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THE EFFECT OF THE COVID-19 PANDEMIC ON FINANCIAL PERFORMANCE IN THE INDONESIAN BANKING SECTOR

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ABSTRACT

The Covid-19 pandemic weakened the Indonesian economy which led to a decline in financial performance. The weakening of a country's economy has an impact on the banking sector industry because banks function as financial intermediary institutions. This study aims to analyze the impact of the Covid -19 pandemic on financial performance in the banking sector listed on the Indonesia Stock Exchange (IDX). The sample of this research used 27 companies listed on the IDX main board for the period 2019 and 2020. Data analysis used the Wilcoxon Signed Rank Test by comparing financial performance (ROA, ROE, BOPO, and NIM) obtained from banking quarterly reports. The results showed that there were differences between the 2nd quarter of 2019 (the period before the pandemic) and the 2nd quarter (the period during the pandemic) for financial performance other than using BOPO. Meanwhile, the difference in financial performance during the pandemic (quarter 2 and quarter 3) shows no difference, however, BOPO shows a difference. Furthermore, this study also compares the financial performance of the 3rd quarter for the period before the pandemic and the period during the pandemic which results in differences in financial performance for all indicators. These results imply for investors to consider investing in the banking sector during a pandemic and for regulators to formulate appropriate policies for the banking sector during a pandemic.

Keywords: ROA, ROE, BOPO, NIM

1. INTRODUCTION

The world economy has weakened due to the Covid-19 pandemic. This also had an impact on the weakening of the Indonesian economy, in the second quarter of 2020 the Indonesian economy experienced a decline of -5.32%, which is different from 2019 in the same quarter experiencing economic growth of 5.05% [1]. The weakening economy was caused by a decrease in income by all types of businesses and this had an impact on the banking sector as banks became intermediary institutions in the economy. Intermediary institutions are the process of purchasing surplus funds from the business sector, government and households, to be channeled to deficit economic units [2].

The performance of the banking sector came under pressure during the Covid-19 pandemic in 2020 due to the fact that many corporate companies were not running normally, however, banking sector liquidity was still sufficient during the pandemic [3]. Research by Devi et al. (2020) stated that there was no difference in liquidity before the pandemic and during the pandemic, but this study stated that there was a difference in profitability in the conditions before the pandemic and during the

pandemic [4]. Wahyudi's research (2020) shows that banking performance during the pandemic has fluctuated and grown [5].

Analysis of the financial performance of banks during a pandemic is important because banks have a responsibility to their stakeholders. Banks are expected to apply the principle of prudence in lending (prudent) during this pandemic to minimize the risks.

Previous research has confirmed that there are differences in financial performance between pre-pandemic and during the pandemic, but there are statements from regulators that the liquidity side of the banking sector can still be said to be satisfactory. So that it is interesting to conduct further research related to whether there are differences in the financial performance of the banking sector before the pandemic and during the pandemic with the quarterly financial report data. This research is expected to contribute to decisions that investors and regulators will consider regarding the banking sector in Indonesia, especially during the Covid-19 pandemic.

2. THEORETICAL FRAMEWORK AND HYPOTHESES

2.1. Resource Based Theory (RBT)

The company has a competitive advantage to face its competitors in business. The potential resources of companies need to be assessed properly due to produce a sustainable competitive advantage and profits that suit their business [4]. It is important for companies to understand competitive advantage in their business, especially in the current state of the Covid-19 pandemic. New and long-term competitive advantages are needed to help the company's financial performance in risky economic conditions [5].

Management is expected to be able to manage company resources, especially during the pandemic so that they can stay in business. The banking sector is a trust institution that must maintain the trust of stakeholders to run its business, so it is necessary to innovate to achieve a sustainable competitive advantage and achieve appropriate profits during the pandemic in order to achieve maximum financial performance.

2.1. Financial performance

Financial performance is a condition that reflects the financial condition of a company based on predetermined objectives, standards and criteria [6]. Financial performance is analyzed not only for one period but involves several periods to obtain changes in the trend of a company's financial performance. Financial performance analysis can be analyzed with financial ratio analysis.

The analysis of the financial performance ratios of the banking sector in this study uses the ratio of Return on Assets (ROA), Return on Equity (ROE), Operational Expenditures to Operating Income (BOPO), and Net Interest Margin (NIM). These ratios are used in this study to measure the financial performance of the banking sector in Indonesia during the Covid-19 period because it is in accordance with previous research [7] which analyzed the financial performance of banks during times of crisis.

Return on Asset (ROA) shows the company's ability to generate return on assets used, the greater the ROA ratio indicates the better the bank is in generating profits in utilizing its assets. Return on Equity (ROE) shows the company's ability to generate return on its own capital used, the greater the ROE ratio will attract investors to invest in the company because the company can make good use of the collected capital.

Operational Expenditures to Operational Income (BOPO) is used to measure the level of efficiency and the ability of a bank to carry out its activities, the smaller the ratio, the more efficient

the bank's financial performance is. Net Interest Margin (NIM) shows a bank's ability to generate net interest income by placing earning assets, the greater this ratio indicates the better the bank is in generating interest income.

2.2. Hypothesis Development

The covid-19 pandemic is detrimental to the economies of countries in the world, including Indonesia. Sri Mulyani as Minister of Finance stated that at the beginning of 2020 the world economy had fairly good growth but during the outbreak of the Covid-19 pandemic, namely the high number of cases affected by Covid1-19 or entering the second quarter, the world economy experienced a decline, but the Indonesian economy was seen still quite good compared to other countries such as India.

The Financial Services Authority (OJK) as the Indonesian banking regulator issued a policy to provide credit/financing relaxation for those affected by the pandemic. The regulation aims to maintain the stability of the financial and banking system, because these policies have an impact on banking performance [8] [9] [10]. The regulator issued this regulation because the performance of the banking sector was affected by the Covid-19 pandemic. The covid-19 pandemic affects the financial performance of companies listed on the IDX including the banking sector, this has been proven by previous research [11]. Based on this description, the first hypothesis in this study is:

H1: The Covid-19 pandemic affected financial performance in the second quarter.

The third quarter of 2020 was announced regarding the development and approval of the use of the covid-19 vaccine [12]. September 2020, Sinopharm vaccine received approval from the United Arab Emirates (UAE) for use in health care workers. In July 2020, the Sinovac vaccine was approved by China to use the vaccine and Indonesia also agreed to use the Sinovac vaccine. August 2020, the Gam-Covid-Vac vaccine was approved by Russia for use and the vaccine was renamed Sputnik V. The development and approval of vaccine use in these countries gave good news to the economy as well as Indonesia. BPS stated that the development of the Indonesian economy in the third quarter of 2020 compared to the previous quarter increased by 5.05 percent (q-to-q) [13]. Based on this description, the second hypothesis in this study is:

H2: The covid-19 pandemic affected the financial performance of the second and third quarters during the pandemic.

The third quarter's financial performance is important to analyze because it has announced and approved the use of vaccines in various countries including Indonesia. The finance ministry stated that the third quarter was a turning point for economic recovery due to improvements in various sectors [14]. The Central Statistics Agency (BPS) shows that in the third quarter of 2020 the Indonesian economy is still lagging behind the previous year in the same quarter, so further analysis is needed regarding financial performance in the third quarter. Based on this description, the third hypothesis in this study is:

H3: The Covid-19 pandemic affected financial performance in the third quarter.

3. RESEARCH METHODOLOGY

This research uses quantitative research methods. The data source uses secondary data which lists of banks taken from the IDX main board in 2019 and 2020. The IDX main board is intended for prospective Issuers or Issuers who have large sizes and have track records [15]. The ratio data is taken from OJK's second and third quarter data in 2019 and 2020.

4. RESULT AND DISCUSSION

4.1. Deskriptive Statistics

Descriptive statistics are used to provide an overview of the research. This study uses descriptive statistics for the minimal value,

3.1. Population and Sample

The population in this study are all banking sector companies listed on the IDX in 2019 and 2020. The sample banking sector companies are companies listed on the IDX main board because the listed companies have a good track record and these companies have a size large so that it is more credible in the eyes of stakeholders.

Another sample criterion is the complete data on banking sector companies in the OJK during the 2nd and 3rd quarter of 2019 and 2020, so that the banking sector companies analyzed in this study are 27 companies.

3.2. Research variable

The financial performance in this study uses the ratio of ROA, ROE, BOPO, and NIM taken from the OJK. The following is the formula for these ratios:

$$\text{ROA} = \frac{\text{Net Income} / \text{Average Total Assets}}{\text{Average Total Assets}}$$

$$\text{ROE} = \frac{\text{Net Income} / \text{Average Equity}}{\text{Average Equity}}$$

$$\text{BOPO} = \frac{\text{Total Assets} / \text{Total Liabilities}}{\text{Total Liabilities}}$$

$$\text{NIM} = \frac{\text{Net Interest Income} / \text{Average Total Assets}}{\text{Average Total Assets}}$$

maximal value, mean value, and standard deviation value for each variable.

Table 1. Descriptive Analysis

	N	Min	Max	Mean	Std. Dev
ROA2_2019	27	.02	3.70	1.4922	1.22544
ROA2_2020	27	.02	3.12	1.1804	.94295
ROA3_2019	27	.05	3.98	1.5019	1.20207
ROA3_2020	27	.05	3.38	1.2277	.96753
ROE2_2019	27	.10	21.30	8.1819	6.39076
ROE2_2020	27	.09	19.41	6.7819	5.68613
ROE3_2019	27	.30	19.98	8.2552	6.22803
ROE3_2020	27	.57	18.63	6.8800	5.50705
BOPO2_2019	27	.81	99.37	80.6222	20.16527
BOPO2_2020	27	.84	113.08	82.7493	20.33412
BOPO3_2019	27	59.84	99.53	85.6963	12.40284
BOPO3_2020	27	65.57	129.36	88.9826	13.42677

NIM2_2019	27	.05	7.50	4.5730	1.66671
NIM2_2020	27	.05	6.93	4.1085	1.76401
NIM3_2019	27	1.06	7.43	4.7226	1.43509
NIM3_2020	27	.58	6.93	4.1874	1.58124

Note: ROA is Return on Asset, ROE is Return on Equity, BOPO is *Belanja Operasional* on *Pendapatan Operasional*, NIM is Net Interest Margin

The minimum score for the ROA ratio is 0.02 in the 2nd quarter of 2019 and 2020. The maximum score is 3.98 in the 3rd quarter of 2019. The minimum score for the ROE ratio is 0.09 in the 2nd quarter of 2020 while the maximum value is 21.30 in the 2nd quarter of the year 2019. The minimum

value of the BOPO ratio was 0.81 in the second quarter of 2019 while the maximum value was 129.36 in the third quarter of 2020. The minimum score for the NIM ratio was 0.05 in the second quarter of 2019 and 2020 while the maximum value of 7.50 was in the second quarter. in 2019.

4.2. Normality Test

The normality test is used to determine whether the data is normally distributed or not. If the data is normally distributed then use the t test but if the

data is not normally distributed then use the Wilcoxon Signed Rank Test.

Table 2. Normality Test Result

1		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
ROA2	2019	.167	22	.003	.868	22	.007
	2020	.130	22	.002	.917	21	.000
ROA3	2019	.201	22	.021	.894	22	.022
	2020	.188	22	.000	.893	21	.025
ROE2	2019	.187	22	.044	.912	22	.000
	2020	.181	22	.000	.887	21	.019
ROE3	2019	.180	22	.000	.916	22	.000
	2020	.185	22	.000	.869	21	.009
BOPO2	2019	.232	22	.003	.629	22	.000
	2020	.240	22	.003	.709	21	.000
BOPO3	2019	.238	22	.002	.704	22	.000
	2020	.161	22	.000	.949	21	.000
NIM2	2019	.182	22	.056	.927	22	.106
	2020	.182	22	.069	.877	21	.013
NIM3	2019	.145	22	.200 [*]	.945	22	.253
	2020	.131	22	.200 [*]	.918	21	.078

Note: ROA is Return on Asset, ROE is Return on Equity, BOPO is *Belanja Operasional* on *Pendapatan Operasional*, NIM is Net Interest Margin

Based on table 2, it can be seen that the significance value is below 0.05, which means that the data is not normally distributed, so the data

cannot be tested with parametric statistics. This study used a non-parametric test, namely the Wilcoxon Signed Rank Test.

4.3. Wilcoxon Signed Rank Test

The Wilcoxon Signed Rank Test is used to show whether there is a difference or not between 2 groups of data that are abnormally distributed. The

following are the results of the Wilcoxon Signed Rank Test for each hypothesis proposed in the study.

Table 3. Wilcoxon Signed Rank Test 2nd Quarter

	ROA2_2020 - ROA2_2019	ROE2_2020 - ROE2_2019	BOPO2_2020 - BOPO2_2019	NIM2_2020 - NIM2_2019
Z	-2.693 ^b	-2.367 ^b	-1.586 ^b	-3.658 ^b
Asymp. Sig. (2-tailed)	.007	.018	.113	.000

Note: ROA is Return on Asset, ROE is Return on Equity, BOPO is *Belanja Operasional* on *Pendapatan Operasional*, NIM is Net Interest Margin

Based on table 3, the results show that the financial performance in the second quarter before the pandemic (2019) and during the pandemic (2020) there are differences except for the BOPO ratio with a significance value of 0.113. Based on the hypothesis, it means that the Covid-19 pandemic has an effect on financial performance in the second

quarter, but not on operating costs on operating income. The Covid-19 pandemic did not affect the BOPO ratio, this was possible because banks were able to maintain operational efficiency and were able to generate operating income during the Covid-19 pandemic

Table 4. Wilcoxon Signed Rank Test 3rd Quarter and 2nd Quarter

	ROA3_2020 - ROA2_2019	ROE3_2020 - ROE2_2019	BOPO3_2020 - BOPO2_2019	NIM3_2020 - NIM2_2019
Z	-.051 ^b	-1.156 ^b	-2.547 ^b	-1.677 ^b
Asymp. Sig. (2-tailed)	.959	.248	.011	.094

Note: ROA is Return on Asset, ROE is Return on Equity, BOPO is *Belanja Operasional* on *Pendapatan Operasional*, NIM is Net Interest Margin

Based on table 4, the results show that the financial performance in the third quarter and second quarter during the pandemic has no difference except for the BOPO ratio with a significant value of 0.011. Based on the hypothesis, it means that the Covid-19 pandemic affects the financial performance of the second and third quarters during the pandemic only for the BOPO

ratio. This is possible because the development and approval of vaccines has not yet fully affected the market considering that vaccines have not been carried out directly to the public. The economic recovery in the third quarter affected the company's BOPO because the economy started operating and it required higher operating costs.

Table 5. Wilcoxon Signed Rank Test 3rd Quarter

	ROA3_2020 - ROA3_2019	ROE3_2020 - ROE3_2019	BOPO3_2020 - BOPO3_2019	NIM3_2020 - NIM3_2019
Z	-2.718 ^b	-2.070 ^b	-2.162 ^b	-3.856 ^b
Asymp. Sig. (2-tailed)	.007	.038	.031	.000

Note: ROA is Return on Asset, ROE is Return on Equity, BOPO is *Belanja Operasional* on *Pendapatan Operasional*, NIM is Net Interest Margin

Based on table 5, the results show that the financial performance in the third quarter before the pandemic and during the pandemic there are differences in all ratios. Based on the hypothesis, it means that the Covid-19 pandemic has an effect on the financial performance of the third quarter. There was an economic recovery in the third quarter of the pandemic, but it is still weak when compared to the pre-pandemic period in the same quarter.

5. CONCLUSIONS, IMPLICATIONS, SUGGESTIONS, AND LIMITATIONS

The conclusion of this research is that the Covid-19 pandemic has affected financial performance but the BOPO ratio needs more attention because in the second quarter BOPO did not show any differences and financial

performance in the third and second quarters during the pandemic only the BOPO ratio showed a difference. This study also concluded that financial performance in the third quarter before the pandemic or after the pandemic showed a difference.

The implication of this research is that it has implications for investors and regulators. Investors need to consider investing in the banking sector during a pandemic and regulators need to formulate appropriate policies for the banking sector during a pandemic. The suggestion of this research is that it is hoped that further research will use more comprehensive financial performance ratios such as debt ratios. Future research is also expected to analyze longer quarters due to the possible lag time

for the market to respond to vaccine use or other regulatory policies.

REFERENCES

- [1] "KSKK_ Stabilitas Sistem Keuangan Triwulan 2 Tahun 2020 Normal Meski Perlu Waspada."
- [2] R. Siringoringo, "Analisis Fungsi Intermediasi Perbankan Indonesia (Studi Kasus Bank Umum Konvensional yang Tercatat di BEI Periode 2012-2016)," vol. 1, no. 2, pp. 135–144, 2017.
- [3] "Kinerja Sektor Perbankan selama 2020 Terkontraksi Akibat Pandemi Covid-19 - Bisnis Liputan6."
- [4] R. M. Grant, "The Resource-Based Theory of Competitive Advantage: Implications for Strategy Formulation," *Knowl. Strateg.*, pp. 3–24, 1991.
- [5] Y. Sun, Y. Yang, N. Huang, and X. Zou, "The impacts of climate change risks on financial performance of mining industry: Evidence from listed companies in China," *Resour. Policy*, vol. 69, no. December, p. 101828, 2020, doi: 10.1016/j.resourpol.2020.101828.
- [6] K. R. Subramanyam, *Financial statement analysis*. McGraw Hill Education, 2014.
- [7] I. Oino, "Impact of regulatory capital on European banks financial performance: A review of post global financial crisis," *Res. Int. Bus. Financ.*, vol. 44, no. January 2017, pp. 309–318, 2018, doi: 10.1016/j.ribaf.2017.07.099.
- [8] H. S. Disemadi and A. I. Shaleh, "Banking credit restructuring policy amid COVID-19 pandemic in Indonesia," *J. Inov. Ekon.*, vol. 5, no. 02, pp. 63–70, 2020, doi: 10.22219/jiko.v5i3.11790.
- [9] F. R. Albanjari and C. Kurniawan, "Jurnal Eksyar (Jurnal Ekonomi Syariah) Jurnal Eksyar (Jurnal Ekonomi Syariah)," vol. 07, no. 01, pp. 24–36, 2020.
- [10] A. R. Azhari and R. Wahyudi, "Analisis Kinerja Perbankan Syariah Di Indonesia Dengan," *J. Ekon. Syariah Indones.*, vol. X, no. 2, pp. 67–83, 2020, doi: 10.21927/jesi.v10i2.1462.
- [11] S. Devi, N. M. S. Warasniasih, and P. R. Masdiantini, "The Impact of COVID-19 Pandemic on the Financial Performance of Firms on the Indonesia Stock Exchange," *J. Econ. Business, Account. Ventur.*, vol. 23, no. 2, pp. 226–242, 2020, doi: 10.14414/jebav.v23i2.2313.
- [12] N. F. Shalihah, "Update Vaksin Corona: Meningkatkan, Kini 5 Vaksin Disetujui Terbatas," *Kompas.com*. p. 1, 2020, [Online]. Available: <https://www.kompas.com/tren/read/2020/09/19/100400165/update-vaksin-corona-meningkat-kini-5-vaksin-disetujui-terbatas?page=all>.
- [13] Badan Pusat Statistik, "Badan Pusat Statistik." pp. 335–58, 2020, doi: 10.1055/s-2008-1040325.
- [14] Kemenkeu, "Menkeu: Triwulan III 2020, Pertumbuhan Ekonomi Indonesia Tunjukkan Perbaikan Signifikan," *Kemenkeu.Go.Id*. 2020, [Online]. Available: <https://www.kemenkeu.go.id/publikasi/berita/menkeu-triwulan-iii-2020-pertumbuhan-ekonomi-indonesia-tunjukkan-perbaikan-signifikan/>.
- [15] "Panduan Go Public."

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