



DOES COVID-19 EFFECT BANK PERFORMANCE? An Evidence From Indonesia

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Received Date : 23.01.2022

Revised Date : 19.06.2022

Accepted Date : 27.06.2022

PROGRAM STUDI MANAJEMEN
FAKULTAS EKONOMI DAN BISNIS
UNIVERSITAS KOMPUTER INDONESIA
BANDUNG

ABSTRACT

Banking is a sector that helps a country's economy. The goal of this study is to see if COVID-19 impacts the banking industry's performance. The data for this study spans two years, from 2019 to 2020. The year before the pandemic is 2019, and the pandemic is 2020. This study includes data from 17 banks as a sample. The Mann-Whitney non-parametric test method was employed in this investigation. The study looks at any changes in bank financial performance in Indonesia before and after the Covid-19 outbreak. According to the findings, bank performance in company size, profitability, and efficiency did not alter before or during the pandemic. This explains why the bank's performance is stable due to the government's macroeconomic policies. Bank success has been sustained by macro policies such as lower interest rates and credit deregulation. The research will have an impact on the recovery process of the financial services sector as a result of the impact of the pandemic. This research will also show the effectiveness of government policies in the recovery of the financial services sector. The results of research on government policies effectiveness will be a novelty in this study.

Keywords : Banking, Covid-19, Pandemic Effect, Financial Performance, Policy

ABSTRAK

Perbankan merupakan industri pendukung perekonomian sebuah negara. Penelitian ini bertujuan untuk meneliti apakah covid-19 mempengaruhi kinerja industri perbankan? Penelitian ini mempergunakan data 2 tahun. Tahun 2019 merupakan tahun sebelum adanya pandemi dan tahun 2020 merupakan tahun terjadinya pandemi. Penelitian ini mempergunakan data sample 17 banks. Penelitian ini mempergunakan metode uji beda non parametrik Mann Whitney. Penelitian menguji apakah ada perbedaan kinerja bank-bank di Indonesia antara sebelum dan selama Covid-19 terjadi. Penelitian ini menyimpulkan bahwa sebelum dan selama terjadinya pandemi, kinerja bank dari sisi firm size, profitability dan efficiency tidak memiliki perbedaan. Hal ini menjelaskan bahwa kinerja bank stabil karena kebijakan-kebijakan makro dari pemerintah. Kebijakan makro seperti penurunan suku bunga dan relaksasi kredit telah menjaga kinerja perbankan. Penelitian akan memberikan dampak terhadap proses pemulihan sektor jasa keuangan sebagai akibat dari dampak pandemi. Penelitian ini juga akan menunjukkan efektivitas kebijakan pemerintah dalam pemulihan sektor jasa keuangan. Hasil penelitian terhadap efektivitas kebijakan pemerintah akan menjadi novelty pada penelitian ini.

Kata Kunci : Perbankan, Covid-19, Efek Pandemi, Kebijakan, Kinerja Keuangan

INTRODUCTION

Business models vary in line with the pandemic. The banking industry structure has changed as a result of the pandemic. Restrictions on social activities have reduced transactions using cash. E-commerce transactions have increased tremendously during the pandemic. (Carletti, Claessens, Fatas, & Vives, 2021; Resti, 2021)

Bank DKI's performance has recorded growth in 2021. Bank DKI's net profit increased by 4.16%. Credit risk has become a formidable challenge during 2020. (Bank DKI, 2021). Bank Permata scored excellently in 2021, even though the economy has not recovered due to the pandemic (Bank Permata, 2021). Several large banks have shown satisfactory performance in the first semester of 2020 (Hidayat, 2021).

However, several banks experienced negative growth due to a slowdown in economic activity due to social restrictions (Liputan6.com, 2021). National banking growth is again depressed due to the increase in Covid-19 (Anggraeni, 2021). Banks in Indonesia will face challenges of business risks, liquidity, credit losses, and issues regarding employees (PWC, 2021).

The banking industry is starting to achieve the same performance as before the Covid-19 pandemic (Daniel, 2021). Bank Mandiri recorded a profit growth of 1.7% in the first half of 2021, Bank BNI, Bank CIMB Niaga, Bank BTPN Syariah, and Bank Mega recorded better performance (Intan & Puspanintyas, 2021). The Asian Development Bank recognizes that Indonesian Banking has a better performance than other countries in Asia (Saputra, 2021). The summary of the performance of the banking industry is presented in table 1.

Table 1. Summary of Banking Performance

No.	Indicator	2019	2020	Year on Year
1.	Total Asset (in Billion Rupiah)	8,562,974	9,177,754	7,18%
2.	Total Credit (in Billion Rupiah)	5,616,992	5,481,560	-2,41%
3.	Total Funding (in Billion Rupiah)	5,998,648	6,665,390	11,11%
4.	Capital Adequacy Ratio (%)	23,31	23,81	50
5.	Return On Asset (%)	2,44	1,59	86
6.	Expesnse / Income Ratio (%)	79,58	86,55	696
7.	Loan to Deposit Ratio (%)	93,64	82,24	1,140

Source: OJK Annual Report, 2020

This study uses data that is updated in 2019 and 2020. Data for 2020 is data that banks just published in 2021. The study wanted to determine whether there were differences in banking performance between before and during the pandemic. Based on the information above, some banks are experiencing growth, and some are experiencing a decline in performance. The discussion that exists is not based on a complete study. The research

will focus on three primary parameters: total assets or bank size, profitability, and efficiency ratios.

The novel coronavirus SARS-CoV-2 (coronavirus disease 2019; previously 2019-nCoV), epi-centered in Hubei Province of the People's Republic of China, has spread to many other countries (Velavan & Meyer, 2020). The outbreak of unknown origin was reported in Wuhan, Hubei Province, China. The World Health Organization declared a pandemic on March 12, 2020. The coronavirus disease caused thousands of deaths (Covid-19) (Ciotti, Ciccozzi, Terrinoni, Jiang, & Bernardini, 2020). The Covid-19 pandemic has operated in many businesses, becoming unable to generally due to the locked-down decision by the government (Johan, 2020b).

The Covid-19 has caused a global recession. Many companies have filed for restructuring and bankruptcy due to the Covid-19 pandemic (Johan & Ariawan, 2021). Economic growth slowed during the pandemic. This economic growth has resulted in the potential for social unrest (World Bank, 2020). The government provides relaxation to industries experiencing obstacles due to being locked down during the Covid-19 pandemic (Johan, 2020c). Through the Financial Service Authority, the government has issued POJK No. 11./POJK.03/2020. This POJK provides an opportunity to restructure loan terms for business actors affected by the pandemic (Disemadi & Shaleh, 2020)

The Covid-19 pandemic has changed people's consumption patterns. Many MSMEs have to alter their business patterns from offline to online (Djatomiko & Pudyastiwati, 2020). People's financial behavior changes during the pandemic. This affects the bank's financial performance.

Customer savings increased in the first month of the Pandemic. Customers begin to be on guard in providing funds to anticipate a crisis (Levine, Lin, Tai, & Xie, 2021). Bank lending in countries affected by Covid-19 has slowed. The health crisis impacts bank lending (Çolak & Ztekin, 2021). Business actors applying for loans increased significantly during the Covid-19 Pandemic (Cowling, Liu, & Conway, 2021). There is no difference in bank financial performance before and after the Covid-19 pandemic (Seto & Septianti, 2021). Big banks have a more negligible impact than small banks due to the Covid-19 pandemic. Large banks have more enormous liquidity reserves than small banks (Bernardelli, Korzeb, & Niedziółka, 2021)

The effect of Covid-19 on the agriculture industry influences bank profitability (Olorogun, 2020). Bank interest rates on syndicated loans increased by 11 basis points during the Covid-19 pandemic (Hasan, Ifetekhar and Politsidis, Panagioties and Sharma, & Zenu, 2020). There was no significant change in the delinquency of bank loans during the outbreak (Bao & Huang, 2021). Before and during the Covid-19 pandemic, bank profitability did not experience a significant difference (Hartadinata & Farihah, 2021). The Covid-19 pandemic has a significant negative effect on bank profitability in the long run (Katusiime, 2021). There is no significant

difference between the profitability ratios before and during the pandemic (Sullivan & Widodoatmodjo, 2021)

During the Covid-19 Pandemic, the efficiency ratio positively and significantly impacts bank profitability (Ichsan, Suparmin, Yusuf, Ismal, & Sitompul, 2021). The efficiency ratio experienced a significant change between before and during the pandemic (Sullivan & Widodoatmodjo, 2021). Prior research is summarized in table 2.

This research will provide a novelty in terms of the effectiveness of government policies in the financial sector in times of crisis. There is very little research on this matter, especially in the financial industry. The research will also provide an appropriate policy picture, should the country face a crisis again.

This study has research questions regarding whether profitability, bank size, and efficiency ratio have differences between before and during the pandemic. The research will provide an overview of the banking industry. Many other industries experienced a decline in restructuring, bankruptcy, and layoffs due to the pandemic. Is the banking industry also experiencing the same thing? The previous research is provided in table 2.

Table 2. Previous Research

Variable	Pandemic Covid-19 has a significant effect on Bank Financial Performance	Pandemic Covid-19 has no significant effect on Bank Financial Performance
Firm Size	Bernardelli et al., 2021, Olorogun, 2020	Seto & Septianti, 2021
Profitability	Sullivan & Widodoatmodjo, 2021	Seto & Septianti, 2021, Bao & Huang, 2021, Hartadinata & Farihah, 2021, Katusiime, 2021
Efficiency	Ichsan et al., 2021, Sullivan & Widodoatmodjo, 2021	

Source: research results, 2022

METHODS

A. Non-Parametric Mann Whitney Test

The non-parametric test model in this study follows the model developed by Johan (2017) and Johan (2020a). This research model will focus on the performance difference between the two groups of independent and paired samples. This test aims to test the characteristics of the two groups of independent samples. Mann-Whitney test is alternative testing to the t-test without any restriction. This test can also apply to different samples tests in the two groups.

Mann Whitney U formula test:

$$U = n_1n_2 + \frac{n_1(n_1+1)}{2} - R_1 \quad (1)$$

Or

$$U = n_1n_2 + \frac{n_2(n_2+1)}{2} - R_2 \quad (2)$$

Where the n_1 equals with number of samples 1, n_2 equals with number of samples 2, R_1 equals with number of ranks of the sample 1, R_2 equals with number of ranks of the sample 2. Non-parametric test performed with Mann Whitney Test Using $\alpha = 10\%$.

B. Hypothesis

There were no differences in bank financial performance before and during the Covid-19 pandemic. Financial indicators to be tested in this study are firm size, profitability, and efficiency. Based on previous research, the hypothesis is described in table 3.

Table 3. Research Hypothesis

Hypothesis	Variables	Foreign Banks and Domestic Banks
H1	Firm Size	No Differences
H2	Profitability	No Differences
H3	Efficiency	No Differences

Source: research results, 2022

Based on previous research, the hypothesis is the Covid-19 will have a negative impact on firm size, profitability, and efficiency ratio.

C. Variables and Measurement

The variables and measurements are described in table 4.

Table 4. The variables and measurements

Variables	Measurements
Firm Size	FSi = ln (Total Assets)
Profitability	Return on Equity
Efficiency	Operating Expense / Operating Income

Source: research results, 2022

D. Data

This research used secondary data collected from various official publications by the institutions. The data are panel data that consists of cross-section and time-series data from 2019 to 2020. The sample is the banks that issued their official financial statements during the research period. The sample consists of 17 banks. All banks are registered under the Financial Service Authority (FSA).

DISUCSSSIONS

The largest bank in the study has assets of Rp. 1.075 Trillion, while the smallest bank has assets of Rp. 4.81 Trillion. The average bank in this study has Rp. 146 Trillion. The bank has the most significant profit, a return on equity of 19.42%, and a bank with a loss of 12.74%. On average, banks have a profit of 5.49%. the descriptive statistics are described in table 5.

Table 5. Descriptive Statistics

Variable	N	Min	Max	Mean	Std. Dev.
Firm Size (in billion)	34	4,809.74	1,075,570.00	146,346.82	233,112,72
Profitability (%)	34	-12.74%	19.42%	5.490%	6.299%
Efficiency (%)	34	59.10%	119.43%	88.74%	13.98%

Source: research results, 2022

On average, banks have a ratio between operating costs and operating income of 88.74%. The bank with the most efficient ratio is 59.10%, and the least efficient bank has a ratio of 119.43%. The industry average hovers around 80%. This is shown in table 5 while the research result are described in table 6.

Table 6. Research Results

No.	Variables	Non -Parametric Test (Mann Whitney)
1	Firm Size	-0.396
2	Profitability	-0.741
3	Efficiency	-0.551

Source: research results, 2022

Based on the results of statistical tests, firm size, profitability and efficiency have no difference between before and after the Covid-19 pandemic. This is explained in table 6. The results of this study are the same as several previous studies, as described in the table. 7.

The government has issued several macroeconomics policies, such as relaxation of credit from consumers affected by the Covid-19 pandemic. This credit policy allows banks to reschedule the installments of customers who are unable to pay. With this scheme, banks will not need to increase their non-performing loan reserves. The bank will still have stable profitability. The bank's total assets will also be well maintained with this scheme.

By not making reserve non-performing loans, banks will maintain their performance in total assets and profitability ratios. In addition, many customers have deposited funds in banks due to declining economic activity.

This deposit of funds will increase the total funds in the bank. The declining economic activity resulted in a lot of idle funds in the bank.

The government also issued a policy of lowering interest rates due to low inflation. Banks have a low expense. This low expense will increase bank efficiency. Low interest rates will ease the customer's interest payment obligations. Banks will also have a better interest margin. Low interest rates will maintain the bank's profitability and efficiency ratios.

The results of this study indicate that the government's policy in maintaining macroeconomic stability has met the target. Banking profitability did not change. Banking efficiency also did not change. Meanwhile, declining economic activity has increased public funds stored in customers. These funds are unused funds as a result of the weak economy.

Table 7. Research Summary

No.	Variables	Results	Supported by Previous Research
1.	Firm Size	Not Significant	Seto & Septianti, 2021
2.	Profitability	Not Significant	Seto & Septianti, 2021, Bao & Huang, 2021, Hartadinata & Farihah, 2021, Katusiime, 2021
3.	Efficiency	Not Significant	

Source: research results, 2022

As stated in Table 7, there is no difference in bank size before and after the Covid-19 pandemic (Seto & Septianti, 2021). There was no significant change in the delinquency of bank loans which impact on bank profitability during the outbreak (Bao & Huang, 2021). Before and during the Covid-19 pandemic, bank profitability did not experience a significant difference (Hartadinata & Farihah, 2021). For the efficiency ratio there has been no previous research. This study makes a novelty contribution to the efficiency ratio between before and during the pandemic.

The bank's performance did not change before the pandemic and during the pandemic. This is as a result of government policies and bank management. Government and bank policies have proven effective in maintaining bank performance. Investors have confidence in the banking industry. The condition of bank profits that are maintained with total assets that do not experience changes shows confidence in financial institutions during crisis conditions.

CONCLUSION

The pandemic condition resulted in a global economic recession. Banks are the main institutions supporting the economy. The decline in the economy will result in non-performing loans provided by banks.

Performance conditions and economic indicators can run well, if the government deregulates. In times of crisis, the government is the driver of the economy. The bank's financial performance did not change between before and during the Covid-19 pandemic. This shows that government policies have been effective. The company's management policies have also been in accordance with crisis conditions. This study has a lack of a sample of 17 banks for two years. This research will be able to get more valid results, if the time period is longer. As long as the pandemic is still ongoing, data during the Covid-19 pandemic is only available for a maximum of two years.

RECOMMENDATION

According to the findings, the research duration should be adjusted to account for the effects of Covid-19 that are still present. This research also suggests that businesses or industries with promising futures should be restructured. The government must provide recovery incentives for industries that are critical to the economy of the general public. Incentives are important not only during a pandemic but also thereafter. The government needs to continue the policy of providing incentives to financial institutions so that financial institutions can become the anchor of economic recovery.

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