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# Predicting Islamic Banks Performance During the Covid-19 Pandemic through CAMEL Ratio Strategy

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#### ABSTRACT

The Covid-19 pandemic, which has spread to almost all countries in the world, is currently causing the social and economic life of the community to shake so that it is thought to affect the financial performance of Islamic banks. This study aims to determine the financial performance of Islamic banks before and during a pandemic. The study was conducted by comparing financial reports with CAMEL analysis. The results of the study show that there is no significant difference between the financial performance of Islamic banks before and during the outbreak. Despite the global crisis due to the Covid-19 pandemic, the financial performance of Islamic banks has remained stable. This can be seen in the increase in financial ratios such as CAR and ROA, while the BOPO and NPF ratios tend to decrease, which indicates the efficiency of funds operated by the bank. Even though there was an increase in the amount of credit issued, the increase was still safe.

Keywords: Capital Adequacy Ratio, Non-Performing Financing, Financing to Deposit Ratio,

Return on Asset **JEL Codes:** G20; G21; O16

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#### INTRODUCTION

Banking as a financial institution that functions to collect and distribute funds to the public has an important role in the economy. Law No. 7 of 1992 concerning banking as amended by Law No. 10 of 1998, it is written that commercial banks carry out business activities conventionally and/or based on sharia principles (Islamic banks). Financial institutions with Islamic principles are starting to be accepted by the public. This is evidenced by the increasing number of Islamic commercial banks and the number of conventional banks opening Islamic business units (Sarifudin & Faturohman, 2017).

Although Islamic banks have been accepted and developed in Indonesia, when compared to other countries, the development of Islamic banks in Indonesia is still far behind. Since the establishment of banking based on sharia principles in 1998, the growth of Islamic banks is considered stagnant, approximately 5 percent. The data from Indonesian Financial Services Authority showed that as of October 2019 Islamic banking was able to penetrate the

market share of 6 percent or around 513T. This achievement is likely not to last until the next few months due to the economic downturn due to the virus outbreak.

Covid-19 or more familiarly referred to as the corona virus in recent months has been hotly discussed. The virus originating from Wuhan China has spread to almost all countries in the world including Indonesia. In addition to causing many casualties, the Corona Virus also disrupts economic activities and social activities in the community. The relatively rapid spread of the virus caused chaos to the world economy, which triggered a global crisis. In addition, the virus outbreak also affects the level of confidence in the global financial and food market, the business climate is systematically chaotic, which affects all sectors including the imposition of sharia (Siron et al., 2020; Ganar, 2020).

In facing the crisis due to the virus, the Indonesian government has provided stimuli which are divided into three sectors, namely fiscal, non-fiscal and financial stimuli which are regulated in POJK No. 11/POJK.03/2020 concerning national economic stimulus as a policy on the countercyclical impact of the spread of coronavirus disease 2019 (Handayani et al., 2020). The crisis that occurred due to the Covid-19 outbreak caused liquidity risk and defaults in the banking sector. Financial institutions are estimated to be under pressure, triggering a decline in the financial performance of Islamic banks (Ding & Zhao, 2020).

Financial institutions are a business of trust, so the ability to manage assets is a must to gain credibility from the community. Financial performance is a measure of the success of a company in managing its assets. Changes in the financial performance of Islamic commercial banks before and during the outbreak can be from published financial reports which are reflected in banking financial ratios (Safitri et al., 2019).

The financial ratios that will be used to measure financial performance are the ratio analysis CAMEL (capital, assets, management, earning and liquidity), where the ratio analysis CAMEL is reflected in the financial ratios of CAR, NPF, NIM, ROA and FDR (Kinasih, 2011). This study takes the object of Islamic commercial banks registered with the OJK by comparing the financial performance of Islamic banking seen from the events before and during the global crisis due to the Covid-19 virus outbreak. From the background described, it is interesting to conduct research on how the financial performance of Islamic commercial banks before and during the Covid-19 virus pandemic.

# LITERATURE REVIEW Profitability (ROA)

Profitability is an indicator used to assess the financial performance of a bank. Return on Asset (ROA) is used to calculate the financial performance of a bank in obtaining profit before tax from the bank's total assets. The greater the ROA value, the better the financial performance, this is because the resulting return is greater. Assessment of profitability in banks according to Bank Indonesia is based on two things, namely the value of ROA and BOPO. A bank is said to be healthy if: Minimum return rate (ROA) is 1.2% and BOPO ratio is not more than 93.5%. Based on Bank Indonesia provisions contained in Bank Indonesia regulations, which are listed in BI Circular Letter No. 9/24 /DPbS, ROA is formulated as follows:

$$ROA = \frac{Profit\ Before\ Tax}{Average\ Total} \times 100\%$$

# **Capital Adequacy Ratio (CAR)**

Capital Adequacy Ratio (CAR) is a ratio that shows the minimum capital obligation that a bank must have. The higher the CAR value, the greater the profitability that will be. In Bank Indonesia regulation No. 10/15/PBI/2008, the minimum capital that a bank must have is 8%. The amount of CAR value of a bank can be calculated with the following formula:

$$CAR = \underbrace{\frac{Own}{Capital}}_{RWA} \times 100\%$$

# **Operational Cost to Operating Income (BOPO)**

The BOPO ratio is often referred to as a measure of company efficiency, including the efficiency of Islamic banks. The BOPO ratio is used to measure the ability of bank management to control operating costs against operating income, where the lower the BOPO ratio, the higher the assets received. This also means that if the BOPO ratio is low, the banking performance will get better. The BOPO ratio is formulated as follows:

BOPO = 
$$\frac{\text{operating expenses}}{\text{income}}$$
 x 100%

The level of bank soundness according to BI DIR Decree Number/ KEP / DIR when viewed from BOPO is as follows:

30/21 < 93.52% Healthy 93.52 – 94.73% Fairly Healthy 94.73 – 95.92% Unhealthy > 95.92% Unhealthy

## **Non-Performing Financing (NPF)**

Non-Performing Financing (NPF) is a financial ratio related to credit risk. The smaller the NPF ratio, the lower the credit risk borne by the bank, on the other hand, if the NPF ratio is high, the credit risk owned by the bank is getting bigger so it is possible that the bank is unable to manage credit efficiently. The maximum limit for bank soundness, when viewed from the NPF ratio according to the OJK, is below 5%. The formula for the NPF is:

$$NPF = \frac{Financing (KL,D,M)}{total financing} \times 100\%$$

## Financing to Deposit Ratio (FDR)

Financing to Deposit Ratio (FDR) is the same as LDR in conventional banking, where according to Kasmir (2015) the ratio This can be used to measure the composition of the amount of credit extended compared to the amount of public funds and own capital. If the FDR ratio is high, it shows the lower the liquidity value in banks because of the large amount of financing. Conversely, if the FDR value is small, the bank's profitability will be even greater because the bank is able to channel funds effectively which is possible to generate profits. The formula used to calculate FDR is:

$$FDR = \frac{Total Financing}{Third Party Fund} \times 100\%$$

The criteria for FDR assessment based on BI DIR Decree Number 30/21/KEP/DIR are as follows: ≤ 94.75% Healthy

94.75% - ≤ 98, 50% Fairly Healthy 98.50% - ≤ 102.25% Unhealthy 102.5% Unhealthy

Research related to banking financial performance is not infrequently carried out, but moments of global crisis triggered by virus outbreaks are rare and rarely occur. literacy related to the exact same event is not yet widely found. Moreover, the current covid-19 virus is a deadly

new virus with a relatively high level of transmission, which has triggered the shock of the world economic system which has resulted in a global crisis. Similar studies include the following: Yadyarti et al. (2017) with the title, Comparison of the financial performance of Muamalat Bank Indonesia and independent Islamic banks before and after the global crisis. The type of research used is quantitative research with analysis Wilcoxon. The results showed that CAR, RORA, NPM, ROA, and LDR did not show any differences in performance between Muamalat Bank Indonesia and Mandiri Syariah Bank both before and after the global crisis.

Prabowo (2020) concluded that the level of performance of independent Islamic banks both before and after the global crisis is included in the efficient category. There is no significant difference in the performance of Islamic Mandiri banks both before and after the global crisis. Additionally, Kresmiati (2017) conducted study by using paired sample t-test and hypothesis testing, resulting in the conclusion that before and after the 2008 global financial crisis there was a significant difference in the ROA and BOPO variables, while the CAR variable did not show any significant differences. Dewi and Purnawati (2016) found that that there is no significant difference in the financial performance of ROA, OEOI, LDR, and NPL before and after the acquisition. Nikmah et al. (2019) showed that the most dominant variable in distinguishing bank soundness status is the BOPO variable. Meanwhile, the variables CAR, NPL, NPM, ROA, LDR and IER have a smaller value than BOPO.

## **METHOD**

This study adopted a case study on Islamic commercial banks registered with the Indonesian Financial Services Authority (OJK) during the period before and when the Covid-19 virus outbreak occurred. The data collection method used in this study was to observe the quarterly financial reports before and when an outbreak occurred at the Sharia Commercial Bank by taking a random sample. To examine differences in financial performance before and when an outbreak occurs, it has compared the financial performance ratios before and when the outbreak occurs. The ratios used in this study are the fourth quarter report of 2019 or before the Corona virus spreads in Indonesia and the first quarter of 2020 or during the Corona virus emergency.

#### **RESULTS AND DISCUSSION**

Banking in Indonesia has existed since the Dutch colonial era, banks operating at that time include *De Javasche NV*, *De Post Paar Bank*, *De Algemene Volks Credit Bank*, *Nederland Handels Maaatschppij*, *Bank Nasional Indonesia*, *and Batavia Bank*. During the independence era, there was a development in the banking world, namely the existence of new banks that were established and the nationalization of several previous banks. Then in 1992 the first Islamic bank was established in Indonesia, namely the Indonesian muamalat bank. The establishment of Bank Muamalat is a milestone in the early development of Islamic banks in Indonesia (Muhith, 2017). Islamic banking is a bank whose operational activities adhere to sharia principles. Law No. 21 of 2008 article 1 paragraph 12 concerning Islamic banking explains that what is meant bysharia principles is the principle of Islamic law in banking based on Fatwa issued by an authorized institution (Marimin & Romdhoni, 2015).

Banks are the most important financial institutions in the economy of a country. In article 1 paragraph 2 of Law No.10 of 1998 regarding amendments to Law No. 7 of 1992, it is stated that banking is a place to collect public funds in the form of deposits and channel them back to the community in the form of credit or other forms to improve living standards. the people. Before the existence of Islamic banks in Indonesia, banks with conventional concepts had already developed and had spread to almost all parts of Indonesia.

Even though Islamic banks have been established since 1992, if compared with other Muslim countries, Islamic banks in Indonesia are still far behind. From the year 1992 until 1998

only one Islamic bank unit was established. It can be said that for more than 5 years the development of Islamic banks has been stagnant (Muhith, 2017). After the monetary crisis in 1997/1998, Islamic banking began to become an alternative banking system in Indonesia due to the resilience of Islamic banks in facing crises compared to conventional banks at that time. After that, within one-year Islamic banks experienced significant developments (Belwal & Al Magbali, 2019). As of 2019, there were 14 Islamic Commercial Bank units registered with the OJK including, PT Bank Aceh Syariah, PT BPD Nusa Tenggara Barat Syariah, PT Bank Muamalat Indonesia, PT Bank Victoria Syariah, PT Bank BRI Syariah, PT Bank Jabar Banten Syariah, PT. Bank BNI Syariah, PT Bank Syariah Mandiri, PT Bank Mega Syariah, PT Bank Panin Dubai Syariah, PT Bank Syariah Bukopin, PT BCA Syariah, PT Bank Sharia National Savings Bank, PT Maybank Syariah Indonesia

In 2020 the crisis occurred again due to the deadly virus Covid-19. The virus paralyzes all sectors of human life starting from health, social and economy. The crisis that is being experienced does not only occur in the State of Indonesia but in almost all countries in the world. Some experts think that the impact of the current crisis is likely to be worse than the crisis that occurred in 1998, this of course has an impact on finance, including Islamic banking. Some of the samples taken consider the largest assets in the population list that exist. Based on the sample taken, it is known that the financial performance of Islamic banking before and during the crisis is as follows:

Table 1. Quarter IV December 2019 Publication Report

Dank Nama	CAR before	BOPO before	FDR before	NPF gross	ROA before
Bank Name	Covid	Covid	Covid	before Covid	Covid
Bank Aceh Syariah	18.9	76.95	68.64	1.29	2.33
BNI Syariah	18.88	81.26	74.31	3:33	1.82
BCA Syariah	87.55	90.98	38.28	0.58	1.15
BRI Syariah	25.26	96.8	80.12	5:22	0:31
Bank Syariah Mandiri	16:15	82.89	75.54	2:44	1.69

Table 2. Statements of Publication of The First Quarter March 2020 (During Covid)

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Bank Name	CAR	ВОРО	FDR	NPF	ROA
Bank Aceh Sharia	19:16	84.12	73.77	0:08	1:58
BNI Syariah	19:29	78.53	71.93	1.72	2:24
BCA Syariah	38.36	90	96.39	0.67	0.87
BRI Syariah	21.99	90.18	92.1	2:35	2.95
Bank Syariah Mandiri	16:43	82.87	74.13	2:49	1.74

Based on the output results in Table 1 and Table 2, From the five banks mentioned, it is known that the lowest CAR value before the existence of Covid-19 was at an independent Islamic bank with a value of 16.15 while the maximum value was at Islamic BCA with a value of 38.28. Then when the virus outbreak occurred, the minimum CAR value actually increased from 16.15 to 16.43 as well as the maximum CAR value, the maximum CAR value increased from 38.28 to 38.36. The bank health standard based on the Indonesian bank when viewed from the CAR value is 8%. The results of descriptive analysis show that the minimum car value is more than 8%, which means that Islamic banks are still in good health. If seen from the CAR ratio value which has increased, it can be said that the outbreak has no effect on the financial performance of Islamic banking. Judging from the table above, the independent sharia bank became the bank with the lowest CAR value both before and when the outbreak occurred, while the BCA sharia bank became the bank with the highest CAR value. However, the CAR value of Syariah banks is still in good health.

BOPO or operating cost operating income is the ratio used to compare the bank's operational costs with the bank's operating income in the time period before and when an outbreak occurs. Before the virus outbreak, the minimum value of BOPO was 76.95 with a maximum value of 96.80 when an outbreak occurred, the minimum value of BOPO was 78.53 and the maximum value was 90.18 in BRI Syariah. based on BI DIR Decree Number 30/21/KEP/DIR a BOPO value of more than 95% indicates that the bank is unhealthy. When viewed from each of the BOPO ratio values before and when the outbreak occurred, the BOPO ratio was actually getting better. When an outbreak occurs, the ratio value decreases from being in the unhealthy category to being healthy. This means that the outbreak does not have a significant effect on the operations of Islamic banks, both in terms of costs and income.

Non-Performing Financing (NPF) is one of the credit risks which shows that credit provided by a bank is included in the criteria for bad credit, substandard or doubtful. Based on the sample used, the minimum NPF value before the virus outbreak was 0.58, while the maximum value was 5.22. then when there was a virus the minimum NPF value was 0.08 and the maximum value reached 2.49. From these results it can be said that the virus outbreak has no effect on the NPF ratio because the NPF value is lower, which indicates that the performance or health level of the bank is getting better.

FDR or Financing to Deposit Ratio is the ratio of the amount of credit provided by the bank. In the period before the covid-19 virus outbreak, the minimum FDR value in Islamic commercial banks was 68.64 with a maximum value of 90.98, then when a virus outbreak occurred, the minimum FDR value showed a value of 71.93 with a maximum value of 93.96. As with other financial ratios, the FDR value has also increased. Unlike other financial ratios, the high FDR value is actually not good for bank performance and health. If the FDR value is high, the liquidity risk at the bank will also be high because of the large amount of financing. Even though it is still in the healthy category, the existence of a virus outbreak is quite influential on the value of the FDR ratio in Islamic banks.

Return on Asset is the ratio used by Islamic banks to measure the return on total assets owned. The amount of the ROA ratio can describe the level of profitability or profit obtained by the bank so that it can be seen how well the bank manages the funds it owns. Before the Coronavirus outbreak, the minimum ROA ratio was 0.31 with a maximum value of 2.33. The existence of a virus outbreak did not hamper the growth of Islamic banks, this was evidenced by the increase in the ROA value from the initial minimum value of 0.32 before the outbreak to 0.87 when an outbreak occurred with a maximum value of 2.95.

Seen from the analysis of the financial performance ratios of Islamic banks before and when the outbreak in the first quarter shows that it is not so affected. Although the credit ratio has increased, it is still in a safe stage. Likewise, if seen from the average or mean financial ratios obtained both before the outbreak and during the outbreak, it also shows a positive trend where the values of financial ratios such as CAR, BOPO, NPF and FDR are still at a reasonable stage. This is reinforced by the value of the ROA ratio which shows the amount of profit obtained by Islamic banks in the first quarter when the pandemic was still increasing. From these results it can be said that the financial performance before and when the pandemic in the first quarter remained stable.

#### CONCLUSION

After conducting a study related to financial performance with CAMEL analysis on Islamic banks before and during the crisis, it can be concluded that even though the crisis occurred, the trend of Islamic bank financial performance was still positive. In the first quarter, the financial statements for the quarter of March 2020, the financial performance of Islamic banks experienced an increase in financial ratios such as CAR and ROA when compared to the fourth quarter of the December 2019 quarterly report. Likewise, the BOPO and NPF ratios

tended to decline, indicating the efficiency of funds in operate the bank so that the rate of return obtained is better than before. Even though there was an increase in the amount of credit issued by banks, the increase was still safe. The results of the study show that despite the global crisis due to the Covid-19 pandemic, the financial performance of Islamic banks remains stable. This was the same when the monetary crisis occurred in 1998 where the first Islamic bank in Indonesia, namely the Muamalat Indonesia bank, was able to survive so that Islamic banks in Indonesia could develop until now. Therefore, it is true that Islamic banks are resistant to crises, so there is no need to doubt the performance of Islamic banking. From this conclusion, it can also be said that Islamic banks are feasible and able to compete with conventional banks that have developed in Indonesia first. To dominate the market share, it may take time to get in line with conventional banks today.

Despite being faced with the global crisis due to the Covid-19 pandemic, the financial performance of Islamic banks remains stable. However, it is important for Islamic banks to conduct evaluation and survival strategies in anticipation if the impact of the crisis gets worse. Islamic banks also need to make breakthroughs and innovations in providing services during a pandemic so that even though the space is limited, operational activities continue. The resilience of Islamic banks possesses the opportunity for the development of Islamic banks to compete with conventional banks and dominate the market share. For researchers who wish to study a similar theme, it is expected to take a longer time frame so that the picture of the financial performance of Islamic banks before and during the outbreak can be clearly known, because until this study was made the banking sector had not published the second quarterly publication so that the timeframe used was in this study is still relatively few. In addition, studies related to banking performance were not only carried out using CAMEL analysis, but also received other analyzes with a wider scope so that they could strengthen and add to the variety of research with similar themes.

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