

Banking Regulation and Financial Performance of Selected National Microfinance Banks in Nigeria

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Abstract: *This study investigates the impact of banking regulation on the financial performance of selected National Microfinance Banks in Nigeria. Specifically, the study examines the effect of Minimum Capital Requirements and Prudential Ratios prescribed by the Central Bank of Nigeria on the financial performance of National Microfinance Banks, measured by Return on Equity. An ex-post facto research design was adopted, relying on secondary data obtained from the annual reports of the seven licensed National Microfinance Banks in Nigeria and Central Bank regulatory publications over a ten-year period (2015–2024). The data were analysed using Multivariate Analysis of Variance (MANOVA) to capture the simultaneous effects of regulatory variables on financial performance indicators. The empirical findings reveal that Minimum Capital Requirements and Prudential Ratios exert a statistically significant influence on the financial performance of National Microfinance Banks in Nigeria. Specifically, higher capital requirements and compliance with prudential standards are associated with improved financial performance, suggesting that regulatory measures contribute positively to institutional stability and profitability. The interaction effect between these regulatory variables further indicates that their combined influence plays a critical role in shaping performance outcomes. Based on these findings, the study recommends that regulators should sustain effective enforcement of capital and prudential regulations while ensuring sufficient flexibility to accommodate the unique operational realities of microfinance banks. Additionally, National Microfinance Banks should strengthen internal capital management and risk-control mechanisms to optimise returns and ensure long-term financial sustainability.*

Keywords: financial performance, minimum capital requirements, prudential ratios and returns on equity (ROE)

INTRODUCTION

Banking regulation plays a critical role in ensuring the stability, transparency, and efficiency of financial systems across the world. Regulatory frameworks are designed to safeguard depositors, maintain financial stability, and enhance the performance of financial institutions by setting rules on capital adequacy, liquidity, asset quality, and risk management (Aliyu, Gambo, Enesi, Nwoye, & Ibrahim, 2024). Without strong regulation, banks may engage in excessive risk-taking, mismanagement of funds, or poor lending practices, all of which can undermine financial performance and trigger systemic crises. Thus, effective regulation is not only a tool for oversight but also a mechanism for enhancing the long-term sustainability of financial institutions.

In Nigeria, the Central Bank of Nigeria (CBN) serves as the primary regulatory authority, responsible for issuing prudential guidelines, licensing requirements, and supervisory mechanisms for different categories of banks, including Microfinance Banks (MFBs). Through these regulations, the CBN seeks to promote financial soundness, mitigate risks, and improve overall performance in the banking sector (Adebayo-Oke, Abdulrauf, Rabi, Akande, & Gbadebo, 2024). However, while these measures are intended to strengthen financial institutions, their practical effectiveness in enhancing financial performance especially in the microfinance segment remains a subject of ongoing debate.

Microfinance Banks (MFBs) occupy a unique and vital space in the Nigerian financial system. They were established to extend financial services to individuals and micro, small, and medium-sized enterprises (MSMEs) that are often excluded from traditional banking. By providing credit, savings, and other essential financial products, MFBs foster financial inclusion, poverty reduction, and economic empowerment (Tehulu, 2021; Ngumo et al., 2020). Beyond their developmental role, MFBs also contribute to broader financial stability by diversifying the financial sector and dispersing risks, making the financial system less vulnerable to shocks and crises (Martinez-Campillo & Kumar, 2021; Yahaya, 2020).

Nevertheless, the dual objectives of social outreach and financial sustainability create a regulatory challenge. While banking regulations are expected to enhance prudence and strengthen the resilience of MFBs, compliance with strict requirements such as capital adequacy and liquidity ratios can sometimes strain smaller institutions and impact their profitability. This tension raises important questions: To what extent do regulatory measures contribute to or constrain the financial performance of National Microfinance Banks in Nigeria? Are the existing prudential guidelines effective in balancing stability with operational sustainability?

There are different types of Microfinance Banks in Nigeria, depending on the scope of coverage of the Bank. Specifically, there are National, State, Tier 2 Unit, and Tier 1 Unit Microfinance Banks in Nigeria. The focus of this study is on National Microfinance Banks. In Nigeria, the Microfinance sector has been plagued by recurring institutional failures that question whether regulation has delivered on its promise. For instance, the Central Bank of Nigeria (CBN) revoked the licenses of 103 microfinance banks in 2010 due to weak risk management, poor internal controls, and inadequate capitalization (Alobari et al., 2019; Yahaya, 2020). More than a decade later, in 2023, another wave of collapses saw 179 licenses revoked, again due to issues of non-compliance, governance failures, and financial instability. These repeated crises reveal persistent structural weaknesses and highlight a regulatory system that appears strong on paper but often struggles to produce sustainable outcomes in practice.

The literature reflects this uncertainty. Some studies find that capital adequacy and other prudential requirements improve performance; others argue that they impose financial strain, limiting efficiency and outreach (Aliyu et al., 2024; Adebayo-Oke et al., 2024). These contradictory findings suggest that performance outcomes are influenced by other underexplored factors, making it difficult to determine whether regulation is truly helping or hindering MFBs (Aliyu, Gambo, Enesi, & Ibrahim, 2023).

What remains missing is a clear, evidence-based understanding of how these post-2020 regulations affect the financial performance of microfinance banks, particularly National Microfinance Banks which happen to be the largest and most visible category, with the highest capital requirements. Most prior studies focus on earlier frameworks, leaving the impact of the current regime underexplored. Given the scale of recent institutional failures, this gap in knowledge is both timely and urgent. This study therefore seeks to fill that gap by empirically examining how regulatory provisions specifically minimum capital requirements and Prudential Ratios affect the financial performance of National Microfinance Banks in Nigeria measured by Return on Equity (ROE).

LITERATURE REVIEW

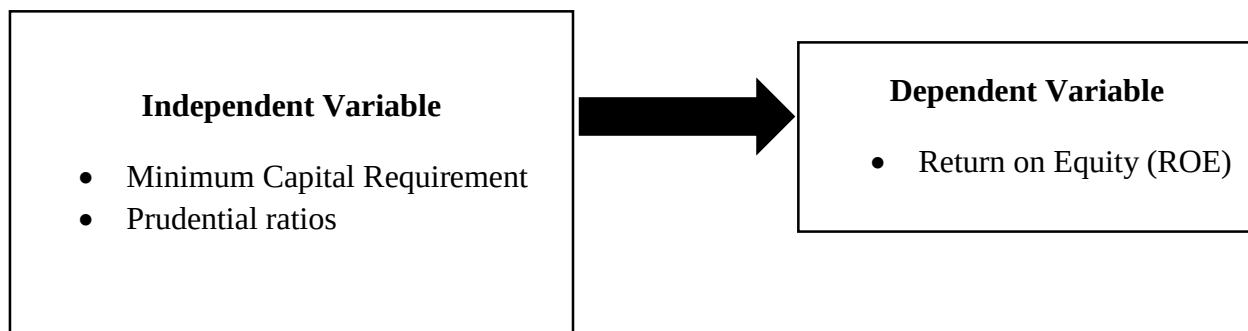
Microfinance is the provision of financial services to low-income individuals and households, as well as micro, small and medium enterprises (Tehulu, 2021). The idea of Microfinance started back in 1974 by Professor M. Yunus by lending 27 USD to 40 Women and later forming the Grameen Bank. Today, the microcredit concept is practiced in more than 100 countries. According to Yunus “Microcredit provides a sustainable business model to solve the world's problems. Banking regulation constitutes a comprehensive system of binding rules, standards, and supervisory mechanisms designed to govern the conduct of financial institutions and ensure systemic stability. In the context of microfinance banking, regulation encompasses both prudential measures that safeguard institutional soundness and non-prudential provisions that address market conduct and consumer protection. The distinction between these regulatory dimensions is fundamental to understanding how regulatory frameworks influence institutional performance outcomes (CGAP, 2022).

The regulatory approach to microfinance banking has evolved from voluntary self-regulation toward more comprehensive government oversight. While self-regulatory mechanisms may enhance internal controls and reporting standards, they have proven insufficient in addressing systemic risks and ensuring financial sustainability. The transition toward formal regulatory oversight reflects recognition that microfinance institutions, particularly those accepting public deposits require robust supervisory frameworks to protect depositors and maintain financial system stability.

Financial performance has been widely discussed in both finance and management literature as a critical indicator of organisational health. At its core, financial performance reflects the extent to which a firm achieves its financial objectives and sustains its operations in a competitive environment. It embodies not only profitability but also efficiency in resource utilisation, liquidity, and the ability to create long-term value for stakeholders (Suleiman, 2023). In this sense, financial performance is a multidimensional concept that captures how well an organisation mobilises and allocates resources to generate returns, remain solvent, and deliver sustainable services.

Return on Equity (ROE) is a critical profitability ratio widely used in banking research. It measures the amount of net income generated per unit of shareholder equity, thereby assessing how effectively management employs owners' capital to create value. ROE is calculated as net income divided by total equity. A higher ROE suggests stronger efficiency in utilising shareholders' funds and a greater ability to deliver attractive returns to investors (Ward & Price, 2016; Ozkan, 2017). Importantly, for banks, and especially microfinance banks, ROE serves as a measure of value

creation in relation to equity contributions. Since MFBs rely on both equity capital and deposits to finance operations, ROE highlights whether shareholder funds are being effectively converted into sustainable profits. In Nigeria, where regulatory requirements such as minimum capital bases have been repeatedly revised by the CBN, ROE has become an essential tool for assessing the impact of these regulations on shareholder value (Aliyu et al., 2022).



Banking Regulation

Banking regulation refers to the system of rules, guidelines, and supervisory mechanisms established by regulatory authorities to control the operations of financial institutions and ensure the stability of the financial system. In Nigeria, the Central Bank of Nigeria plays a central role in designing and enforcing these regulations. For microfinance banks, regulation primarily focuses on prudential measures such as capital adequacy, liquidity requirements, risk management standards, and compliance frameworks. The objective is to safeguard depositors' funds, minimize systemic risk, and promote sound financial practices within the sector.

Minimum Capital Requirement (MCR)

Minimum Capital Requirement refers to the minimum amount of capital that a financial institution must maintain as stipulated by the regulatory authority. It serves as a financial buffer that enables banks to absorb potential losses, maintain solvency, and sustain operations during periods of financial stress. In the context of National Microfinance Banks in Nigeria, higher capital requirements reflect their broader operational scope and risk exposure. Adequate capitalization enhances credibility, supports business expansion, and improves the bank's ability to generate sustainable returns.

Prudential Ratios (PR)

Prudential ratios are key financial indicators used by regulators to assess the financial health and risk profile of banks. These include ratios such as capital adequacy ratio, liquidity ratio, loan-to-deposit ratio, and non-performing loan ratio. They serve as monitoring tools to ensure that banks maintain appropriate levels of liquidity, manage credit risk effectively, and operate within acceptable risk thresholds. Compliance with prudential ratios promotes financial discipline and reduces the likelihood of bank distress or failure.

Financial Performance

Financial performance refers to the ability of a financial institution to generate earnings, utilize resources efficiently, and sustain its operations over time. It reflects how well a bank achieves its financial objectives, including profitability, stability, and growth. In microfinance banking, financial performance is particularly important because institutions must balance profitability with their social mandate of financial inclusion.

Return on Equity

Return on Equity is a key financial performance indicator that measures the profitability of a bank relative to shareholders' equity. It indicates how effectively management is using investors' funds to generate profit. ROE is calculated as net income divided by total equity and is widely used in banking research to assess value creation. A higher ROE suggests efficient utilization of capital and stronger financial performance.

National Microfinance Banks (NMBs)

National Microfinance Banks are a category of microfinance institutions licensed to operate across Nigeria, unlike unit or state microfinance banks which have limited geographic scope. Due to their wider coverage and larger scale of operations, NMBs are subject to stricter regulatory requirements, including higher minimum capital thresholds and more rigorous supervisory oversight. Their performance is therefore more sensitive to regulatory policies and compliance obligations.

Theoretical Review

Out of the two relevant theories reviewed, one was adopted for the study due to its relevance. To examine the impact of Banking Regulation on Financial Performance of National Microfinance Banks in Nigeria, an appropriate theoretical framework would be the Agency Theory. The Agency Theory is concerned with the relationship between principals (such as shareholders or depositors) and agents (such as management or the board of directors) and the potential conflicts of interest that may arise between them (Jensen & Meckling, 1976). In the case of National Microfinance Banks in Nigeria, the principals are the depositors who entrust their savings to the banks, while the agents are the bank management and the board of directors who are responsible for managing the funds. Central Bank of Nigeria (CBN) regulation plays a vital role in shaping the behaviour of National Microfinance Banks in Nigeria. The regulatory framework provides guidelines and standards for financial institutions' operations, including capital adequacy, risk management, governance, and liquidity requirements (Sanusi, 2023).

Empirical Review

Mia (2025) conducted an extensive study on microfinance institutions (MFIs) in Bangladesh, focusing on their role in promoting socio-economic welfare. The findings showed that despite weaknesses in the regulatory framework, most MFIs contributed significantly to household welfare, poverty reduction, and local development outcomes. The study highlighted that the expansion of microfinance services had a multiplier effect on rural livelihoods and socio-economic development, reinforcing the notion that MFIs can be powerful drivers of inclusive growth when properly managed (Mia, 2025).

Amin and Jala Uddin (2025) examined the long-run dynamic relationship between Grameen Bank loan financing, clients' deposits, and economic growth in Bangladesh using cointegration and

Granger causality tests. Their results showed a strong long-term positive effect of both loan disbursements and client savings on economic growth, indicating that microfinance institutions such as Grameen Bank contribute not only to financial inclusion but also to macroeconomic stability and growth. The study thus confirmed the dual role of microfinance as both a financing tool for the poor and a catalyst for national economic development (Amin & Jala Uddin, 2025).

Raihan, Hasan, and Chowdhury (2025) estimated the macroeconomic contribution of microfinance to Bangladesh's GDP. Using labor market-based assumptions, the study found that microfinance accounted for between 8.9% and 11.9% of GDP, with an even stronger impact on rural GDP. These results demonstrated that microfinance remains an essential engine of rural economic transformation by stimulating household productivity and aggregate demand. The findings underscore the need for continuous investment in microfinance institutions to sustain inclusive growth (Raihan, Hasan, & Chowdhury, 2025).

Rauf and Mahood (2025) investigated the development processes of the microfinance sector in Pakistan and their impact on institutional performance and poverty alleviation. The study assessed outreach strategies and intensive development models, finding that early-stage investments in physical infrastructure, recruitment, and branch networks yielded efficiency gains and improved institutional performance. However, the study cautioned that rapid scaling without adequate regulatory oversight could create operational risks. Overall, the findings suggested that balancing outreach expansion with poverty alleviation objectives remains central to ensuring sustainability in Pakistan's microfinance industry (Rauf & Mahood, 2025).

Aliyu, Gambo, Enesi, Nwoye, and Ibrahim (2024) investigated the impact of regulatory influence on the financial performance of National Microfinance Banks (NMBs) in Nigeria, focusing on sanctions, penalties, and Minimum Capital Requirement (MCR) imposed by the Central Bank of Nigeria. Using an ex-post facto design on data from seven NMBs over six years, the study applied Agency Theory and Pecking Order Theory to explain how regulations shape micro-loan allocations and managerial alignment with stakeholders. Findings revealed that although regulatory measures significantly influenced loan allocations, they did not adequately account for variations in return on assets (ROA), and individual regulatory variables had no significant multivariate effect. The authors recommend that NMBs should adapt closely to evolving regulations, while also diversifying strategies to sustain ROA, as regulatory influences alone cannot guarantee performance outcomes (Aliyu et al., 2024).

Daoud and Kammoun (2024) examined the nexus between banking regulation and financial soundness within Islamic banks across eight countries during the COVID-19 crisis. Using financial soundness indicators spanning 2017–2023, the study assessed size, profitability, non-performing financing, and capital adequacy across regions including Saudi Arabia, Southeast Asia, and South Asia. Findings revealed that capital adequacy played a key stabilizing role, particularly in Saudi Arabia, Malaysia, and Indonesia, while weaker regions required additional policy interventions to safeguard stability. The study concluded that effective regulation was instrumental in maintaining resilience during the pandemic, though regional disparities highlighted the need for context-specific policy support (Daoud & Kammoun, 2024).

Sharimakin (2023) analyzed the relationship between operating environment, sustainability, and welfare impact of microfinance banks (MFBs) in Nigeria. Using micro-level cross-sectional data,

the study evaluated how external factors such as loan default, taxes, and cost of education affect MFB profitability, as well as how sustainability influences client welfare. Results showed that unsustainable MFBs were more vulnerable to profitability shocks, while sustainable MFBs enhanced borrowers' welfare by improving access to better livelihood outcomes. The study emphasized that strengthening loan management mechanisms, curbing multiple taxation, and improving regulatory support are crucial for both MFB sustainability and welfare impact (Sharimakin, 2023).

Molla and Kaur (2023) analyzed the relationship between risk management practices and the financial performance of microfinance institutions (MFIs) in Ethiopia, using secondary data from 24 MFIs between 2013 and 2022. Employing a two-step system GMM approach, the study accounted for endogeneity and heteroskedasticity biases in panel data. Results revealed that lagged financial performance indicators (ROA and ROE) significantly enhanced current performance, while financial leverage, interest rate risk, and high cash-to-deposit ratios were detrimental. Loan-to-deposit ratios showed a positive relationship, but non-performing loans were insignificant. The study recommended enhancing financial literacy, optimizing liquidity, and improving credit evaluation to strengthen sustainability and performance (Molla & Kaur, 2023).

Ekoyi, Okechukwu, Ogbu, Ugwu, Nicholas, Chukwudi, Anyanwu, and Offurum (2023) explored the implications of intellectual capital investment on the financial performance of Nigerian banks, motivated by recurring financial distress in the sector. Analyzing data from 12 banks across 15 years with panel regression, the study found that human capital efficiency (HCE) and structural capital efficiency (SCE) positively influenced ROA, ROE, and EPS, while relational capital efficiency (RCE) showed mixed and largely insignificant effects. The findings highlighted the importance of continuous employee training and structural investments for competitive advantage and sustainable performance. The study recommended that Nigerian banks strengthen intellectual capital as a strategic tool to enhance profitability and stability (Ekoyi et al., 2023).

Karanja and Simiyu (2022) assessed credit management practices and loan performance in Kenyan microfinance banks using data from 13 institutions. Employing descriptive and inferential statistics, the study investigated credit policy, client evaluation, collection policy, credit conditions, and risk management. Results showed that credit management practices had a significant effect on loan performance, with client appraisal, credit risk systems, and structured follow-ups proving effective in maintaining low default rates (below 20%). The study concluded that improved credit monitoring systems and regular client engagement could enhance loan recovery and overall portfolio quality (Karanja & Simiyu, 2022).

Alley (2022) reviewed the Banking and Other Financial Institutions Act (BOFIA) 2020 in Nigeria, emphasizing its implications for financial system stability. By situating the analysis within regulatory theories and historical data (1983–2020), the study highlighted how BOFIA enhances compliance, broadens regulatory coverage, tightens prudential requirements, and strengthens disclosure mechanisms. Findings indicated that similar regulatory reforms in 2004 and 2009 had improved Nigerian banks' prudential performance, suggesting BOFIA 2020 has potential to consolidate system stability. However, concerns about supervisory concentration and reduced roles of safety-net institutions were raised. The study recommended harmonizing BOFIA with related laws to avoid systemic risks (Alley, 2022).

Karimi and Cheluget (2022) investigated the effect of prudential regulations on the financial performance of microfinance banks in Nairobi City County, Kenya. Drawing on a sample of 124 respondents from 14 licensed MFBs, the study used descriptive research design with SPSS analysis to assess capital adequacy, liquidity management, operational requirements, and reporting obligations. Findings revealed that capital adequacy strongly influenced lending strategies, outreach, and customer behavior, while liquidity and operational inefficiencies constrained performance. Respondents largely indicated that their banks lacked sufficient capital buffers against loan defaults. The study concluded that prudential requirements significantly affected MFBs' performance and recommended careful liquidity management, capital alignment with risk appetite, and enhanced operational efficiency to improve financial sustainability (Karimi & Cheluget, 2022).

Hartarska, Nadolnyak, and Chen (2021) investigated the effects of banking crises on microfinance institutions (MFIs) across 123 countries using panel data from 1,746 institutions between 2004 and 2017. The study assessed both financial performance and outreach, with special focus on crisis severity, intervention, and potential mission drift. Results revealed that most MFIs demonstrated resilience during banking crises, showing no significant decline in financial performance or deviation from serving marginalized clients. However, microfinance banks—a subset of MFIs—were prone to mission drift during crises. The study emphasized the unique resilience of MFIs serving informal-sector clients, while highlighting vulnerabilities in more formalized microfinance banks. These findings provide valuable insights for donors and stakeholders concerned with safeguarding outreach and stability during systemic disruptions (Hartarska, Nadolnyak, & Chen, 2021).

Nayak (2021) conducted a cross-country investigation across 129 nations to examine whether banking regulations affect bank performance. Drawing on World Bank datasets, the study tested eight regulatory dimensions—entry barriers, permissibility of activities, deposit insurance schemes, capital requirements, disclosure, supervision, external monitoring, and governance. Multiple regression analysis showed that stringent supervision and activity regulations positively influenced financial performance, while strict capital requirements and external monitoring imposed negative effects. However, these same negative factors improved risk management outcomes, indicating a trade-off between profitability and risk control. The study suggested the adoption of uniform global banking regulatory practices to harmonize financial stability objectives with performance optimization (Nayak, 2021).

Ali et al. (2023) assessed the performance of MFIs within the West African Economic and Monetary Union (WAEMU) following regulatory changes in 2007, including the adoption of prudential capital and liquidity ratios. Using data from 2002 to 2015, the study found that the 2007 regulations had a global negative impact on financial performance, primarily due to implementation costs and constraints. Minimum capital and liquidity requirements positively affected performance marginally. Regulation positively influenced social performance, though the net effect was weak. The authors recommended context-specific regulatory frameworks rather than a “one-size-fits-all” approach.

Thangarajan et al. (2023) analyzed the financial performance of MFIs in Tamil Nadu, India, highlighting the sector's rapid growth amid banking restrictions in remote areas. Using annual

reports as secondary data, the study examined the effects of effective asset ratio (EAR) and debt-to-loan ratio (DLR) on MFI performance. Results revealed that EAR positively influenced financial performance, while DLR had adverse effects. The study emphasized the importance of balancing profitability and sustainability in microfinance operations.

Muithya, Muathe, and Kinyua (2021) explored the moderating effect of regulatory frameworks on the relationship between strategic innovation orientation and MFI performance in Kenya. Using a sample of 13 MFIs and multiple regression analysis, the study found that prudential and non-prudential guidelines significantly moderated the link between innovation strategies and both financial and social performance. The findings underscored the importance of regulatory oversight in guiding strategic decisions of MFIs in competitive environments.

Igue (2025) analyzed the performance of Nigerian microfinance banks using an unbalanced panel dataset of 695 microbanks from 2011 to 2017. The study examined the impact of capital structure and competition on social and financial performance. Deposits negatively affected financial performance but improved outreach, while equity negatively affected financial performance without significant impact on social objectives. Competition adversely affected both profitability and operational self-sufficiency, consistent with the “competition-fragility” hypothesis.#

Kitsao (2025) assessed the impact of product diversification, including mobile banking, agency banking, internet banking, and electronic funds transfers, on financial performance of selected MFIs in Kenya. Using primary data from 13 MFIs and multiple regression analysis, the study found that mobile and agency banking positively influenced profitability, while electronic cash transfers had a detrimental effect. The study recommended expanding digital financial services while ensuring strategies to improve accessibility and revenue generation.

Nuriye (2024) examined the effect of prudential regulatory frameworks on financial performance of Kenyan MFIs. Using secondary data from 13 MFIs (2016–2020) and a causal research design, the study found that capital adequacy and liquidity requirements significantly affected performance, whereas MFI size and credit risk were insignificant. The research recommended optimizing liquidity management, capital requirements, and lending practices to enhance profitability and sustainability.

Nambie, Akrofi, and Amoah (2023) investigated the interplay between financial regulation, risk management, and MFI performance in sub-Saharan Africa using a two-step system GMM approach with panel data from 2002 to 2023. Findings indicated that effective regulation positively influenced risk management and financial stability, while excessive regulatory burdens could limit operational flexibility. The study highlighted the importance of tailored, balanced regulations to foster both sustainability and financial inclusion.

Nayak (2021) examined the impact of banking regulations on bank performance using World Bank data from 129 countries. The study found that stricter supervision and limits on permissible activities improved financial performance, whereas capital requirements and external monitoring negatively influenced profitability. The study emphasized that uniform global banking regulations could enhance performance consistency across heterogeneous banking systems. Akims et al. (2021) investigated capital adequacy and its impact on Kenyan MFBs’ financial performance.

Using panel regression analysis on secondary data from 13 MFIs (2013–2019), the study concluded that core capital-to-total assets and core capital-to-total deposits ratios were significant predictors of performance. The study recommended maintaining prudent capital buffers without undermining financial intermediation roles.

Gambo et al. (2022) evaluated the profitability of microfinance banks operating in Nigeria as a precondition of financial sustainability. Profitable banks tend to maintain adequate capital, high deposit base, high liquidity status and high loan quality. Correlational research design was adopted for the study and balanced panel data was used. Financial sustainability microfinance banks were profiled on size, capital adequacy and liquidity status, deposit base and loan quality following a balanced panel design. Multiple regression was used to analyze the data collected. The study reveals low level of profitability and sustainability, and hence recommends that Government and Monetary authorities (CBN) should increase the capital requirements for the establishment of Microfinance Banks as the current requirements are inadequate; embark on effective monitoring of the activities of Microfinance Banks; and promulgate policies that will enhance transparency, proper accountability, and competition in the sector to attract more credible investors.

Kayembe et al. (2021) investigated the factors that influence the sustainability of MFBs in Malawi. A cross-sectional survey was conducted from November to December 2020 among the MFBs employees in the central region of Malawi. Convenience and purposive sampling techniques were used to collect data online using a google form sent via social media platforms. Data were analysed using IBM SPSS software with Statistical significance placed at 0.05. 120 respondents completed the survey representing 79.3% response rate, of which 63% were male. The majority of the respondents fell within the age group of 31 - 40 years, representing 58%, having attained universities and vocational colleges' education level, representing 32.8%. With an experience of over 16 years, representing 41.2% of which were branch managers, representing 49.6%. The results of the ordinary least square regression indicated that reporting and loan management system (RLMS), corporate-governance, and commercialization were positively and significantly influencing the sustainability of MFB. The study argues that through commercialization, standardized reporting, and effective loan portfolio management systems, stakeholder-based approach to corporate governance, and favoured board independence through scale and cost management is critical to improving MFBs financial sustainability.

Karim et al. (2022) examined the impact of sustainable banking regulations on bank-specific characteristics in Pakistan before and during the COVID-19 pandemic. The study also investigates the moderating role of financial stability on the relationship between sustainable banking regulations and bank-specific characteristics. The study uses the system-Generalized Method of Moments to analyse the data. The findings suggest that sustainable banking regulations have a significant impact on bank-specific characteristics, and financial stability moderates this relationship. The study concludes that Pakistani banks have made significant improvements in profitability, market return, capital adequacy, and deposit ratio pre and during the pandemic era. The study recommends that policymakers should continue to monitor and regulate the banking sector to ensure its health and stability. The limitations of the study include the use of secondary data and the focus on only one country. The policy implication of the study is that sustainable banking regulations can help improve the health and stability of the banking sector.

Literature Gap

The literature on banking regulation and the financial performance of microfinance banks in Nigeria exhibits significant conceptual, methodological, and geographic gaps. Although the Central Bank of Nigeria enforces regulatory instruments such as minimum capital requirements and prudential ratios, existing studies rarely isolate their direct effect on ROE, and instead treat banking regulation as a broad construct. Moreover, much of the literature focuses on the microfinance sector as a whole without distinguishing National MFBs, despite their unique operational scale, compliance costs, and regulatory exposure. Methodologically, prior research often relies on short-term or cross-sectional data, offering limited insight into long-run regulatory effects, while panel-based approaches that could better account for firm-specific variations remain underused. Geographically, research centres on general Nigerian microfinance trends rather than specifically on National MFBs, restricting the relevance and generalisability of findings for the segment operating in larger, more regulated urban markets.

METHODOLOGY

This study adopts ex-post factor research design because the variables under investigation such as minimum capital requirement, prudential ratios and ROE are pre-existing and cannot be manipulated by the researcher. Banking regulations and financial performance outcomes have already occurred over time; therefore, the study can only observe and analyse their effects retrospectively. The population of the study is the Seven (7) National Microfinance Banks in Nigeria. They are: AB Microfinance Bank Nigeria, Accion Microfinance Bank Nigeria, ASHA Microfinance Bank Nigeria, Baobab Microfinance Bank Kaduna, La Fayette Microfinance Bank Oyo, LAPO Microfinance Bank Edo and Letshego Microfinance Bank Nigeria. The Sample size is Seven (7) and sampling technique is census sampling technique due to the small nature of the population. Data are to be sourced from the Secondary sources like Annual reports of the 7 National Microfinance Banks for ten years period (2015-2024).

The study adapted the model of Gambo et al, (2025) which states as follows:

$$FP = \alpha + \beta_1 MC + \beta_2 PR + AC + \mu \dots \dots \dots 3.1$$

The model is explicitly modified to:

$$FP = \alpha + \beta_1 MC + \beta_2 PR + \mu \dots \dots \dots 3.2$$

Where: FP = Financial Performance (ROE), MC = Minimum Capital Requirement, PR = Prudential Ratios, α = Intercept, β = Independent variable coefficient, μ = Error terms.

RESULTS AND DISCUSSION

The study adopted Multivariate Analysis of Variance (MANOVA) was used to examine the impact of the regulation on financial sustainability. This approach aligns with the methodologies used by Al-Alawi (2018) and Nareswari et al. (2021), where they employed MANOVA to assess the relationship between similar variables. MANOVA is a suitable technique as it allows for the simultaneous evaluation of multiple dependent variables. It is also helpful in determining associations between different variables (Rai et al., 2019).

Table 1 Descriptive Statistics

	N	Range	Mean	Std. Deviation	Variance	Skewness	Kurtosis
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	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
ROE	49	4.00	2.2994	1.34238	1.802	.932	.133	-.361	.266
MC	49	4.00	2.5389	1.44675	2.093	.673	.133	-.964	.266
PR	49	4.00	2.1677	1.31132	1.720	1.094	.133	.023	.266
Valid N (listwise)	49								

SPSS Output, 2026

Table 1 presents the descriptive statistics of the variables included in the analysis: Returns on Assets (ROE), Minimum Capital Requirement (MC), and Prudential Ratios (PR). These statistics provide valuable insights into the financial Performance of National Microfinance Banks in Nigeria. The mean values of ROE reflect the average financial performance of the microfinance banks. The mean ROE value of 2.2994 suggests that, on average, the banks generated positive returns on their equity.

**Table 2
Correlations**

		ROA	RMLT	MC	PR
ROE	Pearson Correlation	.489**	1	.508**	.392**
	Sig. (2-tailed)	.000		.000	.000
	N	49	49	49	49
	Pearson Correlation	.377**	.392**	.385**	1**
MC					
	Sig. (2-tailed)	.000	.000		.000
	N	49	49	49	49
PR	Pearson Correlation	1.000**	.504**	.377**	1**
	Sig. (2-tailed)	.000	.000	.000	
	N	49	49	49	49

SPSS Output, 2026

Table 2 presents the correlation coefficients between the variables: Returns on Equity (ROE), Minimum Capital Requirement (MC), and Prudential Ratios (PR). These correlations provide insights into the relationships among these variables and their implications for the financial Performance of National Microfinance Banks in Nigeria.

Table 3 Grand Mean

Dependent Variable	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
ROE	2.604 ^a	.093	2.421	2.787

a. Based on modified population marginal mean.

SPSS Output, 2025

Table 3 provides the grand mean and the associated statistical measures for the dependent variable Returns on Equity (ROE). These measures offer valuable insights into the central tendency and variability of these variables in the context of the study on the impact of Banking Regulation on the financial Performance of National Microfinance Banks in Nigeria.

Table 4 Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	ROE	436.121 ^a	12	36.343	85.473 ^a	.000
Intercept	ROE	240.451	1	240.451	565.499	.000
MC	ROE	37.588	4	9.397	22.100	.000
PR	ROE	34.373 ^a	4	8.593	20.210 ^a	.000
MC * PR	ROE	72.983	4	18.246	42.911	.000
	ROE	72.983	4	18.246	13.710	.000
Error	ROE	136.490	49	.425		

a. R Squared = .762 (Adjusted R Squared = .753), b. R Squared = .732 (Adjusted R Squared = .722), c. R Squared = .732 (Adjusted R Squared = .705)

SPSS Output, 2026

DISCUSSION OF FINDINGS

The findings from Table 4 support the suggestion that the Minimum Capital Requirement has a significant impact on ROE in national microfinance banks. The analysis reveals a significant effect of the Minimum Capital Requirement on ROE (Type III Sum of Squares = 37.588, df = 4, Mean Square = 9.397, F = 22.100, $p < 0.001$). This implies that the minimum capital requirement imposed by the central bank affects the ability of microfinance banks to generate returns on equity. These findings are consistent with the study conducted by De Aghion and Morduch (2015), which found that compliance with prudential regulations positively influenced the financial sustainability of microfinance institutions. However, the contradicting studies by Heredia and Spiegel (2019) in Mexico and Adusei and Kwaning (2018) in Ghana reported no significant relationship between prudential ratios and financial performance. These divergent findings emphasize the need for further examination of the factors that may mediate the relationship between capital requirements and financial performance, taking into account the specific characteristics of microfinance institutions and the regulatory frameworks in different contexts.

The results from Table 4 supports the suggestion that Prudential Ratios have a significant impact on ROE in national microfinance banks. The analysis demonstrates a significant effect of Prudential Ratios on ROA (Type III Sum of Squares = 34.373, df = 4, Mean Square = 8.593, F = 20.210, $p < 0.001$). This implies that compliance with prudential ratios imposed by the central bank affects the ability of microfinance banks to generate returns on equity. These findings are consistent with research conducted by Beisland et al. (2018) in Norway and Zou et al. (2017) in

Kenya, which found a positive relationship between prudential ratios and financial performance in microfinance institutions. However, contradictory studies by Casarico et al. (2016) in Italy and Sejko and Mandini (2019) in Albania reported no significant relationship between prudential regulations and financial performance. These conflicting findings highlight the need for further investigation to understand the underlying mechanisms and contextual factors that may mediate the relationship between prudential ratios and financial performance in microfinance institutions. The findings from Table 4 provide mixed evidence regarding the impact of central bank regulations, including both the Minimum Capital Requirement and Prudential Ratios, on the financial Performance indicators of national microfinance banks in Nigeria. The results indicate that the Minimum Capital Requirement and Prudential Ratios have significant effects on ROE. These findings contribute to the understanding of the regulatory landscape and its implications for the microfinance sector in Nigeria, emphasizing the importance of effective regulatory frameworks in ensuring the stability and long-term viability of microfinance institutions.

CONCLUSION AND RECOMMENDATIONS

Based on the findings of the study, the following policy recommendations can be made regarding the impact of regulatory measures on the financial Performance indicators of national microfinance banks in Nigeria:

- i. Policymakers and regulators should recognize the impact of the Minimum Capital Requirement on returns on equity in microfinance banks. Adequate capitalization enhances the attractiveness of microfinance institutions to investors and contributes to the financial stability of these institutions. Microfinance banks should strive to maintain an optimal level of capital to maximize returns on equity. This can be achieved through prudent capital allocation, effective risk management practices, and efficient use of financial resources.
- ii. Policymakers and regulators should recognize the relationship between prudential ratios and returns on equity in microfinance banks. Compliance with these ratios is crucial for the profitability and financial sustainability of microfinance institutions. Microfinance banks should focus on adhering to prudential ratios to optimize returns on equity. This can be achieved through effective risk management, ensuring efficient use of financial resources, and implementing strategies to improve asset quality and profitability.

Suggestions for further studies

Given the limitations of the present study, several areas warrant further investigation to enhance our understanding of the regulatory dynamics and their impact on the financial performance of microfinance institutions. The following areas of research are recommended for future studies:

Longitudinal Analysis: Conducting longitudinal studies would enable researchers to assess the long-term effects of regulatory measures on the financial performance indicators of microfinance banks. By examining changes in these indicators over time, researchers can better understand the causality and directionality of the relationships.

Comparative Analysis: Comparing the regulatory frameworks and financial performance of microfinance institutions across different countries or regions would provide valuable insights. Such comparative studies would help identify best practices and determine the contextual factors that contribute to favourable outcomes.

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