**The Comparative Analysis of the Financing of Islamic Banking and Conventional Banking in Indonesia in the Periods of January 2003 - October 2015**

Abstract

Islamic banking and conventional banking are the banking industry competitive, so in this study examined the comparison between the effects of external and internal factors on the bank's financing problems (NPF with NPL), with the period January 2003 - October 2015. External factors comprise of Economic Performance (EK), inflation (INF) and the Global Financial Crisis Dummy (D07). Meanwhile, internal factors consist of Financing (FIN / LOAN) and a financing rate of return (FR). The results of cointegration test indicated that there was a long-term relationship between the external and internal factors of the NPF bank and NPL. The results of research in general influence of external factors significantly affect the bank's NPL while the NPF does not affect. Internal factors of the bank to the bank had a negative effect on NPF and higher influence than the NPL. This suggests that the increase in financing and financing rate of return of Islamic banks lower the NPF, it is concluded that the financing of Islamic banks is healthier compared to that of conventional banks.

**Keywords: NPF, NPL, Economic Performance, Inflation, Global Financial Crisis, Financing, Financing Rate of Return**

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Introduction

Islamic Banking in Indonesia was initiated by the establishment of Bank Muamalat Indonesia in 1992. Islamic Banking is a bank which operates by applying the Islamic principles, and it is relatively different from the operational procedure of the conventional bank, although they share the same business activities.

In Islamic Banking, the bank is not allowed to charge its customers for fees and interests. Islam prohibits Muslims to take the interest since it is regarded as “*riba”* (usury) which is a prohibited transaction in Islam (Qur'an, Al-Baqarah Ch.1: verse 275) regardless of the purpose of the loan and the charged interest rates (Anwar, 2016).

Moreover, based on the explanation of Aburime and Alio (2009), there are some characteristics of Islamic Banking such as the prohibition on interest imposition as well as the principles of profit-sharing and loss bearing. It means that interest paid on all loan money is forbidden. Furthermore, the profit-sharing and loss-bearing is the basic principle in Islamic Banking in which the bank can transact, and there will be a profit-sharing and loss-bearing for both the investors and depositor (Anwar, 2016).

The general provisions of bank operations based on the Law of the Republic of Indonesia Number 21 the Year 2008, about Islamic Banking, Article 1 verse 2. The bank is a business entity that collects funds from the people in the form of deposits and distributes it to the people in the form of a loan and/or other forms to enhance people's lives. The functions of Islamic Banks are also mentioned in Article 4, in which the Islamic Banks and Islamic Business Units must do their functions of collecting and distributing public funds.

One of the primary operations of Islamic Banks is to collect public funds in the form of Savings, Deposits, and Clearing based on the Islamic principles. It is an essential requirement in maintaining the Islamic Bank's continuity, in addition to the capital investment from the shareholders. The other major operation of the Islamic Bank is to distribute funds to the people in the form of Islamic-based financing. Islamic bank financing is an alternative solution for the people to meet their needs of funds for business improvement and consumption needs. The role of Islamic banking financing for the people will give peacefulness and blessing because the transaction is free from the usury element. Besides, the Islamic bank also applies the justice principles.

Financing is one of the most significant and most essential earning assets for the Islamic banks. In this case, the earning assets refer to various banking products used by banks to invest their funds to earn income. The quality of Islamic bank financing becomes a major concern since it is an indicator of the bank financial health. Consequently, it requires an assessment.

The assessment of the quality of the earning assets of Islamic banks is stipulated in Bank Indonesia Regulation Number: 13/13/PBI/2011, about the assessment of the quality of earning assets in the form of Financing for Islamic Commercial Bank and Islamic Business Unit. Article 8 Paragraph 2 explains that the Earning Assets Quality in the form of financing shall be classified into Current, Special Mention, Sub-standard, Doubtful, and Loss.

In the explanation of Article 8 of Indonesian Regulation Number 7 of 1992 jo. Act Number 10 of 1998 about Banking as well as in the elucidation of Article 37 of Regulation Number 21 of 2008 about Islamic banking, it is stated that Islamic-based loan or financing given by the banks come up with some risks. Consequently, in its application, the bank should notice the sound principles of Islamic-based loan and financing (Djamil, 2012, p.72).

In Islamic banking, financing with congestion or failure in payment namely Non-Performing Financing (NPF) is considered as non-current financing. The NPF ratio compares the total amount of assets problems (collectability (Earning Assets Quality) those are Special Mention, Sub-standard, Doubtful, and Loss of the total loan amount in the Islamic bank. The NPF ratio is one of the indicators of the Islamic bank financial-health. The higher the NPF value, the worse financial-health of the Islamic bank will be.

NPF is a deduction of profits in the banking system because the banks are required to make Provision for Earning Assets Backup which is taken from the bank’s own profit. It will reduce the amount of result sharing given to the customer’s deposit. If this happens continuously, the Islamic bank will get a difficulty in competing with the conventional banks which can provide higher rewards for the customers. In term of the financing, if there is financial congestion, the funds distributed to the people by the Islamic bank will be at risk. It might be unable to be withdrawn so that the Islamic bank's capital will be decreased. Also, the bank will reduce the funds distributed to the people.

In the Islamic bank, the nonperforming finance ratio is called NPF (Non-Performing Financing) whereas, in the conventional bank, it is called NPL (Non-Performing Loan). The calculation of the NPF and NPL ratio is the same that is the comparison of the nonperforming financing/loan and the total amount of financing/loan which is distributed by the Islamic bank or the conventional bank. Both the NPL and NPF ratio affect the needs in forming Provision for Earning Assets Backup and the decrease of the customer’s deposits.

Non-Performing Loan (NPL) is still one of the most exciting topics in the banking issues recently. Moreover, it happens after the many crises in unsafe banking conditions in the bubble economy today. NPL not only indicates the bank's financial health but also provides some information on the real sectors development. From the aspect of banking management, NPLs can give an overview of how the manager runs a prudent loan management system. A nonperforming loan is also an indicator of the real sector sluggishness as a response to the general economic condition. Even in many studies, besides the predicted bank failure and economic crisis indicators, NPL rate becomes the main concern (Ali, 2006; Faiz, 2010).

In its development, the Islamic bank has to compete with the conventional bank because both share the same business activity that is to collect funds from the people in the form of deposits and to distribute the funds to the people in the forms of loan or financing. There is fierce competition between the two banks because the first Islamic bank was established in 1992 namely Bank Muamalat Indonesia. On the other hand, the first conventional bank was established the year before and developed into more than ten banks. The conventional banks had more experience and assets compared to the Islamic ones.

It is essential to go over the comparison between the Islamic banks and the conventional banks especially in term of the financing because financing is the primary source of the banking income besides the fee-based income. The more thorough study about the financing quality based on the financing problems is also needed. It is so since the financing problems will disadvantage the banking operations. Investigating the factors affecting the financing problems will result is a comparative analysis of the financing quality condition between the Islamic banks and the conventional banks.

The result of the research is a comparative analysis of the factors affecting the problematic financing of the Islamic banks and conventional banks. The research is beneficial for several parties such as: (1) the government to make banking policies, (2) the Islamic banks and conventional banks management to apply profitable business strategies, (3) college students as a reference to carry out other researchers on Islamic banking.

Literature Review and Hypothesis Development

The performance comparison between the Islamic banks and the conventional banks in term of the working efficiency was also studied by Beck, Demirgüç-Kunt, & Merrouche (2013). They stated that the operational restrictions in Islamic banks tend to increase the assets concentration and restrict the instrument use of the hedging banks. Such a similar ambiguity is related to the Islamic bank's efficiency. In the Islamic banks, the monitoring and screening process of the costs might be lower, thus providing lower corporate concerns. On the other hand, the higher complexity of Islamic banking might results in the higher cost so that its efficiency might be decreased. Moreover, the younger age of the Islamic bank compared to the most conventional banks may imply the higher cost structure.

There were some studies about on the factors affecting loan or financing problems in banking (Espinoza & Prasad, 2010; Faiz, 2010; Saba, Kouser, & Azeem, 2012; Soebagio, 2005). The results of those studies concluded that the loan and financing problems were affected by both the external and internal factors. Espinoza and Prasad (2010) tested the effects of microeconomic factors on NPL (Non-Performing Loan) in 80 banks around GCC areas in 1995 to 2000. It is concluded that the GDP (economic growth) and capital significantly had negative effects on the NPL. On the contrary, the variables of the Interest Rate Levels, Loan Growth, Bank Effectiveness Levels, and Dummy Asian Crisis gave positive impacts on NPL. However, among those four variables, the Dummy variable shows an insignificant impact.

The study of Saba et al. (2012) about the impacts of the microeconomic factors on NPL was conducted in the US banks from 1985 to 2010. The study showed that the GDP per capita, the Interest Rate Levels, and the Total Loan had positive impacts on NPL. The studies carried out by Soebagio (2005) about the factors affecting the NPL in Indonesian banking sector from 2000 to 2004 revealed that the microeconomic factors (Exchange Rates, Inflation, and GDP) partially had significant positive impacts on NPL. Nevertheless, the GDP did not give significant impact. The tests on the microeconomic factors (CAR, CAP, and Loan Interest Rate) partially had a significant impact on NPL. The effects of those three variables were different on NPL. CAP and Loan Interest Rate had positive effects whereas CAR had the negative ones.

Faiz (2010) also studied the comparison of the factors affecting the NPF of Islamic banks and the NPL of conventional banks. This study employed the tests with VAR analysis on the variables (Financing, GDP, Inflation, Exchange Rates). The result showed that those variables had negative effects on NPF except the Exchange Rate. The Inflation variable significantly gave positive impacts on NPL while the Loan to Deposit Ratio and Indonesian Interest Rate had negative effects on the NPL. However, the Indonesian Interest Rate affected insignificantly.

Based on Faiz (2010) research using Ordinary Least Square (OLS) analysis technique, it is concluded that dummy crisis, financing, exchange rates had negative impacts to NPF although it was only financing which had significant effects. Furthermore, dummy crisis and LDR significantly had negative effects on NPL. On the contrary, the inflation and Indonesian Interest Rate had positive effects on NPL although they were not significant.

According to some researches on the factors affecting the Non-Performing Financing (NPF), it is concluded that there were some variables which did not fit the theory. For examples were the Financing which had negative effects on the NPF, GDP which had positive effects on NPF, and some other variables which did not have significant impacts such as the Exchange Rates, Dummy Crisis, and Inflation. The existence of some free variables with insignificant impact did not fit the theory from Ihda's research, reduced the information accuracy and empirical evidence about the effects of the free variables on the NPF development of Faiz (2010).

Data and Methodology of the Research

Data

The object of the research was the data of Islamic banks (Commercial Islamic Banks and Islamic Business Unit) and National Commercial Banks in Indonesia. The researcher observed the monthly collected data from January 2003 to October 2015. There was 154 observation time (N=154). The data were the secondary ones, which were arranged based on the time series.

The data were collected through documentation study. It was a data collection which was conducted with categorization and classification of the written materials about the problem formulation of the research.

The Islamic banks' data collected were the Non-Performing Financing (NPF) and the Total Financing in Indonesia from January 2003 to October 2015. The data sources used in this study were gathered from the Islamic Banking Statistics published by Bank Indonesia. Besides, the information was also downloaded from the official website of Bank Indonesia namely www.bi.go.id.

The conventional banks' data collected were the Non-Performing Loan (NPL) and the Total Loan in Indonesia from January 2003 to October 2015. The data sources used in this research were obtained from the Indonesian Banking Statistics published by Bank Indonesia. Also, the information was also downloaded from the official website of Bank Indonesia at www.bi.go.id.

The research data about the Indonesian economic indicators collected were the Financing Rate (financing rate of investment with the government banks as the proxy) and the Inflation Rate in Indonesia from January 2003 to October 2015. The data sources used in this study were obtained from Indonesian Economic and Financial Statistics published by Bank Indonesia. Besides, the information was also downloaded from the official website of Bank Indonesia at www.bi.go.id.

The research data about the Indonesian economic indicators collected were the Economic Performance (IPI as the proxy) in Indonesia from January 2003 to October 2015. The data sources used in this study were gathered from by Indonesian Central Bureau of Statistics published by Bank Indonesia. Also, it was also downloaded through the official website of Indonesian Central Bureau of Statistics namely www.bps.go.id.

Thedata about the global economic crisis dummy (D07) were determined and supported by the literature discussing the occurrence of global financial crisis that began in August 2007.The supporting literature about the dummy global financial crisis was Faisal Basri and Haris Munandar’s book published in2009 entitled “*Landskap Ekonomi Indonesia : Kajian dan Renungan Terhadap Masalah – Masalah Structural, Transformasi Baru, dan Prospek Perekonomian Indonesia*” (Landscape of Indonesian Economy: Study and Reflection of Structural Issues, New Transformations, Economy Prospect of Indonesia).

All of those data are grouped into tables and then processed using Eviews 6.1.

The analysis technique model of this research is shown in equations 1.1 and 1.2.

................... (1.1)

NPF = b1 EK + b2 FIN + b3 FR + b4 D07 + b5 INF

................... (1.2)

NPL = b1 EK + b2 LOAN + b3 FR + b4 D07 + b5 INF

Where:

NPF : (non-performing financing) in period t

NPL : (non-performing loan) in period t

EK : Economic Performance in period t

FIN : Total Financing of the Islamic bank in period t

LOAN : Total Loan of the conventional bank in period t

FR : Financing Rate of Return in period t

D07 : Global Financial Crisis *Dummy* in period t

INF : Inflation Rate in period t

The coefficients of each independent variable are named by b1, b2, b3, b4, and b5.

Analysis Technique

**Stationary Testing**

According to Gujarati & Porter (2209, p.428), time series stationary is very important because if the time series is not stationary, we can study its behavior only in the discussed period. Therefore, each set of the time series data is only for certain episodes.

The methods used in this root unit testing were *Augmented Dickey-Fuller* (ADF) test and *Philips – Perron* (PP) test. Meanwhile, for determining the critical value, this research used MacKinnon critical value criterion. If the t-ADF or t-PP value is broader than the required critical value, then the data is static or does not have a unit root (Faiz, 2010).

**Cointegration Testing**

As suggested by Gujarati & Porter (2009, p.459), the contribution given to the concept of unit root, co integration, and others, ensuring us to know whether the residual regression is stationary. Granger noted that co-integration test could be assumed as a pre-test to avoid fake regression condition.

The definition of co-integration is vital since through this concept we can observe the relationship between long-run equilibrium from the non-stationary variables (because it has trends) (Rosadi, 2012, p.200).

One of the approaches which can be used in the co-integration test is the Johansen method (Ajija, 2011, p.190).

In the reduce-rank test, Johansen used two different statistical tests those are trace test (λ *trace*) and *maximum eigenvalue test* (λ *max*). Trace test measures H0 in the cointegration equation as the alternative cointegration from the cointegration equation *k* where *k* is an endogenous variable number for = 0, 1, ..., k-1. The H0 test through trace test can be shown by the following equation:

*LRtrace*  = *- T*log (1 - λi ) ...................................................... (1.3)

λi is the biggest eigenvalue from a matrix  . The maximum eigenvalue test examines H0 in the cointegration equation as the alternative cointegration of the cointegration equation k + 1. H0 testing through the maximum eigenvalue test can be shown by the following equation:

*LRmax* = - *T* log (log (1 – λr+1 ) ................................................ (1.4)

*LRmax* = *LRtrace*  - *LRtrace*  ................................. (1.5)

Where:  = 0, 1, ..., k-1.

The main problem in the time series data is the autocorrelation. To overcome this problem, the optimum lag length from the optimum lag test should be used. The optimum lag was determined based on the shortest lag according to Schwarz Information Criterion (SCI). According to Gujarati SIC gives better scales than AIC. It is because SIC gives bigger scales and penalties on the variables addition (Faiz, 2010).

Findings

**Data Stationary Testing**

To initiate time series data testing, the unit root test or the stationary data test should be carried out with Augmented Dickey-Fuller (ADF) and Philips Perron (PP). In the data stationary test of the time series data, there is a hypothesis that if there is a unit root in H0, there will be no unit root in H1. The result of the stationary test is presented in table 1.

**Table 1.**

**The Results of the ADF and PP Stationary**



*Economic*

*Performance*

*Inflation*

Description:

* \* Significant 10 %
* \*\* Significant 5 %
* \*\*\* Significant 1 %
* Source: processed EViews 6.1

The explanation about unit root test (stationary test) with ADF method on the level and first difference stage either in the form of intercept or trend and intercept showing that all variables are significant when α = 1 %, 5 %, and 10%. It shows that the ADF t-statistic value is more significant than Mackinnon Critical Value.

Based on Table 1, the stationary test used the ADF method on the intercept level stage. There was a unit root in the variable since the t-ADF value was smaller than the critical value as suggested by Mackinnon Critical Value and the other way around. The description of the stationary test results is as follows:

1. LNNPF Variable is found to be significantly having the unit root
2. LNEK Variable is found to be significantly not having the unit root when α = 10
3. LNFIN Variable is found to be significantly having the unit root
4. FR Variable is found to be significantly not having the unit root when α = 10
5. D07 Variable is found to be significantly having the unit root
6. INF Variable is found to be significantly not having the unit root when α = 10
7. LNNPL Variable is found to be significantly having the unit root
8. LNLOAN Variable is found to be significantly having the unit root

Based on Table 1, the stationary test used PP method on the level stages those are either intercept or trend and intercept. All variables (LNNPF, LNEK, LNFIN, FR, D07, INF, LNNPL, and LNLOAN) were concluded to be significantly having the unit root. In this research, α = 1%. Hence, based on the stationary test all variables are concluded to have unit roots.

**Cointegration Testing**

The cointegration test is initiated by the determination of Lag Length and Granger Causality Test (the results are attached). The cointegration test provides a result which can be analyzed that between the dependent and independent variables there is a long-term relationship or a balance between the two (Gujarati & Porter, 2009, p. 458). Granger Representation theory explains that if variable x and variable y are cointegrated, the relationship between the two variables can be stated as ECM (Error Correction Model) which correcting for a balancing condition.

**Table 2.**

**The Result of the Cointegration Test of NPF Equation**

Source: Eviews 6.1

Based on the result of the cointegration test in Table 2 we know that there is a cointegrated relationship between Non-Trend – Intercept and Non-Trend (2) data. It is so since the value of Trace Statistic (λ trace) is more prominent than its critical value in the significance level α = 5 %. Thus, H0 which states that r=1 or accepted cointegration. Meanwhile, the value of Max Eigen statistic (λ max) is smaller than its critical value in the significance level α = 5 %, so that H0 which stated that r=1 or accepted cointegration. In this case, the researcher will analyze the cointegration based on the Trace statistic value showing that cointegration occurs.

**Table 3.**

**The Result of the Cointegration Test of NPL Equation**

Source: Eviews 6.1

Based on the result of the cointegration test in Table 3 it can be seen that there is a cointegrating relationship between Non-Trend – Intercept and Non-Trend (2) data. It is so since the value of Trace Statistic (λ trace) is bigger than its critical value in the significance level α = 5 %. Thus, H0 which states that r=1 or accepted cointegration. Meanwhile, the value of Max Eigen statistic (λ max) is smaller than its critical value in the significance level α = 5 %, so that H0 which stated that r=1 or accepted cointegration. In this case, the researcher will analyze the cointegration based on the Trace statistic value showing that cointegration occurs.

Discussion

The regression result above can be formulated into a long-term equation of NPF (Non Performing Financing) as follows:

LNNPF = + 10,78930 LNEK – 32,61116 LNFIN – 6,800193 FR – 0,920757 D07

t–std. error  (11,0644) (8,04110) (1,72187)   (2,65747)

t – statistic (0,975136) (4,05556) (3,949307)   (0,34648)

– 0,294769 INF

t–std. error  (0.29488)

t – statistic (0,99962)

As for the long-term NPL (Non Performing Loan) the equation is as follows:

LNNPL = + 0,713770 LNEK – 14,55309 LNLOAN – 0,310318 FR + 1,020945 D07

t–std. error  (1,02672) (2,56904) (0,11680)   (0,30414)

t – statistic (0,695194) (5,66480) (2,65683)   (3,356826)

– 0,076983 INF

t–std. error  (0,02746)

t – statistic (2,80346)

The comparison between the long-term equations of cointegration tests of NPF and NPL is presented in table 4 below.

**Table 4.**

**The Comparative Analysis**

**between the Long-term Equations of Cointegration Tests of NPF and NPL**

|  |  |  |
| --- | --- | --- |
| Independent Variables | Dependent Variables | |
| NPF (Non-Performing Financing) | NPL (Non-Performing Loan) |
| LNEK (Economic Performance) | EK (Economic Performance) has 10.79 % positive effect on NPF. Hence, in every 1% of EK increment, there will be 10.79 % NPF increment. The t-statistic value (0.975136) is smaller than the value of t-table in 1% significance level. Thus, EK variable cannot explain the long-term equation. | EK (Economic Performance) has 0.71% positive effect on NPL. Hence, in every 1% of EK increment, there will be 0.71% NPF increment. The t-statistic value (0.695194) is smaller than the value of t-table in 1% significance level. Thus, EK variable cannot explain the long-term equation. |
| LNFIN/LNLOAN (Financing/Loan) | FIN has 32.61 % negative effect on NPF. Hence, in every 1% of FIN (Financing) increment, there will be 32.61 % NPF decline. The t-statistic value (4.05556) is bigger than the value of t-table in 1% significance level. Thus, FIN variable can explain the long-term equation. | LOAN has 14.55 % negative effect on NPL. Hence, in every 1% of LOAN increment, there will be 14.55 % NPL decline. The t-statistic value (5.66480) is bigger than the value of t-table in 1% significance level. Thus, LOAN variable can explain the long-term equation. |
| FR (Financing Rate) | FR has 6.8 % negative effect on NPF. Hence, in every 1% of FR increment, there will be 6.8 % NPF decline. The t-statistic value (3.949307) is bigger than the value of t-table in 1% significance level. Thus, FR variable can explain the long-term equation. | FR has 0.31 % negative effect on NPL. Hence, in every 1% of FR increment, there will be 0.31 % NPL decline. The t-statistic value (2.65683) is bigger than the value of t-table in 1% significance level. Thus, FR variable can explain the long-term equation. |
| D07 (Global Financial Crisis Dummy) | D07 has 0.92 % negative effect on NPF. Hence, in every 1% of D07 increment, there will be 0.92 % NPF decline. The t-statistic value (0.34648) is smaller than the value of t-table in 1% significance level. Thus, the D07 variable cannot explain the long-term equation. | D07 has 1.02 % positive effect on NPL. Hence, in every 1% of D07 increment, there will be 1.02 % NPL increment. The t-statistic value (3.356826) is bigger than the value of t-table in 1% significance level. Thus, the D07 variable can explain the long-term equation. |
| INF (Inflation) | INF has 0.29 % negative effect on NPF. Hence, in every 1% of INF (Inflation) increment, there will be 0.29 % NPF decline. The t-statistic value (0.99962) is bigger than the value of t-table in 1% significance level. Thus, INF variable can explain the long-term equation. | INF has 0.08 % negative effect on NPF. Hence, in every 1% of INF (Inflation) increment, there will be 0.08 % NPF decline. The t-statistic value (2.80346) is bigger than the value of t-table in 1% significance level. Thus, INF variable can explain the long-term equation. |

Source: Eviews 6.1.

The Effects of Economic Performance on NPF and NPL

The positive effects found in the cointegration test result of this research are the same as those of Espinoza & Prasad (2010) and Saba et al. (2012). It is proven that the Economic Performance which is shown by the GDP (Gross Domestic Product) data gives a positive effect on the Non-Performing Loan. Nevertheless, based on Table 1.4 the Economic Performance variable does not significantly give positive effects on either the NPF (Non-Performing Financing) or NPL (Non-Performing Loan). The result of this study shows that there is a contradiction that the higher Economic Performance will lead to a higher NPF. As suggested by Espinoza & Prasad (2010), the result of this research gives some information to the regulator and central bank that despite the Economic Performance increases, they should conduct a strict supervision on the financing growth.

The Effects of Financing on NPF and Loan on NPL

Based on Table 4 the effect of Financing on NPF and NPL is significantly negative. Consequently, in every Financing increase will lead to NPF and NPL decrease. It shows that in the periods of January 2003- October 2015 the financing was distributed by the bank to the appropriate customers so that the risk of non-performing financing has vanished.

Some different researches showed different results from this research. The example is Beattie et al. (1995) which suggests that a terrible or incorrect financing is one of the causes of bank failure. The bank failure is estimated to be able to lead to bankruptcy in the whole financial system (Mokhtar & Zakaria, 2009). This opinion is also supported by Ali (2006) who explains the negative impacts of the bank’s crisis. In other words, it shows that the incorrect financing distribution will lead to a financing failure.

Based on Table 4 the effect of Financing (FIN) on NPF is 32.61 % bigger than that of Loan (LOAN) on NPL which is 14.55 %. It shows that in Islamic banking the bigger financing distributed to the customers, the lower risk of non-performing financing. Hence, the financing distributed by the Islamic banks is a good quality financing. Financing has the most significant impact on the NPF/NPL compared to other independent variables. The financing of Islamic banks has a more significant impact on NPF compared to that of the conventional banks. Thus, it can be concluded that the financing of the Islamic banks is relatively better.

The Effects of Financing Rate (FR) on NPF and NPL

Based on Table 4 the effect of FR on NPF and NPL is significantly negative. Therefore, any increase of FR will decrease the NPF and NPL. It indicates that in the periods of January 2003 – October 2015 the financing rate charged to the customers did not make them have the difficulties in paying the financing installment obligation or in other words the financing is confirmed to be healthy. The result of this research is the same as the research of Baholli, Dika, & Xhabija (2015) which states that the interest rate levels give negative effects on the fluctuations of NPL.

Based on Table 4 the effect of FR on NPF is 6.8 % bigger than the effect of FR on NPL that is 0.31 %. It indicates that in the Islamic banking the financing is healthier (the non-performing financing risks decrease) if the financing rate in return is bigger. It has a bigger effect compared to that of the conventional bank.

The Effects of Global Financial Crisis Dummy (D07) on NPF and NPL

The effect of D07 on NPL is significant; hence it means that any occurrence of D07 (Global Financial Crisis) will increase NPL. The impact of the financial crisis to NPL is stated in Espinoza (2010) research as suggested by Ciccarelli et al. (2010) that the global financial crisis might lower the GDP. It is caused by the bank policy in tightening the financing provision in which the financing plays an essential role in the production growth. The financing provision tightening refers to a specific condition when the bank GDP decrease which indicates the decline of the economic performance. It will result in the increasing charge for the customers. A payment provision is a form of bank backup in managing the risks of the non-performing financing.

The global financial crisis was initially happened in the United States in 2007 due to the bank financing failure in the property sector which affects all of the banks in the world. As suggested by Norgen (2010), the spreading US banks failure made a domino-effect which threatened the worldwide financial system. A bank failure may cause other's bank failure. The impact of the global financial crisis was not only noticed in the US but also in Europe and Asia.

The Effects of Inflation (INF) on NPF and NPL

Based on Table 4 the effect of inflation on NPF is negative and insignificant. Hence, it can be concluded that the inflation rate does not give significant effect on non-performing financing in the Islamic banks. The effect of inflation on NPL is significantly negative.

The correlation between the inflation rate and the customer’s financing capacity might be positive or negative (Nkusu, 2011). The high inflation rate can enhance the financing customer’s payment capacity if the customers can reduce their total financing. However, it can also decrease the customer’s payment capacity if the customers’ real income decreases due to the limited income they get. Hence, the correlation between the inflation rate and the NPL might be negative or positive depending on the economic activities.

Conclusion

In its operation, the Islamic banking has to compete with the conventional banking which has run the banking activities for such a more extended period. The non-performing financing is a pivotal issue for both the Islamic banking and the conventional banking. The factors affecting the financing problems arise either from the external factors or the internal ones. The external factors are the economic performance, inflation, and the global financial crisis while the internal factors are the financing and the financing rate of return.

There are some results of the cointegration test on those external and internal factors affecting the financing problems of the NPF and NPL. Commonly, the values of the external and internal factors on the financing problems of Islamic banking (NPF) are higher than those of the conventional banking (NPL). The effects of the external variables (economic performance, inflation, and global financial crisis) on the Islamic banking financing problems are insignificant. However, in the conventional banking, the economic performance variable has an insignificant effect. On the contrary, the inflation and global financial crisis have significant effects on NPL. It can be concluded that the operation of the conventional banking is relatively affected by the macroeconomic conditions.

Moreover, there are some test results of the internal banking factors such as the financing and financing rate of return on the banking financing problems. The internal factors have the bigger effects on NPF than those on NPL. The effect is significantly negative. It indicates that the financing distributed by the Islamic banking and conventional banking is a good financing since the increase in the financing and financing rate of return will lead to a financing problem decline. Based on the essential effects of the internal factors it can be concluded that the financing of the Islamic banking is better than that of the conventional banking.

The Islamic banking Non-Performing Financing (NPF) is mostly affected by the internal banking factors. Nevertheless, the negative effect of the internal factors indicates that the NPF of Islamic banking will decline if there is an increase in the amount of financing and financing rate of return. The values of the internal factors effect on NPF are higher than those of NPL. It can be concluded that the financing of the Islamic banking is better than that of the conventional banking.

The external factors of the conventional banking have significant effects on NPL. The D07 (Global Financial Crisis Dummy) has a positive effect since it can increase the nonperforming loan (NPL). The inflation factor gives an adverse effect because if the inflation rate increase will decrease the NPL. However, the Economic Performance factor has insignificant effects on NPL.

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