

## Islamic Banks vs Conventional Banks in Indonesia: An Analysis on Financial Performances

*(Bank Islam vs Bank Konvensional di Indonesia: Satu Analisis Prestasi Kewangan)*

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### ABSTRACT

*Islamic banks in Indonesia have been in existence for more than two decades. Substantial development has taken place in this largest Muslim country. Regulator, academicians, and practitioners have been providing significant support with the objective of improving the performance of the Islamic banking. Hence, it is timely to assess whether its performance differs than that of the conventional banks. This paper aims to describe and critically evaluate and compare the financial performance of Islamic banks to that of conventional banks. Data of Capital Adequacy Ratio (CAR), Return on Asset (ROA), Operational Cost/Operational Revenue (BOPO), Non-Performing Loan (NPL)/Non Performing Financing (NPF) and Loan Deposit Ratio (LDR)/Financing Deposit Ratio (FDR) for Islamic and conventional banks are examined. The analysis of monthly data covers the period from January 2004 to July 2014 (127 observations). Paired sampled t-test was adopted to see whether there are significant differences in the financial ratios between both banks. This study found that CAR, ROA, BOPO and NPL of conventional banks are significantly higher than that of Islamic banks but not FDR. Based on the result of capital adequacy, the findings suggest that Islamic banks need to have more capital to face the involved risk as that of conventional banks. Conventional banks need to function themselves as financial intermediaries to support the real sector as that of Islamic banks.*

*Keywords: Islamic banks; conventional banks; financial performances*

### ABSTRAK

*Bank Islam di Indonesia telah wujud sejak dua puluh tahun yang lalu. Banyak perkembangan telah berlaku dalam negara Islam terbesar ini. Pembuat polisi, ahli akademik dan pengamal industri telah memberi sokongan yang padu untuk memastikan peningkatan pencapaian prestasi dalam perbankan Islam. Justeru, sekarang adalah masanya untuk menilai perbezaan prestasi di antara perbankan Islam dan perbankan konvensional. Artikel ini bertujuan untuk menerangkan, menilai dan membandingkan dengan kritikal perbezaan dalam prestasi kewangan bank Islam dan bank konvensional. Data berkaitan nisbah kecukupan modal (CAR), pulangan atas aset (ROA), kos/pendapatan operasi (BOPO), pinjaman tidak dibayar/ pembiayaan tidak dibayar (NPL), dan nisbah deposit pinjaman/ nisbah deposit pembiayaan bank Islam dan bank konvensional telah dikaji. Analisis kajian melibatkan data bulanan meliputi tempoh Januari 2004 hingga Julai 2014 (127 pemerhatian). Ujian t digunakan untuk melihat sama ada terdapat perbezaan yang signifikan dalam nisbah antara kedua-dua bank. Kajian ini mendapati CAR, ROA, BOPO dan NPL bank konvensional adalah signifikan lebih tinggi daripada bank Islam, tetapi tidak FDR. Berdasarkan keputusan kajian dalam kecukupan modal, dapatan mencadangkan bank Islam memerlukan lebih banyak modal untuk menghadapi risiko seperti bank konvensional. Bank konvensional pula perlu bertindak sebagai intermediari kewangan untuk menyokong sektor lain seperti mana bank Islam.*

*Kata kunci: Bank Islam; bank konvensional; prestasi kewangan*

### INTRODUCTION

Islamic banking industry has been put into a greater attention for the past three to four decades, particularly after the Organization of Islamic Conference meeting held in Makkah in the late 70s. One of the results of the meeting was to introduce new type of banks which operate in interest free banking system. These banks do not consider interest as a profit; rather they use rental fees, margin fees etc. based on the involved contracts.

In the case of Indonesia, in the 80s there were *shariah*-based institutions. However, they were not in the

form of banks, but rather of cooperatives. At that time, it was not put in the spotlight until the establishment of Bank Muamalat Indonesia, the first Islamic bank (BMI) in the early 90s. The establishment of BMI seemed to be the momentum for the development of Islamic finance. Moreover, the launched by the late President Suharto made this establishment an important one.

Since then, the Islamic banks have been the alternatives to the long existing conventional banks in developing the Indonesian economy. Challenges were certainly faced during the early years of their establishment. Due to the new banking concept, many

people are still unaware of this concept. Socialization and promotion of the Islamic banking concept were then launched. As time goes, academic institutions started to establish Islamic economic study program in their Bachelor as well as in post graduate programs. Obviously, this supports the development of Islamic banking industry from the theoretical perspectives.

Having been existed for quite some time, it is then necessary to look into the financial performance of the Islamic banking industry so as to evaluate and propose some suggestions for the development of this industry. To the best of the author's knowledge, there are at least 3 studies pertaining to Islamic banking issues. Samad and Hassan (1999) looked at the case of Malaysia, Moin (2008) focused on Pakistan and Ika and Abdullah (2011) examined the case of Indonesia by using a few Islamic banks. This study attempts to extend the work by Ika and Abdullah (2011) at the industrial level and analyze it in a more comprehensive way.

A study was done by Samad and Hassan (1999) pertaining to the financial performance of both types of banks (Islamic and conventional) in the case of Malaysia. They adopted the ratios of profitability (ROA, ROE and PER), liquidity (Cash deposit ratio, Loan deposit Ratio, Current ratio, Current asset ratio), Credit risk (debt equity ratio, Debt to total asset ratio, Equity Multiplier, Loan to deposit ratio), and commitment on economy and community (long term loan ratio, Government Bond Investment, *Mudharabah musharakah* ratio). They compare done available Islamic bank namely Bank Islam Malaysia Berhad with ten conventional banks. Moreover, they divided the data into two periods; that is from 1984 to 1989 and 1990 to 1997. Results showed that there was no difference in Islamic banks' performances of community financing in the two periods. Moreover, the comparison of BMB to the group of some conventional banks resulted in no significant difference in the economic participation (as measured by LTA).

Similar study was done by Moin (2008) in the case of Pakistan. Its objective was to examine and evaluate the financial performance of the Meezan Bank Limited (MBL); the first Islamic bank in Pakistan in comparison to that of five groups of conventional banks. The study's evaluation covered profitability, liquidity, risk and efficiency for the period from 2003 to 2007. It found that the MBL was less profitable, less risky and less efficient as compared to those 5 conventional banks. The main reason for this is the long experience of the conventional banks as well as their domination in the total national banking asset, where as Islamic banks have just started operating a few years back. As an infant industry, it may not have a substantial experience with regard to the risk management. Thus, their profitability may not be optimum. Nonetheless, the trend of Islamic banks is considerably improving.

Another study has been done by Ika and Abdullah (2011) in the case of Indonesia. The result showed that in terms of the liquidity issue, Islamic banks performed

better. However, for the other ratios they seemed to be similar to that of conventional banks. Their analysis suggested that even though Indonesia has the largest Muslim population, it does not guarantee that the Muslims are always following the Islamic rules. This can be observed when the Indonesian Ulama board released a fatwa which states that interest is *haram* few years ago. The figure of Islamic banks' deposits and financings did not seem to be affected by this announcement. Moreover, they argued that macroeconomic variables such as interest rate and economic performance are important factors that affect Islamic banks' performances.

Based on the literature, this paper extends those works by looking at the industry level of Islamic banks as well as conventional banks on their financial performances. While the previous study focused on few Islamic banks, this paper attempts to look into industry level and this ensures addition to the existing literature. This is important especially to the regulator that develops the Islamic banking industry. Moreover, Islamic banks have been in existence since 1993 to complement the conventional banks in Indonesia. As such, it is timely to look into their performances. To the best of the author's knowledge, there has been no study conducted that compares both industries; and this is important to the Central Bank as the monetary authority. One objective of this study is to see the difference in terms of financial intermediaries between both types of banks. Moreover, this result is particularly essential as to further see whether Islamic banks can serve as the channel of the monetary policy by the Central Bank<sup>1</sup>.

The sequence of this paper is as follows: after this introduction, literature review is conducted pertaining to the previous studies done on the performance of conventional and Islamic banks. Following this, data and method are then explained. Next is to discuss the result and analysis, which is a major part of this paper. This paper ends with conclusion which also provides policy recommendation for the regulators.

## LITERATURE REVIEW

Samad and Hassan (1999) examined the profitability ratio, liquidity ratio, credit risk and the Economic and Community Commitment at 1 and 10 Islamic Bank Conventional Banks in Malaysia, with time period of 1984-1989 being compared with 1990-1997. Their study concluded that, in terms of liquidity performance comparison between 1984-1989 and 1990-1997, Islamic banks were more liquid than the group of eight conventional banks. This study is consistent with Saifullah (2010), Wasiuzzaman and Gunasegavan (2013), and Khediri et al. (2015). The comparison between Islamic banks and conventional banks shows that Islamic banks are still less risky and more solvent, as measured by DER, DTAR, EM and LDR. The difference in risk as measured by debt – equity is statistically significant. Bank Islam

showed lower risk compared to that of the conventional banks, and was in significant.

Rosly and Bakar (2003) found that profitability of Islamic banks, as indicated by ROA, is higher than that of conventional banks. However, in this case, a higher profitability does not translate to efficiency. This is because IBS is still using the infrastructure of the parent company, which is conventional bank. Other studies have shown conflicting results on this matter. Saifullah (2010), Rozzani and Rahman (2013), Erol et al. (2014), Hadriche (2015), and Khediri et al. (2015) suggest that Islamic banks are more profitable; while that is not the case by studies done by Fayed (2012), and Wasiuzzaman and Gunasegavan (2013)

Samad (2004) discussed the performance of Islamic banks and conventional banks in Bahrain after the first Gulf War in 1991. Comparative financial measure is expressed by using various financial ratios and they indicate that there is no significant difference in the profitability and liquidity between Islamic banks and conventional banks. In addition, Islamic banks are less exposed to credit risk as compared to conventional banks. Their credit performance is better than conventional banks. This result is similar with Khediri et al. (2015), but not Fayed (2012).

Ika and Abdullah (2011) examined the ratios of liquidity, profitability, risk and solvency and efficiency at 6 and 3 conventional banks and Islamic Banks in Indonesia, respectively. From this study it can be concluded that Islamic banks are more liquid than the conventional ones. However, the rest of the other ratios showed no statistical difference. These results indicate that although Indonesia is one of the largest Muslim communities in the world, their consciousness about *shariah*-compliant products and services is still low. Even after the release of the MUI fatwa about the prohibition of interest, the financial performance of Islamic banks in Indonesia still show no statistical difference. It seems that macro-economic indicators, such as interest rates, can affect the performance of Islamic banks in Indonesia.

Hamid and Azmi (2011) examined the financial performance of BIMB in the period between 2000 and 2009 and made a comparative assessment between Islamic bank Malaysia (BIMB) and interest-based conventional bank. The bank's financial performance was measured based on criteria such as profitability, liquidity, risk and solvency, and community involvement of the bank. The study found no significant difference between Islamic and conventional banks. Additionally the basic mode of Islamic banking, i.e. the profit and loss sharing, has no significant bearing on the financing portfolio of BIMB.

Usman and Khan (2012) comparatively evaluated the performance of Islamic and conventional banks. The study made a proper comparative study on the profitability and liquidity ratios of Islamic banks (Mezan Bank Ltd., the Islamic Bank and Albaraka) and conventional banks (Faysal Bank, and Bank of Khyber KASB) by using the banks' data between the period 2007 and 2009. The results showed that Islamic banks had a high growth rate

and profitability over the conventional banks. Besides that, Islamic banks had better liquidity strength over conventional banks.

#### DATA AND METHOD

This study focuses on the financial ratios of two types of banks (Islamic and conventional). Data adopted are the Capital Adequacy Ratio (CAR), Return on Assets (ROA), Operational Cost/Operational Revenue (BOPO), Non Performing Loan (NPL) / Non Performing Financing (NPF) as well as Loan to Deposit Ratio (LDR) / Financing to Deposit Ratio (FDR)<sup>2</sup>. The definition of the variables used in the study will be described in detail below:

Capital Adequacy Ratio (CAR) is defined as the ratio that indicates the ability of bank's capital in business development and accommodating the possible risk of losses resulting from operational activities of the bank. Assessment on this aspect is done as to determine whether the bank has adequate capital to support their needs. Return on Assets (ROA) is the ratio used to measure the bank's ability to make profit. This ratio is related to earnings before taxes in the last 12 months against the average volume of business in the same period. ROA also describes asset turnover. Operational Cost/Operational Revenue (BOPO) is often called the efficiency ratio and is used to measure the ability of bank management in controlling operating expenses to operating income. The smaller the ratio, the more efficient the bank's operational costs. Thus, the possibility of a bank to be in error is smaller, and the bank's performance is better.

NPF and NPL in Islamic banks and conventional financial ratios are related to credit risk and financing. Non Performing Financing shows the ability of bank management to manage the troubled financing granted by banks. As such, the higher ratio, the lower the quality of the bank's credit. Credit and financing in this case are loans and financings granted to third parties excluding loans to other banks. Credit or financing problems are classified as substandard, special mention and jammed. Loan to Deposit Ratio (LDR) / Financing to Deposit Ratio (FDR) is the ratio of the financing granted by banks to the third party funds which are successfully deployed by banks. FDR ratio is analogous to the Loan to Deposit Ratio (LDR) of the conventional banks; which is the ratio used to measure the level of bank liquidity and shows the bank's ability to meet the demand for credit by using the total assets owned by banks.

Monthly data are from January 2004 to July 2014 (127 observations). The samples used in this study are 24 conventional commercial banks and 11 Islamic banks. The secondary sources of data are gathered from the official website of Bank Indonesia as the Central Bank of Indonesia and the official website of *Otoritas Jasa Keuangan* (Financial Service Authority) of Indonesia.

This study used simple T-test method. This method is used to observe whether there is a statistical difference

between two series of data. Technically, each ratio of Islamic banks will be compared to that of conventional ratio using *t*-test. Depending upon the number of observations, normally T-test result of more than 2 would mean that there is a significant difference between the two data series. The result would enable us to assess whether the Islamic banking ratio is better, same or worse than that of conventional banks.

Before conducting the *t*-test, the procedure requires the identification of the variances on the homogeneity. For that, levene test is adopted to solve that issue. In the case whereby the levene test shows heterogeneity, *t*-test assuming unequal variance will be adopted. Conversely, if the levene test is otherwise, *t*-test assuming equal variance will be used.

The next section discusses the result and analysis; starting with the levene test's results and followed by appropriate *t*-test. Next is discussion on the analysis and ends with conclusion.

## RESULT AND ANALYSIS

### RESULT

This chapter discusses the result of the test and followed by the analysis. Table 1 shows the mean and standard deviation of each variable of both conventional and Islamic banks. Moreover, the sequence of the discussion will start from CAR, ROA, NPL/NPF and LDR/FDR to BOPO.

TABLE 1. Test of homogeneity of variances

	Levene Statistic	df1	df2	Sig.
CAR	2,932	1	252	0.00
ROA	7,055	1	252	0.00
BOPO	7,688	1	252	0.00
NPF	35,184	1	252	0.00
FDR	15,213	1	252	0.00

Assuming that the alpha ( $\alpha$ ) adopted is 5%, the levene result shows that the variables being observed do not have the same variances. For the variance of CAR, it reveals homogeneity and the remaining variables show that their variances to be heterogeneity. Therefore, *t*-test assuming equal variance will be used for CAR; and for the rest, *t*-test assuming unequal variance will be conducted.

Table 2 above shows that almost all ratios for conventional banks are significantly higher than that of Islamic banks except for FDR. Capital adequacy for conventional banks has significantly better (19.09) capital as compared to that of Islamic banks. This *t*-stat result is expected since the mean of CAR for conventional banks which is at 19.09 is substantially higher than that of the Islamic bank's mean of 13.86.

In terms of the profitability, the means of ROA for conventional and Islamic are at 2.84 and 1.54, respectively; while the *t*-test is 26.19. This means that the profitability of conventional banks is significantly higher than that of Islamic banks, despite Islamic banks having slightly higher standard deviation.

With regard to the credit quality of those two types of banks, NPL for conventional is at 4.21 whereas Islamic bank is at 3.65. The T-stat of 2.60 means that the difference between the two types of banks is significant. In this case, the financings of the Islamic banks are of better quality than loans of the conventional banks. LDR and FDR are at 70.71 and 103.47, respectively; and the *t*-stat is at -22.50<sup>3</sup>. This means that Islamic banks are significantly able to perform the act of financial intermediaries as compared to the conventional banks and interestingly their standard deviation is less than that of conventional banks.

The other variable is BOPO; which refers to the operational cost over the operational revenue. A high BOPO would mean less efficiency; and conversely a low BOPO means that bank has better efficiency. Result shows that BOPO for conventional is 85.4, while for Islamic bank it is 81.3. The fact that *t*-stat is at 3.32 means that there is

TABLE 2. Financial performance between Conventional and Islamic Bank January 2004 - July 2014

Variables	Mean		VARIANCE		<i>t</i> -stat
	Conventional Bank (BUK)	Islamic Bank (BUS)	Conventional Bank (BUK)	Islamic Bank (BUS)	
CAR	19.09	13.86	3.5	4.37	20.83
ROA	2.84	1.54	0.11	0.20	26.19
LDR and FDR	70.71	103.47	174.68	94.46	-22.50
NPL and NPF	4.21	3.65	4.21	3.66	2.60
BOPO	85.4	81.3	63.21	129.87	3.32

a significant differences in the BOPO between two means. In this case, Islamic banks are more efficient although their standard deviations show much higher value than their conventional counter parts. Notice that in this ratio, the lower the BOPO the more efficient will the bank be.

ANALYSIS

ANALYSIS OF CAPITAL ADEQUACY RATIO (CAR)

The reason of CAR of conventional banks being more significant to that of the Islamic banks might be due to the fact that the conventional banks in Indonesia have been established longer than the Islamic banks. The conventional bank has been operating long before the Indonesian independence, which was in 1945. The Dutch which occupied Indonesia for more than 300 years had named the bank, De Javasce Bank, which was later nationalized into Central Bank of Indonesia (Bank Indonesia 2013). Since then there had been only conventional banks in Indonesia until the introduction of the first Islamic bank in 1992 by Bank Muamalat Indonesia. Until the end of 2013, there were 120 conventional banks operating in Indonesia (Statistic Perbankan Indonesia, December 2013). Meanwhile, there were 11 Islamic banks (Statistic Perbankan Indonesia, January 2014). With this experience, it is expected that the conventional banks are able to accumulate their capitals. Moreover, the long experience may enable the conventional banks to have a better technique in mitigating their risks than Islamic banks.

From Figure 1 above, it shows that during the period under study, the CAR is almost consistently higher than that of the Islamic Banks except for the first few months of 2011. The higher CAR (above the 8%) means that the banks are resilient to risk. Overall, conventional banks recorded more than 15% of CAR while Islamic Banks are within the range of 9% to 20%.

There is a slight downward trend of CAR for conventional banks; but for Islamic banks, it is slightly upward. During the first few months of 2011, the CAR of Islamic banks had been relatively higher than the previous

periods. It was due to the fact that during that time the Islamic bank industry had been able to earn huge profit; which is later contributed as additional capital to the Islamic banks. The paid in capital increased by 28.5% on the following year (Laporan Perkembangan Perbankan Syariah 2011). This significant increase in the capital leads to the increase in CAR.

However, this study does not seem to be consistent with the previous study in the case of Malaysia, as shown by Wasiuzzaman and Gunasegavan (2013). Their result showed that the Islamic banks' CAR is better than that of conventional banks. They argued that the ability of the Islamic bank management of better managing the capital acts as a buffer against the losses compared to that of the conventional banks.

ANALYSIS OF RETURN ON ASSETS (ROA)

In this study, ROA is adopted as an indicator for profitability. Figure 2 shows that overall, the ROA for conventional banks is higher than that of the Islamic banks despite the banks' few months ROAs being close to each other. The range of ROA for conventional banks is between 1.5 % to almost 4%, while ROA of Islamic Banks ranged from 0.0 to almost 3 %. The reason for the significant ROA of conventional banks to that of Islamic Banks might be due to the contribution of bank asset to the total national asset. Up until mid-2014, the Islamic bank market share stood at around 5%. With a given small market share, the facility given to the customers will also be small.

As we are aware, in Islamic banks, before a banking product is launched, it needs the approval from the central bank as a regulator. This is important because the central bank has to protect the consumers' interest. Moreover, the product also needs to be approved by National Shariah Board for any *shariah* issues. Having gaining the approval of these two institutions, can only the product be launched. It is obvious that the process takes time; and as a result the variety of Islamic banking product will be limited. This is not the case with the conventional bank as the bank only needs the approval of one party, i.e. the central bank. Given the limited product offered, it is then

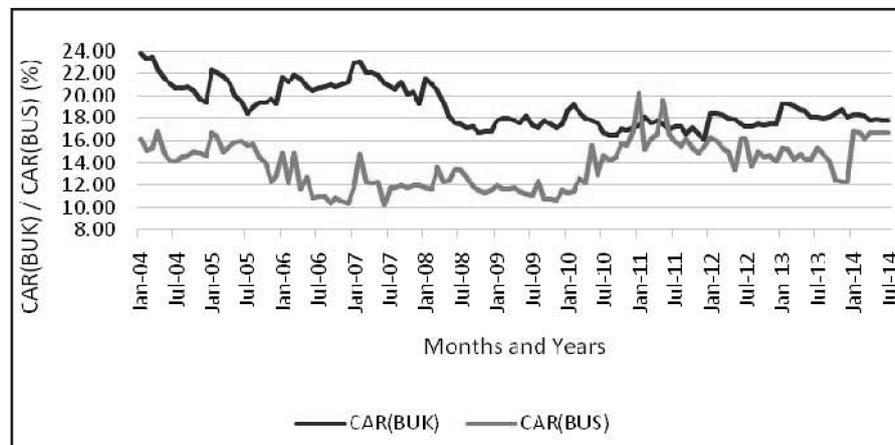


FIGURE 1. CAR (BUK) of Conventional Banks (BUK) and CAR (BUS) of Islamic Banks (BUS)

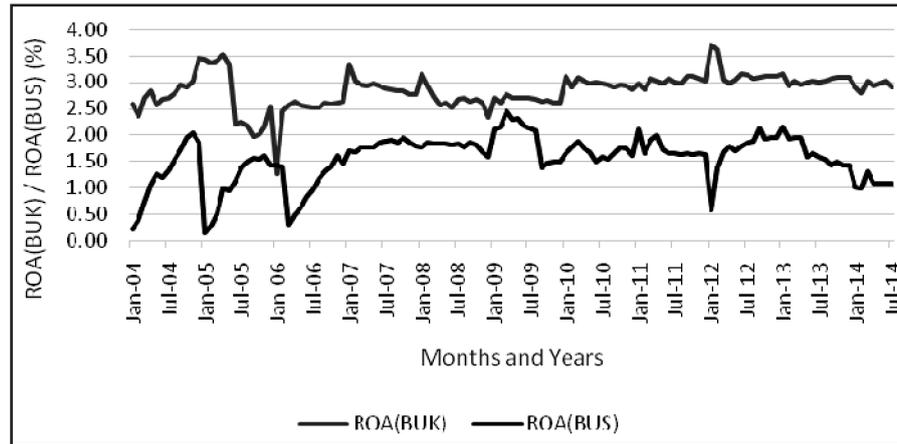


FIGURE 2. ROA (BUK) of Conventional Banks (BUK) and ROA (BUS) of Islamic Banks (BUS)

expected that the profitability will not be as high as that of conventional banks.

Another experience which may lead to the conclusion that ROA for conventional banks being much higher than that of Islamic banks is because in 2011, Indonesia had been awarded the ‘investment’ grade by all rating agencies (Laporan Perkembangan Perbankan Syariah 2011). As a result, many foreign investors have invested in Indonesia and they prefer to interact with conventional banks as they provide more facilities for transactions in which Islamic banks are lacking. Figure 2 shows that from 2011 onward, the ROAs from conventional banks were more than that of Islamic banks. This might be the reason of why conventional banks have been able to record better profit as compared to the conventional banks. Similar results are found in Fayed (2013) in the case of Egypt, and Saifullah (2010) in the case of Bangladesh.

This result does not support previous studies such as Hadriche (2015) in the case of Islamic and conventional banks in GCC countries. However, Hadriche (2015) indicated a much higher number of business activities in Islamic Banks. Therefore, if Islamic banks are able to earn more profit than the conventional banks, then it is not a surprising fact. Similar finding is found by Khediri et al. (2015) which is also in the same region.

Another interesting study pertaining to this issue can be seen from the study done by Rozzani and Rahman (2013) whereby profitability as represented by ROA was more significant among the Islamic banks compared to conventional banks. However, as Rosly and Bakar (2003) mentioned this is because Islamic banks in Malaysia, to some extent, still utilize the infrastructure of their parent companies, which are conventional banks.

ANALYSIS OF NPL AND NPF

Non Performing Loan simply means loan which cannot be repaid by the borrower. A high NPL means that there are substantial amount of loans which could not be returned by the borrowers. Table 2 shows that there is a significant difference between the mean of NPL and that of NPF. Figure 3 shows that NPL was higher than NPF at the beginning, but from January 2007 onwards, the NPF was relatively higher than that of NPL.

From 2006 to mid 2007, the NPF shows a significant upward trend compared to the previous period. This might be due to the overall economic condition of Indonesia. In the midst of 2005, the world oil price had gone up which leads to the reduction of the subsidies

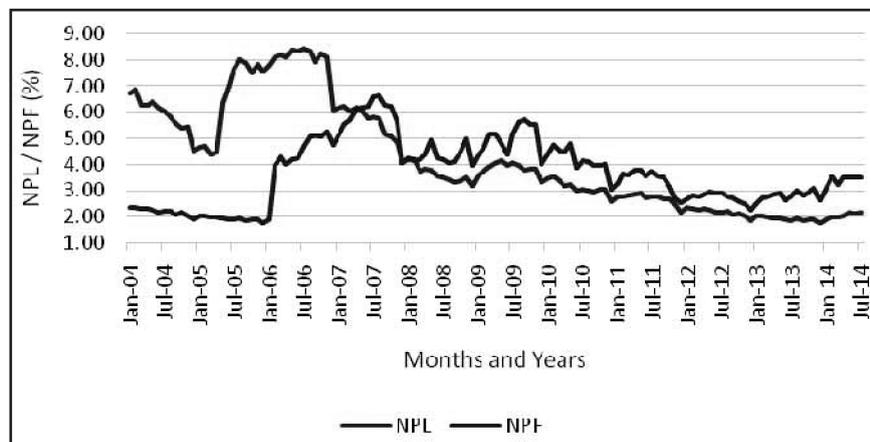


FIGURE 3. NPL of Conventional Banks (BUK) and NPF of Islamic Banks (BUS)

for the fuel in Indonesia. Consequently, general price increased which in turn increased NPL and NPF.

The response by central bank on the increase in inflation was to increase the interest rate; and this policy aimed to slow down the economy as the people were more willing to put their extra money in banks and borrower also preferred to not requesting financing from the banks.

It is interesting to see why the timing of abrupt increase in NPL is different from that of the NPF. NPL in April was at 4.45 and it abruptly increased to 6.37 in May. Meanwhile, during this time NPF showed 1.96 and 1.95<sup>4</sup>. NPF sharply increased in February 2006 (3.97) from the previous month of 1.9.

This can be explained by the difference in the nature of the loan contract between conventional and Islamic banks. In conventional banks, interest rate applied to the loan contract is adjustable, i.e. depending on the overall economic performance. If the central bank increases the rate during the loan contract, the banks will increase the interest rate on loan and the borrower does not have a say in the interest rate charged. This certainly creates uncertainty to the borrower.

This will not happen in the case of Islamic banks. In Islamic banks, each contract has different characteristics from the others. The basics of the Islamic financial contract are, buy and sell, rent, and profit loss sharing. The example of buy and sell is *murabahah*, rent is *ijarah* and profit loss sharing is *mudharabah* and *musharakah*. In terms of margin as the replacement of interest rate, it cannot easily be adjusted.

In the case of Indonesia, among all those types of product, *murabahah* still dominates the financings offered by Islamic banks. This contract provides a fixed margin that has to be paid by customers. This means, the margin cannot not be changed whatsoever. For example, when the interest rate for loan in conventional bank increases due to the increase of interest rate by central bank, the bank can easily adjust it. However, in this case, customers are at a disadvantage since they have to pay higher margin. Meanwhile, for the Islamic banks, although the interest rate for loan increases, the margin of *murabahah* cannot be increased. Once the bank does that, the contract will

be invalid. Therefore, the customers only have to pay the margin as stated in the contract.

This might be the reason why the timing of sudden increase in interest rate for conventional happened earlier (not at the same time) than Islamic banks. This is because the conventional banks can easily adjust on the interest rate that requires their customers to pay more. Meanwhile, the *murabahah* takes longer to increase its NPF. Previous study related to this credit risk can be found in Saifullah (2010), where by it says that conventional credit risk is better than that of Islamic. However, the study by Fayed (2013) shows otherwise.

From 2007 onwards, both NPL and NPF showed downward trend with the NPF generally being above the NPL. This means, both banks have been successful in providing loans and financings to the prospective businesses.

ANALYSIS OF LDR AND FDR

Table 2 shows that the level of financial intermediation for Islamic bank is much better than that of conventional banks. A higher FDR than LDR would mean that Islamic banks have been successful at acting as a bridge between parties, i.e. those with excess funds and other parties in need of funds. The funds collected from the depositors have been channeled to the other party. The fact that the mean of FDR exceeds 100 indicates that deposit alone is not enough to meet the demand for financing. It requires part of the equity or financing from other Islamic banks to top up with the existing deposit.

Figure 4 shows the range of FDR stands at more than 75% up to almost 135%. Meanwhile, for the LDR, it ranges from more than 40% to less than 105. The figure also shows that in all the periods under study, the value of FDR is higher than that of conventional.

A possible reason for this might be due to the policy imposed by Bank Indonesia on the reserve requirement for both types of banks (Sukmana & Kholid 2013). For the conventional banks, the reserve requirement is based on the collected bank deposit from the third party. In the case where the bank has been able to collect deposit in



FIGURE 4. LDR of Conventional Banks (BUK) and FDR of Islamic Banks (BUS)

a huge amount (in nominal term), the percentage of the reserve requirement is higher. Similarly, for the small banks which are only able to collect small nominal amount of deposit, the percentage of reserve requirement is small.

As a result, big banks which are placing more money as reserve requirement would have limited chance of providing financing to their customers. This might be the reason as to why conventional banks have less LDR. Reserve requirement can also be considered as tax by the bank. This is because banks have been able to collect deposit but they cannot use all the deposits as financing since they need to have a portion of the funds place dat central bank. The larger the amount of collected deposit, the larger the amount which will be need to place dat the central bank. This obviously discourages the banks, particularly for the big banks which have spent a lot of funds for marketing to attract customers to increase their deposits with the banks.

Meanwhile, the policy of reserve requirement by Bank Indonesia for Islamic banks says that the reserve requirement is not based on the collected deposit amount as what is happening in the conventional banks. Rather it is based on whether the Islamic banks have been able to meet the level of the financial intermediation or not. The proxy that indicates the level of financial intermediation is Financing to Deposit Ratio (FDR). High FDR means that banks are able to perform as financial intermediaries. In this policy, those with high FDR will be rewarded and conversely low FDR will be punished.

Reward here means that the percentage portion for the reserve requirement is not high. For example, an Islamic bank with FDR of more than 80% will be rewarded with the percentage portion for the deposit collected at only 5% (Sukmana & Kholid 2013). Meanwhile, for an Islamic bank with FDR less than 80%, it will be punished. The “punishment” is in the form of the policy rule of conventional banks which imposes higher rate for reserve requirement.

By having this policy, Islamic banks are encouraged to channel their funds to as many potential businesses as possible given the risk exposure. The higher their amount

of financings, the better it is since less percentage of reserve requirements is being applied. This policy is the reason why FDR is significantly higher than LDR.

Another possible reason of why FDR is higher than LDR is because of the performance of money market. This market is used as a platform for the banks to manage their liquidity. For banks with high liquidity, they can share their excess liquidity with this market and later have it channeled to other banks which are need of liquidity at a negotiated price. Similarly, the banks with less liquidity can also actively seek funds in this market in order to achieve a proper level of liquidity.

In the case of conventional banks whereby the numbers of banks are many, the funds are abundant and the products in the money market are various, the transactions can be expected to be huge with large nominal amount of funds in each transaction. Currently, there are 120 conventional banks. Some banks are experiencing less liquidity and at the same time some other banks are in excess of liquidity. Hence, these banks can make an arrangement as to provide mutual benefit for the two parties.

Meanwhile, the Islamic money market in Indonesia is less developed as compared to that of conventional banks. Currently there are only 11 Islamic banks. Sometimes, some banks are having high liquidity, but they cannot have their funds well distributed via this market since the other banks may already have ample liquidity. In this case, money market has not adequately functioned; which requires the banks to distribute the funds to the real sectors via financing. Moreover, the products of Islamic money market might not be varied. Again, this is because the number of Islamic banks is not many. Furthermore, it might be due to the *shariah* issues. In Malaysia, its money market is more developed due to the contract of *Bay Al-Inah* which is permissible. As a result, there are more transactions in Malaysia. However, in Indonesia, that contract is not permissible which leads to the less developed Islamic money market. Previous studies which have the similar view pertaining to this issue can be found in Saifullah (2012), Wasiuzzaman and Gunasegavan (2013) and Khediri et al. (2015); but not Fayed (2013).

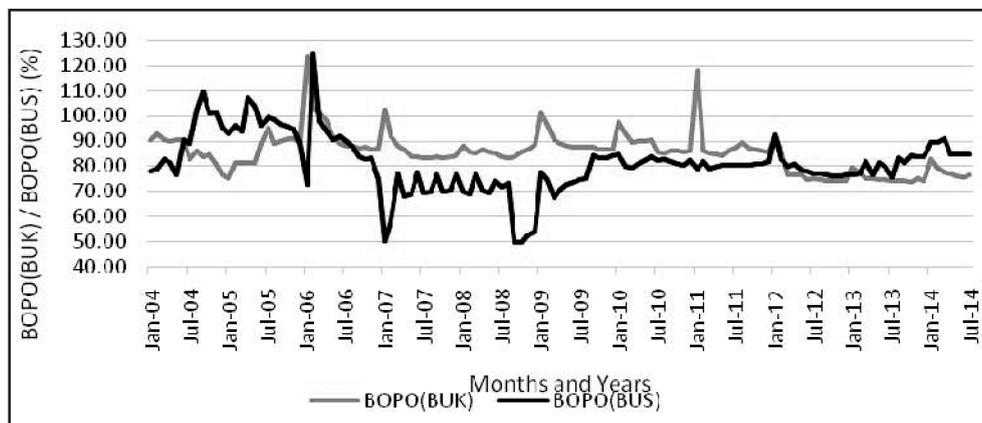


FIGURE 5. BOPO (BUK) of Conventional Banks (BUK) and BOPO (BUS) of Islamic Banks (BUS)

## ANALYSIS OF BOPO

BOPO means operational cost over operational revenue. Table 2 shows that the Islamic banks are more efficient than the conventional banks. It supports the study done by Wasiuzzaman and Gunasegavan (2013). The lower the indicator of BOPO, the more efficient it is. Figure 5 reveals that in many cases, BOPO of Islamic banks (BUS) is below than that of conventional banks (BUK), especially during the period from September 2008 to January 2009. The probable reasons as to why Islamic banks' BOPO is better (lower value) as compared to the conventional banks are due to two reasons; namely the performances of FDR as well as NPF. The performance of FDR above shows that the demand for financing of Islamic bank is high. It requires the bank to find additional funds for its financing. In case where the funds are not enough, the equity needs to be utilized; and in fact this is the scenario.

In other figure, we see that the NPF is better. Table 2 shows that mean of NPF is 3.65. The standard of NPF or NPL is 5%. With this small figure of NPF together with the huge financing (as shown by the high FDR), this would mean that the bank is very efficient. The Islamic banks have been able to appropriately identify their customers who are in need of financing. These two figures' results show better revenue as well as less cost, leading to low BOPO.

Conversely, in the case of conventional banks, the reason for the low LDR is because the conventional banks have an option when financing is not in favor of the banks. In this case, the banks can send their funds to the money market. The yield might not be as high as giving financing, but certainly, with the active transaction in the money market, the risk is low. This leads to a high BOPO. Meanwhile, relatively high NPL means that the banks are slightly less prudent than the Islamic banks. These factors perhaps explain as to why the BOPO (operational cost / operational revenue) for conventional banks is higher than that of Islamic banks. A high BOPO would mean that the banks are less efficient. The bank cannot generate revenue with the given cost.

## CONCLUSION

This paper attempts to critically evaluate the performance of Islamic and conventional banks. Capital adequacy, profitability, financial intermediation level, non performing loan and non performing financing are the items focused in this paper. This paper concludes that the long experience of banking is important in gaining better profit, which later be partly treated as additional capital. Moreover, the facilities of the banks are also important in attracting the customers and this has been successfully done by conventional banks. NPF, FDR and BOPO have been in favor of Islamic banks due to the lack of performance of the money market which forces the Islamic banks to distribute the funds for financing. Moreover, the regulation

of central bank on Islamic banks in regard to the reserve requirement based on the level of intermediation would also encourage banks to perform better.

The FDR based RR policy imposed in Indonesia seems to be the main reason of explaining the fact that Islamic banks in Indonesia is functioning well as financial intermediaries as compared to their conventional counterparts. The aim of this policy is to return the banks to their main function and Islamic banks have proven that. Given the success of this policy, it is expected that the policy to be extended to the conventional banks. The central bank should appreciate conventional banks with high FDR; otherwise, it should be punished (by imposing high reserve required ratio).

Another interesting finding in this result is that even though NPL is significantly higher than that of Islamic banks, the result of conventional banks' ROA is significantly higher. It is common that if NPL is higher, the profitability will be negatively affected. The facts that NPL is higher, and ROA of conventional banks is also higher suggest that the management of conventional banking is much better.

The management of conventional banks is more efficient compared to that of Islamic banks. One of the reasons is probably due to the technology that they adopt. The advanced technology used by conventional banks may reduce their costs. Conversely, the lack of technology utilized by Islamic banks may have resulted in higher cost, such as transferring of funds from Islamic banks to other banks is still less efficient than the conventional banks.

Having these results, the expected proposed future study would be on how the macroeconomic variables influence the two types of banks given the fact that all of the present results are rejected. The macroeconomic variables may influence variable of the conventional banks but not of Islamic and also the other way around. The result would be important as the banking sector in Indonesia remains to be dominant to the economy (Goeltom 2008).

## ENDNOTES

- <sup>1</sup> For more discussion on Islamic banks and bank lending channel of monetary policy, kindly see Sukmana and Kholid (2010).
- <sup>2</sup> While loan refers to conventional banks, financing is for Islamic banks.
- <sup>3</sup> The negative sign of T-stat is due to the fact that the mean for FDR (in Islamic Banks) is higher than that of conventional banks.
- <sup>4</sup> It does not differ much.

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