

Comparative Analysis of The Performance of Sharia Banks and Conventional Banks in Indonesia

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Abstract

This paper examines the comparative performance of sharia banks and conventional banks for the period 2010-2020. The financial performance itself is seen from 3 aspects, namely efficiency, asset quality, and stability. Based on previous empirical research, the indicators used to measure efficiency are BOPO, asset quality with NPF (sharia banks) and NPL (conventional banks), and stability with Z scores. This research was conducted at sharia banks and conventional banks in the period 2010-2020 and used secondary data. The sample used was selected by purposive sampling. The data used in this study were obtained from financial statements collected and published through the Otoritas Jasa Keuangan (OJK) website www.ojk.go.id, the Osiris database, and the website of each bank that was used as a research sample and tested using two different statistical techniques average (independent sample test). The results of this study indicate that the rapid development of sharia banks compared to conventional banks in the post-crisis period was followed by the consistency of performance (better than conventional banks) as shown in the crisis period

Keywords: *Asset quality; Conventional bank; Efficiency; Sharia banks; Stability*

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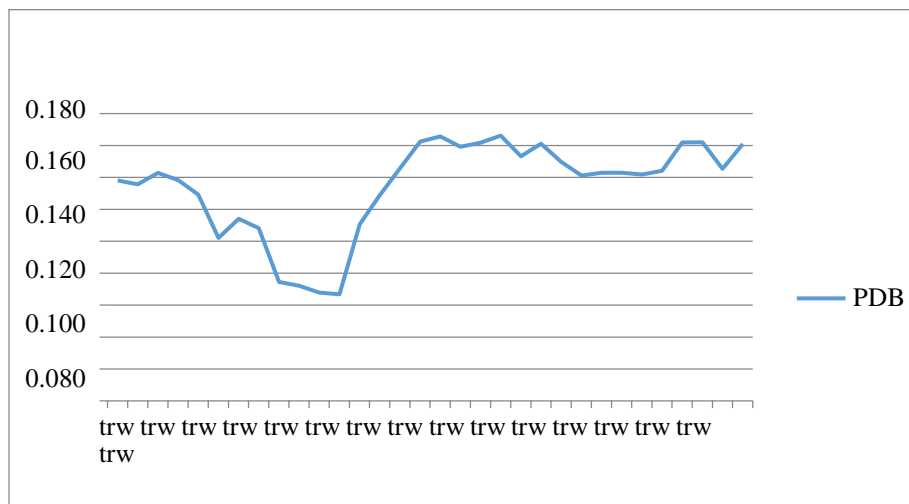
INTRODUCTION

The economic turmoil that took place in 2007 was caused by Subprime Mortgage in America, and according to economists, this crisis is the worst that has ever happened in the history of the world since The Great Depression that occurred in 1930. Friedman and Schwartz (1963) in Hossein askari et al., argued that what caused the crisis in 1930 was the same as that which had taken place in 2007, namely the excess lending and speculation in the property business and derivatives market. (Hasan, M., & Dridi, 2010) explain the chronology of the subprime mortgage crisis that has taken place in the United States. The crisis was preceded by a policy of financing or lending that tends to be too expansive by the government. This was then used by Lehman Brothers to apply for a very high amount of credit, and then channel it to the high-risk Kredit Perumahan Rakyat (KPR) with an adjustable-rate mortgage (ARM) system. The high risk of mortgages is caused by one of the customers being subprime (not eligible to receive mortgages). In addition, Lehman Brothers also securitized the KPR in the form of Collateralized Debt

Obligations (CDO) and Mortgage-Backed Security (MBS), which always received a good rating from investment grade. This rating assessment is not without basis. This assessment is based on risk management practices in general such as over-collateralization (providing excess collateral when applying for credit) or providing credit only in default credit conditions. The high rating ratings succeeded in convincing investors to invest in subprime-based investments, and this contributed to the boom in the field that occurred in the period III-2007 to quarter II-2008. At that time the rating agency corrected the MBS credit rating of US \$ 1.9 trillion, causing the value of the shares of the companies involved to incur large losses due to ownership of these securities.

Bad debts in the property sector have caused the MBS market value to drop dramatically and force banks that invest their capital (the biggest investment banks) in the US to suffer losses. During the period referred to, namely September 2008, Lehman Brothers declared bankruptcy, while Bear Sterns and Merrill Lynch were forced to relinquish their ownership to another bank. The fall of the 5 biggest investment banks in the US has a big contribution to the global financial market turmoil (Bank Indonesia, 2008).

Indonesia as one of the developing countries in the Asian region did not escape the global financial crisis that hit several other developing countries such as Malaysia, Japan, and China.



Picture 1: Gross Domestic Bruto (Source: Secondary Data Processed, 2021)

The movement of Indonesia's GDP during the crisis showed a decline in the third quarter of 2008 which continued until the fourth quarter of 2010. The contagion effect of the global financial crisis was felt by developing countries. The decline in Indonesia's GDP due to the global financial crisis was due to Indonesia being one of the exporters of natural resources (SDA). The fall in world oil prices is one of the factors that weaken Indonesia's GDP.

According to the data, the impact of the subprime mortgage crisis that occurred in the US spread to Asia, including Indonesia. In the 2008 period, in general, Indonesia's economic growth was in the range of 6.1% (YoY), which is quite high compared to other Asian countries. Although in this period, the impact of slowing global growth was felt, especially in the fourth quarter of 2008. Based on the data, the contribution of national private consumption to GDP is still quite satisfying. However, this contribution to GDP is quite corrected compared to 2007 data (Bank Indonesia, 2008).

The economic turmoil that had occurred in 1930, coupled with the case of subprime mortgages that occurred in the US, caused academics and practitioners to take the view that financial transactions based on Islamic principles were able to be chosen by avoiding the global financial crisis to prevent it from happening again (Hasan, M., & Dridi, 2010) suggested that

some academics and practitioners in the sector concerned were of the view that the principle of asset-based and risk-sharing in sharia banks would eventually become the foundation for crisis events that had a global impact. Hasan and Dridi (2010) tried to compare the performance of Islamic banks with conventional banks in the period 2008-2009 when the financial crisis occurred. The research sample conducted by Hasan includes Bahrain, Jordan, Kuwait, Malaysia, Qatar, Saudi Arabia, Turkey, and the UAE with a total of 120 Islamic and conventional banks. The results showed that Islamic banks were affected by the crisis differently than conventional banks. The characteristics of Islamic banks helped limit Islamic banks from the negative impact of the crisis, although on the other hand the weak risk management of Islamic banks made the profitability performance of Islamic banks decline in 2009. However, the growth and asset growth of Islamic banks was superior to conventional ones. It has also been empirically proven that sharia banks have better levels of efficiency, asset quality, and stability compared to conventional banks because they have survived crises that have occurred (Beck, T., Demirgüç-Kunt, A., & Merrouche, 2013; Bourkhis, K., & Nabi, 2013; Hasan, M., & Dridi, 2010; Mirakhor, A., 2008; Mollah & Zaman, 2015; Rosman, Wahab, & Zainol, 2014; Siddiqi, M.N., 2008)

While the World Islamic Banking Competitiveness Report data states that sharia banks are developing more rapidly compared to conventional banks in the post-crisis period. The question that arises then is whether the rapid development of Sharia banks compared to Conventional banks in the post-crisis period is followed by the consistency of performance as shown in the period during the crisis. This research was conducted to answer that question.

The first theory used in this study is the Minsky Theory. This theory was coined by an American economist named Hyman Minsky. This theory sees that the current financial crisis has a cyclical nature that relies on the theory of business cycle (theory of business cycle) or is currently popularly called Minsky Moment. In this theory, Minsky categorizes the behavior of economic actors into three parts, namely: (1) hedge, which is the type that tends to be careful in making loans, so that in the end he can pay interest and principal, (2) speculative, namely the type of economic agent which began to expand the business. Due to inaccuracy, related to loans, this type is only able to pay interest, while the principal of the loan is paid by selling assets, (3) Ponzi finance, the type that ultimately is no longer able to pay interest and principal. Minsky argues that in an economic system if economic actors are hedge, the economic climate will tend to be healthy and balanced. Meanwhile, if the type is speculative and Ponzi finance, then the economic system will tend to be more vulnerable to crisis. In the global crisis caused by subprime mortgages, there was an increase in bank credit at the beginning of the financial crisis and was stable until March 2008 or in a boom phase. However, in the middle of 2009, there was a decline in loan trends in banks, a decrease in demand for loans as a result of weakening economic conditions or being in a bust phase. In addition, (Beachy, 2012) explained that there is a moral hazard in the global crisis, banks channel housing loans to customers who are not eligible for financing (subprime groups). This condition causes high numbers of customers who fail to pay and causes problematic banking liquidity.

The next theory is Theory Generation of Financial Crisis. This theory, is divided into 3 phases; (1) the first crisis generation model proposed by (Krugman, 1979) In this theory, it was stated that the crisis could occur due to the existence of excessively expansive lending activities by the government. This was then used by speculators to convert them into foreign exchange, which had an impact on worsening inflation rates. (2) the second-generation crisis model proposed by Obstfeld and Rogoff in 1986. This theory improves the perspective of the first

theory by considering the role of the central bank in overcoming the crisis. However, the central bank will still consider aspects of costs and benefits in the use of foreign exchange in this regard. (3) the third crisis generation model proposed. In this theory, there is a twin crisis, a crisis that occurs in the banking sector, and a funding crisis that occurs simultaneously. Specifically, from the banking side, the main cause is moral hazard. According to (Beachy, 2012) explaining that there is a moral hazard in the global subprime mortgage crisis is when banks distribute housing loans to customers who are not eligible for financing (subprime groups). Changes in interest rates led to high non-performing loans by subprime groups, and at a certain level of accumulation, Lehman Brothers went bankrupt.

From a sharia point of view, there are Sharia Principles. In this principles, the income generated by a company or organization must be able to bring benefits or good for the community (jalb almanafi ') and prevent the public from deterioration and destruction (dar'u almafasiid) and the concept of jalb almanafi' and dar'u almafasiid are often secured as Maslahah (Kara, 2012; Mirakhor, A., 2008; Rahman, 2003). Furthermore, with the concept of Maslahah, will bring all individual activities, including the management of companies and organizations not only to achieve the goals of an individual world but also for the purpose of the hereafter (Falah) (Aris, N. A., Othman, R., & Azli, 2013; Kara, 2012; Mirakhor, A., 2008; Nugroho, L., Utami, W., Akbar, T. & Arafah, 2017). Based on the Falah concept, profit maximization is limited by ethics and morals. Maqasid syariah is an activity to fulfill basic needs (dharuriyat), secondary needs (hajiyat), and tertiary needs (tahsiniyah). So, to meet these needs, it must be adjusted to the sharia rules (maqasid) which include; religion, soul management, management of reasonable matters; family arrangements; property management; and protecting the environment (Arafah, W., & Nugroho, 2016; Mohammad, M. O., & Shahwan, 2013). Sharia banks and conventional banks have different goals, sharia banks have the goal of achieving Falah so that the existence of Sharia banks can provide social welfare for the community while also considering justice, morals, ethics, and balance while conventional banks tend to focus on the personal prosperity of organizations or companies. However, in its development, all banks, Sharia banks must apply sustainable Islamic principles, and Conventional banks must be able to realize the triple P concept (profit, people, and planet) (Bhardwaj, B. R., & Malhotra, 2013; Nugroho, L., Utami, W., Akbar, T. & Arafah, 2017; Sobhani, F. A., Amran, & Zainuddin, 2012).

This research uses 3 independent variables. The first variable is efficiency. Efficiency is a comparison ratio of inputs produced by companies with outputs that have been issued. In the banking world, banks can be said to be efficient if they are able to suppress the output figures that have been issued without ignoring the planned input targets. Rozzani and Rahm,an in 2013 stated that efficiency is an important indicator that is able to show the bank's performance in the current year as well as a medium to increase the achievement of future targets. Several previous empirical studies (Beck, T., Demirgüç-Kunt, A., & Merrouche, 2013; Bourkhis, K., & Nabi, 2013; Rosman et al., 2014) examined the comparative efficiency of sharia banks and conventional banks. The results of these studies, overall showed that Sharia banks are better than Conventional banks during the crisis Based on World Bank Islamic Report data in 2016, showed that the development of Sharia banks showed a very rapid rate compared to Conventional banks in several countries including Indonesia, the question that arose later, was the rapid development of sharia banks in Indonesia as well? followed by the consistency of efficiency compared to Conventional banks in times of crisis. Based on the explanation above, then hypothesis 1: "Sharia banks have better efficiency compared to conventional banks for the period 2010-2020".

The second independent variable is asset quality. The quality of assets owned by banking institutions shows the ability to manage assets and is also beneficial for creditors in assessing the feasibility of credit disbursement. This instrument describes the quality of assets of banking

institutions in connection with the activities of credit disbursement to customers as well as funding in various portfolio instruments. In this context, the activities mentioned previously are valued based on their level of collectibility, included in the category in accordance with established standards, doubt or loss. Previous empirical research states that sharia banks have better asset quality compared to Conventional banks in the crisis period (Beck, T., Demirgüç-Kunt, A., & Merrouche, 2013). Based on data from the World Bank Islamic Report in 2016, shows that the development of sharia banks shows a very rapid figure compared to conventional banks in several countries including Indonesia. The question that arises then is whether the rapid development of sharia banks in Indonesia is also followed by the consistency of asset quality compared to conventional banks in times of crisis. Based on the explanation above, hypothesis 2: "Sharia banks have better asset quality compared to conventional banks for the period 2010-2020".

The last independent variable is stability. Bank stability is one of the pillars of economic growth. Therefore, the central bank not only manages financial stability but also banking stability to support sustainable economic development. In Indonesia, it is not only conventional banking but also Islamic banking that plays an important role in economic growth (Nugroho, L., Utami, W., Akbar, T. & Arafah, 2017). The results of a previous study conducted by (Beck, T., Demirgüç-Kunt, A., & Merrouche, 2013) showed that the stability of sharia banks was better compared to conventional banks during the crisis. Based data from the World Bank Islamic Report in 2016, shows that the development of sharia banks shows a very rapid figure compared to Conventional banks in several countries including Indonesia. The question that arises then is whether the rapid development of sharia banks in Indonesia is also followed by a consistency of stability compared to conventional banks during the crisis. Based on the explanation above, hypothesis 3: "Sharia banks have better asset quality compared to conventional banks for the period 2010-2020".

This research was conducted at sharia banks and conventional banks registered at OJK in 2020. The sampling technique was purposive sampling. The data used in this study were obtained from the Otoritas Jasa Keuangan (OJK) website www.ojk.go.id, the Osiris database, and the website of each bank that was used as a research sample and used the statistical test two different test statistical techniques average (independent sample test).

To improve the aspect of comparability between Islamic banks and conventional banks, due to differences in characteristics and business principles, the researchers used the following indicators; (1) The sample used in this study came from sharia banks and conventional banks registered with the Financial Services Authority for the period 2010-2020, (2) The sample in this study includes sharia banks and conventional banks, with the exception of state-owned or state-owned, foreign, joint, and regional credit banks (BPD) banks, (3) The sample in this study includes all sharia banks and conventional banks which publish financial statements for the period 31 December 2010- 31 December 2020, (4) The sample in this study includes all sharia banks and conventional banks that have capital in the range of 1 T to 10 T and with asset values between 7 T to 100 T, and use the rupiah as a reporting exchange rate.

The results of this study indicate that the rapid development of sharia banks compared to conventional banks in the post-crisis period was followed by performance consistency (better than conventional banks) as shown in the crisis period. (M. K. Hassan & Rasem, 2016) suggest that in theory there are several reasons why finance with a sharia system is more resistant to financial crises compared to conventional banks. First, Islam prohibits the sale and purchase of

debt. The prohibition of buying and selling debt indirectly will create a fair and transparent financial transaction. Second, Islamic finance is based on capital rather than debt-based. In other words, every financing that comes out has a backup in the form of real assets which in the future will save the bank from the form of default from the customer. Third, Islam has the principle of building trust between financial institutions and investors, thus creating transparency between the two parties, which in turn will minimize moral hazard. Fourth, the application of profit-loss sharing (*mudharabah* and *musyarakah*) accompanied by the full spirit of Sharia will create clear openness and transparency between the institution and the investor. This transparency will later form a market discipline to monitor the inadvertence of the financing that has come out. Fifth, to prevent subprime lending from what happened in 2007, Islam places the owner of the fund (financial institution) and the borrower as a partner or working partner where the owner of the fund has a continued share in the transaction. Sixth, because many companies go bankrupt due to accounting practices and unethical business practices (moral hazard), the Islamic financial system provides moral and practical choices for those who are interested in investing in a portfolio that has social and ethical responsibilities in investing.

RESEARCH METHODS

This research was conducted at sharia banks and conventional banks in Indonesia registered with OJK in 2020. Samples were obtained by purposive sampling. The data is secondary and obtained from the Otoritas Jasa Keuangan (OJK) website www.ojk.go.id, (Keuangan, 2021) Osiris database, and the website of each bank which is used as a research sample and uses two different test statistical techniques average test (independent sample test). This research is a descriptive study (describing the performance of Sharia banks and conventional banks) and then comparing them (comparative). Based on previous empirical research (Pasiouras, Tanna, & Zopounidis, 2009) the indicator used to measure efficiency is the Cost Income Ratio (CIR), or commonly referred to as BOPO, with the following formula:

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

For asset quality, sharia banks are calculated using Non-performing Financing (NPF) and can be calculated using the following formula (SE BI Nomor.9/24/DPbs,2007):

$$\text{Non Performing Financing (NPF)} = \frac{\text{Jumlah pembiayaan bermasalah}}{\text{Total pembiayaan}} \times 100\%$$

Whereas asset quality for conventional banks, measured by NPL indicators (Wibowo and Syaichu, 2013; Firmansyah, 2014; and Soekapdjo, 2020), NPL formulations are as follows:

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

NPF and NPL are basically the same and can be compared because they both compare the total credit/financing problems with the total credit or financing as a whole. The term NPF used in Sharia banks is intended to replace the concept of loans (loans) in the conventional system, replaced by the concept of financing (financing).

Finally, for stability, based on previous empirical research (Wibowo & Syaichu, 2013) the standard indicator commonly used to assess bank stability is the Z Score. The calculation referred to uses the following formula:

$$Z = 6.56 X1 + 3.26 X2 + 6.72 X3 + 1.05 X4$$

Where:

X1: Working Capital / Total Assets

X2: Retained Earnings / Total Assets

X3: EBIT / Total Assets

X4: Stock Market Value / Debt Book Value

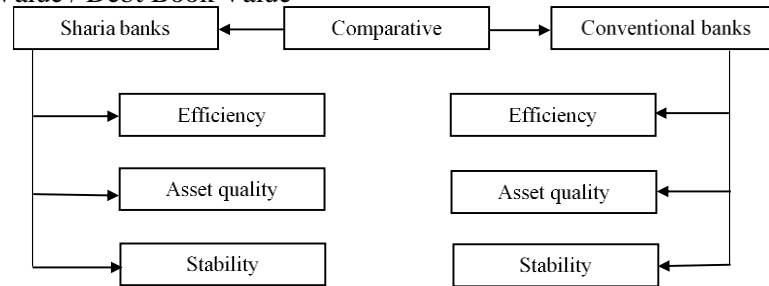


Figure 2. Conceptual Framework

RESULT AND DISCUSSION

This research was conducted at banks in Indonesia registered in Indonesia as of 2020. While the research data were obtained by purposive sampling. The criteria used are as follows:

1. The sample used in this study came from sharia banks and conventional banks registered with the Financial Services Authority for the period 2010-2020.
2. The sample in this study includes sharia banks and conventional banks, with the exception of state-owned or state-owned, foreign, joint, and regional credit banks (BPD) banks.
3. The sample in this study includes all sharia banks and conventional banks which publish financial statements for the period 31 December 2010- 31 December 2020.
4. The sample in this study includes all sharia banks and conventional banks that have capital in the range of 1 T to 10 T and with asset values between 7 T to 100 T, and use the rupiah as a reporting exchange rate.

Table 1. Population and Samples

No	Description	Total
1	The sample used in this study came from sharia banks and conventional banks registered with the Financial Services Authority for the period 2010-2020.	183
2	The sample in this study includes sharia banks and conventional banks, with the exception of state-owned or state-owned, foreign, joint and regional credit banks (BPD) banks.	94
3	The sample in this study includes all sharia banks and conventional banks which publish financial statements for the period 31 December 2010- 31 December 2020.	62
4	The sample in this study includes all sharia banks and conventional banks that have capital in the range of 1 T to 10 T and with asset values between 7 T to 100 T, and use the rupiah as a reporting exchange rate.	19
5	Number of final research samples	19 x 11 = 209

Source: Secondary data processed, 2021

Based on the table above, it can be seen that the total sample totals 209 banks. With a composition of 77 sharia banks and 132 conventional banks. To improve the aspect of comparability, or in other words, it is expected that the difference in performance shown by the

two banking groups is due to the existence of sharia principles and not other aspects, the researcher adds capital and asset limits to the sample used (as seen in the final criteria for the determination above).

Table 2. List of Research Sample Capital Values

No	Bank name	Value (Rp. Millions)
1	PT Bank Mega Syariah	1.288.195
2	PT Bank Muamalat Indonesia	3.958.257
3	PT Bank Panin Dubai Syariah Indonesia Tbk	1.683.340
4	PT Bank BNI Syariah	4.230.770
5	PT Bank BRI Syariah	5.087.986
6	PT Bank Syariah Mandiri	8.037.508
7	PT BCA Syariah	2.231.989
8	PT Bank Artha Graha Internasional, Tbk	4.536.034
9	PT Bank Bukopin, Tbk	8.773.112
10	PT Bank Bumi Arta, Tbk	1.518.556
11	PT Bank Capital Indonesia, Tbk	2.272.609
12	PT Bank ICBC Indonesia	6.010.341
13	PT Bank Index Selindo	1.537.065
14	PT Bank KEB Hana Indonesia	9.420.042
15	PT Bank MNC Internasional, Tbk	1.562.040
16	PT Bank Rabobank Internasional Indonesia	2.031.353
17	PT Bank Victoria Internsional, Tbk	3.019.466
18	PT Bank Mandiri Taspen	2.674.572
19	PT Bank Sahabat Sampoerna	1.648.479
An average capital of 7 Sharia banks		3.788.292
Average capital of 12 conventional banks		3.750.306

Source: Secondary data processed, 2021

From the table 2, it can be seen that the average sample capital of sharia banks (Rp. 3,788,292,000,000) is not much different from the average sample capital of conventional banks (Rp. 3,750,306,000,000).

From the table 3, it can be seen that the average assets of a sharia bank (Rp. 38,438,800,000,000) are not much different from a conventional bank (Rp. 28,864,77,000,000). Likewise, in terms of market share, sharia banks show an average of 0.458%, while conventional banks show a rate of 0.344%.

Table 3. List of Research Sample Asset Values

No	Bank	Value (Rp. Millions)	Market Share (%)
1	PT Bank Mega Syariah	8.022.758	0.096
2	PT Bank Muamalat Indonesia	50.408.985	0.601
3	PT Bank Panin Dubai Syariah Indonesia Tbk	11.127.021	0.133
4	PT Bank BNI Syariah	49.954.163	0.596
5	PT Bank BRI Syariah	43.112.706	0.514
6	PT Bank Syariah Mandiri	98.583.050	1.176
7	PT BCA Syariah	7.862.917	0.094
8	PT Bank Artha Graha Internasional, Tbk	25.554.856	0.305
9	PT Bank Bukopin, Tbk	95.150.210	1.135
10	PT Bank Bumi Arta, Tbk	7.597.597	0.091
11	PT Bank Capital Indonesia, Tbk	19.023.101	0.227
12	PT Bank ICBC Indonesia	53.121.508	0.634
13	PT Bank Index Selindo	9.252.803	0.110
14	PT Bank KEB Hana Indonesia	45.045.241	0.537
15	PT Bank MNC Internasional, Tbk	10.609.742	0.127
16	PT Bank Rabobank Internasional Indonesia	13.914.950	0.166
17	PT Bank Victoria Internasional, Tbk	28.617.537	0.341
18	PT Bank Mandiri Taspen	26.950.958	0.321
19	PT Bank Sahabat Sampoerna	11.538.095	0.138
Total assets of conventional banks (Rp. Millios)			8.068.346.000
Total assets of sharia banks (Rp. Millios)			316.691.000
Total Banking Assets in Indonesia (Rp. Millions)			8.385.037.000
Average 7 Assets of Sharia banks (Rp. Millions)			38.438.800
Average Assets of 12 Conventional banks (Rp. Millions)			28.864.717
7 Bank Syariah Market Share Average (%)			0,458
Market Share Average 12 Conventional banks (%)			0,344

Source: Secondary data processed, 2021

Table 4. Descriptive Variable Statistics

Indicator	Bank	N	Min	Max	Mean	Std.Dev
BOPO	Sharia	77	0.326	1.992	0.7369	0.24996
	Conventional	132	0.550	1.740	0.8702	0.17947
NPF	Sharia	77	0,0002	0,0635	0,0138	0,01380
	Conventional	132	0,0002	0,2192	0,0239	0,02950
Z Score	Sharia	77	0.590	4.020	1.3586	0.58117
	Conventional	132	0.480	2.390	1.1767	0.36403

Source: Secondary data processed, 2021

From table 4, it can be seen that the average value of the efficiency of sharia banks, which is indicated by BOPO, is 0.7369 lower than conventional banks which show a figure of 0.8702. Based on the explanation, it can be seen that Islamic banking institutions have a lower BOPO ratio than conventional banks. This indicates that, in terms of efficiency, Sharia banks are better than conventional banks.

In terms of asset quality as indicated by NPF for sharia banks and NPL for conventional banks. The table above shows that sharia banks show an average NPF ratio of 0.0138, better if compared to the average NPL ratio shown by conventional banks which shows a figure of 0.0239. Based on the above data presentation, it can be seen that sharia banks show a lower nominal NPF ratio compared to conventional NPL banks. So in the end, in terms of asset quality, it can be concluded that the quality of Islamic bank assets is better than conventional banks. However, Based on SE BI No. 9/24 / DPBs dated October 30, 2007, NPF <2% was classified as very good. Meanwhile, based on BI Circular Letter No. 13/1 / PBI / 2011 states that banks with NPL values below 10% (0.1) are in very good condition. So, it can be concluded based on the results of this study, seen from the average value of NPF and NPL, both Sharia banks and conventional banks are in very good condition.

Based on the data exposure in the above table, it can also be seen that sharia banks show

Table 5. Results of Independent Sample t-Test Variables

Indicator	Levane’s Test for Equality of Variances (Sig.)	Mean Difference	t	Sig. (2-tailed)
BOPO	0.000	-0.09035	-2.554	0.000
NPL	0.001	-0.01009	-2.825	0.005
Z Score	0.000	0.18191	2.787	0.006

Source: Secondary data processed, 2021

an average nominal Z Score of 1.3586, more convincing (high) when compared to the average Z Score of Conventional banks which shows a figure of 1.1767. So that it indicates that sharia banks have a relatively lower bankruptcy risk (safer) compared to conventional banks. Based on the standard Z Score criteria (Rudianto, 2013), both the average value of the sharia bank Z Score (1.3586) and the average value of the Conventional bank Z Score (1.1767), included in the gray zone category. Rudianto stated that companies that are in this condition are included in the category of vulnerable (gray zone). As a consequence, prompt and responsive handling is needed so that problems can be resolved immediately.

V. Wiratna Sujarweni (2014) states that if the significance value of Leven's Test for Equality of Variance is below 0.05, then the variance between group A and group B is assumed to be heterogeneous (not the same), both for BOPO, NPF/NPL, and Z Score. For the efficiency variable represented by BOPO, based on the above results, the t value shows a figure of -2.554 with an average difference of -0.09035, and with a significance value <0.5%, 0.000. So, it can be concluded that significantly sharia banks have a better level of efficiency in the observation period compared to conventional banks, H1 is supported. This confirms previous studies conducted by (Al-Khasawneh, J.A., Bassedat, Aktan, & Thapa, 2012; Umardani & Muchlish, 2016).

For asset quality variables represented by NPF and NPL, the t value shows a figure of -2.825 with an average difference of -0.01009, and with a significance value <0.5%, 0.001. So, it can be concluded that significantly sharia banks have a better level of asset quality in the observation period compared to conventional banks, H2 is supported. This study confirms the research conducted by Vivin and Wahono (2017) and Setyaningsih and Sri Utami (2013).

Finally, the stability variable is represented by the Z Score. From the table above, the t value represents 2.787, and the average difference is 0.1819 and with a significance value <5%, 0.000. So, it can be concluded that significantly sharia banks have a better level of stability in the observation period compared to conventional banks, H3 is supported. This confirms previous research conducted by (Cihak & Heiko, 2008; Minati & Ihsan, 2016).

Overall the results of the above studies also show that the comparative analysis of performance (efficiency, asset quality, and stability) of sharia banks and conventional banks in the period 2010-2020 shows that the performance of Sharia banks is better than conventional banks.

(M. K. Hassan & Rasem, 2016) stated a number of reasons why the performance of sharia banks is more convincing when compared to conventional banks; First, Islam prohibits the sale and purchase of debt. The prohibition of buying and selling debt, indirectly will create a fair and transparent financial transaction. Second, Islamic finance is based on capital rather than debt-based. In other words, every financing that comes out has a backup in the form of real assets which in the future will save the bank from the form of default from the customer. Third, Islam has the principle of building trust between financial institutions and investors, thus creating transparency between the two parties, which in turn will minimize moral hazard. Fourth, the application of profit-loss sharing (*mudharabah* and *musyarakah*) accompanied by the full spirit of sharia will create clear openness and transparency between the institution and the investor. This transparency will later form a market discipline to monitor the inadvertence of the financing that has come out. Fifth, to prevent subprime lending from what happened in 2007, Islam places the owner of the fund (financial institution) and the borrower as a partner or working partner where the owner of the fund has a continued share in the transaction. Sixth, because many companies go bankrupt due to accounting practices and unethical business practices (moral hazard), the Islamic financial system provides moral and practical choices for those who are interested in investing in a portfolio that has social and ethical responsibilities in investing.

Furthermore, the existence of sharia banks is still a solution to the conventional banking system which tends to be more vulnerable to crisis. Sharia banks create a balance in the financial system. The purpose of the Sharia system is not only to focus on profitability but also to create social welfare. Therefore, every element of sharia bank profit is always accompanied by the obligation to pay *zakat* with the aim of increasing welfare for the whole community (A. Hassan & Syafri Harahap, 2010; Zaher & Kabir Hassan, 2001). Furthermore, the existence of a sharia bank also has *Falah's* goal of prosperity for all people, because Islam is a religion that brings mercy to the entire universe, including animals, plants, and especially humans. In accordance with the word of Allah SWT in Surah Al-Anbiya verse 107: "And We do not send you, (O Muhammad), except to bring mercy to the universe." Therefore, sharia banks in their operations must be based on morals and ethics so that profits increase and profitability is not the main goal, but *Falah*. In carrying out their business activities, sharia banks use a profit-sharing system, therefore there is no risk transfer to the lending parties as in the conventional system.

CONCLUSIONS

Previous research related to comparative analysis of the performance of sharia banks and conventional banks in the crisis period shows that sharia banks are better than conventional banks. Meanwhile, according to data from the world Islamic banking competitiveness report, it shows that sharia banks are developing more rapidly compared to conventional banks in the post-crisis period in several countries including Indonesia. This research shows that the rapid development of sharia banks compared to conventional banks in the post-crisis period was actually followed by the consistency of performance as shown in the period during the crisis. (M. K. Hassan & Rasem, 2016) stated a number of reasons why the performance of sharia banks is more convincing when compared to conventional banks; First, Islam prohibits the sale and

purchase of debt. Second, Islamic finance is based on capital rather than debt-based. Third, Islam has the principle of building trust between financial institutions and investors, thus creating transparency between the two parties, which in turn will minimize moral hazard. Fourth, the application of profit-loss sharing (*mudharabah* and *musyarakah*) accompanied by the full spirit of Sharia will create clear openness and transparency between the institution and the investor. Fifth, Islam places the owner of the fund (financial institution) and the borrower as a partner or working partner where the owner of the fund has an advanced share in the transaction. Sixth, the Islamic financial system provides moral and practical choices for those who are interested in investing in a portfolio that has social and ethical responsibilities in investing. This study has several limitations, namely; (1) only for banks in Indonesia registered with OJK in 2020, (2) samples exclude Persero banks, Joint banks, Foreign banks, and BPD, (3) samples of only banks that regularly publish financial statements (31 December 2010 - 31 December 2020) and (4) with a capital range of 1T - 10T and an asset range of 7T - 100T. This research is expected to be used as a reference for information by practitioners about banking performance and the basis for decision-making. This research also contributes to the literature related to the comparison of the performance of sharia banks and conventional banks after the crisis. Finally, as a reference for making appropriate policies by policymakers.

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