Is Syariah System Better Than the Conventional System in Crisis?

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Abstract. This study aims to analyse the resilience of Islamic banks' financial performance during the era of the COVID-19 crisis and the recovery compared to conventional banks. Islamic banks are unique as they do not use an interest system, but instead a profile/loss-sharing system which reflects their religious values. This profit/loss-sharing system has advantages, such as the ability of losses to be absorbed by depositors, a stable long-term performance, the avoidance of one-party exploitation, and the ability to provide financing with higher risks and longer terms. However, this profit-sharing system has a higher level of information asymmetry. This research was conducted in Indonesia with samples of Islamic banking companies and conventional banks. The company's size was taken into consideration when selecting samples and the banking performance used was CAMEL (capital, asset quality, management, earnings and liquidity). The performance of the COVID-19 crisis period is measured during the period of 2020 (crisis) while the non-crisis period was measured in 2019. The results of the study found that Islamic banks were more stable during the crisis period as indicated by their levels of profitability and non performing financing. Meanwhile, conventional banks a decline. Management efficiency, capital and liquidity are better than conventional bank but not significant. Generally, the performance of conventional banks was higher than that of Islamic banks both in the pre-crisis and crisis periods, however, the fluctuation of the decline in the performance of conventional banks due to the crisis was higher, while Islamic banks were more stable and even experienced improvements during the crisis period.

Keywords: Capital · Asset quality/non performing Financing · Management Efficiency · Earning · Liquidity

1 Introduction

Early in 2020, the COVID-19 pandemic began in Wuhan, China, in December 2019. The virus quickly spread throughout the world; as many as 202 countries suffered, with 857,700 victims and 42,092 deaths, while only 177,048 recovered [1]. From the 202 countries, China, Italy, Spain, the United States, Brazil and India had the most victims. To prevent the spread of this pandemic, most countries implemented lockdowns, halting economic activities and social activities.

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As a result of lockdown policies, economies collapsed. Human activities such as working, studying and worshipping were limited to be done from home as gatherings were prohibited. Almost every country which had been known as developed countries experienced a recession, such as the USA, Japan, Korea and European countries. This did not exclude Indonesia.

The pandemic had caused negative growth in all sectors of the Indonesian economy except for the health and telecommunication sectors. As a result of the impact of the crisis the tourism, aviation and hospitality sectors experienced a sharp decline, as well as the banking sector which also underwent a fall in performance. Based on Indonesian banking statistics, bank profits in the first quarter of 2020 decreased by 61.24% for the low-capital bank groups, while high-capital banks decreased by 7%. Islamic banks, however, experienced profit growth.

Islamic banks that use a profit and loss sharing system rather than an interest system are advantageous, as debtors' losses are absorbed by depositors [2, 3], resulting in a more stable performance in the long term [4]. However, the use of the profit-sharing system has a higher level of information asymmetry due to fundamental problems in financial reports. Companies that partner with Islamic banks have lower profits and high operating costs [5].

Several studies found that the 2008 financial crisis decreased the level of liquidity and increased operational costs in banking as a whole. However, this effect was lower in Islamic banks than in conventional banks [6]. The global crisis has also found that the application of sharia makes Islamic banks more stable, even during the global financial crisis. Islamic banks in Middle Eastern countries improved macroeconomic conditions, affecting profitability and total assets as well as increasing liquidity [7, 8].

Based on this, this study aims to evaluate the resilience of Islamic banks against the COVID-19 crisis. Bank performance is examined using the CAMEL ratio which is a measure of bank performance, namely capital, assets, management, earnings and liquidity. The results of this study are expected to become a policy reference for banking development, specifically Islamic banks, which currently have only 9% market share in Indonesia.

2 Literature Review

The emergence of COVID-19 was first detected in Wuhan, China in early December 2019 when a number of patients were sick with symptoms of an unknown disease. Dr Li Wenilang was the first to spread the news of this mysterious virus on social media. This virus had actually been around for a long time, but had only been found in animals. In February, it was discovered that the coronavirus, which had originated from bats, had infected humans as humans and bats have a genetic similarity of 96%. This mutated virus in humans is able to spread rapidly.

The COVID-19 virus is transmitted through droplets from coughing or sneezing; personal contact such as touching or shaking hands; touching objects or surfaces before touching the mouth, nose or eyes without washing hands. This virus was initially taken lightly like the common cold; when it was spread from China, it was not considered a significant problem. When Italy's 10-day lockdown was implemented the country's first infections, the population treated the situation as a holiday, rather than staying home. As a result, cases in Italy jumped drastically, causing thousands of deaths. Thus, the dangers of the virus were then realized, but it was too late as many countries had already been infected; millions of people had contracted the virus.

One solution was social distancing to reduce the spread. To effectively maintain distance, all activities of the population were reduced and it was made advisable to stay at home. Each country carried out a lockdown by closing state borders and closing airports and flights to prevent human activity between countries. Population activities were also restricted; education and all religious work activities were limited to being carried out in their respective homes. The worst result of this was the collapse of the society's economy.

The collapse of airlines, hotels, and transportation businesses ultimately affected all other economic activities. The impact of a crisis on the economy is not a new concept: an economic crisis occurred in 1997/1998 across various countries in Asia and, the 2008 financial crisis hit America, Europe and several developed countries. However, these crises did not limit human activities, and only affected a particular region. The COVID-19 pandemic crisis has affected countries worldwide with no exception. Furthermore, the lockdown and restrictions on human activities have greatly brought down the world economy.

The economic crisis in 1997/1998 resulted in dozens of banking companies experiencing bankruptcy, several state-owned banks merging and hundreds of companies undergoing bankruptcy. However, the crisis quickly recovered because restrictions on human activities were placed. In 2008, the financial crisis in Indonesia affected conditions in the economic sector, resulting in the closure of the Century bank. The 2008 financial crisis caused the economy and financial market sector to decline and the prospects for economic growth to decline in several developed countries such as America (Nastase et al. 2010).

Indonesia is one of the countries in Southeast Asia which was also affected by the pandemic. The economic collapse was marked by a 27% decline in the stock price index up to March 20, 2020. The government issued an economic stimulus policy to encourage economic activity so that it would not be too heavy among others by relaxing credit. The banking sector revealed that there was a decline in the performance of their creditors engaged in the transportation, hotel, restaurant, CPO, coal, machinery and heavy equipment sectors [9].

The 2008 financial crisis affected the performance of the automatic industry and there was a reduction in economic growth in the financial industry in all countries [5, 10, 11]. The fall of one industrial sector has had a multiplier effect on a number of other industries, including the financial industry sector, due to an increase in non-performing debt, a decrease in trade and a decrease in the value of the currency [12].

Bank Indonesia and the Financial Services Authority classify risks for financial services including credit risk, market risk, liquidity risk, operational risk, compliance risk, legal risk, reputation risk, and strategic risk. The authorities have made policies in the banking industry by making regulations for credit restructuring and other credit easing policies. The COVID-19 crisis has affected the banking industry, sharply affecting the financial performance of banks, namely the decline in profit in the first quarter decreased by 61.24% for small banks while banks with large capital decreased by 7%. The economic crisis in 1997/1998 in Indonesia caused dozens of banks to be liquidated and merged. In 2008, Financial crisis only caused 1 bank to be liquidated.

Islamic banks use a different system from conventional banks, namely the profit-sharing system so that the debtor's losses will be absorbed by the depositors. This condition means that many conventional banks were merged and liquidated during the crisis period in 2008, but Islamic banks showed an increase in financial performance [14, 15]. In Islamic banking, deposits of more than 70% are in the form of profit sharing, while financing of more than 80% is in the form of non-profit sharing [16, 18].

Based on this, we suspect that Islamic banks are more resilient to crises than conventional banks. Islamic bank resilience is measured by the performance of (1) Capital, namely capital adequacy (CAR) (2) Asset quality, especially productive assets, namely trying to keep the level of non-performing finance as low as possible; (3) management as measured by the level of effectiveness and management efficiency (4) Profit level (earning) and finally (5) the level of liquidity. Based on this, the hypothesis of this research is:

H_1: The effect of the COVID-19 crisis on the level of Islamic bank capital is lower
H_2: The effect of the COVID-19 crisis on the level of asset quality of Islamic banks is lower
H_3: The effect of the COVID-19 crisis on the level of management of Islamic banks is lower
H_4: The effect of the COVID-19 crisis on the level of profit of Islamic banks is lower
H_5: The effect of the COVID-19 crisis on the level of liquidity of Islamic banks is lower

3 Methodology and Data Analysis

The research samples are Islamic commercial banks and conventional commercial banks in Indonesia. The data used are the end of 2019 financial statements (the period before the crisis) and the end of 2020 financial statements (at the time of the crisis). The operational definition for each variable, namely Capital, uses a capital adequacy ratio (CAR) which calculates it with a ratio of capital to assets calculated according to Risk. The regulator, in this case the Financial Services Authority, stipulates a regulation that the CAR is $>11\%$.

Earning asset quality is measured by Non-Performing Financing (NPF), which is the ratio of non-performing financing to total financing. The regulations of the financial services authority regarding NPF are shown in Table 1.

Management used a proxy comparison of Operating Costs with operating income (BOPO). This proxy measures the level of management efficiency Y measures inputs versus outputs. The smaller this ratio indicates the more efficient. The efficiency criteria are very good if it is less than 83% and less good if it is above 89%.

Earning or profitability is measured by the return on assets (ROA) program, which is the comparison between profit and total assets. This regulation on earnings stipulates that an ROA greater than 1.5% is very good. Liquidity is measured by FDR (Financing Deposit Ratio) which is the ratio between Financing and deposits (third party deposits) in the form of demand deposits, savings and time deposits.

Table 1. Ranking Non-Performing Financing.

Rank	Information	NPF
1	Strong	NPF $\leq$ 2%
2	Satisfactory	2% < NPF $\leq$ 5%
3	Fair	5% < NPF $\leq$ 8%
4	Marginal	8% < NPF $\leq$ 12%
5	Unsatisfactory	NPF $\geq$ 12%

4 Research Result and Discussion

A. *Before Covid*

The CAR of Islamic banks and conventional banks is not significantly different because the CAR has provisions from the regulatory authorities regarding the minimum limit and all banks meet these requirements. Islamic banks and conventional banks have a capital adequacy level of 20%. So, it is included in the very adequate criteria (Table 2).

The level of risk in Islamic banks is significantly higher than conventional banks, this can be seen from the NPF in Islamic banks which is higher with an average of 3.5% while in conventional banks it is only 2.19, so Islamic banks and conventional banks are still in the satisfactory category. in financing risk management. The level of risk in Islamic banks is higher because the financing in Islamic banks is smaller due to the market share of Islamic banks is still small at 5%. Islamic banks in Indonesia which have started to develop since 2009 have lost experience with conventional banks that have been around for hundreds of years. The quality of human resources and service quality of Islamic banks are still unable to compete with conventional banks because of the lagging experience, and this should be a trigger for Islamic banks to accelerate the mastery of technology and human resources.

The quality of management as indicated by the level of efficiency also shows that Islamic banks are significantly less efficient where Islamic banks have a comparative level of operating costs and operating income which is still 91.54% while in conventional

Table 2. Hypothesis test results.

Ref.	Conventional				Islamic				Compare mean C-I (sig)		
	2020	1919	Δ	sig	2020	19	Δ	Sig	20	19	Δ
CAR	20,09	20,32	-0,23	0,42	20,27	19,99	0,28	0,42	0,46	0,43	0,23
NPF	2,71	2,19	0,52	0,12	3,47	3,50	-0,03	0,48	0,16	0,02	0,01
MGT	83,40	82,98	0,43	0,46	90,94	91,54	-0,60	0,43	0,02	0,02	0,32
ROA	1,61	1,94	-0,32	0,18	0,83	0,92	-0,08	0,40	0,01	0,01	0,06
LDR	93,63	95,60	-1,98	0,39	90,33	82,66	7,67	0,17	0,36	0,02	0,11

banks it is only 82.98. In this efficiency level, Islamic banks are still in inadequate criteria because they are greater than 89%, so this must be a concern for Islamic bank management in banking management. This level of efficiency is important to be able to compete and increase profitability so that it can be used for further bank development. The low level of efficiency of Islamic banks is due to the lower investment in the banking technology sector of Islamic banks compared to conventional banks. Conventional banks have used a lot of technology such as ATM, mobile banking, digital banking, while Islamic banks are still limited in their use of technology and most of the ATMs of Islamic banks are still in conventional banks. Conventional bank efficiency level has been included in the healthy criteria.

The profitability of Islamic banks is significantly lower than conventional banks. This is influenced by the lower level of quality of productive assets, lower levels of efficiency and consequently the level of profitability is also lower. Islamic banks' earning level is still in sufficient criteria, while conventional banks are in very healthy criteria.

The liquidity level of Islamic banks is also significantly different from conventional banks, this can be seen from the ratio of the level of financing to deposit ratios in Islamic banks of 82.66% while in conventional banks it has reached 95.60%. In Syairah Bank, the growth of public funds is quite good because it is supported by the level of obedience of Muslims in Indonesia, it is necessary to support the performance of Islamic banks to channel it to parties who need financing to improve their business [26].

B. *When Covid*

At the time of covid 19, the performance of Islamic banks and conventional banks in terms of capital did not experience significant differences. During the Covid period, the CAR level of Islamic banks and conventional banks remained in the range of 20%.

The risk level of Islamic banks decreased by 0.03% to 3.47% while in conventional banks it increased to 2.71%. The existence of a shift in the level of risk (NPF) between Islamic banks and conventional banks causes the difference in risk between conventional banks and Islamic banks to be insignificant. Islamic banks with a profit-sharing system where this system is better at dealing with risks show better performance [27].

The level of efficiency in the Islamic bank crisis period showed a difference with an increase in efficiency although this increase was not significant. Whereas in conventional banks there is a decrease in efficiency but the decrease is also not significant, so as a result the difference in efficiency levels between Islamic banks and conventional banks decreases, but conventional banks are still significantly more efficient.

The level of bank profitability in the covid era has decreased but this decline is not significant. The level of profitability of Islamic banks is still lower than conventional banks. The level of earnings of conventional banks is still in a very healthy condition, while Islamic banks are still in sufficient criteria.

The level of liquidity indicated by the FDR of Islamic banks has improved while conventional banks have decreased. The difference in the FDR rate of conventional banks and Islamic banks in the covid era is not significant.

C. *Effect of Covid*

The impact of covid on the level of capital is not significant, this is because the crises faced by banks in this decade have often occurred such as the 1997/1998 monetary crisis, the 2008 financial crisis and the 2020 covid crisis so that banks are experienced and can anticipate. The regulator, in this case the Financial Services Authority, has anticipated a crisis from this experience. Even some banks have increased their capital so that Covid affects the capital (CAR) of Islamic banking positively so that the CAR has increased from 19.99% to 20.27%. Meanwhile, at conventional banks, Covid caused a decrease in CAR, although it was not significant [28].

The quality of productive assets or the level of risk shows that Islamic banks are better in facing the crisis, as can be seen from the NPF which has decreased from 3.5% to 3.47%, while conventional banks have increased from 2.19% to 2.71%. It is proven that Islamic banks are better or more resistant to crisis than conventional banks. The Islamic banking system that uses profit-loss sharing is proven that this system can absorb the losses of debtors to depositors so that the effect of risk on bank performance for Islamic banks is better than conventional banks.

The effect of Covid on the quality of productive assets in conventional banks occurs especially in large banks with capital above IDR 5 trillion (Bank Books 3 and 4). This happens because the impact of covid is most felt in middle and upper businesses whose entrepreneurs are conventional bank debtors' book 3 and 4. While small banks do not increase their NPF because their customers are MSMEs, credit is smaller and MSMEs are more flexible in dealing with crises and most of their businesses are in the sector. consumption needs. Large banks experienced an increase in NPF from the previous average of 2.5% to an average of 3%, while small conventional banks had an average NPF of 1.2%.

The effect of the profit-loss sharing system is more visible on the level of management efficiency. The crisis affects efficiency, but the level of influence of Islamic banks is good because there is an increase in efficiency while in conventional banks it has a negative effect, namely a decrease in efficiency. Efficiency Islamic banks experienced an increase of 0.06 while conventional banks experienced a decrease of 0.43. The decline in efficiency in conventional banks occurs in large banks.

Covid 19 affected the earning level of both Islamic banks and conventional banks, but the decline was not significant. The decline in earnings at conventional banks is greater than that of Islamic banks. In Islamic banks, earnings decreased by 0.08% while in conventional banks it decreased by 0.32%. The decline in earnings in conventional banks at large banks decreased by 0.62% and in small banks decreased by 0.17%. This shows that conventional banks with an interest system, Covid causes a high decline because debtors experience business difficulties and profits decrease even some losses as a result of not being able to pay interest, while public funds deposits with an interest system, the bank still has to pay as a result, it can be seen in the decreased level of efficiency. and declining profits. The effect of covid on liquidity is also a difference between Islamic banks and conventional banks, namely in Islamic banks the effect is positive while in conventional banks it is negative.

5 Conclusion

The COVID-19 crisis affected the performance of conventional banks and Islamic banks, but the effect of the crisis on Islamic banks was lower and positive than that of conventional banks are negative. This was evident especially in terms of asset quality (non-performing financing), profitability, and management efficiency. The performance of Islamic banks is lower than conventional banks due to age and experience where Islamic banks in Indonesia on average were only established in 2008 while conventional banks have been around for decades. The founders and owners of Islamic banks are conventional banks so that the quality of human resources, technology and services of conventional banks is more advanced and better. Islamic banks to catch up with conventional banks must improve the quality of human resources, and the technology used.

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