# INDONESIAN BANKS' PROFITABILITY AMID COVID-19 PANDEMIC

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**Abstract.** Banking in Indonesia faces a number of challenges in the midst of the COVID-19 outbreak. During the COVID-19 pandemic, banking is facing several possible financial performance risks. For these reasons, a research is needed to analyse the impact of COVID-19 outbreak on banking's financial performance in Indonesia, through analysing the conventional banks' financial reports using financial ratios, namely the ratio of Non-Performing Loan (NPL) and Return on Asset (ROA). This research is a quantitative one with a descriptive approach. The data taken were quarterly data throughout the year of 2019 and 2020. The data were processed with paired sample t-test using SPSS. The results of the data processing show that there are significant differences on Return on Asset (ROA), before and during the pandemic. But the result of the Non-Performing Loan (NPL) data processing shows that there is no significant difference before and during the COVID-19 pandemic.

Keywords: NPL, ROA, bank, pandemic, COVID-19.

## 1. INTRODUCTION

The COVID-19 pandemic, also known as the coronavirus disease outbreak, originated in China in December 2019 and has spread since March 2020 in Indonesia. There is little doubt that the COVID-19 pandemic affects a number of sectors of life, including the economy. Nearly every nation in the world, including Indonesia, experienced a recession as a result of this circumstance. The BPS data indicates that Indonesia's economy contracted by 5.32% in the second quarter of 2020, 3.49% in the third quarter, and 2.19% in the fourth quarter of 2020. As a result, Indonesia's economic growth in 2020 contracted by 2.07% year on year (yoy).

There is substantial evidence that Indonesian banks' performance is directly impacted by the economic downturn. The primary purpose of banking, according to Abdullah (2016), is to gather the public's funds and return them to the community or act as an agent of trust, both in raising and channeling funds, as well as acting as an agent of development and service. Because banks perform the roles of fund collectors, credit distributors, productive and efficient places for community savings, trade settlement guarantees through the issuance of L/Cs, and project completion guarantees through the issuance of bank guarantees, banks facilitate economic growth in an entire country.

According to Jalih and Rani (2020), there were significant differences in bank non-performing loans (NPLs) following the public awareness of the COVID-19 epidemic and the adoption of the new normal. According to research by Espinoza and Prasad (2010), if economic development slows down and interest rates and risk aversion rise, the NPL ratio will get worse. According to research by Ilhami and Thamrin (2021), the CAR, ROA, NPF, and FDR ratios show that there was not a significant difference in the financial performance of Islamic banking in Indonesia during the COVID-19 outbreak.

The researchers plan to use two performance variables, namely NPL, or non-performing loan, and ROA, or return on assets, to get a general picture of the financial performance of conventional state-owned and private banks in Indonesia based on the previously mentioned studies. The purpose of this study is to determine whether the two profitability ratios differed before and during the COVID-19 outbreak.

NPL or non-performing loan is a comparison between the amount of credit given to the collectability level which is a non-performing loan compared to the total credit given by the bank (Riyadi, 2006). Accordingly, it can be claimed that NPLs reflect credit risk, with the bank bearing a larger credit risk at higher NPL levels (Diyanti and Widyarti, 2012). A bank is deemed to have potential issues that could jeopardize its business continuity if it has a non-performing loan ratio or a net non-performing loan (NPL) of more than 5% of total loans, as per Bank Indonesia Regulation number 15/2/PBI/2013.

ROA or return on assets is a ratio that shows the comparison between profit and total bank assets. This ratio is used to assess how well bank management is doing in terms of making overall profit. A bank's level of profit and asset utilization position are positively correlated with its return on assets (Liora et al., 2014). Net income is divided by total assets to determine return on assets, or ROA. After taxes, net income is defined as such. The average of all assets at the start and end of the year is known as total assets. Additionally, according to Liora et al. (2014), ROA can be used to gauge how effectively each division uses its accounting resources and how well its actions are executed.

The virus known as SARS-CoV-2, or severe acute respiratory syndrome coronavirus 2, is the source of the COVID-19 pandemic. This virus targets the respiratory system, resulting in moderate to severe respiratory disorders, serious lung infections, and even death. This virus can infect anyone, including children and adults. According to information made public by Indonesia's National COVID-19 Handling Task Force, as of 21 November 2021, there were 4,253,412 confirmed positive cases and 143,739 deaths overall. Many Indonesian companies have begun enforcing work-from-home policies in an attempt to reduce physical contact between employees since the virus' outbreak in March 2020. The Central Bureau of Statistics (BPS) Head, Margo Yuwono, claims that although Indonesia's economy expanded positively in the second quarter of 2021 on both a quarterly and annual basis, Indonesia has technically exited the recession. However, the rate of economic expansion is still below average. Margo believes that better public health management is essential to future economic recovery because it will increase people's mobility and activities.

## 2. LITERATURE REVIEW

## 2.1 Non-Performing Loan (NPL)

A financial ratio called non-performing loan (NPL) illustrates the credit risk associated with providing credit and allocating capital to various portfolios. Bad loans, also known as non-performing loans (NPLs), fall into three categories:

- 1) Substandard loans
  - Substandard loans are loans that have been in arrears with the following criteria:
  - a) Refund of principal and interest has been delayed beyond 90 days to less than 180 days.
  - b) Under these circumstances, the debtor and creditor relationship deteriorates.
  - c) The creditor does not believe the financial information provided by the debtor.
- 2) Doubtful loans

Loans classified as doubtful if they meet any of the following criteria and have principal and interest payment delays:

- a) A 180–270day delay in principal and interest payments.
- b) Under these circumstances, the debtor and creditor relationship is deteriorating.
- c) Financial data is no longer trustworthy.
- 3) Bad loans

Overdue loans exceeding 270 days are classified as bad loans. Every financial investment must be evaluated for quality by identifying its collectibility level, that is, whether it is current, doubtful or loss. According to SE BI Number 17/19/DPUM, dated 8 July 2015, the maximum NPL ratio is 5%. Every creditor needs to be aware of the credit's level of collectibility. This is required in order to determine the minimum reserve

required for the creditor to write off productive assets in order to cover potential losses. The following method can be used to obtain the NPL calculation based on SE BI Number 13/30/DPNP, dated 16 December 2011:

$$NPL = rac{The \ value \ of \ non-performing \ loans}{The \ total \ value \ of \ the \ loan \ portfolio}$$

Creditors normally depend on the credit component to acquire their earning assets. This implies that, in addition to recapitulation bonds, creditors also rely on interest from loans as a source of income. Even if bad credit arises, it will affect losses because high NPLs will reduce the amount of interest income that creditors will receive.

## 2.2 Return on Assets (ROA)

Return on assets (ROA) is a measurement used to assess how well a business uses its assets to generate profits. In other words, the purpose of this ratio is to assess the managerial capacity to generate total profits. The higher the return on assets, the higher the profit margin realized by the creditor and the better the asset utilization position of the company.

Return on assets (ROA) gauges a company's historical profitability. The company's potential to turn a profit in the future can then be determined by projecting the analysis of ROA forward. After deducting the costs associated with funding these assets, ROA evaluates a company's capacity to turn a profit on its entire asset base.

#### 3. RESEARCH METHODS

# 3.1 Type of Research

The type of research used in this study was descriptive quantitative research. A descriptive study was conducted to describe whether there are differences between NPLs and ROA before and during the COVID-19 outbreak.

The most important process in quantitative research was the process of measurement. The measurement process provided the fundamental relationship between empirical observations and the mathematical expression of quantitative relationships.

## 3.2 Sample

State-owned and private conventional banks in Indonesia that published quarterly financial reports in March, June, September, December 2019 and in March, June, September, and December 2020 were the samples of this study.

## 3.3 Data Source

The data used are secondary data taken from the Indonesian Stock Exchange website, and the websites of each banking company, in the form of financial reports published by each bank quarterly to evaluate NPL and ROA.

## 3.4 Data Collection Method

This study used the documentation method in the form of secondary data obtained from quarterly published financial reports available on the Indonesian Stock Exchange website or the websites of each banking company. The data used are the ones that recorded in the period before the COVID-19 outbreak (2019) and during the outbreak of COVID-19 (2020) at state-owned and private banks in Indonesia.

## 3.5 Data Analysis Method

Verification analysis became the method of analysis in this study through the statistical test that would be carried out, which was hypothesis testing (t-test statistic). The t-test was a statistical test used to test the validity of the hypothesis proposed by researchers by differentiating the means of the two populations. This study used a paired sample t-test. Paired sample t-test was one of the experimental methods used to assess the effectiveness of the

treatment, which were marked by the difference in means before and after the treatment (Widiyanto, 2013). This test was used to measure the difference in the financial performance of Indonesian banks, before the COVID-19 pandemic hit Indonesia for the first time and during the COVID-19 pandemic in Indonesia. Data processing in this study used SPSS.

## 4. RESULTS AND DISCUSSIONS

## 4.1 Non-Performing Loan (NPL)

Looking at the data in Table 1, the NPL before the COVID-19 pandemic averaged 3.26% and commercial bank NPL during the COVID-19 pandemic averaged 3.52%. Under the Indonesian Banking Law Number 15/2/PBI/2013, a bank is considered to be in trouble and its business continuity may be threatened if its net NPL ratio exceeds 5%. Thus, the NPL of state-owned and private conventional banks has increased slightly, but it is less than 5%, so it can be said to be at a good level.

Paired Samples Statistic							
		Mean	N	Std. Deviaton	Std. Error Mean		
Pair 1	Before COVID-19 pandemic	3.2629	228	2.10781	.13959		
	During COVID-19 pandemic	3.5235	228	2.05709	.13623		

**Table 1. NPL Descriptive Statistics Results** 

Table 2 below shows the difference in Non-Performing Loan (NPL) between the prepandemic and post-pandemic NPL. The difference in NPL between the two periods is 0.26053%. The NPL during the pandemic were higher than those before the pandemic. The significance level of the NPL is 0.061, meaning it is higher than the significance level of 0.05. It can be concluded that there are differences in NPL between the two periods, but they are not very significant. The findings in Table 2 below are in line with the findings of Ilhami (2020), which shows that Non-Performing Finance (NPF) in the Islamic banking sector in Indonesia was affected by the pandemic, but not very significantly.

**Paired Samples Test** Paired Differences 95 % Confidence Interval of the Difference Std. Std. df Sig. (2-Mean Lower Upper t Deviation Error tailed) Mean Pair Before COVID-19 1 pandemic -.26053 .01186 -1.885 .061 2.08733 .13824 227 .53292 During COVID-19 pandemic

**Table 2. NPL Descriptive Statistics Results** 

# 4.2 Return on Asset (ROA)

Table 3 below shows that the average (mean) value before the pandemic was higher than the average value during the pandemic. Whereas table 4 shows that ROA generates a

significance value of 0.002, which is lower than the significance level (0.05), which means ROA of conventional state-owned banks and private banks shows a significant difference between pre-pandemic and post-pandemic.

**Table 3. ROA Descriptive Statistics Results** 

Paired Samples Statistic									
		Mean	N	Std. Deviation	Std. Mean	Error			
Pair 1	Before COVID-19 pandemic	1.08	228	1.814	.120				
	During COVID-19 pandemic	.71	228	2.372	.157				

**Table 4. ROA Descriptive Statistics Results** 

Paired Samples Test										
Paired Differences										
				95 % Confidence Interval of the Difference						
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	df	Sig. tailed)	(2-
Pair 1	Before COVID-19 pandemic During COVID-19 pandemic	.372	1.824	.121	.134	.610	3.076	227	.002	

## **CONCLUSIONS**

Based on the data processing and the results of the data analysis, which refers to issues and research goals in descriptive and statistical terms, it is possible to conclude that COVID-19 has a major impact on the performance of ROA ratio of the banking sector in Indonesia. However, the paired sample t-test result on NPL ratio did not show any significant difference before and during the pandemic. Thus, conventional banking in Indonesia could still survive in the midst of the pandemic, despite a decrease in ROA ratio and an increase in NPL ratio.

There are several suggestions and contribution from the following study, specifically (1) for banks, they can use the results of this study to monitor the development of NPL and ROA to cope with the COVID-19 pandemic phenomenon and the implementation of the new normal in society so that it can be useful for determining strategies in considering restructuring and granting new credit during a pandemic, (2) for the government, through this study, in a short period of time, it can be used as an evaluation and reference for policies that have been and will be implemented in order to obtain the best alternative policies for all stakeholders in the country's economy, (3) for further research, this could become the basis for further studies using other financial aspects or ratios as indicators of the health of the Indonesian banking industry which has been affected by the pandemic. The data analyzed can also be continued over a longer period of time to see the long-term response of NPL and ROA to the COVID-19 phenomenon and the implementation of the new normal.

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