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Comparative Study of Financial Soundness of State and Private Banks in Indonesia

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Abstract

This study aims to investigate the impact of bank soundness on the return on assets (ROA) experienced by state and private banks over the 2016-2022 fiscal quarters. In this study, a quantitative research method employing secondary data obtained through the official website of the OJK (Financial Services Authority) was used as the research methodology. For this investigation, the panel data regression analysis carried out in EViews 9 was the analytical tool. According to research on state banks, the CAR and LDR variables have only a partially significant effect on ROA. Notwithstanding this, ROA is significantly influenced by the NPL and NIM variables. On the other hand, private banks provide some evidence suggesting that the CAR and NPL variables do not have a significant impact on ROA. Several LDR and NIM variables significantly influence ROA.

Keywords: *Capital Adequacy Ratio* (CAR), *Loan to Deposit Ratio* (LDR), *Net Interest Margin* (NIM), *Non-Performing Loan* (NPL), *Return On Asset* (ROA).

Abstrak

Tujuan dari penelitian ini adalah untuk mengetahui pengaruh tingkat kesehatan bank terhadap *return on asset* (ROA) pada bank pemerintah dan swasta periode triwulan 2016-2022. Dalam penelitian ini menggunakan metode penelitian kuantitatif dengan menggunakan data sekunder yang diperoleh melalui situs resmi OJK (Otoritas Jasa Keuangan). Alat analisis yang digunakan dalam penelitian ini adalah analisis regresi data panel menggunakan *E-Views* 9. Berdasarkan hasil penelitian pada bank pemerintah, secara parsial variabel CAR dan LDR tidak berpengaruh signifikan terhadap ROA. Namun variabel NPL dan NIM berpengaruh secara signifikan terhadap ROA. Di sisi lain, bank swasta menunjukkan bahwa variabel CAR dan NPL tidak berpengaruh signifikan terhadap ROA. Sedangkan variabel LDR dan NIM berpengaruh secara signifikan terhadap ROA.

Kata kunci: *Capital Adequacy Ratio* (CAR), *Loan to Deposit Ratio* (LDR), *Net Interest Margin* (NIM), *Non-Performing Loan* (NPL), *Return On Asset* (ROA).

1. Introduction

It is impossible to disentangle the contribution of a nation's banking sector from its overall economic development because the two are inextricably linked. Financial intermediaries between those with spare cash (surplus units) and those who need it are what banks are all about (deficit units). Banking Law No. 10 of 1998 defines a bank as an institution that accepts deposits and other savings from the public and returns those funds to the public in the form of loans, deposits, and other services with the intention of improving the standard of living for the populace as a whole. As a result, financial institutions are required to always ensure that their performance is in sound condition.

The financial system in Indonesia can be broken down into two categories, state banks and private banks, depending on who owns the institution. A bank that has the Indonesian government as the owner of both the deed of establishment and the capital is referred to as a state bank. Because the government owns both of these things, it also owns all of the bank's profits. The national private-type

bank, on the other hand, is either wholly or principally owned by the private sector of the federal government. Additionally, the private sector is responsible for establishing the deed of establishment, as well as the distribution of profits for private profits (Kasmir, 2011).

State banks already have a good image in the eyes of the public. The level of public confidence in state banks is relatively higher than in private banks. This is because the people saw the economic shocks that occurred in the past that had an impact on the banking sector. On the other hand, private banks also have a good image. This can be seen based on a large number of private banks in Indonesia, namely 104 banks. The journal researched by Kosim & Pratama (2021) stated that when the economic crisis occurred in 1998, 16 private banks were liquidated. So people flocked to move their funds to state banks, considered safer and not at high risk. Therefore, public trust in state banks is formed based on these historical facts. One of the factors of public confidence in banking can be seen through the bank's financial performance.

Financial performance, as defined by Putri and Dharma (2016), is a description of the outcomes that a company or bank can achieve through its operations within a given time period in order to generate profits efficiently and effectively, and these profits are quantifiable through the examination of financial statements. Simply put, a company's or bank's financial performance is the potential gains to be made from its current activities. A bank's profitability is a crucial indicator of its overall success. A company's profitability can be measured by calculating its return on assets (ROA). Return on assets (ROA) is a ratio used to assess the efficiency with which a bank's management creates operating profit. The acronym CAMEL refers to the rating system for bank soundness based on several factors, including the capital, assets, management, earnings, and liquidity, and it was established per Bank Indonesia Regulation No. 6/10/PBI/2004 and Bank Indonesia Circular Letter No. 6/23/DPNP. In 2004, this rating scheme came into effect.

Two aspects must be considered to keep the bank in a healthy condition, namely the internal and external conditions of the bank. One of the internal aspects is fundamental factors such as a bank's financial performance that can affect the bank's health. Meanwhile, from the external aspect, several factors can be observed; the first is a political activity in a country. These political activities have links to the economy. If political action brings political risk, it will harm economic conditions and vice versa. The election that took place in 2019 had an impact on several industries, such as the paper and printing industry, the manufacturing industry, the transportation and telecommunications industry, the textile and clothing industry, advertising services, to the hotel and restaurant industry. Research conducted by Sariartha et al. (2018) states that there is an increase in bank credit during the election period. This happens because the behaviour of political candidates requires high costs, causing the growth of bank credit. On the other hand, credit growth was not accompanied by increased bank profitability.

At the beginning of the year 2020, Covid-19 was the cause of global pandemic In the second quarter of 2020, Indonesia's economy experienced negative growth of 5.32%, as reported by the Central Statistics Agency (BPS), according to data from August 2020. The pandemic has repercussions not only for the rate of economic expansion but also for the banking industry. In 2020 OJK recorded a decrease in the CAR ratio from 23-24% as of November 2019 to 21.77% as of March 2020. In addition, banks experienced an increase in credit risk and a decrease in Third Party Funds (TPF). Sukendri (2021) and Sumadi (2020) revealed that the COVID-19 pandemic impacted banking profitability To overcome this, several banks have implemented credit restructuring policies that provide leniency in terms of time and a reduction in loan interest rates.

Based on this background, the author seeks to review the level of bank soundness in state and private banks in 2016-2022 because in 2022, after the pandemic, economic conditions in Indonesia have begun to stabilize, whether banking financial performance has improved or not. In addition, several

previous studies gave different results, so this research needs to be reviewed. The results of this study are expected to provide information as a basis for consideration, support, and contributions to decision makers who use banking services

2. Literature Review

2. 1 Profitability

According to Wahyuni and Efriza (2017), "the profitability ratio is a ratio used to measure a firm's capacity to generate profits from its ordinary business activities." As a ratio of how profitable a bank is, return on assets is commonly used. For a financial institution, a higher Return on Assets (ROA) means more money in the bank's coffers. Consequently, the likelihood of the bank getting into trouble is reduced in proportion to the ROA. According to Prasanjaya and Ramantha (2013), the objective of calculating a company's profitability is to establish a target level of profits for the business to achieve within a specified amount of time. Companies that are successful earn satisfactory performance scores.

2. 2 Effect of Capital Adequacy Ratio (CAR) on Return On Assets (ROA)

Effect of Capital Adequacy Ratio (CAR) on Return On Assets (ROA) can be seen through previous research conducted by Ramadhanti (2019) and Bimantoro & Ardiansah (2018) stated that CAR significantly affects ROA. This indicates that the higher the CAR, the higher the banking system's profitability. The CAR ratio can benefit the bank, and a high CAR score increases bank efficiency, thereby increasing public confidence. Meanwhile, research by Tangngisalu et al. (2020) states that CAR does not affect ROA. The results of this study differ from the theory put forward, where banks with higher CAR can finance their operations and significantly affect profitability. Based on the description above, the research hypothesis can be formulated as follows:
H1: Capital Adequacy Ratio has a significant effect on Return On Assets

2. 3 Effect of Non-Performing Loan (NPL) on Return On Assets (ROA)

Effect of Non-Performing Loan (NPL) on Return On Assets (ROA) can be seen through Research conducted by Jati (2021) says that NPL significantly affects ROA. This ratio shows the ability of bank management to manage non-performing loans. The lower the NPL, the lower the credit risk for the bank. Meanwhile, another study by Anggriani & Muniarty (2020) showed that NPL had no significant effect on ROA. The greater the NPL value, the more it will affect banks' profitability. Based on the description above, the research hypothesis can be formulated as follows:
H2: Non-Performing Loans have a significant effect on Return On Assets

2. 4 Effect of Loan to Deposit Ratio (LDR) on Return On Assets (ROA)

Effect of Loan to Deposit Ratio (LDR) on Return On Assets (ROA) can be seen through Juwita et al. (2018) research state that LDR has a positive and significant effect on ROA. The results of this study align with the concept and logic of the bank that the more third party funds that can be collected from the public, the more likely it is to generate income from these funds. Another study by Anugrah & Yatna (2019) showed that LDR did not affect profitability (ROA) at BUKU 4 Conventional Commercial Banks 99,17%. The existence of the prudential principle of banks in dealing with liquidity risk makes changes to the LDR that do not affect increasing or decreasing ROA. Based on the description above, the research hypothesis can be formulated as follows:
H3: Loan to Deposit Ratio has a significant effect on Return On Assets

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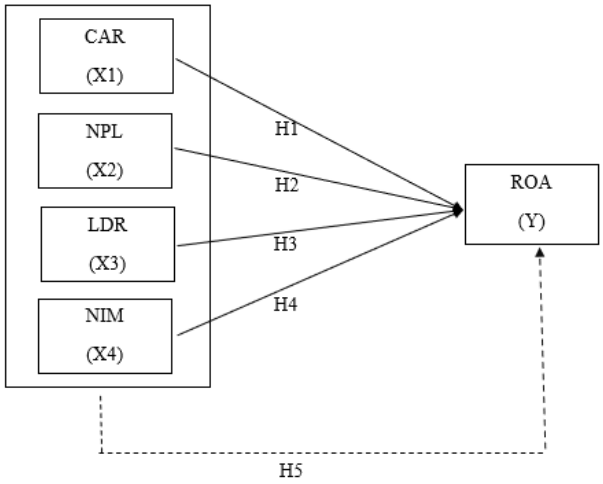
2. 5 Effect of Net Interest Margin (NIM) on Return On Assets (ROA)

Effect of Net Interest Margin (NIM) on Return On Assets (ROA) Sunaryo (2020) research says that NIM has a positive and significant effect on ROA. Any increase in net interest income increases profitability. This shows that the bank's ability to generate net interest affects the rate of return on the bank's total assets. Meanwhile, Wijaya & Yudawisastra's (2019) research showed that NIM did not affect ROA. Based on the description above, the research hypothesis can be formulated as follows:
H4: Net Interest Margin has a significant effect on Return On Assets Based on the description above, the conceptual framework can be described as follows:

Picture 1. Conceptual Framework



3. Research Method

The method of research that was used in this investigation was a quantitative research method, and the secondary data that was used came from the official website of the OJK. The required information consists of the quarterly financial statements for both private and state banks, covering the period of 2016-2022. The OJK-registered state banks, as well as private banks, make up the population of this study, which covers the period of time from 2016 to 2022 on a quarterly basis. A sample of 4 state and private banks was obtained through the use of purposive sampling in the sampling process. Due to the fact that there are a total of four state banks in Indonesia, the researchers decided to take a sample from the private sector, selecting four banks based on a set of criteria. Bank Rakyat Indonesia, Tbk (BBRI), Bank Negara Indonesia, Tbk (BBNI), Bank Mandiri, Tbk (BMRI), and Bank Tabungan Negara, Tbk (BTBN) are all state-owned financial institutions (BBTN). Private banks in Indonesia include the likes of Bank Central Asia, Tbk (BBCA), Bank OCBC NISP, Tbk (NISP), Bank Danamon Indonesia, Tbk (BDMN), and Bank Panin Indonesia, Tbk (PNBN).

Panel data, which are a combination of time series and cross-section data, are used for the analysis of the data in this study. In this investigation, the time period 2016-2022 was used for the time series data, and eight different banking sector companies were used for the cross-sectional data. In addition, the application known as Eviews 9 is used to perform the task of data processing. The Chow test is utilized in the process of selecting the panel data regression model. The Chow test determines whether a Fixed Effect or Common Effect model is more appropriate for the data. Tests for normality, multicollinearity, heteroscedasticity and autocorrelation were used in the next step, which was the execution of the classical assumption test. The t-test assesses the influence of a single independent variable on the dependent variable, while the F-test considers the combined effect of all independent variables. In order to determine whether or not the hypothesized relationship between the independent and dependent variables is indeed the case, the t-test is used in this study. The coefficient of

determination (R^2) is the last criterion used to evaluate a model's ability to explain observed data for a particular dependent variable.

3.1 Variable Operational Definitions

A. Capital Adequacy Ratio (CAR)

Banks' ability to hold onto risky assets like credit is measured by their capital adequacy ratio (CAR), which is a key performance indicator (KPI) according to Fahmi (2014). The ability of a bank to support risky assets increases in direct proportion to the capital adequacy ratio. The Bank of Indonesia mandates that a CAR of 8% or higher be met in order for a financial institution to be considered strong. The rules imposed by the BIS are to blame for this situation (Bank for International Settlements). Bank assets financed by bank capital and bank assets obtained from sources other than the bank, such as debtors, debt, and other sources, can both be evaluated using CAR, as stated by Kasmir (2011).

$$CAR = \frac{Modal}{Aktiva\ Tertimbang\ Menurut\ Risiko} \times 100\%$$

B. Non Performing Loan (NPL)

According to Rivai (2013), Non-Performing Loans (NPL) are loans that cannot be repaid by the debtor as they should. A non-performing loan, or NPL, is one in which the debtor is unable to meet his obligations to the bank by making the initial instalment payment as promised. One of the most important indicators that determine how well banking functions are being carried out is the percentage of loans that are either non-performing or non-performing. The role of the bank as an intermediary or liaison between parties who have excess funds and those who need funds is one of the functions that the bank performs. The maximum interest rate that can be charged on loan by Bank Indonesia is 5%, as stated in Bank Indonesia Regulation No. 20/8/PBI/2018. If this value is exceeded, it will have an effect on the evaluation of the bank's ability to make payments.

$$NPL = \frac{Kredit\ Bermasalah}{Total\ Kredit} \times 100\%$$

C. Loan to Deposit Ratio (LDR)

Riyadi (2016) explains that the loan-to-deposit ratio (LDR) measures how many deposits a bank has in relation to the number of loans it has made to outside parties. It is the bank's ability to turn taxpayer money into credit that is measured by this metric (in the form of demand deposits, savings deposits, time deposits, time deposits, and other liabilities). The Bank of Indonesia stipulates an LDR of between 78% and 92% in Regulation No. 15/7/PBI/2013. If the value of the LDR is lower than 78%, it is possible to assert that the bank is unable to channel funds properly. However, if the LDR is greater than 92%, this indicates that the total loan made by the bank is greater than the amount that was borrowed.

$$LDR = \frac{Jumlah\ Kredit}{Total\ Dana\ Pihak\ Ketiga} \times 100\%$$

D. Net Interest Margin (NIM)

Dendawijaya (2009) argues that a ratio known as the net interest margin can be used to assess a bank's management's ability to oversee productive assets and generate net interest income. According to Bank Indonesia, a NIM ratio of 6% is typical. When this ratio is high, the bank is more likely to be realizing its full potential as a result of the interest it earns on the revenue it generates from the assets under management.

$$NIM = \frac{Pendapatan\ Bunga\ Bersih}{Aktiva\ Produktif} \times 100\%$$

E. Return On Assets (ROA)

according to Kasmir (2011), Return On Assets (ROA) is the ratio that shows the results (return) on the total assets used in the company. Meanwhile, according to Sudana (2013) Return On Assets (ROA) shows the company's ability to use all of its assets to generate profit after tax.

$$ROA = \frac{Laba\ Bersih}{Total\ Aktiva} \times 100\%$$

3.2 Multiple Linear Regression Analysis

Multiple linear regression is used to test the effect of two or more independent variables on one dependent variable and is generally expressed in the following equation:

$$Yp = \alpha + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + e$$
$$Ys = \alpha + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + e$$

Keterangan:
Yp : State Bank Dependent Variable
Ys : Private Bank Dependent Variable
α : Constant
b_1 : Capital Adequacy Ratio Regression Coefficient
b_2 : Non Performing Loan Regression Coefficient
b_3 : Loan to Deposit Ratio Regression Coefficient
b_4 : Net Interest Margin Regression Coefficient
X_1 : Capital Adequacy Ratio
X_2 : Non Performing Loan
X_3 : Loan to Deposit Ratio
X_4 : Net Interest Margin
e : Disruptive Variables

4. Result

4. 1 *Chow Test*

In the current investigation, the Chow test is being used to decide whether the Fixed Effect Model or the Common Effect Model will be applied when estimating panel data.

Table 1 Chow Test Results

Effects Test	Bank Pemerintah		Bank Swasta	
	Statistic	Prob.	Statistic	Prob.
Cross-section F	15.123865	0.0000	22.944424	0.0000
Cross-section Chi-Square	40.252541	0.0000	56.220975	0.0000

Source: E-Views 9 Output

The significance value of the F test on state banks and private banks is 0.0000, so H_0 is rejected, and H_a is accepted. So that the suitable model to use is Fixed Effect because the probability value is < 0.05.

4. 2 *Normality Test*

The objective of the normality test is to establish whether or not the residual value, which has been standardized as part of the regression model, follows a normal distribution.

Table 2 Normality Test Results

	Bank Pemerintah	Bank Swasta
Jarque-Bera	1.926493	3.704575
Prob.	0.381652	0.156878

Source: E-Views 9 Output

According to the data presented in the graph that is located above, the probability of a state bank is equal to 0.38, while the probability of a private bank is equal to 0.15. Because the probability value of the two banks is greater than 0.05, one can draw the conclusion that the two banks do not have any issues with their normality and that the residuals follow a normal distribution.

4. 3 *Heteroscedasticity Test*

The purpose of the heteroscedasticity test is to determine whether or not the residual of one observation differs significantly from the variance of the residual of another observation in the regression model. The glejser test was utilized in this investigation as part of the heteroscedasticity analysis.

Table 3 Glejser Test Results

Variable	Bank Pemerintah		Bank Swasta	
	t-Statistic	Prob.	t-Statistic	Prob.
C	1.096993	0.2754	-0.024212	0.9807
CAR	-0.410207	0.6826	0.129738	0.8970
NPL	1.255478	0.2124	1.054092	0.2945
LDR	-0.519962	0.6043	0.827188	0.4102
NIM	-0.138475	0.8902	-0.881912	0.3800

Source: E-Views 9 Output

The regression results above show no heteroscedasticity problem in state and private banks because the probability value obtained is > 0.05.

4. 4 *Multicollinearity Test*

A multicollinearity test can be done by calculating the correlation coefficient between the independent variables.

Table 4 Multicollinearity Test Results

	Bank Pemerintah				Bank Swasta			
	X1	X2	X3	X4	X1	X2	X3	X4
X1	1.000	-0.007	-0.030	0.615	1.000	0.498	-0.240	0.172
X2	-0.007	1.000	-0.149	-0.294	0.498	1.000	0.434	0.080
X3	-0.030	-0.149	1.000	-0.096	-0.240	0.434	1.000	-0.090
X4	0.615	-0.294	-0.096	1.000	0.172	0.080	-0.090	1.000

Source: E-Views 9 Output

Based on the table above, it can be concluded that all independent variables in state banks and private banks show a value of < 0.8. So this indicates that there is no multicollinearity.

4. 5 *Autocorrelation Test*

Autocorrelation test can be done using Durbin Watson test

Table 5 Durbin Watson Test Results

Jenis Bank	Nilai Durbin-Watson Stat
Bank Pemerintah	1.161389
Bank Swasta	1.190528

Source: E-Views 9 Output

Based on the Durbin-Watson test results, this value will be compared with the Durbin-Watson table =5%. The test results on state banks are 1.161389 ($0 < DW < D_L$ or $0 < 1.161389 < 1.6016$), so in state banks, there is an autocorrelation. In comparison, the private bank test result is 1.90528 ($0 < DW < D_L$, or $0 < 1.190528 < 1.6016$) then. There is autocorrelation in private banks.

After doing the classical assumption test above, it can be concluded that the data in this study did not pass the classical assumption test. A weighting method can be used for the next test to overcome this problem and obtain a BLUE estimation model. The estimation used is the Fixed effect cross-section weight model.

4. 6 *T-Test, F-Test, and Coefficient of Determination*

Table 6 Model Fixed Effect Cross-Section Weight

Variable	Bank Pemerintah		Bank Swasta	
	t-Statistic	Prob.	t-Statistic	Prob.
C	2.844126	0.0054	-2.189286	0.0310
CAR	1.089859	0.2785	1.235129	0.2198
NPL	-12.35450	0.0000	1.387607	0.1685
LDR	0.093782	0.9255	5.205656	0.0000
NIM	4.998592	0.0000	3.184737	0.0020
R-squared		0.808991		0.895204
F-statistic		63.32039		126.6941
Prob (F-statistic)		0.000000		0.000000

Source: E-Views 9 Output

Table 6 of the report on state banks shows that the t-test found no statistically significant relationship between the CAR and LDR variables and ROA (0.2785 and 0.9255 are both greater than 0.05). Specifically, NPL and NIM had a large effect on ROA (0.0000 and 0.0000 0.05, respectively). Meanwhile, a t-test on private banks shows that CAR and NPL do not significantly affect ROA (0.2198 and 0.1685 are both greater than 0.05). The LDR and NIM factors have a considerable effect on ROA (p values of 0.0000 and 0.0020, respectively).

According to the findings of the F test performed on state banks, which show a value of 0.000000 0.05, one can draw the conclusion that all of the X variables simultaneously affect the Y variable. While the value for private banks is 0.000000 0.05, which indicates that all variables X have a common effect on variable Y, this is not the case in public banks.

In addition, the coefficient of determination test performed on state banks has an R^2 value of 0.808991, whereas the R^2 value for the test performed on private banks is 0.895204. Because a value close to 1 indicates that the independent variable provides almost all of the information needed to predict the variation of the dependent variable, it is possible to draw the conclusion that the R2 value

for state and private banks is very high. This is because a value close to 1 indicates that an association exists between the two variables.

4. 7 *Capital Adequacy Ratio (CAR)*

The capital Adequacy Ratio (CAR) does not affect the profitability of state and private banks. This is because there was a decrease in CAR in 2020 when the covid-19 pandemic occurred in that year. Many people withdraw their funds from banks, especially the lower middle class, who are no longer out of work or have been laid off due to the impact of the pandemic. This increases third-party fund capital. If the CAR value is high, the bank's condition is improving, and it can be said that it can finance its operations well to contribute to profitability significantly. This study's results align with previous research (Tangngisalu et al., 2020), which states that CAR has no significant effect on profitability.

In addition, research conducted by (Sukendri, 2021), who conducted research related to bank capital before and after the Covid-19 pandemic, showed that in 2020 there was a decline in banking capital. Before the pandemic, the average bank capital was 90.8%, while the average bank capital fell to 79.12% during the pandemic. This includes a decrease in core capital to additional bank capital. Another factor that causes a reduction in the value of money is an increase in the value of RWA (Risk Weighted Assets). The rise in RWA can be caused by increased assets owned by banks, such as demand deposits, savings, and time deposits. So that if the ATMR value rises, the CAR ratio will decrease.

4. 8 *Non-Performing Loans (NPL)*

Non-Performing Loans (NPL) significantly affect profitability at state banks. This is because state banks experienced an increase in the NPL ratio in 2020. During the covid-19 pandemic, many debtors could not pay their loans, so the bank implemented a credit restructuring policy. One of the policies of credit restructuring is to reduce interest rates and loan interest arrears, where one of the sources of bank income comes from interest from debtors. This policy results in an increase in credit risk and a decrease in bank profitability. The study results align with research conducted by (Jati, 2021), which shows that NPL significantly affects profitability. At the same time, the NPL ratio in private banks has no considerable impact on profitability. The ratio that is used to measure non-performing loans is called the credit risk proxied by the NPL ratio. When there is a lower risk of loans that are not performing as expected, there is a greater potential to increase profits. The findings of this study are consistent with those discovered by Anggriani and Muniarty (2020), who discovered that NPL does not have a significant impact on a company's ability to turn a profit.

NPLs at state banks have increased during the COVID-19 pandemic. This is because that year, the government, through state banks, attempted to recover the economy affected by COVID-19. One of the policies is distributing low-interest People's Business Credit (KUR) for MSME actors. In 2020, state banks disbursed a KUR of 53.44% or Rp. 137.5 trillion. This results in an increase in the risk of non-performing loans at state banks. Meanwhile, private banks during the pandemic recorded greater profitability than state banks. In addition, SME commercial loans from a private bank experienced a decline in 2020 by 7.9% or Rp. 186.8 trillion. So private banks are more careful in lending and tend to hold back aggressive lending to customers, so this causes the NPL not to affect the profitability of private banks.

When viewed from the NPL ratio, private banks are better than state banks because private banks adequately perform risk mitigation in suppressing bad loans. Risk mitigation measures taken by private banks include monitoring the quality of credit portfolios and communicating with debtors to regulators and implementing the Early Warning System (EWS). EWS is a mechanism or system for detecting or recognizing early symptoms expected to affect the development of the debtor's business

conditions. So that by implementing EWS, banks can minimize or prevent losses due to credit that cannot be paid.

4. 9 *Loan to Deposit Ratio (LDR)*

The profitability of private banks is significantly affected by the Loan to Deposit Ratio (LDR). LDR is a metric used to assess the extent to which banks extend credit from Third Party Funds (DPK) they have amassed. The LDR ratio is proportional to a company's profitability because of public confidence in the banking sector's ability to handle Third Party Funds. If the ratio improves, the company's bottom line will improve. Consistent with the findings of Juwita et al. (2018), who found that the LDR ratio significantly affects a company's ability to turn a profit, this study found the same thing. There is not a discernible relationship between the LDR ratio and the profitability of state banks. This is due to the fact that while third-party funds in 2020 will be higher, the amount of credit that will be distributed in that year will be lower. Because of the elevated risk of loans that aren't being repaid during the pandemic, some financial institutions are choosing to limit the amount of aggressive lending they do to their customers. Therefore, banks need to exercise greater caution when extending credit to customers. These findings are consistent with research conducted by Anugrah and Yatna (2019), which demonstrates that LDR does not have a significant impact on a company's profitability.

The LDR ratio of state banks tends to be higher than private banks. The high LDR is due to credit growth at state banks which is greater than the growth in deposits. The higher the LDR ratio, the more illiquid a bank can be. Because banks are considered to have difficulty meeting their short-term obligations (Agustina & Wijaya, 2013), meanwhile, for private banks, the growth of third-party funds in 2020 increased to Rp. 975.9 trillion, but credit growth decreased. This causes the LDR ratio of private banks to be smaller.

When viewed through the LDR ratio, private banks are better than state banks. The LDR ratio of private banks ranges from 78-92%. This follows the requirements set forth in Bank Indonesia Regulation No. 15/7/PBI/2013 regarding LDR ratios in the banking industry. One of the strategies of private banks in increasing TPF is by increasing the number of customer deposits, either in the form of savings or time deposits.

4. 10 *Net Interest Margin (NIM)*

Net Interest Margin (NIM) has a significant effect on profitability at state banks and private banks. The NIM ratio indicates the bank's ability to generate net interest income by placing earning assets. The greater this ratio, the higher the interest income on making assets managed by the bank, so the probability of the bank is in trouble is getting smaller. This study's results align with research (Sunaryo, 2020), which states that NIM significantly affects profitability.

The NIM ratio or net interest income affects profitability. This is because NIM values are stable and do not experience significant fluctuations. As long as banks extend credit to customers, the bank will still benefit from net interest income.

Based on the discussion above, the CAR, LDR and NIM ratios must affect profitability. However, the NPL ratio should have no effect because it has a negative impact on profitability. This is in line with research conducted by (Moorcy., 2020) which states that CAR, LDR and NIM have an effect on profitability. The higher the value of this ratio, the more it will affect the level of profitability. However, the lower the NPL value, the higher the profitability value.

From the results of this study, state-owned banks excel in the NIM ratio, while the NPL ratio of state-owned banks still influences profitability. However, private banks are superior in terms of NPL, LDR

and NIM ratios. So to continue to improve their performance, state-owned banks must be more careful in extending credit to customers because any increase in the NPL value will reduce the value of profitability. Meanwhile, private banks must increase the value of third party funds because if a bank's DPK value is high, more credit can be disbursed to customers.

5. Conclusion

Study results on state banks indicate that CAR and LDR variables only have a weak impact on ROA. Despite this, NPL and NIM have a sizable impact on ROA. However, data from private banks suggest that CAR and NPL variables do not significantly affect ROA. ROA is profoundly affected by LDR and NIM as independent variables. At the same time, evidence from both public and private financial institutions demonstrates that X factors have an aggregate effect on Y.

This study shows that CAR, LDR and NIM ratios should influence profitability. But the NPL ratio should have no effect because it negatively impacts profitability. From the results of this study, state-owned banks excel in the NIM ratio, while the NPL ratio of state-owned banks still influences profitability. But private banks are superior in terms of NPL, LDR, and NIM ratios.

For further research, researchers are advised to analyze the financial performance of banks through external aspects such as macro and micro stability and domestic and foreign political conditions. In addition, researchers are advised to use different analytical methods or techniques such as the GARCH method, VAR, and others to see volatility or fluctuations in the influence of bank financial performance.

It is hoped that the banking sector will maintain profitability as measured by the financial performance to establish effective policies. Some things that can be done include state banks must be more careful in extending credit to customers. Because every increase in the NPL value will reduce the value of profitability, meanwhile, private banks must increase the value of third-party funds (DPK) because if a bank's DPK value is high, more credit can be distributed to customers.

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