

Analysis of the Effect of Capital Adequacy Ratio (CAR), Loan to Deposit Ratio (LDR), And Non-Performing Loan (NPL) On Return on Assets (ROA) (Study on Conventional Banking Companies)

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ABSTRACT

Banking is a financial institution that has an important role in Indonesia, which concerns banks, including institutions, business activities, and ways and processes in carrying out their business activities. The purpose of this study is to determine the analysis of the effect of capital adequacy ratio (CAR), loan to deposit ratio (LDR), and non-performing loan (NPL) on return on assets (ROA) studies in conventional banking companies. This research method is from data that has been published, namely annual reports on the websites of each state- owned bank for 2013-2022 and the Financial Services Authority (OJK). The results of this study are Capital Adequacy Ratio, Loan to Deposit Ratio, and Non-Performing Loan simultaneously have a significant effect on Return On Assets.

INTRODUCTION

Banking is a financial institution that has an important role in Indonesia, which concerns banks, including institutions, business activities, and ways and processes in carrying out their business activities (Basic Banking Law Number 10 of 1998). In the national economy, banks are the heart of the economy because banks flow back the money received to be circulated to the economic system to carry out economic activities (Wijaya & Tiyas, 2016). The existence of covid-19 has an impact on the national economy, especially the banking world, which is experiencing negative growth or heading for a recession. Thus, a number of banks forced to and has taken a policy of write off and write off receivables. In running its business, the main objective is to obtain maximum profit. The ability to earn profits can be measured using profitability ratios. Profitability is a ratio to measure the performance of a company in seeking profit in a certain period (Kasmir, 2012).

According to Lorenza et al., (2020), the benchmark for knowing the weakening or strengthening of banking companies can be observed from the profit or profitability ratio. Profitability (ROA) provides an overview of the level of effectiveness in banking, so that the higher the level of profitability, the better the banking performance and the sustainability of its business will be guaranteed (Prasetyo, 2015). In In this study, profitability is proxied by the return on asset (ROA) ratio. Return On Asset (ROA) is a ratio that show the results on the total assets used in the company's operations (Kasmir, 2014).

Efforts to manage finances in banking companies and financial risks are things that need to be taken seriously which can be seen and measured in the Balance Sheet report, where the results will be seen whether the performance of a company can reach the specified target or not. Financial performance is a picture of a bank that has successfully distributed the funds received by the company through activities that are carried out properly and correctly (Chaerunisak, p. 2019). One of the main indicators to measure the company's ability to face financial risk is the CAR Capital Adequacy Ratio). CAR (Capital Adequacy Ratio) is a capital adequacy ratio, which means the amount of capital needed by the bank to cover the risk of financial losses that may arise from the cultivation of risky assets (Rahma, 2018). In addition, Loan To Deposit Ratio (LDR) and Non Performing Loan (NPL) are also important factors in maintaining the company's financial health.

The selection of non-performing loans as a factor affecting profitability is because non-performing loans are an indicator that can show the ability of bank management to manage credit effectively, the existence of non-performing loans can have an impact on increasing costs for allowance for impairment losses (CKPN) which can reduce bank income and have an impact on reducing bank profits and can reduce the value of return on assets (Susilawati & Nurulrahmatiah, 2021).

Based on the explanation has been explained to CAR, LDR, NPL and ROA related to the phenomena that occur and the existence of research GAP in previous researchers. Therefore, researchers want to conduct research on analyzing the effect of capital adequacy ratio (CAR), loan to deposit ratio (LDR), non-performing loans (NPL) on return on assets (ROA) studies in companies.), non-performing loans (NPL) on return on assets (ROA) studies in conventional banking companies. The purpose of this study was to determine the analysis of the effect of capital adequacy ratio (CAR), loan to deposit ratio (LDR), and non-performing loan (NPL) on return on assets (ROA) study on conventional banking companies.

THEORETICAL OVERVIEW

1. Return On Assets (ROA)

Return on Assets (ROA) ratio is one of the profitability ratios. This ratio is used to measure the ability of bank management to obtain overall profit (profit). The greater the ROA of a bank, the greater the level of profit achieved by the bank and the better the position of the bank in terms of asset use (Suhartanto, 2022).

2. Non Performing Loan (NPL)

The Non Performing Loan (NPL) ratio is the percentage of the amount of non-performing loans compared to the total credit as a whole. Loans in this case are loans from the bank concerned that are given to third parties (private or corporate customers) and do not include loans to other banks. Loans that are included in non-performing loans are substandard, doubtful, and bad loans. In accordance with regulations issued by Bank Indonesia in 2004, the ratio of non-performing loans to non-performing loans is as follows the stipulated NPL is 5%. If more than that, it can be concluded that the bank is not healthy. The higher the NPL ratio, the lower the performance or profitability of banking and also the profit earned by the bank. Banks with high NPLs will increase costs, both productive asset reserves and other costs, so that they have the potential for bank losses (Suhartanto, 2022).

3. Capital Adequacy Ratio (CAR)

According to Warsha and Mustanda (2016) Capital Adequacy Ratio (CAR) or commonly referred to as the capital adequacy ratio is a ratio that reflects the bank's ability to cover the risk of loss from its activities and the bank's ability to fund its operational activities. In accordance with the assessment of the Capital Adequacy Ratio (CAR) ratio based on Bank Indonesia Regulation No.15/12/PBI/2013 for the value of the Capital Adequacy Ratio (CAR) itself, which is at least 8%. The calculation of the Capital Adequacy Ratio (CAR) ratio in accordance with Bank Indonesia standards is as follows:

$$\text{CAR} = \frac{\text{modal}}{\text{ATMR}} \times 100\%$$

4. Loan To Deposit Ratio (LDR) According to Kasmir (2018), Loan to Deposit Ratio (LDR) is a ratio that aims to measure the composition of the amount of credit provided compared to the amount of public funds and own capital used. This ratio is also used to assess the liquidity of a bank by dividing the amount of credit provided by the bank against third party funds. Meanwhile, which includes funds third parties themselves are divided into 3, namely:

- a. Demand deposits, which are third party deposits with banks whose withdrawals can be made at any time by using checks, other payment orders or by book-entry.
- b. Deposits or time deposits, namely third party deposits with banks whose withdrawals can only be made within a certain period according to the agreement between the third party and the bank concerned.
- c. Public savings, namely third party deposits in banks whose withdrawals can only be made according to certain conditions.

The measurement of the Loan to Deposit Ratio (LDR) is that the higher this ratio, the lower the liquidity ability of the bank concerned so that the possibility of a bank in problematic conditions will be greater. Conversely, the lower the Loan to Deposit Ratio (LDR) ratio, it will show the bank's lack of effectiveness in channeling credit so that the bank loses the opportunity to make a profit.

According to PBI No. 17/11/PBI/2015 dated June 25, 2015, the standard Loan to Deposit Ratio (LDR) is 78% - 92%. The measurement of the Loan to Deposit Ratio (LDR) can be formulated as follows (Abdurrohman, 2020).

$$\text{CAR} = \frac{\text{Kredit}}{\text{Dana Pihak Ketiga}} \times 100\%$$

DISCUSSION

Analysis of the Effect of Capital Adequacy Ratio (CAR) on Return On Assets (ROA)

Table 1. T test

Based on the test results hypothesis above regarding the effect of Capital Adequacy Ratio on Return

Model	Ustandardized coefficient		Standardized coefficient	t	sig
	B	Std. Error	Beta		
Constant	-0,31	.012	-.061	-2,407	.022

On Assets obtained t value of -2.047 with an absolute value for comparison is 2.047. If compared to the t table which is 2.032, so the value of t count $2.047 > t$ table 2,032. As well as a significance value of 0.022 which means it is smaller than 0,05. So that it can be obtained decision that the Capital Adequacy Ratio has a significant negative effect partially on Return On Assets (Ababiel, 2024).

So that it can be obtained decision that the Capital Adequacy Ratio has a significant negative effect partially on Return On Assets. This means that the level of profit obtained by the bank is affected by the magnitude of this negative CAR ratio. This proves that the role of the adequacy of bank capital in running its main business is not too good. too good. With the non-fulfillment of CAR by the bank then the bank may not be able to absorb losses experienced, so that the activities carried out will not run efficiently, and in the eventually the profit earned by the bank will decrease. With decrease in profit, it will will also have an impacton the decline in financial performance of the bank. This is in line with research from (Rismanty & Suraya, 2023) and (Chintia & Dahlan, 2020) which states the results of his research, namely CAR partially there is a negative and significant influence on ROA.

Analysis of Loan To Deposit Ratio (LDR) Against Return On Assets (ROA)

Table 2. T test

According to Bank Indonesia Regulation Indonesia Regulation No. 15/15/PBI/2013 sets the Loan to Deposit Ratio (LDR) of a bank is 78%-92%. The higher the LDR, the higher the

Model	Ustandardized coefficient		Standardized coefficient	t	sig
	B	Std. Error	Beta		
Constant	.012	.006	.091	1,927	.062

liquidity is getting lower because the amount of funds used to financing credit is getting smaller and vice versa (Kasmir, 2008). Liquidity risk is the risk risk faced by banks in providing liquid tools to be able to fulfill its debt obligations and other obligations as well as the ability ability to fulfill credit requests that are filed without the occurrence of suspension (Hasibuan, 2007). High bank liquidity high liquidity will result in low profit low profit, on the other hand, when the level of liquidity level is low, it will produce high profits. Bank that has high liquidity, its assets are relatively larger in short-term assets. While banks with low liquidity low liquidity, the portion of its funds more embedded in long-term assets. long-term assets. The more funds deposited in cash, the more liquid the bank is (Taswan, 2010). the bank (Taswan, 2010). The increase in LDR can be caused due to an increase in the amount of credit granted. If total loans increase then the bank's interest income derived from credit will increase. Then it will be followed by ROA bank which will increase if bank income increases. So that LDR can signal good news that the bank's performance is getting better and then it will be followed by increase in ROA (Ababiel, 2024).

Analysis of Non Performing Loan (NPL) Against Return On Assets (ROA)

Table 3. T test

Non Performing Loan on the results descriptive analysis data processing results in an average value of 1.0575, then the standard deviation value is 0.722438002. Because the average value is greater than the standard deviation, it can be concluded that the data distribution is normal and good enough. While the minimum value is 0.26 and the maximum value is 3.04. While from the t test, the t count is -0.360 with an absolute value for comparison is 0.360.

Model	Ustandardized coefficient		Standardized coefficient Beta	t	sig
	B	Std. Error			
Constant	-.031	.085	-.019	-.360	.721

When compared to the t table which is 2.032, so the t value is $0.360 < t \text{ table } 2.032$. As well as the significance value of 0.721 which means greater than 0.05. So that it can be obtained decision that Non Performing Loan has no partial effect on Return On Assets. So whatever the value of the Non Performing Loan (NPL) ratio does not affect the size of the Return on Asset

(ROA). So it can be concluded that the role of banks in carrying out function as an intermediary not going well (Ababiel, 2024).

CONCLUSIONS

Capital Adequacy Ratio, Loan to Deposit Ratio, and Non Performing Loan simultaneously effect significant to Return On Assets. Results calculation of the effect of Capital Adequacy Ratio on Return On Assets obtained a t value of -2.047 with value absolute for comparison is 2.047. If compared to the t table which is 2.032, so the value of t count $2.047 > t \text{ table } 2,032$. Results These results give decision that Capital Adequacy Ratio has a significant negative effect partially on Return On Assets. This means that the level of profit obtained by the bank is affected by the magnitude of this negative CAR ratio. This proves that the role of adequacy capital bank in running its main business is not too good too good. By not fulfilling CAR by the bank then the bank may not be able to absorb losses that experienced, so that the activities carried out will not run efficiently, and in the end ultimately the profit earned by the bank the bank will decrease. With decreasing profit, then it will will also have an impact on the decline in the bank's financial performance.

While the bank's liquidity high liquidity will result in low profit low, otherwise when the level of liquidity low then will result in high profits. Bank that have high liquidity, their assets are assets are relatively larger in short-term assets. assets. While banks with low liquidity, the portion of its funds more embedded in long-term assets. Long-term assets.

NPL data test results t table is 2.032, so the value of t count $0.360 < t \text{ table } 2.032$. As well as the significance value of 0.721 which means greater than 0.05. So that it can be obtained decision that Non Performing Loan not partial effect on Return On Assets. Whatever the value of the Non Performing Loan (NPL) ratio does not affect the size of the Return on Asset (ROA) ratio. So it can be concluded that the role of the bank in carrying out its function as an intermediary is not running well (Ababiel, 2024). well (Ababiel, 2024).

CONCLUSION

The variable independent variable that used in this study are only from internal side of the company, namely Capital Adequacy Ratio (CAR), Loan to Deposit Ratio (LDR) and Non Performing Loan (NPL). Ratio (LDR) and Non Performing Loan (NPL). (NPL). Suggestions for other researchers to add research variables and the number of company samples.

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