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Exploring the Influence of Capital Adequacy Ratio, Non-Performing Loan, and Loans to Deposit Ratio on Predicting Problematic Conditions in Rural Bank's

Mengeksplorasi Pengaruh *Capital Adequacy Ratio*, Non Performing Loan, dan Loans to Deposit Ratio dalam Memprediksi Kondisi Bermasalah pada Bank Perkreditan Rakyat

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ABSTRACT
This research was conducted to examine the impact of Capital Adequacy Ratio (CAR), Non-Performing Loan (NPL), and Loans to Deposit Ratio (LDR) on the problematic conditions in the banking sector, with a specific focus on Rural Banks in the Riau Province. The population of this study included 34 Rural Banks, and a purposive sampling technique was applied to select 24 Rural Banks that met the specified criteria. The data analysis method employed Ordinary Least Squares through Eviews 12, using panel data from the years 2018-2022. The research findings suggest that Non-Performing Loan (NPL) significantly influences problematic conditions in Rural Banks in the Riau Province. However, Capital Adequacy Ratio (CAR) and Loans to Deposit Ratio (LDR) do not demonstrate a significant impact on the problematic conditions in Rural Banks in the Riau Province.
Keywords: CAR (Capital Adequacy Ratio), NPL (Non-Performing Loan), LDR (Loans to Deposit Ratio), Rural Banks (BPR)

ABSTRAK
Penelitian ini dilakukan untuk menguji pengaruh Capital Adequacy Ratio (CAR), Non Performing Loan (NPL), dan Loans to Deposit Ratio (LDR) terhadap kondisi bermasalah pada sektor perbankan, dengan fokus khusus pada Bank Perkreditan Rakyat (BPR) di Provinsi Riau. Populasi penelitian ini mencakup 34 Bank Perkreditan Rakyat, dan teknik purposive sampling digunakan untuk memilih 24 Bank Perkreditan Rakyat yang memenuhi kriteria yang ditentukan. Metode analisis data menggunakan Ordinary Least Squares melalui Eviews 12, dengan menggunakan data panel dari tahun 2018-2022. Temuan penelitian menunjukkan bahwa Non Performing Loan (NPL) secara signifikan berpengaruh terhadap kondisi bermasalah pada Bank Perkreditan Rakyat di Provinsi Riau. Namun, Capital Adequacy Ratio (CAR) dan Loans to Deposit Ratio (LDR) tidak menunjukkan pengaruh yang signifikan terhadap kondisi bermasalah pada Bank Perkreditan Rakyat di Provinsi Riau.
Kata kunci: CAR (Capital Adequacy Ratio), NPL (Non Performing Loan), LDR (Loans to Deposit Ratio), Bank Perkreditan Rakyat (BPR)

1. Introduction

Banks play a crucial role in the economy at both micro and macro levels within a country. Rural Banks (BPR) are among the key participants in the microfinancial market, and they hold a significant position within communities and the micro, small, and medium-sized enterprises (MSMEs) sector. In accordance with Regulation PJOK.03/2014 egarding Rural Banks by the Financial Services Authority (OJK), the role of BPR is pivotal in fostering national economic growth and supporting the development of dynamic businesses. To achieve these objectives, a resilient national banking sector is essential. This encompasses the Rural Bank industry, which should operate in a healthy, robust, productive, and competitive manner. Thus, BPR is expected to effectively serve the community, particularly in the micro and small business sectors. With

optimal support from the banking sector, it is anticipated that the national economy can develop sustainably

Microfinance institutions face numerous challenges, one of which is poor management. Ineffective bank management can lead to the bankruptcy of the institution. According to a cnbcindonesia, (2023), the number of Rural Banks decreased from 1,608 in 2022 to 1,584 in 2023. This decline is attributed to the volatile financial performance caused by inadequate management within these institutions. The overall asset quality of Rural Banks continues to deteriorate, as reflected in the increasing Non-Performing Loan (NPL) ratio. Banking statistics from the Financial Services Authority (OJK, 2023) indicate that the gross NPL ratio for Rural Banks rose to 10.15% or approximately IDR 13.92 trillion out of a total loan disbursement of IDR 137.48 trillion as of August 2023. This suggests that the management of receivables by In line with the nationwide issues of poor management in the microfinance sector, Rural Banks in the Riau Province of Indonesia face similar challenges. OJK, 2023 shows a decrease in the number of operating Rural Banks in Riau from 34 to 24. This decline poses a significant problem that needs to be addressed to ensure the survival of Rural Banks amid problematic conditions. The ability to manage a bank is evaluated from both internal and external perspectives. According to banking statistics in Indonesia, the repayment rate of loans in Rural Banks in Riau Province is relatively low, experiencing an annual increase in Non-Performing Loans (NPL). This trend results in a reduction of capital in these Rural Banks, indicating that the institutions are facing health issues or are in an unfavorable financial condition (Bank Indonesia, 2006). Based on data analysis, the 24 Rural Banks in Riau Province exhibit a notably high level of Non-Performing Loans (NPL) from 2018 to 2022 as follows:

Table 1. Number of Banks Experiencing Poor Non-Performing Loans (NPL) Period 2018-2022

Year	Number of Problematic Banks
2018	15 Banks
2019	15 Banks
2020	15 Banks
2021	18 Banks
2022	19 Banks

Data sources Processed from OJK 2023 Publications

Table 1 illustrates the total number of People's Credit Banks facing issues in managing their receivables. Out of the 24 operating People's Credit Banks, only 9 banks did not experience non-performing loan problems in 2018. These include BPR Sari Madu, Perumda BPR Rokan Hulu, PD. BPR Rokan Hilir, PT BPR Pekanbaru, PT BPR Harta Mandiri, PT BPR Arsham Sejahtera, and PT BPR Arsham Sejahtera. Based on the analysis presented in the form of a graph, the majority of People's Credit Banks in the Riau Province experienced an increase in the Non-Performing Loan ratio during the period from 2018 to 2022. One notable example is PT BPR Mandiri Jaya Perkasa, which consistently witnessed a significant annual increase in its Non-Performing Loan data.

Figure 1. Non-Performing Loan Graph of BPR Mandiri Jaya

Data Source Processed from OJK 2024

Several studies have demonstrated factors contributing to the problematic conditions of a bank. According to (Soukal et al., 2023) a crucial influencing factor is the Capital Adequacy Ratio (CAR). The better the CAR of a bank, the healthier the bank's condition, and conversely, an inadequate CAR can negatively impact a bank's condition. Another perspective, as stated by Ndambu, (2011) highlights the impact of Non-Performing Loans (NPL) on the problematic conditions of a bank. A higher NPL in a bank diminishes its capital, leading to problematic conditions for the bank. Meanwhile, according to Chandrasari, (2020) the Loans to Deposit Ratio (LDR) also plays a role in influencing the problematic conditions of a bank. Banks with a high LDR face liquidity risks since a substantial portion of their funds has been disbursed as loans. This can become problematic if numerous customers withdraw their deposits simultaneously

Signaling Theory

The Signalling Theory elucidates the rationale behind companies being compelled to disseminate information via their financial reports to external entities. This impetus arises from the information asymmetry existing between the company (management) and external stakeholders, wherein management possesses superior and quicker access to internal company information in comparison to investors and creditors. Financial reports that portray positive performance serve as signals or indications of the company's efficient operation. These affirmative signals are subsequently well-received by external entities, given that market responses are significantly influenced by the fundamental signals emanating from the company. Investor decisions regarding capital allocation hinge on the evaluation that the company can deliver greater value-added compared to alternative investment opportunities (Celani & Singh, 2011; Connelly et al., 2011). Therefore, investor focus is directed toward the company's capabilities as reflected in the issued financial reports. This theory underscores three key points: signal provision, signaler, and signal recipient. Signal provision pertains to the actual conditions experienced by an entity, where the signaler is the management or administrator of the entity disseminating information to stakeholders. The signal recipient, in turn, is the shareholder or stakeholder with interests in the entity (Celani & Singh, 2011; Eldomiaty, 2004; Kharouf et al., 2020; Purwanto, 2019). This theory can delineate the internal and external impacts of the company on potentially problematic conditions, particularly in the context of this research related to people's credit banks.

Problematic Conditions

According to the Financial Services Authority Regulation (PJOK 2016) banks are responsible for maintaining their health by implementing prudence and risk management principles during operational activities. The evaluation of a bank's health is conducted using a risk-based rating approach, both individually and on a consolidated basis. Additionally, banks are obliged to perform self-assessment regarding their health. Bank Indonesia has established parameters for assessing the health of banks, and banks are required to regularly report all their activities during specific periods. The evaluation of a bank's health is conducted annually to identify changes in conditions, whether improvements or deteriorations. If a bank's health continues to improve, it is considered positive and is expected to be maintained. However, for banks showing persistently unhealthy conditions, Bank Indonesia, as the supervisor and developer of banks, can recommend management changes, mergers, consolidations, acquisitions, or even the liquidation of the bank if the condition becomes severe. Capitalization is also a crucial aspect in maintaining the health of a bank

According to OJK, (2016) in financial reports, there is an analysis of financial ratios aimed at facilitating analysts in understanding the financial condition of a company. Ratio analysis is conducted by examining the figures listed in the balance sheet and income statement. This approach involves comparing quantitative data found in the balance sheet and income

statement. Financial ratios, commonly used as analytical tools, assist in assessing the health level of a bank and determining whether a bank is experiencing problems. Some common financial ratios in this context include Capital Adequacy Ratio (CAR), Non-Performing Loans (NPL), and Loan to Deposit Ratio (LDR). These ratios provide insights into the financial health of the bank and help analysts assess stability and potential risks faced by the bank. A bank is considered healthy if the Non-Performing Loans rate is less than 5% and unhealthy if Non-Performing Loans exceed 5% (Bank Indonesia, 2006). To measure problematic conditions in People's Credit Banks, a Dummy Variable is employed, where a bank experiencing problematic conditions, marked by poor health, is assigned a score of 1, and a healthy bank is assigned a score of 0.

Capital Adequacy Ratio (CAR)

According to Bank Indonesia Regulation Number 9/13/PBI/2007 (PBI, 2007), CAR represents the minimum capital provision for banks based on the risk of assets in a broad sense, covering both assets listed in the balance sheet and administrative assets as reflected in contingent obligations or commitments provided by the bank to third parties, as well as market risks. Adequate capital demonstrates a bank's ability to maintain sufficient capital and the bank management's capability to identify, measure, monitor, and control emerging risks that may affect the bank's capital size. The ratio in question is the capital-to-risk-weighted assets ratio (CAR) and, according to Bank Indonesia Regulation Number 10/15/PBI/2008 (Bank Indonesia, 2008). the minimum capital adequacy requirement for commercial banks is 8%.

Devi et al.,(2020) state that CAR is a measurement used to assess capital adequacy. The Capital Adequacy Ratio (CAR) indicates the sufficiency of capital set by regulatory bodies, specifically applicable to industries under government supervision, such as banking. Banks can use financial ratios to evaluate their capital adequacy and other financial performances. According to the Financial Services Authority regulations, the minimum capital requirement for banks is 8%. A study by Sari (2017) asserts that CAR has a positive impact on firm value. CAR is a capital sufficiency ratio designed to absorb potential loss risks faced by a bank. The higher the CAR, the better the bank's ability to bear the risk associated with each risky credit or productive asset

This finding is supported by the research of Halimah and Julianty (2018), stating a positive correlation between Capital Adequacy Ratio (CAR) and Price to Book Value. According to Bank Indonesia Circular Letter No. 6/23/DPNP dated May 31, 2004, CAR can be formulated as follows:

$$CAR = \frac{Capital}{Risk - Weighted\ Assets} \text{x} 100\%$$

AIf the Capital Adequacy Ratio (CAR) is high, it indicates that the bank has sufficient capital to absorb losses. Banks with a low CAR are more vulnerable to problematic conditions because they have a smaller capital buffer to absorb losses arising from problematic assets or operational failures (Soukal et al., 2023). Therefore, the proposed hypothesis is:

H1: Capital Adequacy Ratio influences the problematic conditions of Rural Bank's in the Riau Province.

Non-Performing Loan (NPL)

Non-Performing Loan (NPL) is a ratio that compares the total amount of non-performing loans to the total bank loans, often associated with the likelihood of default or failure to repay. A smaller NPL value indicates that the bank is more effective in managing credit risks, as changes below 2% are considered healthy by Bank Indonesia. A high NPL level creates serious challenges that can undermine financial stability. Firstly, the impact on profitability becomes evident, as companies must allocate reserves to address potential losses due to problematic loans,

ultimately reducing net income available to support operational and long-term growth, hindering financial sustainability. Moreover, the increased credit risk caused by high NPL can reduce credibility in the eyes of investors and creditors, potentially raising borrowing costs or even impeding the ability to obtain external financing (Saputra & Mayangsari, 2022). Specifically, liquidity consequences can be a serious concern, with funds expected from borrowers unable to pay possibly not being recovered in a timely manner, hindering the fulfillment of daily financial obligations and threatening operational continuity. Impact on capitalization and leverage also occurs, as companies need to allocate additional capital to deal with NPL, limiting the ability to invest capital in more productive activities and affecting leverage ratios that can damage financial image and hinder access to capital markets (Nurhikmah & Rahim, 2021). A high level of NPL can also result in a credit rating downgrade by rating agencies, impacting higher borrowing costs and causing additional financial difficulties, which can harm overall financial sustainability. Therefore, effective NPL risk management becomes crucial in maintaining and enhancing Financial Sustainability. Credit risk profiles (non-performing, doubtful, or bad loans) in the banking sector align with implemented credit risk management measures, including restructuring for debtors, by applying transactional methods and managing their risk portfolios, as outlined by Bank Indonesia, (2015) :

$$NPL = \frac{Non - Performing\ Loans}{Total\ Loans} \text{x} 100\%$$

H2: *Non-Performing Loan (NPL)* Influences the problematic conditions of Rural Bank's in the Riau Province

Loan to Deposit Ratio

Loan to Deposit Ratio (LDR) is the ratio of total loans to Third Party Funds (DPK) collected by the Bank (Muhammad Adil, 2022). This ratio indicates the level of a bank's ability to channel funds from third parties in the form of loans. When further developed, it is not only compared to loans but also extended to include issued securities (Bonds) and core capital. To determine the extent of the credit expansion carried out by the bank, it is essential to look at the value of the Loan to Deposit Ratio, which assesses the ratio of loans to third-party funds, also known as Loan to Deposit Ratio. J. Feldman & Taylor Aggeler, (1998) define Loan to Deposit Ratio as a metric used to evaluate a bank's ability to repay depositors and other creditors without excessive costs while continuing operations. According to Bank Indonesia, (2017) Loan to Deposit Ratio (LDR) is a ratio that measures the proportion of funds disbursed by the bank in the form of loans to the total funds received by the bank from the public in the form of deposits. This ratio is crucial in measuring the bank's liquidity and the effectiveness of using funds received from the public. The Loan to Deposit Ratio is calculated using the following formula:

$$LDR = \frac{Total\ Loans\ Given}{Total\ Third - Party\ Funds} \text{x} 100$$

A high Loan to Deposit Ratio indicates that a significant portion of the bank's funds is invested in the form of loans. This may create liquidity risks if many customers withdraw their funds simultaneously, as the bank may not have enough liquid funds to meet these withdrawal requests. In extreme conditions, this could trigger a serious liquidity crisis (Aprilliadi, 2020).

H3: Loan to Deposit Ratio influences the problematic conditions of Rural Bank's in the Riau Province

2. Research Method

Data Source

The research methodology employed in this study encompasses the associative method and descriptive research method. The associative approach aims to understand the direction

and influence of each independent variable on its dependent variable (Ghozali, 2011; Sekaran & Bougie, 2011; Sugiyono, 2019). The independent variables in this research consist of the Capital Adequacy Ratio (CAR), Non-Performing Loan (NPL), and Loans to Deposit Ratio (LDR), while the dependent variable is the problematic condition (KB) in Rural Banks in the Riau Province.

Population and Sample

The population for this research consists of rural credit banks operating in the Riau Province, totaling 34 ruralbanks, utilizing purposive sampling technique. However, based on the purposive sampling technique, only 24 rural credit banks in the Riau Province meet the specified criteria.

Data Analysis Technique

This research aims to investigate the impact of green banking and capital adequacy ratio on the profit growth of Islamic commercial banks in Indonesia. The data analysis technique employed in this study utilizes panel data regression using Eviews 12 software. Panel data refers to information obtained from observations on several individual entities or cross-sectional units, each observed over consecutive time periods (time units). Generally, there are two approaches used in modeling panel data: the model without individual effects (common effect) and the model with individual effects, both fixed and random (Gujarati, 2011; IHS Global, 2020).

1. Panel Data Regression Test

a. Selection of Panel Data Regression Analysis Technique

Panel data is a combination of cross-sectional and time series observation data. There are three main approaches to estimating panel data: 1) Common Effect Model (CEM), 2) Fixed Effect Model (FEM), and 3) Random Effect Model (REM)

1) Chow Test for Choosing Between CEM and FEM:

Hypothesis (Ho): Common Effect Model (CEM)

Hypothesis (Ha): Fixed Effect Model (FEM)

a) If the F-statistic's probability value is less than the significance level (5%), reject Ho
b) If the F-statistic's probability value is greater than the significance level (5%), reject Ha.

2) Hausman Test:

Hausman test is used to determine whether to use Fixed Effect Model (FEM) or Random Effect Model (REM).

a) If the probability value is < 0.05, the model used is Fixed Effect Model (FEM).
b) If the probability value is > 0.05, the model used is Random Effect Model (REM).

3. Hypothesis Testing with t-test and F-test

4. Coefficient of Determination (R2)

3. Research Results And Discussion

After conducting panel data regression analysis using three methods, namely Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM), the next step is to select the best regression model suitable for the data. This is achieved by performing the Chow test and the Hausman test

1. Chow test

Table 2. Chow Test Result

Effects Test	Statistic	d.f.	Prob.
Cross-section F	1.744350	(22,89)	0.0359
Cross-section Chi-square	41.228033	22	0.0077

Data Source: Data processed using EViews 2024

Jika dilihat dari hasil output di atas, dimana nilai chi-square nya lebih kecil dari alpha 0,0077 < 0,05 maka model yang tepat menggunakan *Fixed Effect Model* (REM) dani nilai Cross Section F lebih kecil dari 0,05 maka harus dilakukan uji hausman.

2. Hausman Test

This test is conducted to choose between the Fixed Effect Model (FEM) and the Random Effect Model (REM). The Hausman test is performed when the results of the Chow test accept the alternative hypothesis (Ha), which is the Fixed Effect Model (FEM). The Fixed Effect Model (FEM) is then compared to the Random Effect Model (REM).

Table 3. Hausman Test Result

Correlated Random Effects - Hausman Test			
Equation: Untitled			
Test cross-section random effects			
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	0.607931	3	0.8946

Sumber; Data olahan eviews 2024

Based on the above Table 3, the probability value is 0.8946. Thus, the selected model is the Random Effect Model. This means, from the Hausman test, the model deemed more suitable for use in the panel data regression is the Random Effect Model. The next test to determine the appropriate model for use in panel data regression is the Lagrange Multiplier (LM) Test

Table 4. Angrange Multiplier (LM)

Lagrange Multiplier Tests for Random Effects			
Null hypotheses: No effects			
Alternative hypotheses: Two-sided (Breusch-Pagan) and one-sided			
(all others) alternatives			
	Test Hypothesis		
	Cross-section	Time	Both
Breusch-Pagan	3.437854	1.208397	4.646251
	(0.0637)	(0.2716)	(0.0311)

Data Source: Data processed using EViews 2024

Based on the Lagrange multiplier test, the cross-section Breusch-Pagan value obtained is 0.0637, which is greater than 0.05. According to these results, the selected model is the Common Effect Model. Therefore, the appropriate regression analysis to use is the Common Effect Model regression analysis.

Table 5. t Statistic test result

Sample: 2018 2022				
Periods included: 5				
Cross-sections included: 24				
Total panel (balanced) observations: 115				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.123120	0.086572	12.97321	0.0000
CAR	-0.055465	0.179503	-0.308990	0.7579
NPL	-10.70031	0.707081	-15.13307	0.0000
LDR	0.029290	0.058117	0.503989	0.6153

Data Source: Data processed using EViews 2024

Based on the multiple linear regression analysis of panel data using EViews 12 with the Common Effect Model, the calculated t-value for Capital Adequacy Ratio (CAR) is -0.309, which is less than -1.980, with a probability value of 0.758 (> 0.05). This implies that Capital Adequacy Ratio does not have a significant effect on the problematic condition of rural credit banks in the Riau Province. Through the regression test, it is observed that the calculated t-value for Non-Performing Loan (NPL) is -15.133, which is greater than -1.980, with a probability value of 0.000 (< 0.05). This suggests that Non-Performing Loan (NPL) significantly influences the problematic condition of rural credit banks in the Riau Province. Furthermore, the calculated t-value for Loans to Deposit Ratio (LDR) is 0.504, which is less than 1.980, with a probability value of 0.615 (> 0.05). This indicates that Loans to Deposit Ratio (LDR) does not significantly affect the problematic condition of rural credit banks in the Riau Province. The results of this research are obtained using the Common Effect Model regression with the following equation:

KB = 1.19833509059 - 11.0858794276*NPL - 0.0104607717512*LDR - 0.162264489694*CAR + [CX=F]

Tabel 6. UJI F

Root MSE	0.256121	R-squared	0.679404
Mean dep endent var	0.713043	Adjusted R-squared	0.670740
S.D. dependent var	0.454321	S.E. of regression	0.260695
Akaike info criterion	0.183230	Sum squared resid	7.543754
Schwarz criterion	0.278706	Log likelihood	-6.535730
Hannan-Quinn criter.	0.221983	F-statistic	78.41019
Durbin-Watson stat	1.497636	Prob(F-statistic)	0.000000

Data Source: Data processed using EViews 2024

From the table above, it is evident that the F probability value is 0.0000, indicating that the measurements for each variable in this study are accurate, and each variable in this research meets the criteria for the simultaneous F test.

Tabel 7. R test Result

R-squared	0.679404
Adjusted R-squared	0.670740

Data Source: Data processed using EViews 2024

Table 7 explains that the Adjusted R-squared value for the Troubled Condition in rural credit banks in the Riau province is 0.670 or 67%, meaning that the value is influenced by the variance of its independent variables, namely Capital Adequacy Ratio, Non-Performing Loan, and Loans to Deposit Ratio, at a strong level (Sarstedt et al., 2020).

Capital Adequacy Ratio (CAR) does not affect the Troubled Condition in Rural Banks in Riau Province

Based on the research findings, it is indicated that the Capital Adequacy Ratio (CAR) does not have a significant effect on the Troubled Condition in Rural Banks in Riau Province. This result contradicts the opinion of experts who assert that Capital Adequacy Ratio (CAR) affects the troubled condition (Andrew G Haldane, 2012). The findings of this study are inconsistent with several previous studies stating that a poor Capital Adequacy Ratio (CAR) in an entity will affect its condition (Aprilliadi, 2020; Bestari & Rohman, 2013; Nugroho & Sampurno, 2011). This research can be explained based on the processed data related to the Capital Adequacy Ratio (CAR) in rural banks in Riau Province, which is still considered good, and thus, it does not have a significant impact on the troubled condition of Rural Banks in Riau Province. This result aligns with previous studies stating that other factors such as risk management and macroeconomic

conditions have a more significant influence on bank stability than CAR only (Pasiouras et al., 2009).

Non-Performing Loan (NPL) has a negative influence on the Troubled Condition in Rural Banks in Riau Province

The findings of this research indicate that Non-Performing Loan (NPL) has an impact on the Troubled Condition in Rural Banks in Riau Province. This result is supported by the increasing trend in the accounts receivable turnover ratio in Rural Banks in Riau Province each year. Among the 24 rural banks sampled in this study, only a small portion were able to manage their receivables effectively. The research findings align with expert opinions stating that NPL can lead to financial instability in banks by affecting loan repayments and increasing credit risk. A higher ratio of Non-Performing Loans (NPL) is associated with adverse effects (Iqbal & Nosheen, 2023) This result is consistent with the research conducted by (Abdi, 2021) indicating that problematic loans negatively impact bank profits and may necessitate urgent recapitalization while limiting credit provision, thus contributing to troubled conditions in the bank. Another viewpoint by Andriani, (2013) states that problematic loans result in a loss of opportunities for banks to generate income from the granted credit, reducing profit earnings and adversely affecting bank profitability.

Loan to Deposit Ratio (LDR) does not have a significant impact on the Troubled Condition in Rural Banks in Riau

he Loan to Deposit Ratio (LDR) is a ratio that measures the extent to which a bank's loans compare to the total deposits received. This ratio provides an indication of the bank's liquidity and its credit disbursement strategy. A high LDR may suggest an aggressive credit disbursement strategy, while a low LDR indicates a more conservative approach. Based on the processed data, the LDR in Rural Banks in Riau Province is at a reasonable ratio, which does not impact the troubled conditions in these banks. This finding contradicts the opinion of experts who state that banks with a poor LDR are prone to experiencing problematic conditions(Dietrich & Wanzenried, 2011). The results of this research do not align with some previous studies, which suggest that if the LDR in a bank cannot increase deposits, it may lead to troubled conditions in that bank (Dietrich & Wanzenried, 2011; DiSalvo & Johnston, 2017). On the other hand, this research is in line with the view that banks can effectively manage liquidity and credit risks even with a high LDR, depending on market conditions and management strategies (Angbazo, 1997)

4. Conclusion

This study aims to assess the impact of Capital Adequacy Ratio (CAR), Non-Performing Loan (NPL), and Loans to Deposit Ratio (LDR) on problematic conditions in Rural Banks (Bank Perkreditan Rakyat - BPR) in the Riau Province. Utilizing panel data from 24 selected BPRs during the period 2018-2022, the research findings indicate that CAR does not have a significant impact on problematic conditions in BPRs in the Riau Province. Conversely, NPL significantly influences problematic conditions, indicating challenges in receivables management in the majority of BPRs. Meanwhile, LDR does not have a significant impact on problematic conditions, suggesting that the loan-to-deposit ratio considered reasonable in BPRs does not significantly contribute to problematic conditions. The results of this study provide valuable insights for regulatory frameworks and banking practices in the microfinance sector, highlighting the importance of NPL management in ensuring stability and profitability of BPRs in the Riau Province.

The research underscores the importance of effective management of Non-Performing Loans (NPL) to ensure the stability and profitability of Rural Banks in Riau Province. While Capital Adequacy Ratio (CAR) is a regulatory requirement, its direct impact on troubled conditions appears limited in comparison to other factors.

Loans to Deposit Ratio (LDR) is not a significant determinant of troubled conditions, challenging the notion that a poor LDR leads to problematic situations

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