



The Influence of Credit Risk and Liquidity with Guarantee Interest Rate as a Moderator on the Financial Performance of Conventional and Islamic Rural Banks (BPR and BPRS)

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Abstract

This study aims to evaluate the financial performance (profitability), credit risk, and liquidity of BPR and BPRS before and during the pandemic. The study focuses on analyzing the impact of credit risk and liquidity on profitability and the moderating effect of the guarantee interest rate on liquidity in relation to the financial performance of BPR and BPRS. A total sample of 1,349 BPR and 153 BPRS across Indonesia was analyzed using Stata software. The research employed quantitative methods to test the proposed hypotheses regarding the relationships between credit risk, liquidity, and profitability while assessing the moderating role of the guarantee interest rate. The findings show that NPL/NPF significantly affects the financial performance (ROA) of BPR and BPRS, with an increase in NPL/NPF negatively impacting profitability. Additionally, the guaranteed interest rate strengthens the positive relationship between LDR/FDR and ROA, indicating that higher interest rates improve fund management and financial performance. This study contributes to the literature by highlighting the significant role of credit risk management and the importance of interest rate moderation in enhancing the financial stability and profitability of BPR and BPRS. It also emphasizes the differences in risk management approaches between BPR and BPRS, especially during economic downturns like the pandemic.

Keywords: Financial performance, credit risk, liquidity, profitability, interest rate moderation, BPR, BPRS

Introduction

The COVID-19 pandemic, which emerged at the end of 2019, has disrupted almost every sector globally, including the financial and banking industries. The spread of the SARS-CoV-2 virus was declared a pandemic by the World Health Organization (WHO) in early 2020 due to its rapid transmission and high fatality rates. As of December 2020, over 80 million cases and nearly 2 million deaths were recorded across 221 countries (WHO, 2020). This unprecedented crisis led many nations to implement strict measures such as lockdowns, curtailing economic activities and severely affecting financial institutions, particularly in developing economies.

The banking sector, a critical intermediary in any economy, faced severe challenges during the pandemic, with disruptions in global trade, supply chains, and credit markets. Micro, Small, and Medium Enterprises (MSMEs), which typically function as a buffer during financial crises, were also adversely affected by the pandemic. With the cessation of production and consumption activities, MSMEs experienced reduced revenue and limited capacity to repay loans, leading to an increase in non-performing loans (NPLs) in the banking sector (Sofyan, 2021). This situation prompted banks to face heightened credit risk, threatening their financial stability (Sofyan, 2021).

In Indonesia, the performance of Bank Perkreditan Rakyat (BPR) and Bank Pembiayaan Rakyat Syariah (BPRS) was notably affected during the pandemic. While these banks primarily serve local communities and MSMEs, the pandemic-induced uncertainty resulted in a sharp decline in profitability and liquidity. According to the Financial Services Authority (OJK), many BPRs and BPRS faced difficulties in meeting the regulatory requirements for core capital, leading to a reduction in the number of BPRs and BPRS from 1,770 in 2017 to 1,607 in 2022 (OJK, 2024).

The impact of the pandemic on the financial performance of BPRs and BPRS was reflected in key financial ratios, including the Non-Performing Loan (NPL) ratio, Loan to Deposit Ratio (LDR), Capital Adequacy Ratio (CAR), and Return on Assets (ROA). Studies by Sofyan (2021) and Raharjo et al. (2021) reported that BPRs and BPRS experienced significant increases in NPLs, which

negatively impacted their overall profitability and capital adequacy (Raharjo et al., 2021). Additionally, liquidity risk, as measured by the LDR and Cash Ratio (CR), fluctuated during the pandemic due to reduced loan demand and increased uncertainty in the banking environment.

Several studies have analyzed the impact of financial crises on the banking sector, but few have specifically focused on the effects of the COVID-19 pandemic on rural and Islamic banks such as BPR and BPRS. This gap is critical because these banks play a unique role in supporting local economies, particularly MSMEs, which are more vulnerable to economic shocks. While previous research has explored the effect of credit and liquidity risks on the performance of commercial banks, limited studies have examined these risks in the context of BPR and BPRS during the pandemic.

Research by Anwar et al. (2020) suggested that to maintain profitability, BPRs need to manage credit risk effectively and optimize liquidity. However, during the pandemic, the heightened uncertainty in the financial markets and the sharp decline in loan repayments severely hampered the ability of BPRs to meet their financial obligations. This situation also highlighted the need for stronger regulatory support, particularly from institutions such as Lembaga Penjamin Simpanan (LPS), which guarantees depositors' funds and plays a crucial role in maintaining financial stability (Anwar et al., 2020).

Despite the various challenges, the BPR sector showed some resilience, especially in maintaining its liquidity position. For instance, the Cash Ratio of BPRs and BPRS fluctuated during the pandemic but remained above the regulatory threshold, indicating that these banks were still able to meet short-term obligations. However, the long-term sustainability of these banks remains in question, particularly given the ongoing uncertainty in global economic recovery efforts (Fitri et al., 2022).

The role of LPS in maintaining stability in the banking sector has also been critical during the pandemic. LPS guarantees depositors' funds, ensuring confidence in the banking system. The institution has adjusted the guarantee interest rate several times during the pandemic to reflect changes in the market environment. A study by Juniasti (2022) highlighted that fluctuations in the LPS guarantee interest rate affected the liquidity and profitability of BPRs and BPRS, particularly with regard to their ability to attract deposits and manage credit risk (Juniasti, 2022).

This research aims to fill the gap in understanding how credit risk, liquidity, and regulatory factors such as LPS guarantee interest rates have affected

the performance of BPR and BPRS during the COVID-19 pandemic. By focusing on key financial indicators such as CAR, NPL, ROA, and LDR, this study seeks to provide insights into the vulnerabilities and strengths of these banks during periods of economic turmoil.

In terms of novelty, this study expands on previous research by examining the moderating role of LPS guarantee interest rates on the relationship between liquidity and financial performance. While past studies have primarily focused on commercial banks, this study offers a unique perspective by analyzing rural and Islamic banks, which play a crucial role in supporting local economies and underserved communities.

Therefore, this research intends to analyze the impact of credit risk and liquidity on the financial performance of BPR and BPRS during the COVID-19 pandemic, with a specific focus on the moderating role of LPS guarantee interest rates. The objectives of this research are to determine how credit risk affects the financial performance of BPR and BPRS, how liquidity influences their performance, and how LPS guarantee interest rates moderate the relationship between liquidity and financial performance.

Literature Review

Agency Theory and Signal Theory in Banking

Agency theory and signal theory are often used to explain the dynamics between bank management and stakeholders. Jensen and Meckling (1976) introduced agency theory to address the conflicts of interest between principals (shareholders) and agents (bank managers). This theory has been applied in numerous studies to assess how bank management's actions influence financial performance and risk-taking behavior. In the context of rural banks, agency problems can arise when management pursues short-term gains at the expense of long-term stability, particularly during crises like the COVID-19 pandemic (Jensen & Meckling, 1976). Signal theory, as described by Spence (1973), suggests that banks send signals to the market through their financial reports and other disclosures. For BPRs and BPRS, maintaining a healthy CAR, low NPLs, and stable liquidity ratios serve as positive signals to stakeholders, indicating the institution's ability to manage risk effectively (Spence, 1973).

The role of financial institutions, particularly banks, as intermediaries in channeling funds from savers to borrowers, is essential for economic stability. This role becomes even more crucial during periods of economic distress, such

as the COVID-19 pandemic, which significantly impacted global financial systems. Several studies have focused on how banking institutions, including conventional and Islamic banks, have navigated the challenges posed by increased credit and liquidity risks during such crises. This literature review aims to synthesize key research on credit risk, liquidity management, financial performance, and the moderating role of deposit insurance rates, particularly in the context of Bank Perkreditan Rakyat (BPR) and Bank Pembiayaan Rakyat Syariah (BPRS).

The Impact of Credit Risk on Financial Performance

Credit risk is one of the main risks faced by banks, including rural banks (BPR) and Islamic rural banks (BPRS). This risk occurs when borrowers or debtors fail to meet their obligations, leading to an increase in non-performing loans (NPL) in conventional banks and non-performing financing (NPF) in Islamic banks. A high NPL/NPF ratio indicates a rise in unproductive assets, which can ultimately decrease interest income and erode bank profitability, measured by Return on Assets (ROA). Poor performance in managing credit risk can negatively affect public trust in banks, which in turn impacts the stability and sustainability of their operations. Previous studies by Hidayat et al. (2021) and Wahyudi and Muharram (2023) indicate that high credit risk significantly contributes to a decline in ROA, especially in unstable economic conditions such as during the pandemic.

The differences in how BPR and BPRS manage credit risk also warrant attention. BPRS, operating under Sharia principles, tends to have lower credit risk due to strict supervision by the Sharia Supervisory Board (DPS) and the prohibition of engaging in activities involving elements of usury and uncertainty. This makes BPRS more resilient to economic shocks compared to conventional BPR. However, during the COVID-19 pandemic, both BPR and BPRS faced significant pressure on their credit portfolios, as reflected in the rising NPL/NPF ratios. Based on this understanding, it can be concluded that high credit risk tends to negatively impact the financial performance of BPR and BPRS, particularly in terms of ROA.

Hypothesis 1 (H1): Non-Performing Loans (NPL) or Non-Performing Financing (NPF) negatively affect the Return on Assets (ROA) of BPR/BPRS.

The Impact of Liquidity on Financial Performance

Liquidity is a crucial aspect of banking operations, including BPR and BPRS, reflecting the bank's ability to meet its short-term obligations without disrupting financial stability. Liquidity ratios such as the Cash Ratio (CR) and the Loan to Deposit Ratio (LDR) or Financing to Deposit Ratio (FDR) are used to measure how efficiently banks manage their liquidity. A high CR may indicate the presence of funds that have not been disbursed as loans or financing, known as idle cash. While a high CR can reduce liquidity risk, it also lowers bank profitability because idle cash does not generate income and increases operational costs, ultimately reducing the Return on Assets (ROA). Research by Damayanthi et al. (2023) and Purwanti and Warasto (2023) supports the view that poorly managed liquidity can negatively affect ROA.

Conversely, an optimal LDR/FDR ratio indicates that the bank has successfully channeled its funds effectively into loans or financing, contributing positively to financial performance. A high LDR/FDR signifies that the bank is performing its intermediation function well, reducing idle cash and increasing revenue through the disbursement of funds to productive sectors. However, it is important for banks to maintain a balance between fund collection and loan disbursement to avoid excessive liquidity risk. Previous studies by Raharjo et al. (2021) and Yasin & Fisabilillah (2021) suggest that well-managed liquidity can improve ROA, though it should be noted that both excessively high or low liquidity levels can have implications that affect a bank's financial performance.

Hypothesis 2a (H2a): The Cash Ratio (CR) negatively affects the ROA of BPR/BPRS.

Hypothesis 2b (H2b): The Loan to Deposit Ratio (LDR) or Financing to Deposit Ratio (FDR) positively affects the ROA of BPR/BPRS.

The Moderating Effect of LPS Deposit Guarantee Interest Rate on the Relationship between Liquidity and Financial Performance

The deposit guarantee interest rate set by the Indonesian Deposit Insurance Corporation (LPS) plays an important role in managing banking liquidity, including BPR and BPRS. This guarantee interest rate serves as a reference for banks in determining deposit interest rates, particularly for time deposits, which are expected to attract funds from the public. When the guarantee interest rate rises, banks tend to increase their deposit interest rates to maintain the attractiveness of their savings products. However, this increase can also raise the cost of funds, which ultimately affects the bank's financial

performance. If liquidity is not well managed, the rising cost of funds can reduce profitability, especially when loan interest rates cannot be increased in line with the rising cost of funds. Research by Hartanto (2022) and Juniasti (2022) shows that the guarantee interest rate has a significant impact on determining bank profitability, with direct implications for liquidity management.

In the context of liquidity, the LPS deposit guarantee interest rate can moderate the effect of liquidity ratios such as the Cash Ratio (CR) and Loan to Deposit Ratio (LDR) or Financing to Deposit Ratio (FDR) on Return on Assets (ROA). A higher guarantee interest rate can reduce the effectiveness of the CR in improving ROA because the costs associated with unallocated funds (idle cash) increase. On the other hand, a moderate guarantee interest rate can strengthen the positive relationship between LDR/FDR and ROA by encouraging banks to channel more funds into productive loans or financing. During a pandemic situation like COVID-19, the role of the deposit guarantee interest rate becomes increasingly important as banks need to adjust their liquidity strategies to remain competitive and maintain profitability.

Hypothesis 3a (H3a): The LPS deposit guarantee interest rate negatively moderates the effect of CR on ROA of BPR/BPRS.

Hypothesis 3b (H3b): The LPS deposit guarantee interest rate positively moderates the effect of LDR/FDR on ROA of BPR/BPRS.s

Method

This study employs a quantitative research design with a comparative approach to examine the financial performance of Bank Perkreditan Rakyat (BPR) and Bank Pembiayaan Rakyat Syariah (BPRS) before and during the COVID-19 pandemic. A comparative approach enables researchers to compare financial performance, credit risk, and liquidity between BPR and BPRS under similar economic conditions (Sekaran & Bougie, 2016). The study specifically analyzes key financial metrics such as Return on Assets (ROA), Non-Performing Loans (NPL), Cash Ratio (CR), and Loan to Deposit Ratio (LDR) to determine how credit and liquidity risks influence financial performance during the 2017-2022 period.

The population of this study comprises all BPR and BPRS institutions in Indonesia that are registered and licensed by Otoritas Jasa Keuangan (OJK) from 2017 to 2022. The population includes 1,440 BPRs and 167 BPRSs. A purposive sampling technique is used to select 1,349 BPRs and 153 BPRSs as the study's sample. The criteria for sample selection are based on the availability of complete

financial reports for the entire study period. The use of purposive sampling ensures that the selected institutions are representative of the population and meet the research objectives.

The data collection method focuses on secondary data, primarily derived from financial reports published by OJK. These reports provide detailed information on key financial ratios, allowing for a comprehensive analysis of credit risk, liquidity, and financial performance. The study also utilizes relevant literature, journals, and official documents to support the analysis. Data are processed using quantitative statistical methods to generate insights, which are then presented in tables, graphs, and diagrams for better visualization and interpretation.

For data analysis, this study utilizes panel data regression to analyze the impact of credit and liquidity risks on financial performance. The panel data model includes cross-sectional data from 1,502 institutions across six years, resulting in a total of 9,012 observations. The Stata software version 14 is employed to process the data, allowing the researcher to assess the relationships between the independent variables (credit and liquidity risks), the moderating variable (LPS guarantee rates), and the dependent variable (ROA). The analysis also includes classical assumption tests to ensure the validity and reliability of the regression models.

Table 1 Variable Measurement

No	Variable	Definition
	Financial Performance	
1	Return on Assets (ROA)	ROA is a measure that shows a company's ability to optimize its assets to generate profit. ROA is obtained by dividing the total Net Income by the average total assets of the BPR or BPRS. ROA = (Profit before tax) / (Average total assets)
	Risk	
2	Non-Performing Loan (NPL)	NPL, also known as Non-Performing Financing (NPF) in Islamic banking, is one of the key ratios for quickly assessing a bank's health. It compares the amount of non-performing loans to the entire loan portfolio. From the NPL, one can evaluate profitability conditions, credit risk, capital conditions, liquidity, and market risk. NPL = (Non-performing loans) / (Total loans)

	Liquidity	
3	Cash Ratio (CR)	CR measures a company's ability to meet its current liabilities or short-term debt using its total cash and cash equivalents. $CR = (\text{Total liquid assets}) / (\text{Total current liabilities})$
4	Loan to Deposit Ratio (LDR) / Financing to Deposit Ratio (FDR)	LDR/FDR is the ratio of total loans to total deposits received. This financial ratio is used as an indicator of a bank's ability to disburse core capital and third-party funds (DPK) sourced from the public (in the form of savings or time deposits) into loans or financing. LDR/FDR serves as an indicator of a bank's liquidity assessment, i.e., its competence to repay obligations to its customers. The higher the ratio, the lower the bank's liquidity capability. $LDR/FDR = (\text{Loans}/\text{Financing}) / (\text{Third-party funds})$
	Moderating Variable	
5	LPS Deposit Guarantee Interest Rate	The interest rate on deposits guaranteed by the Indonesia Deposit Insurance Corporation (LPS) is based on a specified time period.
	Control Variables	
6	Bank Size	Represents the size of a banking institution, measured by the natural logarithm of the bank's total assets. $\text{Bank Size} = \text{Ln} (\text{Total Assets})$
7	Covid-19 Pandemic	Valued at 1 to represent the Covid-19 Pandemic period (data for 2017-2019) and 0 for the Non-Pandemic Covid-19 period (data for 2020-2022).
8	Capital Adequacy Ratio (CAR)	CAR is a ratio that measures a bank's capital indicator. CAR is calculated by dividing capital by risk-weighted assets (RWA). $CAR = \text{Capital} / \text{RWA}$
9	Operational Costs to Operating Income (BOPO)	BOPO is the ratio between total operational expenses (funding costs and PPAP expenses) compared to operating income over the last 12 months or a shorter annualized period. $BOPO = (\text{Operating expenses}) / (\text{Operating income})$

Source: SE OJK 11/SEOJK.03/2022 concerning TKS Assessment, data processed (2024)

Based on the explanation of the hypotheses, variables, and data analysis methods above, the formula for testing the variables of Credit Risk, Liquidity, Deposit Guarantee Interest Rate, and BPR/BPRS Performance is as follows:

$$[(PERF)]_{it} = \alpha + \beta_1 [(RISK)]_{it} + \beta_2 LIQ + \beta_3 CTRL + \beta_4 SBP + \beta_5 [(LIQ)]_{it} * [(SBP)]_{it} + \varepsilon_{(i,t)}; i=1,2,\dots,N; t=1,2,\dots,T$$

Explanation:

Dependent Variable (PERF) = BPR/BPRS Performance

Y1 = ROA

Independent Variable (RISK) = BPR/BPRS Risk

X1 = NPL/NPF

Independent Variable (LIQ) = BPR/BPRS Liquidity Level

X2 = LDR/FDR

X3 = CR

Moderating Variable (SBP) = LPS Deposit Guarantee Interest

Rate

Control Variables (CTRL):

C1 = Covid-19 Pandemic

C2 = Bank Size

C3 = CAR

C4 = BOPO

α = Slope

β = Intercept

ε = Error

N = Observation Unit

T = Period

Result and Discussion

The descriptive statistics of the variables analyzed in this study show that the average Return on Assets (ROA) is 2.23, with a maximum value of 8.29 and a minimum of -5.57, indicating significant variation in financial performance across the sample. The Non-Performing Loan (NPL) ratio has a mean of 7.813, reaching a maximum of 23.82 and a minimum of 0.66, reflecting a wide range of

credit risk levels. Cash Ratio (CR) and Financing to Deposit Ratio (FDR) have averages of 27.356 and 75.211, respectively, highlighting liquidity variations in the sample. The average interest rate stands at 7.5833, with a range between 6 and 9.25. Bank Size, measured through the natural log of total assets, averages 17.063, while Capital Adequacy Ratio (CAR) shows a mean of 40.810, suggesting strong capital positions across the sample. Additionally, the average BOPO (Operational Efficiency Ratio) is relatively high at 89.148, indicating varying degrees of operational efficiency, with a range from 63.7 to 140.04. The binary variable for Covid-19 has a mean of 0.5, indicating an even distribution between the pre-and during-pandemic periods.

Table. 1 Description

Description	Variable	n	Mean	Max	Min	Std. Dev.	Vif
ROA	Y	9.012	2.23	8.29	-5.57	3.231	
NPL	X ₁	9.012	7.813	23.82	0.66	6.501	0.2040
CR	X _{2a}	9.012	27.356	75.18	7.77	17.888	0.2057
FDR	X _{2b}	9.012	75.211	97.89	44.56	14.032	0.7199
Suku Bunga	M	9.012	7.5833	9.25	6	1.2389	0.7220
Covid19	C ₁	9.012	0.5	1	0	0.5	0.7383
Bank Size	C ₂	9.012	17.063	19.668	11.457	1.849	0.7829
CAR	C ₃	9.012	40.810	109.24	13.13	26.374	0.8064
BOPO	C ₄	9.012	89.148	140.04	63.7	18.276	0.8487

Source: Processed STATA Output, 2024.

Table 3 Regression Result

Variable	Description	Coef.	Std. Error	t	P > t
X1	NPL	-0.0359	0.0036	-9.99	0.000
X2a	CR	0.0035	0.0053	0.67	0.503
X-2b	LDR	0.0119	0.0069	1.72	0.086
M	Suku Bunga	-0.1468	0.0796	-1.84	0.065
X2aM	SB - >ROA&CR	0.0000	0.0006	0.05	0.962
X2bM	SB - >ROA&FDR	0.0021	0.0008	2.47	0.014
C1	NPL	-0.3217	0.0836	-3.84	0.000

Variable	Description	Coef.	Std. Error	t	P > t
C2	Covid19	-0.0051	0.0157	-0.33	0.744
C3	Bank Size	0.0021	0.0011	1.82	0.069
C4	CAR	-0.1341	0.0013	-98.95	0.000
_cons		15.289	0.7543	20.27	0.000
Numb of obs		9.012			
F		1295.67			
Prob > F		0.0000			
Adj R squared		0.7404			
Hausman test		0.0000			

Source: Processed STATA Output, 2024.

The regression results indicate that several variables significantly affect the financial performance (ROA) of BPR/S. Non-performing loans (NPL) have a significant negative impact on ROA with a coefficient of -0.0359 ($p < 0.001$), indicating that an increase in NPL reduces profitability. The Cash Ratio (CR) and Loan Deposit Ratio (LDR) show no significant effect on ROA ($p > 0.05$), while the guarantee interest rate (Suku Bunga) has a marginally negative impact ($p = 0.065$). The interaction between Suku Bunga and LDR (X2bM) is significant ($p = 0.014$), showing that the interest rate positively moderates the effect of LDR on ROA. Other control variables, such as Bank Size ($p = 0.069$) and CAR ($p < 0.001$), are also significant, with CAR having a substantial negative effect. The model explains 74.04% of the variance in ROA ($\text{Adj } R^2 = 0.7404$), with the overall model being highly significant ($F = 1295.67$, $p < 0.001$).

Discussion

NPL/NPF has a negative effect on ROA of BPR/S

This study shows that non-performing loans (NPL) and non-performing financing (NPF) have a significant negative impact on the Return on Assets (ROA) of BPR/S. A high NPL/NPF ratio indicates a substantial amount of problematic loans, leading to increased operational costs, reduced income, and

disruptions in the bank's intermediation function. This ultimately lowers profitability, as measured by ROA. These findings are consistent with previous studies by Sunarto & Supriati (2017) and Fauzia (2019), which also found that NPL/NPF has a significant negative effect on ROA. Effective risk management in controlling NPL/NPF is crucial for maintaining the financial stability of BPR/S, particularly given the vulnerability of its customer base to economic fluctuations. (Sunarto & Supriati, 2017).

CR has a negative effect on ROA of BPR/S

This hypothesis is rejected, as the study found no significant effect of the Cash Ratio (CR) on ROA. Although a high CR can lower liquidity risk, it does not necessarily increase profitability. A high CR indicates a bank's high liquidity, but it does not guarantee that the bank is efficiently utilizing its assets to generate profits. This could be due to unutilized funds that are not being channeled into loans, reducing the bank's potential income. This study aligns with findings by Purwanti & Warasto (2023) and Yasin & Fisabilillah (2021), which also show that CR does not significantly affect ROA. A high CR often highlights unutilized funds, which in turn reduces the bank's profitability. (Purwanti & Warasto, 2023).

LDR/FDR has a positive effect on ROA of BPR/S

This hypothesis is also rejected, as no significant effect was found between Loan to Deposit Ratio (LDR) or Financing to Deposit Ratio (FDR) and ROA. These ratios measure the extent to which collected funds are channeled into loans or financing. However, the study shows that even with high LDR/FDR, without proper risk management, increased loan disbursement can lead to credit risk, which may reduce profitability. This finding aligns with the study by Damayanthi (2023), which indicates that LDR/FDR does not directly influence financial performance. However, Yasin & Fisabilillah (2021) found that LDR/FDR could affect profitability when liquidity risk is properly managed. (Damayanthi, 2023).

The guarantee interest rate moderates the effect of CR on ROA of BPR/S

This hypothesis is rejected as the study found no significant effect of the guaranteed interest rate in moderating the relationship between CR and ROA. While the guaranteed interest rate is typically associated with the stability of bank deposits, its impact on liquidity is not directly related to financial performance (ROA). The stability of deposits, influenced by the interest rate, does not have a strong correlation with profitability in the context of BPR/S liquidity. This result is consistent with findings by Purwanti & Warasto (2023) and Yasin & Fisabilillah

(2021), which also indicate that the interest rate does not significantly moderate the relationship between liquidity and profitability. (Yasin & Fisabilillah, 2021).

Guarantee interest rate moderates the effect of LDR/FDR on ROA of BPR/S

This hypothesis is accepted as the study found that the guaranteed interest rate significantly moderates the positive relationship between LDR/FDR and ROA. High interest rates help banks attract more deposits, as customers are incentivized to save. Furthermore, banks can set competitive loan interest rates, which enhances profitability by channeling funds more productively and securely. This finding is consistent with research by Hartanto (2022), which suggests that a high guarantee interest rate boosts customer trust and loyalty, ultimately improving LDR/FDR and financial performance. Stable funding enables banks to extend more loans, increasing ROA. The study highlights that careful management of interest rates can lead to better financial outcomes for BPR/S. (Hartanto, 2022).

Conclusion

This study found that credit risk, measured by Non-Performing Loans (NPL) and Non-Performing Financing (NPF), significantly impacts the financial performance of BPR and BPRS in Indonesia, with increased NPL/NPF ratios significantly reducing profitability. On the other hand, guarantee interest rates were found to strengthen the relationship between the Loan to Deposit Ratio (LDR)/Financing to Deposit Ratio (FDR) and Return on Assets (ROA), highlighting the importance of appropriate interest rates in promoting productive loan distribution and maintaining bank liquidity stability.

However, this study has several limitations, particularly in terms of the research timeframe, which was limited to the period before and during the COVID-19 pandemic. Economic stimulus policies from the government during this period affected several financial ratios, and the results may differ once these policies are lifted. Furthermore, this study focuses solely on BPR and BPRS in Indonesia, without considering other financial institutions that may have also been significantly impacted during the pandemic.

For future research, it is recommended that the study period be extended to include the post-pandemic period in order to evaluate the effectiveness of credit risk management implemented by BPR and BPRS. Future studies should also incorporate external variables such as inflation rates and the Bank Indonesia

interest rate, as well as consider the impact of new regulatory policies regarding risk-based supervision on the financial performance and risk management of financial institutions.

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