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# A COMPARISON OF SHARIA BANKS AND CONVENTIONAL BANKS IN TERMS OF EFFICIENCY, ASSET QUALITY AND STABILITY IN INDONESIA FOR THE PERIOD 2008-2016

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## Abstract

*This research aims to compare the efficiency, asset quality, and bank stability between Islamic banking and conventional banking system in Indonesia in 2008 – 2016. This research used secondary data based on Financial Statement derived from the Financial Service Authority (Otoritas Jasa Keuangan or OJK). The methodology of the study is descriptive by comparing efficiency, asset quality and stability between Islamic banks and conventional banks. The variables used are: (1) overhead cost and cost income ratio as efficiency proxy; (2) the nonperforming loan is a proxy of asset quality; and (3) return on assets and Z score are proxy of stability. The result from statistic data process showed that there were differences in efficiency, asset quality, and stability between Islamic Banking and Conventional Banking where conventional banking more efficient, have better asset quality and more stability than sharia banking. There are some causes of sharia banking weakness such as of Information Technology that still behind of conventional banking, competency, and experience of human resources and the consciousness of the Muslim community to use sharia banking products for their primary financial transaction. Nevertheless, the contribution of sharia banks in improving social welfare has an essential role because the higher the income received, the higher the zakat issued by Islamic banks. Sharia banks as a solution of conventional banking that caused the financial crisis because of the principle of justice and Falah is an essential pillar of sharia banks.*

***Keywords:*** *Efficiency, Asset quality, Stability, Islamic Banking, Conventional Banking, Falah*
***JEL****: E5, E59, E6, E62*

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## 1. Background

In the economy of a country, the bank has a vital role in maintaining monetary and financial stability. Also, the primary function of the bank as an intermediary financial institution that connects between the surplus (depositors-owner Fund) with a deficit (the borrower-debtor). Industrial Bank is laden with risks and instability, primarily resulting from economic fluctuations and managerial operations (Malik, 2017). Bank failures can negatively impact other industries since banking has assets of the consumer and also from manufacturers (both as a bank customer). The inability of banking can have substantial economic costs. The experience of Indonesia when the financial crisis in 1998, showed the cost incurred by the economy through restructuring programs reached 47 percent of the gross domestic product (Stiglitz, 2000). The primary service in banking on the community is gathering funds (current account, savings, and deposits), disbursing funds in the form of loans and support to the community for delivery their money. Therefore, the Bank has a significant role in supporting business transactions. Even in the days of Prophet Muhammad transaction storage of money or possessions, borrow money for business purposes, and consumption, as well as the services of remittances, was a common activity performed at the time. Moreover, according to Sukmadilaga and Nugroho (2017) the business activity also should be supported by accounting that commanded in the Qur'an to take copious notes, namely in Al-Baqarah verse 282, which means: "O you who have believed, when you contract a debt for a specified term, write it down. Moreover, let a scribe write [it] between you

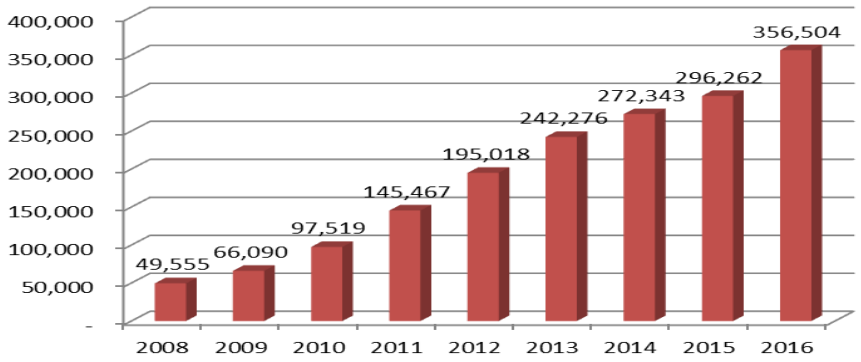
injustice. Let no scribe refuse to write us God has taught him. So let him write and let the one who has the obligation dictate. And let him fear Allah, his Lord, and not leave anything out of it. But if the one who has the obligation is of limited understanding or weak or unable to dictate himself, then let his guardian dictate in justice. And bring to witness two witnesses from among your men. And if there are not two men [available], then a man and two women from those whom you accept us witnesses-so that if one of the women errs, then the other can remind her. And let not the witnesses refuse when they are called upon. And do not be [too] weary to write it, whether it is small or large, for its [specified] term. That is more just in the sight of God and stronger u.s. Evidence and more likely to prevent doubt between you, except when it is an immediate transaction which you conduct among yourselves. For [then] there is no blame upon you if you do not write it. And take witnesses when you conclude a contract. Let no scribe be harmed or any witness. For if you do so, indeed, it is a [grave] disobedience in you. And the fear of God. And God teaches you. And Allah knows of all things."

The phenomenon of the development of the bank as intermediary financial institutions in Indonesia was marked by the publication of deregulation in the financial and monetary fields in June 1983. The phenomenon of bank development as an intermediary financial institution in Indonesia was marked by the issuance of deregulation in finance and monetary in June 1983 which led to liberalization in the banking sector. Liberalization led to a growing number of banks thus increasing access to financial services for the community to meet consumption and business needs. It also affects the spread of outlets throughout Indonesia to reach all the people who not only live in big cities but also in rural and remote areas. Regarding aNugroho et al. (2017) and Mitton (2002), in 1997 the economy of Indonesia is experiencing a crisis caused by the monetary crisis in Asia so that the result is terrible for many sectors and also the banking sector is no exception. The impact of the crisis is there 16 national private banks liquidated and also impact Government-owned bank merger (SOEs) into bank Mandiri (BBD-Bank Bumi Daya, BDN-Bank Dagang Negara, Bank Exim-Bank Export Import Indonesia, Bapindo-Bank Pembangunan Indonesia). However, the monetary crisis at that time did not have an impact on Islamic banking where there are no Islamic banks are collapsing.

The increase in the number of Shariah public banks is rapidly in Indonesia, where in 1992 by Bank Muamalat (only one bank) and in the year 2017 developed into totaled 13 Shariah public banks (Bank Muamalat Indonesia, Bank Syariah Mandiri, Bank Mega Syariah, Bank BRI Syariah, Bank Syariah Bukopin, Bank BNI Syariah, Bank Jabar Banten Syariah, BCA Syariah, Bank Victoria Syariah, Maybank Syariah Indonesia, Bank Panin Syariah, Bank Tabungan Pensiunan Nasional Syariah, Bank Aceh). Nevertheless, the rate of growth of Islamic banking assets experienced a slowdown. Where the asset growth of Shariah banking based on statistics published by the Central Bank of Indonesia, recorded growth of Islamic banking assets continued to increase. The increase of asset sharia bank industries (full pledge sharia bank and subsidiary sharia bank) can be shown in the below graphic 1.1 the growth of sharia industries during 2008-2016.

**Graph. 1.1 Asset Growth of Sharia Banking Industries (2008-2016)**

In billion Rp.




Source: Indonesia Central Bank

According to Widyastuti & Armanto (2013) and Usman et al., (2018), the increase of competition in the banking sector in Indonesia has started to noticeably since the existence of the policy related to the Indonesian banking openness. The condition of the transparency of banks in Indonesia was initiated with the promulgation of a policy package on June 1, 1983 (PAKJUN), which aims to modernize operational banks in Indonesia. Then, the PAKJUN continued with a policy package October (PAKTO) published on 27 October 1988. The PAKTO aims to give ease of permitting the establishment of the new bank, including the opening of a branch office. Then, with the funds of Rp 10 billion, investors can set up a new bank (Deni & Djoni, 2004), and this causes a significant increase in the number of banks. The goal of deregulation should be to create an efficient market mechanism (Martin & Scott, 2000). The increasing number of such banks is high among the banks so that banks are required for efficiency in the allocation of resources it has (Mathisen & Buchs, 2005; Usman et al., 2018). Also, the Bank should also reduce its operational costs, in other words, the bank must be able to increase its productivity (Allen and Rai, 1996; Dietsch and Weill, 2000; Weill, 2004). The current condition where there is rapid competition in banking industries enforce the bank to specialize and differentiate themselves to keep the profit for banks to survive in competition (Schaeck et al., 2009). The same is also conveyed by Zarutskie (2010), which in his research says that competition encourages banks to be more cost-effective than their competitors by specializing in certain types of loans and collecting retail funds which have a cheap cost of funds. For example: focus on the microloan segment with the support affordable fund sources (savings from micro and small entrepreneur).

Also, according to Dick & Lehnert, (2010), there are other alternatives in improving bank efficiency, namely through enhancing the quality of loan screening in specific segments, so that loans disbursed to borrowers are of good quality so as not to impact on the poor quality of loans. Therefore, with the lowest number of problem loans (NPF) will lead to lower costs to reduce the need for capital to ensure a financing reserves problem and increase bank profits compared with its competitors. Sharia banks and conventional banks have different principles in which Islamic Banks do not practice transactions related to interest and apply profit and loss sharing in their business activities (Chotib & Utami, 2014; aArafah & Nugroho, 2016; ). In other words, there are clear operational differences and principles between sharia banks and conventional banks (aPrastowo, 2015). Thus, the principal and operational differences between conventional and sharia banks can affect critical financial indicators such as efficiency, asset quality and stability. Conceptually and in previous research, Islamic banks should have better efficiency, better asset quality and stability compared to conventional banks because Islamic banks can survive in the economic crisis that has ever happened (Beck et al., 2013; Bourkhis & Nabi, 2013; Rosman et al., 2014; Mollah & Zaman 2015; Nugroho, L., & Husnadi, T. C. 2017). Therefore, further research is needed to know the level of efficiency, asset quality and stability between conventional banks and Islamic banks in the period after the crisis so that the problem restrictions on research are based on research questions as follows:

- Is there a significant difference between the efficiency of sharia commercial banks with conventional commercial banks?

- Is there a significant difference between the asset quality of sharia commercial banks with conventional commercial banks?
- Is there a significant difference between the stability of sharia commercial banks with conventional commercial banks?

## 2. Literature Review

### 2.1. Agency Theory VS Sharia Principles

The agency theory explains that in a company two parties interact with each other. The parties are the owners of the company (shareholders) and the management of the company. Furthermore, shareholders are referred to as principals whereas management is a person who is authorized by shareholders to operate a company called an agent. Companies separating management and ownership functions tend to be susceptible to agency conflicts because each party has conflicting interests to achieve their prosperity (Jensen & Meckling, 1976; Chrisman et al., 2004; Hayward & Boeker 1998).

Nevertheless, in sharia principles, there is no difference of interest between agent and principal, because the business activity is to render benefit of all parties. The income generated by the company or organization must be capable of providing benefits or goodness for humanity (jalb almanafi') and avoiding humanity from badness or destruction (dar'u almafasid) so that the concept of jalb almanafi' and dar'u almafasid is called Maslahah (Kara, 2012; Nugroho & Husnadi, 2017; Iqbal & Mirakhor, 2011; Rahman, 2003). Furthermore, with the concept of maslahah this will bring all human activity, including managing companies and organizations not only to achieve the goals of the world individually, but hereafter as the final destination (Falah) (aNugroho et al., 2017; bNugroho et al., 2017; Iqbal & Mirakhor 2011; Aris et al., 2013; Kara, 2012). Regarding the concept of Falah, profit maximization restricted by ethics and morals. Maqasid Shariah is an activity to fulfill basic needs (dharuriyat), secondary needs (hajiyat) and tertiary needs (tahsiniyah). Thus, to meet those needs, it must comply with the rules of Shariah (maqasid) which include: maintain the religion; maintain the soul; maintain the reasonable; maintain family/descent; maintain the property and keep the environment (aArafah & Nugroho, 2016; bArafah & Nugroho, 2016; bPrastowo, 2015; Nugroho, 2014; Mohammad & Shahwan, 2013; Wajdi, 2008). Sharia principles can eliminate the causes of conflict in agency theory. Asymmetric information is one of the reasons of disputes in agency theory (Willenborg & McKeown 2000; DeFond & Zhang, 2014; Nugroho et al., 2018) because there is biased information due to different interests. However, asymmetric information can be eliminated with the existence of maqasid syariah which causes the similarity of goals among stakeholders is to provide maslahat. Based on the maqasid shariah, the knowledge and awareness of every Muslim becomes very important in carrying out his religion in totality (kaffah)

In the event of a financial crisis in 1998, it required the considerable cost to save financial stability, but it took a long time to foster public confidence in the national financial system. The precarious financial system tends to be vulnerable to turbulence, and then it disrupts the economic system of the state Bank stability is one of the pillars in strengthening the country's economic system. Thus the stability of banks is essential and the focus of government policy in a country. Former studies have benchmarked business models, efficiency and stability between sharia banks and conventional banks in times of financial crisis (Beck et al., 2013). While the proxy of bank stability can be reflected by Z score and Return On Asset (ROA) (Laeven & Levine 2009; Koehn & Santomero, 1980; Buser et al., 1981; Beck et al., 2013). Conventional banks and sharia banks have different objectives, Islamic banks have a goal to achieve Falah so that the existence of sharia banks should provide social wellbeing for people who also consider justice, morals, ethics, and equations while conventional banking aims solely for goodness in the world. Nevertheless, in its current development, all banks, both conventional and sharia banks must implement sustainable Islamic banks, and conventional banks must deliver a triple P concept (profit, people, and planet) (Nugroho & Chowdhury, 2015; Sobhani et al., 2012; Bhardwaj & Malhotra, 2013; cNugroho et al., 2017). Then, based on previous studies some critical financial indicators commonly used in measuring bank performance, in general, are efficiency ratio, asset quality, and financial stability (Sukarno & Syaichu, 2006; Margaretha, 2018; Beck et al., 2013; Schaeck & Cihák 2014).

### *2.2 Efficiency*

Based Efficiency is the ratio between output and input, a company, especially a bank can be said to be efficient if it can produce more output than inputs issued. Bank efficiency is one of the crucial indicators to analyze the performance of a bank and also as a means to further improve the effectiveness of bank policy (Fuentes & Vergara, 2003; Rozzani & Rahman, 2013) Efficiency can be seen from two sides, namely the cost efficiency and profit efficiency (Sherman & Gold, 1985; Sathye, 2001). Some ratios can be used to measure efficiency such as operating cost ratio. The operational cost ratio is used to measure the efficiency and ability of bank in conducting its operation. There are some researcher opinions and studies about the comparison of the efficiency of the sharia bank and conventional bank. These belong to Beck et al., (2013), Bourkhis & Nabi, (2013) and Rosman et al., (2014).All of them explains that sharia bank is more efficient compared to a conventional bank. Indicators used by previous researchers to measure efficiency in the banking industry are the overhead cost and cost income ratio (Beck et al., 2013; Rosman et al., 2014; Saeed & Izzeldin, 2016).

Regarding the research aims, the hypothesis 1 is "There is a difference in efficiency between sharia commercial banks with conventional commercial banks in Indonesia."

### *2.3 Asset Quality*

Regarding the size of the organization, large banks have a higher probability of having better performance compared to smaller banks, as large banks are managed more professionally and have better-diversified asset portfolios (Beck et al., 2013; Humphery-Jenner & Powell, 2011; Stanwick & Stanwick, 1998). Banks can manage funds in productive assets as a source of income used to finance their overall operational costs, such as labor costs, interest costs, and other operational costs. Therefore, productive assets must be managed well to generate profits. Asset quality assessment is intended to evaluate the condition of bank assets and the adequacy of credit risk management. This aspect shows the quality of assets concerning the credit risks faced by banks due to lending and investment of bank funds in different portfolios. Every investment of bank funds in earning assets has assessed its quality by determining the level of collectibility are substandard, doubtful or loss. The differentiation of the collectibility level is necessary to decide on the minimum reserve requirement for the elimination of productive assets which must be provided by the bank to cover possible losses (aNugroho et al., 2017; De Bock & Demyanets, 2012; Chan et al., 1986). Furthermore, based on previous research the appropriate indicators used to measure asset quality are non-performing loans (Shrieves & Dahl, 1992; Bernstein, 1996; Klein, 2013).

Regarding the research aims, the hypothesis 2 is "There is a difference in asset quality between sharia commercial bank with the conventional bank in Indonesia."

### *2.4 Bank Stability*

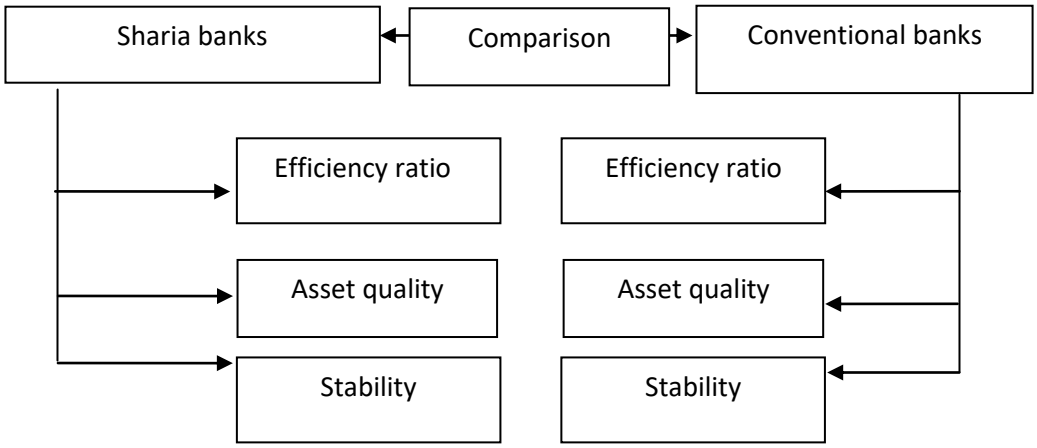
Banking stability is one of the pillars of economic growth. Therefore, the central bank not only maintains monetary stability but also maintains banking stability to support sustainable economic growth. In Indonesia, not only conventional banking but also sharia banking also plays a role in promoting economic growth (bNugroho et al., 2017). The stability of sharia and conventional banking can be seen from bank soundness. The financial system plays a vital role in the economy, as part of the economic system. The financial system serves to place funds from those who experience surplus to the deficit. If the financial system is not stable and does not work efficiently, then the placement of funds will not run well so that it can hamper economic growth. The results of previous research conducted by Beck et al., (2013) that the stability of Islamic banks is better than conventional banks, while the research results Myirandasari & Manzilati (2014). The stability of conventional banks is better than in Islamic banks. According to previous researchers who reviewed related to the stability of banks, they use indicators of return on assets ROA and Z score (Koehn & Santomero, 1980; Buser et al., 1981; Laeven & Levine 009; Beck et al., 2013)

Regarding the research aims, the hypothesis 3 is "There is a difference in stability between sharia commercial banks with conventional commercial banks in Indonesia."

### *2.5 Conceptual Framework*

Based on literature review and hypothesis, the research framework can be illustrated as follows:

Figure 1.1 Conceptual Framework




## 3. Research Methodology

The research was conducted at sharia commercial bank and conventional commercial bank period 2008-2016 and indirect observation that using secondary data. The data used in this study obtained from financial statements collected and published through the website Financial Services Authority www.ojk.go.id (OJK) and each website Bank. Also other reference sources such as scientific journals, reference books, and previous research.

### *3.1 Research Design*

The research design in this research is a comparative descriptive study. Comparative research is a study to compare the similarities and differences between two or more specific phenomena or populations that can be individual, industrial organizations or other perspectives. So this study aims to compare the level of efficiency, asset quality, and stability between sharia banks and conventional banks. The Statistical process in this study objective to show significant differences in efficiency, asset quality, and stability between Sharia Commercial Banks and Conventional Banks. Furthermore, the data in this research used are secondary data, so that the processing using two different test statistical techniques average (independent sample t-test).

### *3.2 Research variables*

#### *3.2.1 Efficiency*

There are two indicators used in this study to assess bank efficiency, namely overhead cost (OC), and cost income ratio (CIR). According to Pasiouras et al., (2009) and Beck & Levine (1999) then the formulation of OC and CIR as follows

$$\text{Overhead Cost} = \frac{\text{Total Operating Cost}}{\text{Total Assets}} \times 100\% \quad (1)$$

$$\text{Cost Income Ratio} = \frac{\text{Total Operating Cost}}{\text{Total Operating Revenue}} \times 100\% \quad (2)$$

#### *3.2.2 Asset Quality*

Non-performing loan (NPL) is one of the indicators to assess the quality of financing or credit disbursed by the bank. According to Wibowo & Syaichu, (2013), Firmansyah, (2014) and Soekapdjo et al., (2018), the formulation of the NPL ratio is (…):

$$\text{Non Performing Loan} = \frac{\text{Number of Non Performing Loans (NPL)}}{\text{Total Credit}} \times 100\% \quad (3)$$

### *3.2.3 Stability*

The variable of stability of sharia banks and conventional banks refer to Wibowo & Syaichu, (2013) and Usman et al., (2018) are ROA and Z Score, the formula of the indicator as follows (…):

$$\text{ROA} = \frac{\text{Profit before tax}}{\text{Total Assets}} \times 100\% \quad (4)$$

$$\text{Z Score} = \frac{\text{Return on Asset+Capital Adequacy Ratio}}{\text{Standard Deviation of ROA}} \times 100\% \quad (5)$$

## 4. Discussion And Analysis

The population used in this study are sharia commercial banks and conventional commercial banks in 2008-2016 with the acquisition of data from the Financial Services Authority that available online at www.ojk.go.id. This research, using a purposive sampling method to determine the sampling and the selection criteria of this sample are as follows:

1. Conventional banks and sharia banks registered at Bank Indonesia in 2008
2. Conventional banks and sharia banks registered at Bank Indonesia and published their financial statements for the period of 31 December 2008-2016 and use rupiah as reporting currency.
3. Conventional commercial banks and sharia banks do not include foreign banks, mixed banks, or banks BPD (regional banks).
4. Conventional banks and sharia banks that have an asset difference are not too large between banks with other banks, so there is no standard deviation, and the results become representative.

According to the sample criteria, the amount of sampling can be generated in the table below:

**Table 1 Population and Samples**

| No | Description | Number of Banks |
|---|---|---|
| 1 | Conventional commercial banks and sharia commercial banks registered at Bank Indonesia (Central Bank) in 2008 | 124 |
| 2 | Conventional commercial banks and sharia commercial banks in Indonesia that publish financial statements for the period of 2008-2016 | 116 |

| | | |
|---|---|---|
| 3 | Conventional commercial banks and sharia banks that publish financial statements for the 2008-2016 period have a total asset range of Rp3 trillion to Rp34 trillion at the end of 2008 | 11 |
| 4 | Number of research samples for 9 periods (2008-2016) | 99 |

Source: Own

Based on these criteria, 11 Banks become research samples, consisting of 3 sharia banks and 8 conventional banks. The following is a list of Banks that are the sample of this study:

**Table 2 List of banks that were sampled in this study**

| No | Bank Name | Total Assets in 2008 (in a million rupiah) |
|---|---|---|
| 1 | PT Bank Mega Syariah | 3.096.201 |
| 2 | PT Bank Muamalat Indonesia, Tbk | 12.596.715 |
| 3 | PT Bank Syariah Mandiri | 17.065.938 |
| 4 | PT Bank Nusantara Parahyangan, Tbk | 3.694.809 |
| 5 | PT Bank Mestika Dharma, Tbk | 4.989.983 |
| 6 | PT Bank Mayapada Internasional, Tbk | 5.512.694 |
| 7 | PT Bank Victoria Internasional, Tbk | 5.580.480 |
| 8 | PT Bank Sinarmas, Tbk | 6.064.626 |
| 9 | PT Bank Tabungan Pensiunan Nasional, Tbk | 13.697.461 |
| 10 | PT Bank Bukopin, Tbk | 32.649.246 |
| 11 | PT Bank Mega, Tbk | 34.860.872 |

Source: Own

### *4.1. Descriptive Statistics Efficiency*

Efficiency in this research is proxied with overhead cost ratio and BOPO; following is the table of descriptive statistic result from efficiency proxy by using SPSS version 23.:

**Table 3. Statistics-Descriptive Efficiency**

| Indicator | Bank | N | Min | Max | Mean | Std. Dev |
|---|---|---|---|---|---|---|
| Overhead Cost | Sharia Bank | 27 | 3.09 | 12.21 | 5.65 | 2.62 |
| | Conventional Bank | 72 | 1.31 | 7.52 | 4.01 | 1.60 |
| CIR | Sharia Bank | 27 | 73.00 | 99.51 | 87.38 | 8.36 |
| | Conventional Bank | 72 | 54.02 | 98.52 | 83.08 | 9.67 |

Source: Data that has been processed

The results of descriptive statistics from the table 3. above can be seen the number of samples used during the observation period 2008-2016 is 11 banking companies which consisting of 3 syariah banks which consist bank mega syariah; bank muamalat, bank syariah mandiri and in another side 8 conventional banks that state in table 2. The average value of the efficiency of sharia bank, which is represented by overhead cost is 5.65%. This figure shows that the average overhead cost of sharia bank is higher than the average overhead cost of the conventional bank that is equal to 4.01%, it shows that the conventional commercial bank is more efficient than the sharia commercial bank. The minimum value of sharia bank is 3.09% at Bank Muamalat Indonesia, while the minimum value of conventional commercial banks is 1.31% of the Victoria International Bank, the maximum value of sharia bank is 12.21% in Bank Mega Syariah, while the maximum value of conventional commercial bank is 7.52% at Bank Tabungan dan Pensiun Nasional, the value deviation of sharia banks by 2.62% while conventional commercial bank deviation of 1.60%.

The average value of the efficiency of sharia banks represented by the CIR is 87.38%. This figure shows that CIR of sharia banks is larger than the conventional CIR of 83.08% of total operating income, it means that conventional commercial banks are more efficient than with sharia commercial banks, the minimum value of sharia banking is 73.00% in Bank Mandiri Syariah and the minimum value of conventional commercial banks is 54.02% in Bank Mestika Dharma. The maximum value of sharia bank is 99.51%, i.e., at Bank Mega Syariah with a deviation of 8.36%, while the maximum value of a conventional commercial bank is 98.52%, i.e., Bank Nusantara Parahyangan with the deviation of 9.67%.

It can be explained that the average value of overhead cost and CIR of sharia commercial banks higher than conventional commercial banks illustrates the low efficiency of sharia commercial banks in comparison with conventional commercial banks, this is due to the relatively young and still growing age of sharia banks can mean that the operational burden of sharia banks is high, unlike conventional commercial banks that have operated earlier (longer) so that in terms of cost structure of conventional banks is not too high when compared to sharia commercial banks.

### *4.2 Descriptive Statistics of Asset Quality*

Asset quality measurements in this study were proxied by NPL (Non-Performing Loan), following table 4 results from descriptive statistics of asset quality using SPSS version 23 .:

**Table 4. Descriptive Statistics of Asset Quality**

| Indicator | Bank | N | Min | Max | Mean | Std. Dev |
|---|---|---|---|---|---|---|
| NPL | Sharia Bank | 27 | 0.78 | 4.76 | 2.36 | 1.22 |
| | Conventional Bank | 72 | 0.00 | 9.65 | 1.65 | 1.41 |

Source: Data that has been processed

According to table 4, the average value of asset quality of sharia banks represented by NPL is 2.36%, higher than the average value of conventional commercial banks of 1.65%, indicating that conventional banks have better asset quality than sharia commercial banks. The minimum value of sharia commercial banks is 0.78% at Bank Muamalat Indonesia, while the minimum value of conventional commercial banks is 0%, namely Victoria International Bank, while the maximum value of sharia banks is 4.76%, i.e., in Muamalat Indonesia Bank with the standard deviation of sharia banks by 1.22 %. Nevertheless, the maximum value of conventional commercial banks is 9.65% in Mestika Dharma banks with conventional standard bank deviation of 1.41%.

The average value of NPLs of sharia banks is higher than conventional banks, which means that sharia banks have the more significant potential loss due to nonperforming loans and decreased income compared to conventional banks. However, if it refers to the provisions of Bank Indonesia that the best NPL standard is below 5%, the sharia bank is still in ideal condition because it is still in the provisions of Bank Indonesia.

### *4.3 Descriptive Stability Statistics*

The research variable of bank stability in this study is proxy with ROA and Z score, following table 5 result from statistical sampling with SPSS Version 23:

**Table 5. Descriptive Stability Statistics**

| Indicator | Bank | N | Min | Max | Mean | Std. Dev |
|---|---|---|---|---|---|---|
| ROA | Sharia Bank | 27 | 0.17 | 3.81 | 1.43 | 0.95 |
| | Conventional Bank | 72 | 0.15 | 5.42 | 2.17 | 1.29 |
| Z Score | Sharia Bank | 27 | 6.08 | 23.22 | 13.45 | 4.92 |
| | Conventional Bank | 72 | 15.91 | 81.24 | 36.98 | 13.95 |

Source: Data that has been processed

According to table 5, the average value of ROA in sharia banks is 1.43% smaller than the average conventional bank's general ROA of 2.17%, indicating that conventional commercial banks are more stable than sharia commercial banks. The minimum value of sharia commercial banks is 0.17%, i.e., at Bank Muamalat Indonesia while the minimum value of conventional commercial banks is 0.15%, i.e., in Bank Nusantara Parahyangan, while for the maximum value of sharia commercial banks is 3.81% at Bank Mega Syariah with a standard deviation of 0.95 % and the maximum value of conventional commercial banks amounted to 5.42%, i.e., at Bank Mestika Dharma with the standard value of deviation of 1.29%.

The average value of Z-score of sharia banks is 13.45% smaller than the conventional commercial bank Z-score of 36.98%, which means that conventional commercial banks represented by Z-scores are more stable than sharia banks. The minimum value of sharia banks is 6.08%, i.e., at Bank Muamalat Indonesia while the minimum value of conventional commercial banks is 15.91% at Bank Victoria International. However, the maximum value of commercial banks is 23.22% in Bank Mega Syariah with a standard deviation of 4.92%. The maximum value of conventional commercial banks is 81.24% in Bank Bukopin with a standard value of 13.95% deviation.

### *4.4 The Efficiency Of Sharia Commercial Banks Vs Conventional Commercial Banks*

Hypothesis test of efficiency variables is done by using the independent t-test, following test results independent sample t-test variable efficiency:

Table 6. Independent Sample t-Test Efficiency Variables

| Indicator | Mean Difference | t | Sig. (2-tailed) |
|---|---|---|---|
| Overhead Cost | 1.63 | 3.03 | 0.01 |
| CIR | 4.30 | 2.04 | 0.04 |

Source: Data that has been processed

Based on the t-test of overhead cost variable (table 6), t value of 3.03% with average difference 1.63% which is overhead cost bank conventional general is lower than sharia commercial bank, and the value of significance is 0.01 which is less than 0.05. This means that there is a difference in average overhead cost between sharia commercial banks and conventional commercial banks. Its also shown from descriptive statistic table 1 whereas the average value of overhead cost sharia banks obtained by 5.65% while the average value of overhead cost conventional commercial banks amounted to 4.01%. Therefore, the conventional commercial bank overhead cost more efficient if compared to the overhead cost of sharia commercial banks. Another variable of efficiency ratio is cost efficiency ratio (CIR). The result of independent hypothesis t-test (table 4) obtained t value for CIR indicator of 2.04% with an average difference of 4.30% where conventional bank CIR is lower than CIR of sharia commercial bank, and the significance is 0.04. Based on the significance value less than 0.05 indicates that there is a significant difference between sharia bank CIR and conventional bank so it can approve that hypothesis 1 is acceptable. It is also according to the above descriptive statistical results; it is known that the average CIR value of sharia bank is 87.38% and conventional commercial bank CIR is 83.08%, it can be interpreted that conventional bank CIR is more efficient than CIR of sharia bank.

The inefficient condition of sharia banks could because of Information Technology (IT) is still behind the conventional bank and the gap establishment of sharia banks (1992-the oldest Sharia bank) with conventional banks (1896-the oldest conventional bank) so vast that the caused experience and competence of human resources Islamic banks still lower than the human resources in conventional banks (Rusydiana, 2016; Sari et al., 2013; aNugroho et al., 2017). There is also a decline in the performance of Islamic banks from 2010 to 2016 which is marked by the decrease in the rate of asset growth of Islamic banks. The decreasing of asset growth in sharia bank is low from the collection of third-party funds and financing distribution. There are significant factors that can reduce the ability of Islamic banks in raising funds, and the distribution of financing is the ability network (outlet) expansion (bNugroho et al., 2017; Nugroho & Husnadi, 2017; Aysan et al., 2013).

### *4.5 The Quality Of Assets Of Sharia Banks Vs Conventional Banks*

Hypothesis test of asset quality variable is done by using an independent t-test, following test independent sample t-test from asset quality variable:

Table 7. Independent Sample t-Test for Asset Quality Variable

| Indicator | Mean Difference | t | Sig. (2-tailed) |
|---|---|---|---|
| NPL | 0.71 | 2.29 | 0.02 |

Source: Data that has been processed

The result of t-test (table 7) of the NPL variable was obtained at 2.29% with an average difference of 0.71% and obtained a significance value of 0.02. So, there is a significant difference between sharia banking NPL and conventional banking because the amount of significance is less than 0.05. Therefore, hypothesis 2 is acceptable because there is a significant difference between sharia banking NPL and conventional NPL. Referring to descriptive statistic, Islamic banking NPL is 2.36% higher than NPL of conventional banking which is only 1.65%. The cause of the high NPL of Sharia banks during the period was the decrease of assets caused by the low distribution of financing. Low disbursement of financing causes financing portfolios with good quality to decline and impact on rising NPLs (Popita, 2013; Firmansyah, 2014; Sari, 2016). Also, the low competence of account officers from sharia banks in understanding the appropriate Islamic banking products can cause the risk of problem financing (NPL) also increased (aNugroho et al., (2017).

### *4.6 Stability Of Sharia Commercial Banks Vs Conventional Commercial Banks*

Table 8 below is the result of the t-test of ROA and Z score as stability variable using SPSS version 23 statistical software:

Table 8. Independent Sample t-Test for Stability Variables

| Indicator | Mean Difference | t | Sig. (2-tailed) |
|---|---|---|---|
| ROA | -0.73 | -2.69 | 0.01 |
| Z-Score | -23.53 | -12.39 | 0.00 |

Source: Data that has been processed

Based on the data in table 8 above, it is known that ROA and Z-Score are 0.01 and 0.00. Thus, those variables have significant value <0.05. The significance value means there is a significant difference between financial stability of sharia bank and conventional bank. Furthermore, based on table 3 of descriptive statistics of stability variable, the average of ROA and Z-Score from sharia commercial bank is 1.43% and 13.45% lower than the conventional commercial bank which is 2.17% and 36.98%.

Financial stability of sharia banking is related to high NPL and the inefficiency of the sharia bank which have an impact on the profit sharing obtained by sharia bank become lower than profit obtained by a conventional bank. Also, based on previous research, Indonesian people although the majority of Muslims, but their knowledge and understanding of Islamic banks are still low so that the impact on the number of customers of Islamic banks is less than the conventional bank customers (Mu'allim, 2003; Kara, 2013; Rohaya, 2008). The lack of sharia bank outlets also causes this condition compared to conventional banks and the presence of sharia banks as newcomers in serving financial transactions when compared with conventional banks whose presence has exceeded one decade in Indonesia (aNugroho et al., 2017; Nugroho & Husnadi, 2017; bNugroho et al., 2017; Rohaya, 2008).

Nevertheless, the presence of Shariah banks is a solution of the current conventional banking system that can lead to financial crisis. The existence of shariah banking is to create a balance between the world's goals and the hereafter so that the ultimate goal of a sharia bank is not only to achieve profitability (ROA and Z Score high) but also to create social welfare. Therefore, every sharia bank profit is also embodied with an element of zakah which aims to improve

the welfare of the community (Zaher & Kabir 2001; Hassan & Syafri, 2010). Furthermore, the existence of Islamic banks has the purpose of Falah is to provide prosperity for all people, because Islam is a religion that brings grace and welfare for all the entire universe, including animals, plants, jinns and moreover humans. Following the word of God in Surat al-Anbiya verse 107: "And We have not sent you, [O Muhammad], except as a mercy to the worlds." Therefore, Islamic banks in their operations must be based on morals and ethics so that the maximization of income and profit is not the primary purpose of sharia banks, but Falah. In doing its business syariah bank using profit sharing system, therefore there is no risk transfer to borrower customer which usually done by the conventional bank. The condition of sharia banks is possible may not be better than conventional banks when the economic condition is good because Islamic banks do not maximize their income by applying the principle of profit sharing.

## 5. Conclusion

The condition of sharia commercial banks after the banking crisis is no better than conventional banks. The inefficiency of sharia banks and the low quality of sharia bank assets compared to conventional banks have an impact on the low stability of sharia banks compared to conventional banks. Islamic banks have not been able to compete with conventional banks that have been present first to serve financial transactions in Indonesian society that majority of Muslims. Based on this matter to be able to compete with the conventional bank sharia bank must do things as follows:

- Enhance Information Technology (IT) to provide optimal financial services for the community
- Increase the speed of service to compete with conventional banks that can offer faster service than sharia banks supported by IT and professional human resources.
- Maintain the asset quality. The sharia banks must be able to mitigate risks to core business in channeling financing to customers at an early stage by improving the account officer's ability to conduct loan loyalty analysis supported by qualified information sources.
- Optimizing operational costs through the effective organizational structure and optimizing services through IT to maintain the reputation of sharia banks.

Shariah Bank is a bank operating on the basis of Sharia principles that aims not only to seek profit but also to provide a positive contribution to improve social welfare so that it can be possible although the financial stability of Islamic banks is lower than conventional banks, the contribution of Islamic banks in improving the welfare of the community can be more compared to conventional banks.

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