

# **Banking Financial Performance Before and During the Covid 19 Pandemic in Indonesia: Analysis of Comparison Between Islamic and Conventional Banking**

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## **ABSTRACT**

*Banking is one of the financial institutions that is very influential on the economic conditions of a country. The level of banking liquidity is a reflection of the condition of the national economy. This study examines the differences in the financial performance of conventional banking and Islamic financial performance before and during the COVID-19 pandemic in Indonesia. The variables used to measure banking financial performance are risk profile, earnings, and capital. The data used are financial reports published by Otoritas Jasa Keuangan (OJK). The analysis used is the Multivariate Analysis of Variance (MANOVA). The results of the analysis found that there was no difference in the financial performance of Islamic banking on risk profile, earning, and capital indicators before and during the COVID-19 pandemic; there is no difference in the conventional financial performance of earning indicators before and during the Covid 19 pandemic; and there is no difference in the financial performance of conventional banking earning indicators during covid 19 and Islamic banking financial performance indicators of earning before covid 19. This analysis shows that the performance of Islamic finance is still able to deal with the impact of the COVID 19 pandemic in Indonesia.*

**Keyword:** Financial Performance, COVID 19 Pandemic

## **INTRODUCTION**

Indonesia are divided into two parts, namely conventional banks with legal sources, namely the Law and Islamic banks with legal sources, namely the Al-Qur'an and Hadith. Conventional banks are banking institutions that carry out conventional business activities and provide traffic payment services that refer to the laws and regulations issued by the Government through Bank Indonesia. Meanwhile, Islamic banks are banking institutions that carry out all of their business based on sharia principles which refer to the Al-Qur'an and Hadith. In the last few months, Indonesia's economic condition has experienced a decline as a result of the Covid 19 pandemic. information is obtained that the growth of Islamic banking third party funds at the beginning of the emergence of the Covid 19 pandemic has decreased by 0.094 percent. Meanwhile, conventional banks experienced a decline in the second month of the emergence of the Covid 19 Pandemic, namely by 2.112 percent.

Corona virus diseases 2019 (covid-19) are easily transmitted diseases that cause lung disease and, if fatal, can result in death. The very fast spread of the Covid-19 virus forces all humans to limit social interactions. This has an impact on the weakening of people's purchasing power, decreased income, and the worst impact is the economic recession. The growth in the amount of non-performing Islamic bank financing in March and April experienced an increase, but in May it was able to be reduced to -1.12 percent.

Based on Bank Indonesia Regulation (PBI) No.13 / 1 / PBI / 2011 concerning Commercial Bank Soundness Assessment, namely by using Risk-Based Bank Ratings, the scope of the assessment includes Risk Profile factors, Good Corporate Governance. (GCG), Earning , and Capital or abbreviated as RGEC. This provision is a substitute for Bank Indonesia Regulation (PBI) No.6 / 10 / PBI / 2004 with description for assessing Capital, Asset Quality, Management, Profits, Liquidity and Sensitivity to Market Risk (CAMELS). The bank's health assessment uses a scale of 1 to 5, the smaller the points received indicates that the bank's health is getting better. And starting January 2012 all commercial banks in Indonesia are required to use the latest bank health Rating guidelines, namely the RGEC Method. There have been many studies on bank health assessment using the RGEC method, including research conducted by Suryana et al ( 2018) on financial health analysis using the RGEC method, and Dewi (2018) research which examined BRI Health using the RGEC method which showed the results of all RGEC indicators were highly predicated. healthy, and many other studies. Although there have been many studies on RGEC, these studies have never been carried out during a global pandemic situation such as today, so it can be said that this research is the latest research on RGEC. In contrast to Islamic banks, the growth of non-performing loans in conventional banks has an increasing trend. The highest bad credit occurred in June 2020, amounting to 22.29 percent. Almost all of the people's economic activities have stopped. Government regulations that prohibit crowds, people are required to remain at home, several businesses are prohibited from doing activities which in the end result in termination of employment rights (PHK). As a result, people's income has decreased and poverty has increased. This condition also indirectly affects the condition of banking, both conventional and Islamic banks. Based on the results of previous research that have been described above, it can be said that there is a research gap regarding differences in the financial performance of conventional banking and the financial performance of Islamic banking. In addition, these studies have not looked at the differences in the financial performance of conventional banking institutions and Islamic banking in responding to pandemic conditions. Are there differences in the financial performance of banks in responding to pandemic conditions, especially the conditions of the Covid 19 pandemic

## **LITERATURE REVIEW**

Banking financial performance is regulated in the Financial Services Authority (POJK) No. 32 / POJK.03 / 2016 concerning Transparency and Publication of Bank Reports. In this regulation, there is a variable financial performance. The variables of Indonesian banking financial performance can be explained as follows:

- a. Return On Asset (ROA) Return on Asset (ROA) can determine the relationship between organizational structure and financial performance of retail banks, so that it can formulate organizational strategies in dealing with financial distress. ROA focuses on the company's ability to generate profits in company activities (Mawardi, W. 2004: 85). In a Circular Letter of the Financial Services Authority (SEOJK) explains that Return on Assets (ROA) is a comparison between profit before tax and the average total assets in one period (Surat Edaran Otoritas Jasa Keuangan [SEOJK], 2019)
- b. Capital Adequacy Ratio (CAR). Capital Adequacy Ratio is a ratio that shows how much capital capacity in banks can absorb the risk of credit failure that will occur so that the higher the level of the capital ratio, the bank is healthier, and vice versa (Muljono, 1999). The formula for obtaining the capital adequacy ratio has been described by OJK in an OJK circular letter.
- c. Operational Costs and Operating Income Puspitasari's research (2015: 261) states that there are 3 (three) measures towards efficiency including 1. The same input produces a larger output, 2. Smaller inputs produce the same output, and 3. Large inputs will produce output the greater one. To achieve the Bank's efficiency level, it can be measured through the ratio of Operational Costs to Operating Income (BOPO) (POJK no. 06 / POJK.03 / 2016). The BOPO ratio in the research of Setiawan (2008), Surahman (2007), Susanto and Njit (2012) includes this ratio in influencing banking performance.
- d. Net Operational Margin (NOM) Net Operation Margin (NOM) in a Islamic Bank means the same as Net Interest Margin (NIM) in Conventional Banks because in the regulation of the Financial Services Authority (POJK) no. 6 / POJK.03 / 2016 explains that to achieve the level of efficiency of the Bank is measured by the ratio of Net Interest Margin (NIM) or Net Operating Margin (NOM). Aviliani's research, et al. (2015) includes NIM or NOM as a factor that is considered to affect profitability. The NOM ratio is used by banks to measure the ability of management to manage their capital to obtain profits from the provision of funds to the public to generate net profits. Net profit is obtained from the entire distribution of funds after deducting profit sharing and deducting operating expenses.
- e. Financing to Deposit Ratio (FDR) Financing to Deposit Ratio (FDR) in Islamic banks is the same as the LDR Loan to Deposit Ratio in conventional banks in its meaning, where in Bank Indonesia regulation no. 17/11 / PBI / 2015 that the ratio of loans to third parties in Rupiah and foreign currencies, excluding loans to other banks.
- f. Short Term Mismatch Ratio (STMR) This ratio calculates the number of short-term assets compared to shortterm liabilities so that the ability of Islamic banks to meet their short-term liquidity needs is known. Financial Services Authority Circular Letter (SEOJK) Short Term Mismatch Ratio is included in the assessment of bank financial performance. In the research of Cahyani and Saepudin (2015), it is explained that the Short Term Mismatch Ratio is an indicator of the quality of banking performance in Indonesia.

## **RESEARCH METHODS**

The data set consists of 6 financial performance variables for the period January 2020 – September 2020, namely Capital Adequacy Ratio (%), Operating Expenses / Operating Income (%), Net Operation Margin (%), Landing to Deposit Ratio (%), Short Term Mismatch (%) in Islamic banking and conventional CBGB 2 (Commercial Bank – Group of Business) which are used as independent variables. CBGB 2 (Commercial

Bank – Group of Business) is a category of commercial banks, both conventional and Islamic, which have core capital between IDR 1 trillion - IDR 5 trillion. This classification is based on Financial Services Authority Regulation (POJK) No. 6 / POJK.03 / 2016 about Business Activities and Office Networks Based on Bank Core Capital. Judging from the core capital, the business activities of each CBGB category are different. Meanwhile, the growth variable Return on Assets (ROA) in that period was used as the dependent variable. All data used is obtained from the website of the Financial Services Authority (OJK). This study uses an Artificial Neural Network (ANN) model with a quantitative approach. Furthermore, the data will be processed using an Artificial Neural Network to obtain the factors that affect the financial performance of Islamic and conventional banking. Finally, the results of the factors that influence the financial performance of Islamic banking will be compared with the factors that affect conventional financial performance by confirming the results of previous studies, namely the research of Fakhri et al. (2020).

There are three reasons for processing all data in order to change the incoming data to the new version. (1) The level of importance in determining the output is reflected in the data size, (2) Before training the network, by facilitating the initialization of random weights, (3) to avoid different measurements due to different input units, data normalization is carried out. Furthermore, Alyuda provides a complete search feature for designing neural network architectures. This research needs to combine several neurons into a multilayer structure called a neural network to have the power to solve problems of pattern classification and recognition. Therefore, this study uses a feed-forward multi-layer network, which is the type of neural network most commonly used today. The feed-forward multi-layer network consists of an input layer, a hidden layer. and an output layer. Specifically, the input layer is the layer directly connected to outside information. All data in the input layer will be passed to the hidden layer as the next layer. Meanwhile, the hidden layer functions as a detection feature for the input signal and releases it to the output layer. Finally, the output layer is considered to be the aggregator of detected features and the generator of responses. In the network, the output from the output layer is a function of the linear combination of hidden unit activations; the hidden unit activation function is a non-linear function of the weighted input sum.

Mathematically, the model can be written as follows (Anwar and Watanabe, 2011):

$$Y = f(x, \theta) + \varepsilon$$

Where :  $\chi$  = the vector of explanatory variables

$\theta$  = weights vector (parameters)

$\varepsilon$  = the random error component

Artificial Neural Network (ANN) is a method that resembles the way humans think. This research uses ANN (Artificial Neural Network) to determine the factors that affect the decline in financial performance. Research in the field of economics, especially in the fields of business and financial management, banking and corporate failures, stock price prediction, and bond rating has developed research especially for prediction using the Artificial Neural Network (ANN) method. Research on the performance of banks,

especially Islamic banks using a neural network was studied by Al-Osaimy (1998), AlShayea and El-Refae (2012), the failure of conventional banks using the neural network was studied by Tam (1991), Tam and King (1992) and Boyacioglu et al (2009). Meanwhile, Oodom and Sharda (1990), Altman et al. (1994), Almilia and Kritijadi (2003), Hamdi (2012), and Bredart (2014) examined company bankruptcy using a neural network. In addition Setiawan (2008) uses artificial neural networks in researching stock price predictions. In all of these studies, the artificial neural network model outperformed traditional statistical methods such as discriminant analysis and logistic regression. In addition, the most commonly used approach above and in other studies is the backpropagation neural network model (Al-Osaimy, 1998) (Anwar and Watanbe, 2011). Anwar and Hasan (2016) in their research used the ANN method to predict a decline in the financial performance of Islamic banks where the prediction results obtained 85%. These results indicate that the ANN method is very relevant to use in this study. Likewise, with the research of Fakhri et al (2020) where the results of this study prove that the Artificial Neural Network (ANN) is very relevant in determining factors that affect the financial performance of Islamic and conventional banking.

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