LOAN QUALITY METRICS AND THE PERFORMANCE OF MICROFINANCE BANKS IN NIGERIA

By

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ABSTRACT
This research explores the effect of loan quality measures on the performance of microfinance banks (MFBs) in Nigeria, with Return on Assets (ROA) as one of the main performance indicators. Twenty MFBs were purposively selected with data spanning from 2019 to 2023, specifically the study focused on how Loan-to-Deposit Ratio (LDR), Default Rate (DR), and Credit Risk Ratio (CRR) affect MFBs performance. The findings suggest that a higher LDR positively contributes to an improvement in ROA, indicating that properly managed lending tend to enhance profitability through greater interest income. On the contrary, DR and CRR are found to decrease ROA, stressing the need for effective management of DR and CRR to enhance profits. These results support a balanced lending policy and robust risk management practices within MFBs. The study contributes to the existing body of knowledge on risk and MFBs performance in developing countries and is highly valuable for policymakers and financial managers willing to strengthen Nigeria's microfinance sector.

Keywords: *Return on Assets, Credit Risk Ratio, Loan-to-Deposit Ratio, Default Rate*

INTRODUCTION
Microfinance Banks (MFBs) are among the fastest-growing institutions that promote financial inclusion in developing countries. MFBs are important for local economic development, alleviating financial exclusion, and ensuring integration of rural and low-income populations into the formal economy by granting loans and other financial services to people and small businesses that are not part of the traditional banking system (Ademola & Adegoke, 2021; Chmelíková & Redlichová, 2020). Through widening the access to finance for the unbanked, MFBs are thus in a position to create new opportunities for entrepreneurial activities, which in turn will propel economic empowerment and support the financial inclusion of underserved communities (Okereke & Callistus, 2021). Yet, MFBs in Nigeria undergo some major drawbacks that put their sustainability at stake. The fundamental hurdles to their continued service to financially underserved communities are high credit risk, rising default rates, and declining profitability (Ademola et al., 2022).

The financial stability of MFBs is mainly connected with the quality of their loan portfolio, whereby poor portfolio performance heightens the vulnerability of instability and erodes investor and public confidence that may impair the reputation and dependability of the entire sector. MFBs have been battling problems that undermine stability and efficiency over the years, as supported by Ademola et al. (2022). Rising default Rates (DR) has led to an increase in loan loss provisions for MFBs, which has further weakened the already

fragile financial condition and underlined the importance of managing a loan portfolio efficiently. Consequently, MFBs have begun to beef up their provisioning against the estimated losses on loans with a view to saving their operations. This might save their financial position but could dampen the lending activities and growth potential as well. In addition, Credit Risk Ratios (CRR) play a crucial role in assessing credit risk within loan portfolios, which helps observe areas for improvement in credit management policy in the process of appraisal, monitoring, and recovery of loans (Mileris, 2012).. Further, Loan to Deposit Ratio (LDR) is also being used in a wide range to check the operating efficiency of MFIs, in view of the fact that changes in the ratio provides comprehensive information about the quality of the loan portfolios and their likely impacts on viability (Olawale 2014) The study, therefore, tries to establish the degree at which DR, CRR, and LDR determine ROA of MFBs. It also elaborates on how these factors are interrelated in promoting financial inclusions for sustainable development.

Although most of the studies have been conducted on the metrics of loan quality and its influence on the performance of commercial banks, only a few have focused on MFBs, especially in emerging markets like Nigeria. Despite the regulatory attempts to shore up the sector, issues around poor loan quality and credit risk management remain widespread, bringing into question the long-term viability of these institutions. MFBs involve some distinct challenges, such as high exposure to unsecured lending, customers truncated credit history and limited access to capital. These institutional facts bring about the necessity for special analysis of how loan quality indicators, like the CRR, DR and LDR affect the return on assets (ROA) of MFBs. This study, therefore, tries to fill this gap in literature by assessing the influence of these indicators on the profitability of MFBs in Nigeria. With this, the research hopes to provide important guidance to bank managers and policymakers towards improving the quality, resilience, and financial sustainability of loan portfolios within the microfinance industry in Nigeria.

Objectives of the Study

The main aim of the study is to investigate effect of loan quality metrics on the performance of Microfinance Banks in Nigeria; the specific objectives are to:

1. Determine the influence of Default Rates on the performance of MFBs in Nigeria,
2. Establish the extent to which Credit Risk Ratios affect MFBs performance in Nigeria
3. Analyze the effect of Loan to Deposit Ratio on the performance of MFBs in Nigeria

Hypotheses of the Study

The hypotheses are stated in null form and they are:

1. Default Rates does not significantly influence the performance of MFBs in Nigeria
2. Credit Risk Ratio does not significantly affect MFBs performance in Nigeria
3. Loan to Deposit Ratio have no significant effect on MFBs performance in Nigeria

Literature Review

Conceptual Review

Loan Quality

Loan quality represents the overall health and creditworthiness of a bank‘s loan portfolio, reflecting the risk level associated with lending activities and the likelihood that borrowers will meet their repayment obligations (Sifran, 2022). The quality of loans is critical for financial institutions because it directly affects profitability, liquidity, and stability. High loan quality means that loans are performing well with low default risks, while poor loan

quality signals increased risk of defaults and potential financial strain. It is a critical consideration for banks and financial institutions when granting credit. The risk of losses resulting from borrower default is a significant concern, as it can disrupt cash flows and lead to increased collection efforts (Asika, 2021). Banks must therefore carefully assess the creditworthiness of potential borrowers and monitor the performance of their loan portfolios to maintain a healthy financial position.

Default rate (DR)

The default rate (DR) or non-payment percentage, showing the ratio of loans which have not been repaid either on time or in full, is one of the key indicators of credit risk. According to Pantha (2019), it indicates how frequently borrowers fail to pay back partly or wholly. The higher the default rate, the higher the level of risk in loan quality and normally negatively correlates with bank profitability, usually because of particular inefficiencies either in the screening of borrowers or the loan approval processes and general economic conditions that have affected borrowers' loan repayment capabilities.

Adom (2019) found that there is a negative relationship between profitability as measured by ROA and ROE with DR in the Ecobank Group, which is statistically significant. He indicated that high DR have negative consequence on the financial performance of a bank. Djan et al. (2016) in Ghana reported the DR to be the most significant predictor of banks‘ financial performance with very strong emphasis on criticality towards profitability. In fact, this shows that loan defaults have the highest influence on profit earnings for a bank, implying that credit risk management and proactive steps by the management to reduce DR are very crucial in sustaining the profits.

Loan to Deposit Ratio (LDR)

The LDR is the ratio of a bank's use of deposited money for granting loans to customers and hence indicates the liquidity of a bank and its lending policy. This is one very important indicator of a bank's capability in managing its liquidity through a balance of loans granted and deposits mobilized to achieve operational stability (Charles & Uford, 2023). LDR is crucial to evaluating a bank's risk and its financial condition as a whole. High LDR means increasing utilization of deposits received in the bank as loans extended, with decline in profitability, evidenced in the case of Vellanita et al. (2019), where there is an inverse LDR-Return on Equity relationship.

On the other hand, there are studies that argue otherwise; for example, Saleh and Winarso (2021) suggest that changes in LDR may not necessarily explain bank performance. The association between LDR and bank performance is complex and inconsistent; some studies have reported positive correlations, while others have reported negative ones. Isik (2022) found the existence of a nonlinear U-shaped relationship between LDR and ROA for Pakistani banks, which indicates an optimal lending rate that maximizes profitability. The study found the inverted U-shaped relationship for Chinese banks, where too much lending resulted in profitability reduction. This ascertains the idea of an optimal threshold of lending for profitability, whereby too much lending has diminishing returns and leads to poorer performance.

Credit Risk Ratio (CRR)

This is one of the important tools that a bank can use to measure the quality of its loan portfolio, as NPLs are being related to the total loans. It indicates, therefore, what

percentage of the loan likely may fail; thus, it indicates the level of credit risk that may be confronted by a bank. It is the ratio that expresses the chance of loan defaults, expanding the pressure a bank is under because of its inability to maintain its functioning-liquidity ratio. Managing the credit risk ratio is crucial to attaining an optimum trade-off between credit facility extension and risk exposure. Uncontrolled credit risk results in loss of profitability, even up to the extent of jeopardizing a bank's solvency. In an empirical analysis, Milleris (2012) identifies that credit risk contributes to a significant bank performance effect in 22 EU countries, underlining the fact that loan quality comes in direct contact with financial stability and profitability. This can be a crucial relationship since a high credit risk ratio signifies not only potential financial strain coming from loan defaults but may also harm the reputation of the bank and its capacity to attract new business(Mpofu & Nikolaidou, 2018). It also allows the banks work out better capital allocation, which is very crucial for growth to be attained sustainably and for long-term resilience. Banks usually neutralize such a high credit risk ratio by following stringent credit policies, improving their processes for appraising borrowers, and making adequate loan loss provisions. These, together with active monitoring, have reduced the probability of defaults and ensured sound financial performance. It has been one of the central activities in recent years of all banks worldwide, as it is directly related to the banks' operational soundness, regulatory conformity, and overall market competitiveness in the context of new regulations.

Bank Performance

In the modern changing financial world, much focus has been placed on the efficiency of the banking system. According to Sharon (2013), efficiency and competitiveness in financial institutions are hard to measure because their products and services are intangible. Banks‘ performance, according to Agbana et al. (2023), reflects the extent to which a financial organization has been able to realize its financial objectives by aligning its income with its organizational objectives, besides assessing its financial health over some period. Financial performance is normally gauged through profitability ratios, as noted by such scholars as Almekhlafi et al. (2016), and Almshabbak & Chouaibi (2023). These are, in fact, the most commonly used ratios by banks in assessing the performance of loans, as they reflect closely with profits and gains, which is an outcome of success. The most commonly used are the Return on Assets (ROA), and Return on Equity (ROE). ROA reflects the profitability of a firm given its assets - how well management is utilizing the assets to earn profit (Uford, 2017). Whereas ROE measures the efficiency of the company in generating profit from the shareholders' equity. According to Anwer et al. (2023), ROA was chosen in this study because it is relevant to assessing financial performance of MFBs.

Theoretical Review

Agency Theory

Agency theory, in the relevant context, contemplates principal-agent relationships between shareholders or depositors and bank management where there exists, due to asymmetrical information, a typical underlying conflict of interest. Agency theory, in the case of credit risk, helps explain the incentives for bank managers within the context of lending practices. Because bank managers represent the interests of both shareholders and depositors, they may face conflicting incentives: profitability for shareholders and safety and stability for depositors. Poor decisions regarding lending-whey are either lax in their standards or focus on high-risk, high-return loans-increase credit risk and undermine stability. The agency problem could, therefore, be heightened in SSA, where regulatory oversight is varied while

effective credit risk management is vital in aligning bank managers' actions in the interest of the stakeholders. It is through mitigating agency conflicts that banks achieve a balance that promotes sustainable lending practices.

Trade-Off Theory

Because of the costs of financial distress, trade-off theory therefore postulates that banks balance the benefits of high returns resulting from riskier lending so as to maximize firm value. In terms of credit risk, this theory, therefore, would mean that for a particular level of default risk, if the expected return were to warrant it, then such a bank might accept that risk against potential defaults on its books with the profit from high-interest loans. That is particularly true in the Sub-Saharan African context, since banks may face unique economic risks such as higher volatility and lower capitalization that could be inherently inducing higher lending aggressiveness to improve returns at the cost of increasing credit risk. Trade-off theory provides the basis on which to understand why regional banks

would tend to have higher credit risk in an evaluation of the increased returns on loans, which are undertaken more so for the risks involved against defaults and financial instability.

Financial Intermediation Theory

The theory develops how banks, as intermediaries, facilitate the flow of funds from savers to borrowers with a focus on managing credit risk and providing liquidity. In Sub-Saharan Africa, where access to formal financial services may be limited, this management of credit risk becomes a matter of paramount importance. If valued and priced correctly, credit risk therefore enables banks to facilitate more efficient allocation of capital and economic development. However, any weakness in credit risk management practices may hamper this intermediation process by generating defaults and enhancing systemic risks. Indeed, this focus on credit risk determinants is supported by theory on financial intermediation, underlining the crucial role that banks play in assessing the quality of borrowers and managing risk, supporting regional economic stability.

Research Methodology

This study employed a panel research design, which allows for the simultaneous analysis of both cross-sectional data (across different banks) and time-series data (across the years 2019–2023), offering a comprehensive understanding of how the variables evolve and impact bank performance over time. A purposive sampling method was used to select 5 microfinance banks (MFBs) from each of the 4 South Western states of Nigeria (Oyo, Osun, Ogun, and Lagos), resulting in a total sample of 20 MFBs. Secondary data was sourced from the annual audited reports and prospectuses of the selected MFBs for the period 2019 to 2023. The data was analyzed using descriptive statistics, a correlation matrix, and a panel data regression model.

Model Specification

The model specification for the panel data regression analysis can be written as follows:

$$ROA_{it} = 13_0 + 13_1 LDR_{it} + 13_2 DR_{it} + 13_3 CRR_{it} + \epsilon_{it}$$

Where:

ROA_{it}: Return on Assets for microfinance bank i at time t, representing the dependent variable (bank performance)

LDR_{it}: Loan-to-Deposit Ratio for microfinance bank i at time t. It is an independent variable.

DR_{it} : Default Rate for microfinance bank i at time t, an independent variable.

CRR_{it} : Credit Risk Ratio for microfinance bank i at time t. The third independent variable.

B_0 : Constant term (intercept) of the model.

$13_1, 13_2, 13_3$: coefficients for the independent variables, showing the impact of each factor on bank performance ϵ_{it} : The error term, capturing unobserved factors affecting ROA that are

Table 1: Measurement of the variables

Variable	Description	Measurement
Return on Assets (ROA)	A measure of bank profitability relative to its total assets.	(Net Income / Total Assets) × 100
Loan-to-Deposit Ratio (LDR)	A ratio indicating the proportion of a bank's loans compared to its	Total Loans / Total Deposits
Default Rate	A measure of the proportion of loans that are not repaid.	(Non-performing Loans / Total Loans) × 100
Credit Risk Ratio (CRR)	A measure of the credit risk inherent in a bank's loan portfolio.	(Non-performing Loans / Total Loans) ×

Source: Author's Computations, 2024

Results and Discussion

The descriptive statistics for Return on Assets (ROA), Default Rate (DR), Loan-to-Deposit Ratio (LDR), and Credit Risk Ratio (CRR) as indicated in Table 2 provide insight into the profitability, risk exposure, and lending practices of the microfinance banks in the study. The mean ROA of 2.4352 indicates moderate profitability across the selected MFBs. The skewness value of 1.2124 for ROA suggests a positive skew, meaning that most banks have moderate ROAs with a few banks achieving higher profitability.

The mean DR of 0.0471 reflects a relatively low average default rate among the banks, though with variability (standard deviation of 0.0616), indicating some banks experience higher default rates. DR also exhibits a positive skewness of 1.0874, suggesting that while defaults are generally low, a small number of banks have significantly higher default rates. The low mean default rate could imply effective risk management strategies in place, but the high range of values (0.01 to 0.23) also suggests that some banks face higher credit risk.

The mean LDR of 0.1121 implies a conservative lending approach, as banks are lending a modest portion of their deposits. The spread, from a minimum of 0.043 to a maximum of 0.1992, shows some banks are more aggressive in their lending strategies than others. With a positive skewness of 1.2011, most banks maintain lower LDRs, but a few are lending a larger portion of their deposits. This distribution suggests that while many banks maintain cautious lending practices, there are outliers that pursue more aggressive lending, which may increase profitability but also add risk.

CRR shows a mean of 1.4199 with relatively low skewness (0.2668), indicating that credit risk is fairly evenly distributed across these banks. The standard deviation of 0.4713 reflects a moderate variability in credit risk levels, suggesting some differences in risk exposure across the banks. Since higher credit risk may affect profitability negatively, managing CRR remains crucial for these banks. Overall, the low Jarque-Bera

probabilities for all variables suggest they may not deviate significantly from normality, supporting the validity of these descriptive statistics for further inferential analysis.

Table 2: Descriptive Statistics of the Variables

	ROA	DR	LDR	CRR
Mean	2.435200	0.047120	0.112120	1.419876
Median	1.610000	0.032000	0.122000	1.364060
Maximum	2.690000	0.230100	0.199244	1.801780
Minimum	1.220000	0.010000	0.043000	1.246810
Std. Dev.	1.133076	0.061597	0.130044	0.471335
Skewness	1.212410	1.087398	1.201090	0.266821
Kurtosis	1.031184	1.534009	1.053661	1.160304
Jarque-Bera	1.384379	0.827351	1.233347	1.252138
Probability	0.500479	0.467486	0.534532	0.647922
Sum	10.88000	1.178000	2.803000	454.9690
Sum Sq. Dev.	0.425024	0.191061	0.405877	289.2040
Observations	100	100	100	100

Source: Author's Computation, 2024

The correlation matrix in Table 3 revealed relationships among Return on Assets (ROA), Default Rate (DR), Loan-to-Deposit Ratio (LDR), and Credit Risk Ratio (CRR). Findings indicate a moderate negative correlation (-0.5449) between ROA and DR, suggesting that as default rates rise, returns on assets tend to decrease. This is expected, as higher default rates usually necessitate increased loan loss provisions, reducing profitability. Microfinance banks with higher default rates thus experience reduced returns on assets, highlighting the importance of effective loan default management to sustain profitability. Additionally, there is a moderate positive correlation (0.4515) between ROA and LDR, indicating that a higher LDR is associated with improved asset returns. This could imply that banks' lending more relative to their deposits often achieve higher returns, suggesting an active lending strategy. However, it also signals a potential increase in risk, as these banks may be exposed to financial instability associated with heightened lending activity.

A moderate negative correlation (-0.5988) between ROA and CRR shows that banks with higher credit risk ratios tend to report lower ROA. High credit risk implies a larger proportion of loans at risk of default, which can erode profitability. This relationship underscores that, while some risk-taking may yield higher returns, excessive credit risk tends to harm financial performance, increasing the likelihood of defaults and financial instability in microfinance banks. Also, the moderate positive correlation between DR and LDR suggests that banks with a higher LDR tend to have higher default rates, indicating that as banks lend more relative to deposits, they may be taking on additional

exposure to risky loans, increasing the chances of defaults. Although an aggressive lending approach may boost returns, it also raises the potential for higher default rates.

A moderate positive correlation between DR and CRR suggests that banks with higher default rates generally exhibit higher CRR. This is intuitive, as a higher default rate reflects more problematic loans, directly raising the CRR. Banks with elevated CRR levels face greater risks of loan defaults, impacting profitability and financial stability. Moreover, the positive correlation between LDR and CRR suggests that banks with a higher LDR may also have higher CRR. An aggressive lending strategy (reflected in a higher LDR) could result in credit extension to riskier borrowers, thereby increasing overall credit risk for the bank. This relationship highlights the balance needed between increased lending activity and the risk of elevated credit exposure.

In conclusion, while increased lending activity (higher LDR) may enhance profitability (ROA), it can also elevate credit risk (CRR) and default rates (DR), potentially compromising financial health. To maintain profitability and long-term sustainability, banks must balance lending with prudent credit risk management.

Table 3: Correlation Matrix

	ROA	DR	LDR	CRR
ROA	1.000000			
DR	-0.544932	1.000000		
LDR	0.451543	0.503047	1.000000	
CRR	-0.598780	0.477521	0.411925	1.000000

Source: Author's Computation, 2024

The panel data analysis as shown in Table 4, conducted using the Panel Least Squares method, examined a balanced dataset covering 2019 to 2023 across 20 microfinance banks (MFBs) in Nigeria. Return on Assets (ROA), a common measure of profitability in financial institutions, was used as the dependent variable. The primary independent variables include Default Rate (DR), Loan-to-Deposit Ratio (LDR), and Credit Risk Ratio (CRR). The R-squared value of 0.8255 indicates that 82.55% of the variation in ROA is explained by these independent variables, demonstrating the model's strong explanatory power. An F-statistic of 15.1167 (p-value = 0.000008) signifies high overall model significance, as the p-value is well below the 0.05 threshold. Additionally, the Durbin-Watson statistic of 2.0479 suggests no autocorrelation in the residuals, as it is close to the ideal value of 2.

The Default Rate (DR) shows a statistically significant relationship with ROA, as indicated by a t-statistic of 2.9669 and a p-value of 0.0077. The negative coefficient of - 0.0927 suggests that higher default rates are associated with a decline in ROA; specifically, each unit increase in the default rate reduces ROA by approximately 0.0927

units. This inverse relationship implies that as defaults increase, profitability is eroded due to heightened loan loss provisions and decreased revenue. This finding aligns with Adom (2019) and supports the risk-return trade-off theory, which suggests that higher credit risk is associated with lower profitability.

The Loan-to-Deposit Ratio (LDR) demonstrates statistical significance, with a p-value of 0.0124 and a positive coefficient of 0.0379, indicating that a higher LDR is linked to improved ROA. Specifically, each unit increase in LDR is associated with a 0.0379-unit rise in ROA, suggesting that banks‘ lending a larger share of their deposits tend to achieve greater profitability. This finding aligns with Natufe and Evbayiro-Osagie (2023) but contrasts with Vellanita et al. (2019), who identified a significant inverse relationship between LDR and bank performance. However, the positive relationship here also highlights the trade-off between increased lending and associated risks, supporting financial intermediation theory, which posits that lending more relative to deposits can enhance returns, albeit with added risk. This result underscores the importance of efficient loan utilization in microfinance banking.

The Credit Risk Ratio (CRR) shows a statistically significant relationship with ROA, as indicated by a t-statistic of -4.4559 and a p-value of 0.0000. The negative coefficient of -0.5643 reveals that an increase in credit risk correlates with a decrease in ROA; specifically, for each unit increase in CRR, ROA decreases by 0.5643 units. This implies that as the proportion of high-risk loans grows, profitability diminishes due to a rise in defaults and loan loss provisions, which adversely impact profits. The negative effect of CRR on ROA aligns with agency theory, suggesting that higher information asymmetry and lending risk reduce profitability. A high CRR reflects greater uncertainty and risk in loan portfolios, negatively influencing profitability and financial stability. This finding is consistent with the conclusions of Mpofu and Nikolaidou (2018).

Table 4: Regression Analysis

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.443819	0.029230	15.18355	0.0000
DR	-0.092719	0.031251	-2.966913	0.0077
LDR	0.037908	0.017362	2.183389	0.0124
CRR	-0.564321	0.126645	-4.455927	0.0000

R-squared	0.825546	Mean dependent var	0.435200
Adjusted R-squared	0.700728	S.D. dependent var	0.133076
S.E. of regression	0.094031	Akaike info criterion	-1.658895
Sum squared resid	0.159152	Schwarz criterion	-1.317610
Log likelihood	27.73619	Hannan-Quinn criter.	-1.564237
F-statistic	15.11671	Durbin-Watson stat	2.047935
Prob(F-statistic)	0.000008		

Source: Author’s Computation, 2024

Conclusion

The study examined the effect of Loan-to-Deposit Ratio (LDR), Credit Risk Ratio (CRR), and Default Rate (DR) on the performance of microfinance banks (MFBs) in Nigeria, with Return on Assets (ROA) as the measure of profitability. Using panel data from 2019 to 2023 for a sample of 20 MFBs, the analysis demonstrated significant relationships between these variables, highlighting the complex interactions between lending practices, risk exposure, and financial performance within the microfinance sector. LDR was found to positively influence ROA, indicating that increased lending relative to deposits can enhance profitability, while both DR and CRR were negatively associated with ROA, reflecting the detrimental effects of high default rates and credit risk on bank performance.

Theoretically, these findings contribute to understanding the risk-return trade-off in banking, particularly within the context of microfinance. The positive impact of LDR on ROA aligns with financial intermediation theory, suggesting that effective lending practices drive bank profitability. However, the negative relationships of DR and CRR with ROA underscore agency theory, which posits that high-risk exposure in credit portfolios can impair financial returns due to information asymmetries and borrower defaults. These results provide empirical support for these theories within the unique framework of Nigerian microfinance banks, adding depth to the existing literature on credit risk management and profitability in the financial sector.

Practically, the study‘s findings highlight crucial factors affecting bank performance that are relevant for MFBs, regulators, and policymakers. High DR and CRR levels indicate the importance of robust risk management in sustaining profitability, as unchecked risk exposure can hinder financial stability and impact economic growth. For the Nigerian economy, the performance of MFBs is vital, as they play a critical role in financial inclusion and poverty reduction by providing credit to underserved communities. Improved management of lending practices and credit risk in MFBs can contribute to economic stability by reducing the likelihood of defaults and ensuring sustainable bank performance.

Overall, this work contributes to extant studies by providing a focused analysis of Nigerian microfinance banks, a sector less frequently studied in terms of risk-return dynamics. The study‘s insights enrich the academic discourse on the determinants of bank profitability in emerging economies, with implications for strengthening the resilience and effectiveness of MFBs in Nigeria‘s financial landscape.

Recommendation

The positive relationship between LDR and ROA suggests that microfinance banks should consider increasing their LDR strategically to boost profitability, while carefully managing exposure to high-risk borrowers through robust credit assessment.

The negative link between DR and ROA highlights the importance of effective risk management. Microfinance banks are advised to implement strict loan approval criteria, regular borrower evaluations, and proactive portfolio monitoring to control default rates.

Given CRR's negative effect on ROA, MFBs should aim to optimize credit risk by diversifying loan portfolios and avoiding over-reliance on high-risk loans. Regular creditworthiness assessments and ongoing loan performance monitoring are recommended to minimize risk.

Suggestion for further Studies

Future studies could explore the impact of other factors, such as macroeconomic conditions or regulatory policies, on MFB performance. Additionally, investigating how digital lending practices influence risk and profitability in MFBs could provide valuable insights. Comparative studies with other countries would also deepen understanding of regional differences in MFB risk management and performance.

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