THE INFLUENCE OF CAPITAL ADEQUACY, LIQUIDITY, BANK SIZE, AND PROFITABILITY ON CREDIT RISK IN COMMERCIAL BANKS CATEGORY BOOK IV

Rati Pratiwi[1], Jummaini[2], Yanita[3],Ristati[4],

[1] *Faculty of Economics and Business, Malikussaleh University*
[2] *Faculty of Economics and Business, Malikussaleh University*
[3] *Faculty of Economics and Business, Malikussaleh University*
[4] *Faculty of Economics and Business, Malikussaleh University*

Article Info

Abstract

Banks play a crucial role in the economy of a country, especially in developing nations like Indonesia. Commercial banks classified as BUKU IV are the largest banking group in Indonesia and are known for their strong management. This research aims to analyze the influence of capital adequacy, liquidity, bank size, and profitability on credit risk in Commercial Banks classified as BUKU IV during the period of 2015-2020. The independent variables consist of CAR, LDR, BS, and ROA, while the dependent variable is NPL (Non-Performing Loans). Secondary data collected by the researcher from the annual financial reports of BUKU IV commercial banks are utilized in this study, employing a census sampling technique. The data analysis method applied is panel data regression using E-Views 10 software. The research results indicate that ROA has a negative and significant effect on NPL in BUKU IV Commercial Banks. However, CAR, LDR, and BS do not have a significant impact on NPL in BUKU IV Commercial Banks.

Abstrak

Bank merupakan peranan yang sangat penting bagi perekonomian suatu negara terkhusus di negara berkembang seperti Indonesia. Bank Umum kategori BUKU IV merupakan kelompok bank paling luas di Indonesia dan dikenal memiliki manajemen yang baik. Penelitian ini bertujuan untuk menganalisis pengaruh kecukupan modal, likuiditas, bank size dan profitabilitas terhadap risiko kredit pada Bank Umum Kategori BUKU IV periode tahun 2015-2020. Variabel independen terdiri dari CAR, LDR, BS dan ROA, sedangkan variabel dependen adalah NPL. Penelitian ini menggunakan data sekunder yang diperoleh dan dikumpulkan peneliti dari data tahunan laporan keuangan bank umum BUKU IV dengan teknik sampel jenuh. Metode analisis data yang digunakan adalah metode regresi data panel dengan bantuan E-Views 10. Hasil penelitian menunjukkan bahwa ROA berpengaruh negatif dan signifikan terhadap NPL pada Bank Umum Kategori BUKU IV, sedangkan CAR, LDR dan BS tidak berpengaruh dan tidak signifikan terhadap NPL pada Bank Umum Kategori BUKU IV.

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INTRODUCTION

In the current era of information, the global economic system is rapidly evolving. Banks serve as both swift and accurate sources of information and as financial backers for various business transactions, including those on an international scale (Muchdarsyah, 1993). The state of Indonesia's economy during the emergence of the Covid-19 pandemic in 2020 presented significant challenges and impacts across nearly all sectors, including the banking industry. This sector was expected to prioritize the aspect of banking health, aiming to maintain public trust by ensuring comfort and security in transactions. This approach would consequently enable banks to increase their customer base, allowing for the accumulation of funds and utilization of credit facilities provided by the banking institutions themselves (Sudarmanto et al., 2021).

One of the primary sources of income in the banking sector stems from profit-sharing revenue and the provision of profit-sharing loans (Sudarmanto et al., 2021). However, the provision of loans by banks does not guarantee smooth operations, and the possibility of encountering various negative events leading to losses and potential harm to the bank exists. Non-performing loans (NPLs) are among the risk-laden activities within banking, which can result in an escalation of problematic loan levels. This phenomenon arises from both internal and external factors concerning the bank. The occurrence of such factors is often rooted in borrowers' inability to meet their obligations due to the deteriorating economic conditions of a country.
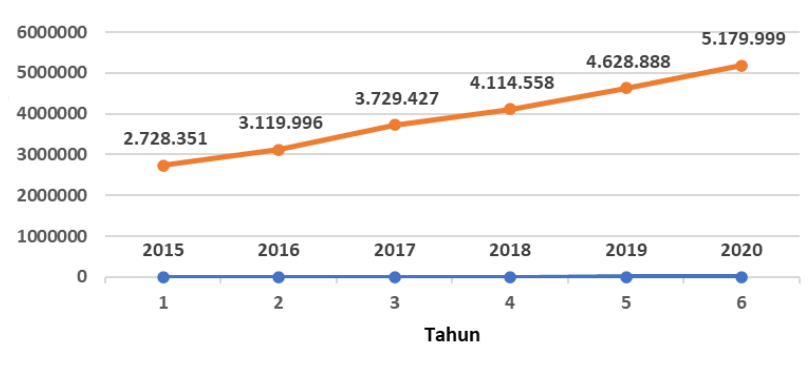

Figure 1. Development of Total Assets Bank, Book IV
Source: Modified of Indonesia Banking Statistics (2020)

Figure 1 illustrates the consistent uptrend in the total assets of BUKU IV Banks each year. The increase in the assets held by these banks consequently leads to an expansion in the volume of loans extended. Dendawijaya (2005) suggests that banks have the opportunity to control the spread rate, meaning they can reduce the interest rates on loans. This approach enhances the bank's effectiveness in catering to customers in need of credit, streamlining loan repayments, and lowering the incidence of problematic loans.

Table 1. Performance of Commercial Bank Book IV Periode 2015-2020

Ratio	Years					
	2015	2016	2017	2018	2019	2020
LDR	85.63%	85.16%	85.96%	89.90%	90.65%	80.11%
ROA	3.53%	3.10%	3.15%	3.29%	3.14%	1.84%
NPL	2.28%	2.79%	2.55%	2.35%	2.35%	2.90%

Source: Secondary Data; Indonesian Banking Statistics (2020)

Based on the facts presented in Table 1, it is evident that both profitability and liquidity

experienced a significant decline in 2016 and 2020. This was primarily due to the high number of debtors unable to repay their loans, resulting from business failures and the drastic impacts of the Covid-19 pandemic. Not only that, the overall health of the banking sector suffered from an increase in Non-Performing Loans (NPL) ratio. However, there exists a contradictory theory to this issue. The high levels of capitalization and total assets of these BUKU IV banks should ideally cover and maintain a stable level of problematic loans, thereby safeguarding the bank's performance and health. (www.wartaekonomi.co.id) (finansial.bisnis.com).

There are several variables that influence Non-Performing Loans (NPL) in measuring the health of a bank. These variables are CAR, LDR, BS, and ROA. CAR indicates how capital is compared to Risk-Weighted Assets (RWA), serving as a means to control the risk of losses in a bank. LDR is used to evaluate liquidity and ascertain a bank's ability to meet its obligations. BS represents the relationship between a bank's asset measurement and ROA reflects the management's capacity to generate profits for the bank, thereby minimizing risks that may arise within the bank.

The Capital Adequacy Ratio (CAR) indicates that the higher the CAR, the better a bank's condition in terms of safety and meeting its obligations, which can subsequently reduce the percentage of Non-Performing Loans (NPL) (Sitanggang, 2020). Research findings by Eka Yulianti et al. (2018) and Yusuf and Fakhruddin (2016) demonstrate that CAR has a positive and significant impact on NPL. Conversely, studies by Kusuma & Haryanto (2016) and Astrini et al. (2018) show that CAR has a negative and significant impact on NPL.

The Loan to Deposit Ratio (LDR) suggests that the higher a bank's LDR, the more loans are disbursed, which can increase profits and effectively control the NPL ratio if the loan disbursement is efficient (Adisaputra, 2012). This theory contradicts the research conducted by Ruslim & Bengawan (2019) and Astrini et al. (2018), which indicate that LDR has a positive impact on NPL. This is because an increased LDR ownership by banks leads to higher credit and unrecoverable debt risks, subsequently causing an increase in NPL.

Bank Size (BS) indicates that on a larger scale, the volume of loans tends to be greater, and banks often focus on interest rate differentials to mitigate credit risks, making their credit management more effective (Dendawijaya, 2005). In contrast to this theory, a different study by Astrini et al. (2018) reveals that bank size has a positive and significant impact on Non-Performing Loans (NPL).

Return On Asset (ROA) is used to gauge a bank's profitability. The higher the ROA, the greater the profits generated, and the likelihood of problematic conditions within a bank is reduced (Gustiadi and Darmawan, 2021). Research findings by Ervina (2016) state that ROA has a significant negative impact on Non-Performing Loans (NPL). However, a study by Mallimi (2017) suggests that ROA does not have a significant impact on NPL.

Based on the presented phenomena and previous research, the researcher is thus interested in conducting a study titled 'The Impact of Capital Adequacy, Liquidity, Bank Size, and Profitability on Credit Risk in BUKU IV Commercial Banks'.

LITERATURE REVIEW
Asymmetric Information Theory

According to King et al. (2017), asymmetric information theory occurs when one party in a transaction possesses more information than the other party. The most common consequence of this information asymmetry is that creditors are unable to differentiate between borrowers of good quality and those of poor quality, resulting in all borrowers being perceived as having a normal level of risk (Ruslim and Bengawan, 2019). Chege and Michongwe (2017) suggest that financial intermediation and the effectiveness of the financial system both require accurate information about potential borrowers and their credit clients.

Credit Risk

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According to Siamat (2004), credit risk is the risk arising from the inability of customers or borrowers to repay the principal amount and interest as agreed upon by the Bank within a specified time frame. According to Riyaldi (2006), Non-Performing Loan (NPL) is the ratio of problematic loans, representing loans with poor collectability, compared to the total credit granted by the bank.

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

Capital Adequacy

According to Nurlela et al. (2021), the capital in a business must be sufficient to cover daily operational expenses. In day-to-day conditions, a steady flow of adequate capital support is crucial to facilitate these operational needs and avoid financial difficulties, minimizing the risk of bankruptcy. Sudarmanto et al. (2021) state that Capital Adequacy Ratio (CAR) can be measured by the ratio of capital to risk-weighted assets to assess the extent to which these assets carry risk relative to the Bank's capital, ensuring its ability to fulfill both short and long-term obligations."

Liquidity

According to Sudarmanto et al. (2021), banking liquidity demonstrates a bank's ability to meet its obligations, particularly the CAR and short-term obligations that are due, and how much a bank can settle its obligations without incurring losses. Kasmir (2015) notes that the Loan to Deposit Ratio is one of the measurements of bank liquidity, obtained by comparing the amount of loans extended to third-party funds such as demand deposits, savings, and time deposits.

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

Bank Size

According to Siringoringo (2017), Bank Size refers to the magnitude of all assets held by a company. The size of a bank also reflects its capability to expand and sustain itself in the face of changes, as larger Bank Size potentially allows the bank to develop business portfolio strategies, particularly in credit provision. Ranyi and Dahl (2003) explain that the Bank Size ratio is derived from the total assets held by a bank compared to the total assets of other banks."

$$Bank\ Size = \frac{Total\ Aset\ Bank}{Total\ Aset\ Seluruh\ Bank\ Populasi} \times 100\%$$

Profitability

According to Dendawijaya (2005), profitability is reflected in how Bank Indonesia emphasizes the magnitude of profits based on the proportionally large assets financed by public deposits, which also determines the condition and health of a bank. Jummalini et al. (2019) note that Return On Asset (ROA) is commonly used in financial statement analysis because it provides an indication of a company's ability to generate future profits based on past performance. Kashmir (2014) explains that Return on Asset (ROA) assesses profitability in relation to total assets, measuring post-tax earnings against total assets.

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

$$CAR = \frac{Modal\ Sendiri}{ATMR} \times 100\%$$

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Research Model

In this study, there are four independent variables: Capital Adequacy Ratio (CAR), Loan to Deposit Ratio (LDR), Bank Size, and Return On Asset (ROA), with the dependent variable being Non-Performing Loan (NPL).
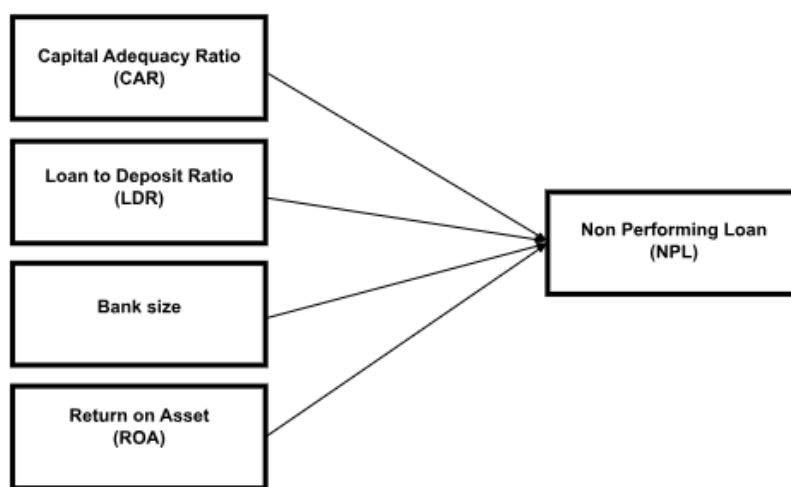

Figure 2. Conceptual Framework
Source: Data processed by author (2022)

Formulation of Research Hypotheses

Hypotheses are formulated based on the theory and framework of thought presented earlier. Through the theory and framework of thought, several hypotheses can be formulated as follows:

H1: Capital Adequacy Ratio negatively influences Non-Performing Loans in BUKU IV Commercial Banks.

H2: Loan to Deposit Ratio negatively influences Non-Performing Loans in BUKU IV Commercial Banks.

H3: Bank Size negatively influences Non-Performing Loans in BUKU IV Commercial Banks.

H4: Return on Asset negatively influences Non-Performing Loans in BUKU IV Commercial Banks.

RESEARCH METHODS

The object of this research is the banking sector of Commercial Banks categorized as Business Activities (BOOK) IV in Indonesia. The research location was conducted through the website of the Financial Services Authority (OJK) (www.ojk.go.id) on commercial banks (BUKU). The population in this study consists of all Commercial Banks BOOK IV in Indonesia for the period 2015-2020, totaling 7 banks. The sampling technique used in this study is a census (complete enumeration) sampling. The type of data used is panel data, and the analysis is facilitated by the E-Views program. The data is sourced from the annual financial reports published by Commercial Banks in Indonesia BOOK IV .

This research applies classical assumption tests in the regression model, involving tests for normality, heteroskedasticity, multicollinearity, and autocorrelation (Basuki and Prawoto, 2015). The analysis model in this study employs panel data regression, with hypothesis testing conducted through the t-test (partial). Before selecting the regression analysis model, tests such as the Chow test, the Hausman test, and the Lagrange Multiplier test are performed. The significance level used for testing in this research is 5% or 0.05.

RESULTS AND DISCUSSION

Descriptive Statistics

Descriptive statistics, including measures such as minimum, maximum, mean, and standard deviation, are employed to provide an overall overview of the data under investigation. This approach offers a concise understanding of the research subject.

Table 2. Descriptive Statistics

	NPL	CAR	LDR	BS	ROA
Mean	2.697143	21.35357	90.68143	15.90595	2.479286
Median	2.825000	21.38000	90.02000	18.64500	2.450000
Mallximum	4.200000	29.58000	107.9200	33.36000	4.190000
Minimum	1.110000	16.28000	65.80000	0.630000	0.240000
Std. Dev.	0.802160	2.457468	7.096971	11.68038	1.053238
Observations	42	42	42	42	42

Source: Data processed by author (2023)

Based on Table 2 above, it can be observed that NPL has a minimum value of 1.1100 and a maximum value of 4.2000, with a mean value of 2.6971 and a standard deviation of 0.8022. CAR exhibits a minimum value of 16.2800 and a maximum value of 29.5800, with a mean value of 21.3536 and a standard deviation of 2.4575. LDR demonstrates a minimum value of 65.8000 and a maximum value of 107.9200, with a mean value of 90.6814 and a standard deviation of 7.0970. BS displays a minimum value of 0.6300 and a maximum value of 33.3600, with a mean value of 15.9059 and a standard deviation of 11.6804. Lastly, ROA showcases a minimum value of 0.2400 and a maximum value of 4.1900, with a mean value of 2.4793 and a standard deviation of 1.0532.

Tests Of Classical Assumption

A. Test of Normality

The normality test conducted in this research is the Jarque-Bera test, as indicated in the following table.
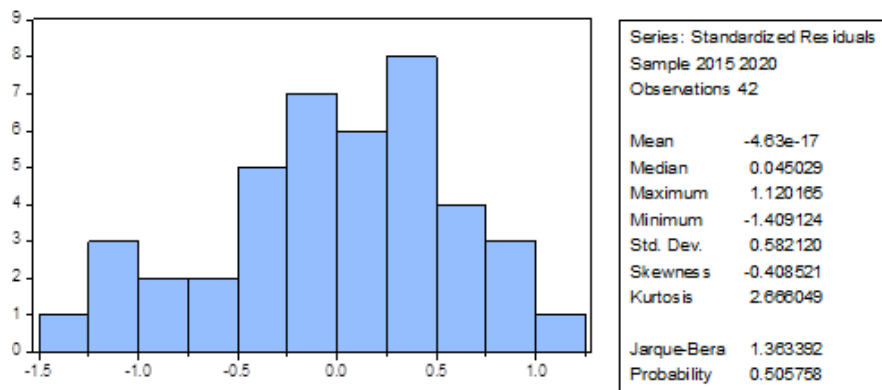

Figure 3. Normality Test Result
Source: Data processed by author (2023)

Based on Figure 3 above, it can be observed that the Jarque-Bera value is 1.3633 and the Probability value is 0.5057, both of which are greater than 0.05. Therefore, it can be concluded that the data in this study is normally distributed.

B. Test of Heteroskedasticity

The results of heteroskedasticity testing using the Glejser test can be seen in the table below.

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Table 3. Heteroskedasticity Test Results

Variable	Coefficient	Std. Error	S t-Statistic	Prob.
C	0.614392	1.224375	0.501800	0.6188
CAR	0.002463	0.028699	0.085809	0.9321
LDR	-0.002324	0.008835	-0.263010	0.7940
BS	0.006407	0.007366	0.869695	0.3901
ROA	-0.040708	0.069936	-0.582069	0.5641

Source: Data processed by author (2022)

Based on Table 3 above, it can be observed that the Probability values in the Glejser test for the independent variables CAR, LDR, BS, and ROA are all above 0.05. This suggests that there is no presence of heteroskedasticity in this study.

C. **Test of Multicollinearity**

In this study, it can be observed that the correlation between some independent variables exceeds the value of 0.8. When the correlation between independent variables is above 0.8, it indicates the absence of multicollinearity, as shown in the following table.

Table 4. Multicollinearity Test Results

	CAR	LDR	BS	ROA
CAR	1.000000	-0.252582	-0.271749	0.306108
LDR	-0.252582	1.000000	-0.416865	-0.221920
BS	-0.271749	-0.416865	1.000000	0.506633
ROA	0.306108	-0.221920	0.506633	1.000000

Source: Data processed by author (2022)

Based on Table 4 above, it can be observed that all the correlation values among the independent variables in this study are above 0.8. From this, it can be concluded that there is no multicollinearity issue in this study. This implies that all the independent variables, namely CAR, LDR, BS, and ROA, do not exhibit a significant correlation relationship with each other.

D. **Test of Autocorrelation**

The autocorrelation test is conducted to determine whether disturbances in period t are correlated with disturbances in period t-1. The results of this test are displayed in the following table.

Table 5. Autocorrelation Test Results

Durbin-Watson stat	1.464234

Source: Data processed by author (2022)

In Table 5, it can be observed that the Durbin-Watson value in this study is 1.4642. This value falls within the tolerance range of the autocorrelation test, which is between -2 and 2. Therefore, it can be concluded that this study does not exhibit autocorrelation symptoms. This indicates that in the research model, there is no correlation disturbance between the time periods used for each variable.

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Model Selection Technique

A. The Chow Test

The Chow test is a test used to determine the most appropriate model for estimating panel data by comparing the Common Effect Model and the Fixed Effect Model.

Table 6. Chow Test Results

Effects Test	Statistic	d.f.	Prob.
Cross-section F	4.739997	(6,31)	0.0016
Cross-section Chi-Square	27.341155	6	0.0001

Source: Data processed by author (2022)

Based on Table 6, it can be observed that the Probability value in the Chi-Square row is 0.0001. This value is below the standard error value of 0.05. Therefore, it can be concluded from the Chow test results that the better model is the Fixed Effect Model.

B. The Hausman Test

The Hausman test is a test used to determine the most appropriate model for estimating panel data by comparing the Fixed Effect Model and the Random Effects Model.

Table 7. Hausman Test Results

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	2.201524	4	0.6988

Source: Data processed by author (2022)

Based on the results above, it can be seen that the Probability value in the Hausman test is 0.6988. This value is above the standard error value of 0.05. Therefore, it can be concluded that the Hausman test selects the Random Effects Model as the appropriate model. This model can also be further confirmed with the Lagrange Multiplier test for final determination.

C. The Lagrange Multiplier Test

The Lagrange Multiplier (LM) test is used to determine the best model between the Fixed Effect Model by comparing the Random Effects Model and the Common Effect Model.

Table 8. Results of Lagrange Multiplier Test

Null (no rand. effect)	Cross-section	Period	Both
Alternative	One-sided	One-sided	
Breusch-Pagan	11.26565	0.089539	11.35519
	(0.0008)	(0.7648)	(0.0008)
Hondall	3.356435	-0.299230	2.161770
	(0.0004)	(0.6176)	(0.0153)
King-Wu	3.356435	-0.299230	2.041912
	(0.0004)	(0.6176)	(0.0206)
GHM	--	--	11.26565
	--	--	(0.0013)

Source: Data processed by author (2022)

Based on the results above, it can be seen that the Prob Both Breusch-Pagan value in the LM test is 0.0008. This value is below the standard error value of 0.05. Therefore, it can be concluded

that the most suitable model for estimating data and testing hypotheses in this research is using the panel data regression with the Random Effects Model (REM).

D. Panel Data Regression Analysis

Based on the model selection results, it can be concluded that the most appropriate model for this research is the Random Effects Model (REM).

Table 9. Regression Results with Random Effects Model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.807781	1.971970	0.916739	0.3652
CAR	-0.004188	0.046804	-0.089469	0.9292
LDR	0.021479	0.014406	1.490922	0.1445
BS	0.002702	0.013657	0.197840	0.8443
ROA	-0.408158	0.122360	-3.335704	0.0019

Source: Data processed by author (2022)

Based on the regression results above using REM, the regression equation for this research can be formulated as follows: NPL = 1.8077 – 0.0041 CAR + 0.0214 LDR + 0.0027 BS – 0.4081 ROA.

From the regression equation above, it can be observed that the constant has a value of 1.8077. This indicates that if all variables CAR, LDR, BS, and ROA have values of zero (equal to 0), then NPL will remain constant with a value of 1.8077. Furthermore, the coefficient value of CAR is -0.0041, indicating that if CAR increases by 1%, NPL will decrease by 0.0041%. The coefficient value of LDR is 0.0214, indicating that if LDR increases by 1%, NPL will increase by 0.0214%. The coefficient value of BS is 0.0027, indicating that if BS increases by 1%, NPL will increase by 0.0027%. The coefficient value of ROA is -0.4081, indicating that if ROA increases by 1%, NPL will decrease by 0.4081%.

E. Test of T (Parsial)

Partial tests are used to observe the influence of each independent variable on the dependent variable. The decision-making criteria in this test involve comparing the calculated t-value with the tabulated t-value and examining its significance level at a significance level of 5% or 0.05.

Based on Table 9 above, the calculated t-value is found to be 0.916739. To obtain the tabulated t-value from the statistical table at a significance level with degrees of freedom (n-k-1), where n is the sample size and k is the number of independent variables. An example to determine the tabulated t-value is with α (n-k-1) = 0.05 (42-4-1) = 0.05 (37), resulting in a tabulated t-value of 2.0262. Based on the table of t-test calculations that have been obtained, the results are as follows:

1. **The influence of Capital Adequacy Ratio (X1) on Non-Performing Loan (Y)**

    CAR has a calculated t-value of -0.0894 < tabulated t-value of 2.0262 with a probability value of 0.9292 > 0.05. It can be concluded that H1 is rejected, indicating that CAR does not have a significant effect on NPL in the Bank Umum category BOOK IV.

    This study found that CAR does not have a significant effect on NPL. This result indicates that the first hypothesis (H1) is rejected. This may suggest that a higher CAR in Bank Umum BUKU IV does not influence the NPL level. It can be interpreted that the management's addition of capital to the bank might have purposes other than improving credit quality, such as investments outside the credit sector or covering potential losses. The CAR held by the bank does not seem to affect the NPL level because the increase in capital might not directly relate to reducing credit risk. For example, the capital increase could be used for business expansion or investments outside the credit sector. These findings align with previous research conducted by Mallimi (2015), Wardhana (2015),

and Gustialti and Diansyah (2021), which also concluded that CAR does not have a significant influence on NPL.

2. The Influence of Loan to Deposit Ratio (X2) on Non-Performing Loan (Y)

The Loan to Deposit Ratio (LDR) has a t-statistic value of $1.4909 <$ t-table value of 2.0262 with a probability value of $0.1445 > 0.05$. It can be concluded that H2 is rejected, indicating that LDR does not have a significant influence on Non-Performing Loan (NPL) in the Commercial Banks category BOOK IV.

This study found that the Loan to Deposit Ratio (LDR) does not have a significant impact on Non-Performing Loan (NPL). This result indicates that the second hypothesis (H2) is rejected. The increase in credit allocation does not lead to an increase in NPL because banks are more selective in choosing quality debtors, thereby not affecting the credit risk level and not disrupting the bank's liquidity. This finding aligns with the theory proposed by Chege and Bichangal (2017), stating that financial intermediation and the effectiveness of the financial system mutually require selective and accurate information about borrower calls and credit utilization. This research outcome differs from the studies by Kusuma & Harjanto (2016) and Yusuf and Fakhruddin (2016), which stated that LDR negatively affects NPL.

3. The Influence of Bank Size (X3) on Non Performing Loan (Y)

BS has a t-statistic value of $0.1978 <$ t-table 2.0262 with a probability value of $0.8443 > 0.05$. It can be concluded that H3 is rejected, meaning that Bank Size (BS) does not have a significant impact on Non-Performing Loan (NPL) in the Category IV Commercial Banks.

The study finds that Bank Size (BS) does not have a significant impact on Non-Performing Loan (NPL). This implies that the third hypothesis (H3) is rejected. The size of total assets in Category IV Commercial Banks does not influence their performance and management quality sufficiently to mitigate the occurrence of risk. The value of Bank Size does not exhibit a significant change in NPL, even though larger banks possess better resources and capabilities for credit diversification. This phenomenon could be attributed to the fact that higher Bank Size doesn't necessarily lead to lower NPL values; borrowers' ability to generate returns for the bank might result in higher NPL figures. This study aligns with research conducted by Sari (2017) and Suryanto (2015), both of which indicate that Bank Size does not significantly affect NPL.

4. The Influence of Return On Asset (X4) on Non Performing Loan (Y)

ROA has a t-statistic value of $-3.3357 >$ t-table 2.0262, with a probability value of $0.0019 < 0.05$. It can be concluded that H4 is accepted, meaning that Return on Asset (ROA) has a significant and meaningful impact on Non-Performing Loan (NPL) in Commercial Banks Category BOOK IV.

This study found that ROA has a negative and significant impact on NPL. This result indicates that the fourth hypothesis (H4) is accepted. ROA is one of the profitability indicators that reflects the ability of the bank's management to generate profits. The larger the ROA, the higher the level of realized profit, which leads to a smaller impact during problematic conditions at the bank.

The findings of this research support the Berger and De Young (1997) theory that states that a high level of defaulting debtors, coupled with low ROA, signifies poor overall management performance, especially in credit activities, which affects the ratio of non-performing loans. The results of this study align with the research by Gustiati and Diansyah (2021) and Wardhana (2015) which state that ROA does not have a significant impact on NPL.

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CONCLUSIONS AND SUGGESTION

Conclusions

This study aimed to examine the influence of the variables Capital Adequacy Ratio, Loan to Deposit Ratio, Bank Size, and Return On Assets on Non-Performing Loans in Category IV Commercial Banks during the period of 2015-2020. Based on the discussed results of the data, it can be concluded that: 1) Partially, CAR does not have a significant impact on NPL in Category IV Commercial Banks. 2) Partially, LDR does not have a significant impact on NPL in Category IV Commercial Banks. 3) Partially, Bank Size does not have a significant impact on NPL in Category IV Commercial Banks. 4) Partially, ROA has a significant negative impact on NPL in Category IV Commercial Banks.

Suggestion

The recommendations that can be provided to various parties are as follows: Category IV banks are expected to maintain the quality and health of these larger banks and must remain cautious in facing economic expansions in the future. For Category IV banking institutions, to minimize credit risk levels, banks can focus on enhancing profitability so that the achieved profit levels can reduce credit risk, resulting in a smaller troubled bank scenario. For future researchers, it is recommended to extend the observation period and the use of samples that are not limited to Category IV, as well as consider adding other variables to obtain more comprehensive information about NPL, such as Inflation, BI Rate, Net Interest Margin, Operating Expense to Operating Income (BOPO), and others.

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