the data tested in this study are of normal category. The standard deviation value of data in Group A and Group B is smaller than the average value. So it can be concluded that the distribution of PT. Bank Mandiri and NPF of PT Bank Syariah Mandiri in this study are evenly distributed and there is no high difference between one data and the other data. From the results of the independent sample T-Test above, it shows that the Sig. (2-tailed) shows the value 0,000 <0.05. According to the basis of decision making in the independent sample T-Test, it can be concluded that H0 is rejected H1 is accepted, which means that there are differences between Group A and Group B. So the results of this study indicate that there are differences between PT. Bank Mandiri and NPF of PT Bank Syariah Mandiri, or it can be said there is a difference between ratios that indicate the ability of bank management in managing loans or financing problems provided by PT. Bank Mandiri and PT Bank Syariah Mandiri.

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