



Research Article

Impact of Covid-19 on Financial Ratio Banking Sector

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Abstract.

The purpose of this research is to provide information on whether the COVID-19 pandemic had an impact on banking in Indonesia, especially for banks listed on the Indonesia Stock Exchange. The impact on banking was measured by using financial performance ratios, namely nonperforming loan (NPL), operating expenses to operating income (BOPO), net interest margin (NIM), and liquidity coverage ratio (LCR). Researchers used comparative data on financial statements, namely in 2019 and 2020. The tool used by researchers to process research data was SPSS 24. Researchers used different test methods to determine the impact of the Covid-19 pandemic on the financial performance of the banking sector. The results showed that the Covid-19 pandemic had affected the financial performance of the banking sector.

Keywords: financial performance, Covid-19, banking sector

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1. INTRODUCTION

Covid-19 currently makes the economy in Indonesia and Asia Pacific have a low point of 10-30, the decline in 2020, namely the 1st quarter resulted in global economic growth weakening [15]. JP Morgan, the world's leading scorer, said that the banking sector in the United States was affected by the credit side with the threat of a decrease in Net Interest Margin (NIM), which could lead to a decline in banking profitability which caused the banking sector in ASEAN to experience a decline in economic growth [15].

The impact of COVID-19 (coronavirus) has raised concerns in various sectors, including schools, fluctuations in oil prices and the financial sector [1]. The banking sector in Indonesia is currently in a weakened condition due to the Covid-19 pandemic, Fitch has just revised its operational rating, Fitch is uncertainty about the impact of the Covid-19 pandemic on bank operations in Indonesia. The operational rating of banks in Indonesia

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from lower medium grade - investment grade to speculative, non-investment grade which was previously [15].

The banking sector which is more affected by the COVID-19 pandemic can be seen in book one and book two which have a smaller industrial scale compared to book III which will be shown by the presence of Non Performing Loans (NPL) which are higher than before being affected by covid-19, there is a risk credit defaults also increase so, the capital of the banking sector book I and book II will be able to reduce capital because it can increase bank credit reserves [12] . The impact of Covid-19 is also predicted to increase even though the pandemic is over, because the business sector is not certain to increase again so that NPLs will continue to increase if there are difficulties in the business sector to pay obligations to banks that have been borrowed [12].

The government makes efforts in such a way as to mitigate the risk of a sustainable crisis with the credit policy provided through the Financial Services Authority (OJK) (POJK) 11/POJK.03/2020, namely National Economic Stimulus as a Countercyclical Policy until July 6, 2020, OJK has recorded there is a restructuring of creditors in the amount of Rp. 769.55 trillion which is given to debtors in the amount of 6.72 million. This means that the impact of the Covid-19 pandemic has had a long impact. Previous researchers Ali et al [2] gave the results that the banking industry is vulnerable to liquidity risk, with government assistance delaying bank credit payments and debt restructuring only delaying company bankruptcy. The government is also asked to be serious in dealing with the liquidity problems of banking companies because 90% and above of the public use banking service channels to conduct business and daily transactions. All banks are vulnerable to liquidity conditions that reach 30% which results in a decline in banking liquidity[2].

Covid-19 Pandemic

The COVID-19 virus is declared by WHO as a pandemic, a pandemic is an epidemic that spreads to all corners of the country, the criteria are [9]:

- 1. Causing death
- 2. Uncontrolled transmission
- 3. It has spread to other countries

The number of victims due to covid-19 on March 28, 2020 is shown in table 1 [9]:

The results of table 1 show that Covid-19 has become pandemic not only in Indonesia but also for around the world, because WHO has also declared that Covid-19 is a pandemic, and the number of infected people is likely to continue to grow until the



TABLE 1: Covid-19 Developments.

	Positive Case	Dies
Indonesia	4.250.000	114.000
Worldwide	250.407.000	5.006.467

Source: (CNN, 2021)

affected countries find a way to prevent it. effective in breaking the chain of transmission of the virus.

The pandemic is developing faster in European countries such as the UK, which states that inflation is at 2% after the Covid-19 pandemic. The government focuses on the central bank to issue efficiency policies or reduce government costs to reduce the state budget deficit. The central bank of Britain, Japan, and several other countries took different steps, namely by buying bonds from private financial institutions and paying with printed money to increase currency circulation in the country, this policy was carried out to avoid deflation and was implemented during the Covid-19 pandemic [16]. Economic conditions in Indonesia can also be mitigated by the government's stimulus in issuing tax increase regulations to assist in dealing with economic problems, unemployment, health care and better education.

1.1. Financial Ratio

Non-Performing Loan (NPL) is a ratio that can reflect the quality of credit originating from a bank loan portfolio, and a reflection of credit quality will show that credit has obstacles/problems when viewed from the loan portfolio of the banking sector in a country. Non-performing loans will certainly affect the stability and health of the banks themselves [19]. The NPL formula is shown below [19]:

Non Performing Loan
$$(NPL) = \frac{Total \ NPL}{Total \ Kredit}$$

Operating Expenses to Operating Income (BOPO) is used to measure the efficiency level of the banking sector, where management in the sector can measure how much the company's ability to control the operating costs incurred against operating income. The BOPO ratio has an ideal value of a maximum of 90% based on BI Circular No. 3/30 DPNP 2001 [7]. The BOPO formula is shown below:

$$BOPO = \frac{Total\ operating\ expense}{Total\ operating\ income}$$



Net Interest Margin (NIM) is a ratio to determine the failure of a company, which must pay attention to the avoidance of managerial risk from the type of transaction that occurs, the structure of the banking market, and the level of changes in the bank's own interest rate. The NIM ratio shows that the company reflects bank characteristics, macroscale economic conditions, explicit and implicit bank taxes, regulations governing loan and deposit insurance, banking financial structure [6]. The NIM formula is shown below:

$$NIM = \frac{Interest\ Income}{Earnings\ Assets}$$

Liquidity Coverage Ratio (LCR) is a ratio used to ensure the level of ability of banking assets to meet short-term obligations, the LCR calculation is also used to determine risks from both external and internal markets so that banks are required to have reserve funds for capital in accordance with business risks. and also prevent short-term liquidity risk which can lead to financial risk for banks [11]. The LCR formula is shown below:

$$LCR = \frac{High\ Quality\ Liquid\ Asset\ Amount\ (HQLA)}{Total\ net\ cash\ flow\ amount}$$

Researchers choose the financial performance ratio in assessing the financial performance of banking companies.

Impact of Covid-19 on Financial Ratio Banking Sector

The impact of Covid-19 on the banking industry is that relationships with customers can become vulnerable to being bad, and damage the image of banking in the public eye if there is a decline in performance in the banking industry, where banking is central in running a stable economy. The banking industry was also affected, namely the delay in payment of loans given to debtors which triggered the bank's cash flow to become unstable. Obstacles also continue where it is difficult for banks to distinguish which includes delays in routine payments and a significant decrease in credit facilities [4].

The banking industry continues to work hard to provide liquidity to the market, seeing market volatility as increasingly difficult to obtain funding from banks, while banks themselves are required to comply with the Stress Capital Buffer (SCB) to reduce banking liquidity in order to minimize bad loans [5]. The COVID-19 pandemic has forced the Bank to proactively intervene in calming the market and demonstrate a commitment to tackling the economic crisis caused by the COVID-19 outbreak. In addition, the Bank of Japan has also issued an emergency statement indicating that there will be an injection of liquidity into the market to stabilize the economy. Meanwhile, the Bank of China has rolled US\$240 billion into the financial system as a response to the virus [10].



In Indonesia itself, the Covid-19 pandemic is increasingly adding to cases in Indonesia, this makes the central bank as the regulator, and the government requires faster coordination at the national and international levels. Banks have also requested that regulators relax capital requirements, several regulators, one of which is the US Securities and Exchange Commission (SEC) have provided waivers in terms of reporting financial statements for companies affected by Covid-19. The banking industry also in the future needs to prepare for all possibilities during times of crisis or epidemic, one form of work migration is to rely on digital connectivity to be a solution in banking operations and efficiency of company operational costs [10].

2. METHODS

2.1. Research Design and Type

This study uses financial statements as data to be processed. Financial statements are an important element to determine the financial performance of a company. Financial performance here is measured using financial ratios banking sector in Indonesia. Researchers use secondary data in taking financial statements, because generally financial reports are closed, and only companies listed on the Indonesia Stock Exchange present reports for public viewing. Researchers in selecting samples that match the research criteria using purposive sampling technique. Researchers used comparative data, namely the 2019 financial statements and 2020 financial statements, to find out whether there was a decline in financial performance before the COVID-19 pandemic and after the Covid-19 pandemic.

2.2. Data analysis technique

The data analysis technique in this study uses quantitative methods by using secondary data. The use of this method is due to the financial statements that are already available on the Indonesia Stock Exchange website which have been audited, so that the financial statements are reliable, trustworthy and credible. The ratios used to measure financial performance are Non Performing Loan (NPL), Operating Expenses to Operating Income (BOPO), Net Interest Margin (NIM) and Liquidity Coverage Ratio (LCR).

The results of this study are intended to provide benefits and information on banking financial risks, especially the condition of financial ratios before 2020, so that the



financial statements used are in 2019 and after 2020 (pandemic period), so that the financial statements used are in 2020. Data processing this study used SPSS 25.

2.3. Research Population and Sample Data

The population in this study are companies listed on the stock exchange in 2019-2020, sample data in this study are banking financial statements for 2019-2020 that have been listed on the Indonesia Stock Exchange. The research criteria using purposive sampling, can be seen below:

TABLE 2: Criteria Purposive Sampling.

Criteria	Number of Companies
Companies listed on the Indonesia Stock Exchange page in 2019-2020	761
Companies listed on the Indonesia Stock Exchange page in 2019-2020	81
Total sample of banking company research	81

Source: IDX (2021), data processed by the author

Total sample of banking company by using purposive sampling criteria, researchers chose a sample of 81 companies.

3. RESULTS AND DISCUSSION

		Mean	Std.Devi ation	Std. Error Mean	Lower	Upper	t	df	Sig. (2-tailed)
Pair 1	NPL 2020 - NPL 2019	- 0,2734 67	0.2229 341	0.0034 188	- 0,3423 68	- .02045 65	-7.999	45	.000

Source: SPSS 24

Figure 1: Test Results for 2019 NPL vs 2020 NPL.

The results shown in table 3 of the NPL Difference Test above show that as a result of this Covid-19 NPL has decreased by an average of -27.34%. by seeing significance level of 0.000 < 0.05 (5%), then the difference in NPL is significant at an error rate of 5% and the Covid 19 hypothesis that it has an impact on the financial performance of the banking sector is accepted.



		Mean	Std.De viation	Std. Error Mean	Lower	Upper	t	df	Sig. (2- tailed)
Pair 1	BOPO 2020- BOPO 2019	7868	.8876	.1308	-1.050	5232	-6.012	45	.000

Source: SPSS 24

Figure 2: Test Results for BOPO 2019 and BOPO 2020.

The results shown in table 4 of the Differential Test of BOPO above show that as a result of this Covid-19 BOPO has decreased by an average of -78.68%. by seeing significance level of 0.000 < 0.05 (5%), then the difference in BOPO is significant at an error rate of 5% and the Covid 19 hypothesis that it has an impact on the financial performance of the banking sector is accepted.

		Mean	Std.De viation	Std. Error Mean	Lower	Upper	t	df	Sig. (2- tailed)
Pair 1	NIM 2020- NIM 2019	0356	.0418	.0061	0481	0232	-5.780	45	.000

Source: SPSS 24

Figure 3: The Difference Test Results for NIM 2019 and NIM 2020.

The results shown in table 5 of the NIM Difference Test above show that as a result of this Covid-19 NIM has decreased by -3.56% on average. by seeing significance level of 0.000 < 0.05 (5%), then the difference in NIM is significant at an error rate of 5% and the Covid 19 hypothesis that it has an impact on the financial performance of the banking sector is accepted.

		Mean	Std.De viation	Std. Error Mean	Lower	Upper	t	df	Sig. (2- tailed)
Pair 1	LCR 2020- LCR 2019	.8579	4.0069	.5907	3320	2.0478	1.452	45	.153

Source: SPSS 24

Figure 4: Test Results for LCR 2019 and LCR 2020.

The results shown in table 10 of the LCR Difference Test above show that as a result of Covid-19, the LCR has increased by an average of 85.79%. by seeing significance level of 0.153 > 0.05 (5%), then this LCR difference is significant at an error rate of 5% and the Covid 19 hypothesis has no impact on the financial performance of the banking sector.



4. CONCLUSIONS

The Non-Performing Loan Ratio, Pre-Operational Operational Cost Ratio and Net Interest Margin ratio shows that the results are accepted, so that financial performance has a negative impact on the financial statement performance of banking companies during the covid-19 period. The Loan to Coverage Ratio showed that the results were not accepted, so that financial performance did not have much impact on the financial statement performance of banking companies during the covid-19 period. Simplest way, but still being accountable.

ACKNOWLEDGMENT

Suggestions from researchers for this research is to ensure that you can collect more research samples and expected to increase the number of financial ratios to strengthen research results by adding relevant theories and linking them with research results so as to sharpen the analysis, and also provide additional knowledge for investors to explore the company's condition during the covid-19 period.

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