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FINANCIAL INCLUSION AND ORGANIZATIONAL PERFORMANCE: EVIDENCE FROM MICROFINANCE BANKS

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ABSTRACT: *Microfinance banks make sound contributions to economic growth and development as well as enhanced employment creation. The study aimed to determine the effects of financial inclusion measures: savings, affordable credits and financial advice on micro-finance banks performance measures (financial and operational) in Lagos State, Nigeria. Survey research design was adopted and the use of the multi-regression method of analysis was employed to analyse the generated data. The sample size was 386 and the sampling technique adopted was the convenience method. The field data generated were normalized, valid and reliable for this study. Findings revealed that financial inclusion measures like savings, affordable credits and financial advice significantly enhance both financial and operational performances of microfinance in Lagos State, with F-statistics (2, 343) = 120.241, p = 0.001 (p<0.05) and F-statistics (2, 343) = 211.814, p = 0.003 (p<0.05) respectively. The study concluded that financial inclusion measures like savings, affordable credits and financial advice improve microfinance banks performance via financial and operational in Lagos State, Nigeria. Thus, the study recommended that microfinance banks policymakers and management should embrace financial inclusion measures such as savings, affordable credits and financial advice in order to enhance financial and operational microfinance performance in Lagos State.*

KEYWORDS: Affordable credits, financial advice, financial inclusion, financial performance, operational performance, savings.

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INTRODUCTION

Financial inclusion has become a significant policy agenda globally, aimed at providing financial services to the unbanked and underserved population. According to the World Bank (2017), financial inclusion refers to the process of ensuring access to appropriate financial products and services needed by individuals and businesses, especially the poor and vulnerable groups, at affordable costs in a responsible and sustainable manner. In Nigeria, financial inclusion is not only a socio-economic goal but also a tool for poverty alleviation, job creation, and sustainable economic growth. The Central Bank of Nigeria (CBN) in 2012 introduced the National Financial Inclusion Strategy (NFIS) aimed at reducing the percentage of adults excluded from the formal financial system from 46.3% in 2010 to 20% by 2020 (CBN, 2018). Financial inclusion is considered as a key enabler to financial institution performance and economic growth and therefore stationed on the growth agenda of most developing nations as a priority (Tameta, 2024). In Nigeria, financial inclusion has been recognized as a crucial element for economic growth and poverty alleviation. Microfinance banks (MFBs) play a pivotal role in this context by providing financial services to underserved populations, thereby fostering financial inclusion (Akinlo & Agunbiade, 2020). The Nigerian government, through various policies and initiatives, has emphasized the importance of expanding financial services to enhance economic participation and stability (Central Bank of Nigeria [CBN], 2021).

Microfinance banks (MFBs) play a critical role in the financial inclusion landscape. These institutions provide financial services such as loans, savings, insurance, and payment services to low-income individuals and small enterprises who may not have access to conventional banks (Armendariz & Morduch, 2010). Organizational performance in microfinance banks encompasses various metrics, including profitability, efficiency, outreach, and sustainability. Effective financial inclusion strategies can significantly influence these performance indicators by expanding the customer base, increasing loan portfolios, and enhancing overall financial health (Beck et al., 2016). However, despite the recognized importance of financial inclusion, the extent to which it affects the organizational performance of MFBs in Nigeria remains under-explored. Despite significant progress in financial inclusion, many microfinance banks in Nigeria face operational challenges such as limited savings, high operating costs, inadequate infrastructure, and regulatory constraints that may impact their organizational performance.

The relationship between financial inclusion and the performance of microfinance banks is particularly crucial because it helps policymakers and stakeholders understand how effective financial inclusion practices can improve not only access to finance but also the operational efficiency and profitability of microfinance institutions (MIs). While previous studies have examined the impact of financial inclusion on poverty reduction (Cull, Demirgüç-Kunt & Morduch, 2014), there is limited empirical evidence on how financial inclusion affects the organizational performance of microfinance banks, especially in Lagos State, Nigeria which has the highest number of microfinance banks and being the commercial hub of the country.

This study would be very important to microfinance banks' policymakers, managements, strategists, etc as it would serve policy guidelines on savings packages for their customers, affordable credit provision and expertise financial advice and programmes. Also, International Monetary Fund (IMF), Central Bank of Nigeria (CBN), Nigeria Deposit Insurance Corporation (NDIC) and others would find this study worthwhile as it would reveal the effect of financial inclusion on the performance of microfinance banks in Lagos state, Nigeria.

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Statement of Problem

Financial inclusion is intended to enhance access to financial services for the underbanked population; however, its impact on the performance of microfinance institutions has not been fully explored. Several MFBs in Nigeria struggle with operational sustainability due to poor financial inclusion practices, high non-performing loans, and limited customer outreach (Ojo, 2017). While there has been a growing number of initiatives aimed at increasing financial inclusion, the extent to which these measures have improved the organizational performance of microfinance banks remains unclear. However, challenges such as limited access to technology, inadequate infrastructure, and regulatory constraints may impede the effectiveness of financial inclusion strategies, thereby affecting the performance of these institutions (Iwuoha, 2019). Understanding the relationship between financial inclusion and organizational performance is critical for policymakers, financial institutions, and stakeholders to design and implement strategies that enhance both financial access and institutional success.

For instance, despite the implementation of the National Financial Inclusion Strategy, many microfinance banks still face liquidity problems, operational inefficiencies, and difficulties in reaching target customers (Adeola & Evans, 2017). The lack of empirical data on the effectiveness of financial inclusion initiatives creates a gap in understanding how these banks can leverage inclusive financial practices to improve performance. Also, despite the studies of other authors on financial inclusion, a very few investigate microfinance banks in Nigeria. Hence, it is important to assess the impact of financial inclusion on key performance indicators such as financial and operational microfinance banks. The primary aim of this study is to investigate the effects of financial inclusion on the organizational performance of microfinance banks in Lagos State, Nigeria; the specific objectives were to examine whether financial inclusion measures (savings, affordable credits and financial advice) influence financial performance among microfinance banks in Lagos State, Nigeria and access if these financial inclusion measures affect the operational performance of microfinance banks in Lagos State, Nigeria. But to achieve the research objectives, the study seeks to answer these research questions: What is the influence of financial inclusion measures (savings, affordable credits and financial advice) on the financial performance among microfinance banks in Lagos State, Nigeria? How do these financial inclusion measures affect the operational performance of microfinance banks in Lagos State, Nigeria?

LITERATURE REVIEW

Conceptual Review

Financial Inclusion

Financial inclusion is a multifaceted concept that encompasses the availability, accessibility, and affordability of financial services to all segments of society, particularly the underserved and marginalized groups (World Bank, 2014). Financial inclusion, according to a United Nations report, is the long-term provision of inexpensive financial services that enable the poor to participate in the formal economy (United Nations, 2016). It aims to empower individuals and businesses by providing them with the tools necessary to participate fully in the economy, thereby fostering economic growth and reducing poverty (Suri & Jack, 2016). In the Nigerian context, financial inclusion has been a focal point of economic policy, with initiatives aimed at

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expanding banking services beyond urban centers to rural and semi-urban areas (Akinlo & Agunbiade, 2020).

Financial inclusion, according to Nwambeke et al. (2023), is the provision of financial services to underserved and low-income groups in society at reasonable prices. These groups frequently have inadequate or no banking. This suggests that those who are underbanked or unbanked lack a secure position to save money, access to small loans or credit lines and are vulnerable to predatory lenders, the ability to establish credit, the ability to receive money from clients or relatives who are working abroad, and the ability to pay suppliers, schools, and doctors in a quick, simple, and dependable manner.

The Role of Financial Inclusion in Microfinance

Microfinance banks are pivotal in promoting financial inclusion, especially in developing economies where traditional banks have limited penetration. MFBs serve as financial intermediaries for low-income individuals who may not meet the eligibility criteria for commercial banks (Mora, 2022). By providing services such as microloans, savings accounts, and insurance, microfinance institutions facilitate the inclusion of marginalized communities in the formal economy.

Microfinance institutions (MFIs), including microfinance banks, are instrumental in advancing financial inclusion by offering tailored financial products such as microloans, savings accounts, and insurance to individuals and small enterprises that are typically excluded from traditional banking systems (Armendariz & Morduch, 2014). Studies have shown that financial inclusion through MFIs contributes to economic empowerment, enhances entrepreneurial activities, and improves household welfare (Beck et al., 2016). In Nigeria, MFIs have been pivotal in bridging the financial gap, providing essential services that support small-scale entrepreneurship and informal businesses (Nwosu & Osabuohien, 2017).

According to Irobi (2019), microfinance institutions play a significant role in bridging the gap between formal financial institutions and the unbanked population. They provide financial services that cater to the needs of low-income individuals and small-scale enterprises that are often overlooked by traditional banks. The Central Bank of Nigeria (2018) noted that microfinance banks have been instrumental in expanding financial access to remote and rural areas, where formal banking services are often scarce.

Factors Influencing Financial Inclusion in Nigeria

Several factors influence financial inclusion in Nigeria, including technological advancements, regulatory frameworks, economic stability, and socio-cultural dynamics. The proliferation of digital banking and mobile financial services has significantly enhanced access to financial services, particularly in remote areas (Afolabi, 2018). Regulatory support from the Central Bank of Nigeria has been crucial in fostering an environment conducive to financial inclusion, through policies that promote the expansion of banking services and protect consumer rights (CBN, 2021). However, challenges such as inadequate savings, infrastructural deficits, and socio-cultural barriers continue to impede the full realization of financial inclusion goals (Iwuoha, 2019).

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Organizational Performance in Microfinance Banks

Organizational performance in microfinance banks is a critical indicator of their effectiveness and sustainability. It is typically measured through various metrics, including profitability, operational efficiency, outreach, and sustainability (Bekele & Tilahun, 2023). Profitability ensures that MFIs can cover their costs and reinvest in expanding their services, while operational efficiency reflects their ability to manage resources effectively and deliver services cost-effectively (Ross et al., 2019). Outreach indicates the extent to which MFIs reach underserved populations, and sustainability assesses their long-term viability in the financial market (Khan & Ahmed, 2022).

Several scholars have examined the relationship between financial inclusion and organizational performance. According to Cull, Demirgüç-Kunt and Morduch (2014), financial inclusion leads to increased customer base and higher revenues for financial institutions, which directly impacts their financial performance. Microfinance banks that adopt financial inclusion practices such as offering diverse and affordable financial products have been found to improve their profitability and loan recovery rates (Adeola & Evans, 2017).

Moreover, Sharma (2016) observed that financial inclusion enhances operational efficiency by reducing transaction costs through the adoption of digital financial services. For instance, mobile banking and agent banking have been shown to increase outreach while lowering the operational costs of microfinance institutions (Donou-Adonsou et al., 2020). These technological innovations allow microfinance banks to serve a larger population at lower costs, thereby improving overall performance.

The Relationship between Financial Inclusion and Organizational Performance

The relationship between financial inclusion and organizational performance has been the subject of extensive research, revealing a positive correlation between the two. Enhanced financial inclusion can lead to increased customer base, higher loan portfolios, and improved profitability for MFIs (Dabla-Norris et al., 2015). Additionally, by serving a broader clientele, MFIs can achieve economies of scale, thereby improving operational efficiency (Beck & Cull, 2014). Furthermore, financial inclusion initiatives can bolster the reputation and trustworthiness of MFIs, attracting more investors and stakeholders, which in turn supports sustainability (Christen et al., 2011).

Theoretical Review

Financial Intermediation Theory

The Financial Intermediation Theory posits that financial intermediaries, such as banks and microfinance institutions, play a crucial role in the economy by channeling funds from savers to borrowers. This theory was first formalized by Gurley and Shaw (1960) and has since been expanded upon by various scholars to explain how financial institutions reduce transaction costs and information asymmetry, thereby fostering economic growth and development. In the context of microfinance institutions, the Financial Intermediation Theory highlights how these organizations act as intermediaries for individuals and businesses that are typically excluded from formal banking services. By providing financial products and services (such as loans, savings accounts, and insurance) to underserved populations, microfinance institutions enhance financial inclusion, which, in turn, can improve their performance.

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The theory supports the idea that access to financial services promotes economic empowerment, increases productivity, and ultimately leads to higher profitability for the institution. Additionally, financial intermediaries help to mitigate risk by spreading it across a large number of clients, which contributes to institutional stability and performance. The reduction of information asymmetry, a core component of this theory, is particularly relevant in microfinance as many clients lack formal credit histories, and the institutions develop innovative ways to assess creditworthiness. Allen and Santomero (1997) expanded on the theory by explaining how financial intermediaries provide liquidity and risk-sharing benefits to clients, which enhances operational performance. For microfinance institutions, offering flexible financial products, such as microloans and savings accounts, encourages greater participation in the financial system, enhancing both social and financial performance. Diamond (1984) further developed the idea that financial intermediaries reduce transaction costs and provide monitoring services that are essential for improving resource allocation. In the case of MFIs, the reduction of such costs is critical to their operational efficiency and overall performance.

Resource-Based View (RBV) Theory

The Resource-Based View (RBV) theory, developed by Barney (1991), is a strategic management framework that emphasizes the internal resources of an organization as the key drivers of competitive advantage and performance. According to the RBV, an organization's unique resources—whether tangible or intangible—determine its ability to achieve superior performance compared to its competitors. In the context of microfinance institutions, RBV theory suggests that their ability to mobilize and leverage unique resources (such as human capital, technological systems, and organizational culture) significantly impacts their performance. For instance, a microfinance bank's ability to develop strong relationships with underserved communities, use innovative technologies (such as mobile banking), and employ knowledgeable staff can lead to higher levels of financial inclusion and improved organizational performance.

The RBV theory also emphasizes the importance of intangible assets like brand reputation and customer trust, which are crucial for MFIs. Since MFIs often work with low-income, underserved clients, trust and social capital play a key role in their operations. Microfinance institutions that effectively build these resources can differentiate themselves in a competitive market and improve their financial sustainability. Barney (1991) argued that firms could achieve a sustained competitive advantage if they possess resources that are valuable, rare, inimitable, and non-substitutable (VRIN). In the case of MFIs, their ability to innovate financial products that meet the needs of the underserved population can be seen as a valuable and rare resource. Wernerfelt (1984) introduced the concept of the "resource position barrier," which emphasizes the importance of resources in gaining a competitive edge. For MFIs, maintaining a strong resource base, such as technological capabilities or specialized staff, can serve as a barrier to entry for competitors and enhance performance.

Empirical Review

Adamu and Adaora (2024) evaluated the impact of financial inclusion strategies on the performance of Nigeria's banking industry. To get the intended outcome, this study employs an ex-post facto research strategy to investigate the relationship between financial inclusion and the economic performance of the Nigerian banking industry. The data utilised in this study

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is sourced from various secondary sources from 2009 to 2019. The study included descriptive statistics and the Ordinary Least Square method of regression analysis. The findings of the study suggest that the adoption of Point of Sale (PoS) terminals significantly influences the overall efficiency and effectiveness of the banking industry in Nigeria, and, additionally, that financial transactions conducted through Automated Teller Machines (ATMs) have a substantial impact on the Return on Equity (ROE) of the banking industry in Nigeria. On the other hand, it was determined that Mobile Money Transfer did not demonstrate a significant impact on the performance of the Nigerian banking sector.

Tameta (2024) investigated the effects of financial inclusion on the performance of financial institutions in Cameroon. Specifically, the study sought to examine the effects of access, availability and usage of banking services on the financial performance of financial institutions in Cameroon. A cross-sectional research design was applied with the use of purposive and convenience sampling methods. Two hundred and ten (210) respondents from 75 financial institutions in Cameroon were selected. Primary data was collected using a self-administered questionnaire. Data collected was sorted, coded and analysed using the Statistical Package for Social Sciences (SPSS v22.0). Data collected was analysed descriptively with the use of mean and inferentially with the use of ordered logit regression model and Pearson correlation matrix to establish the relationship between the dependent variable and the independent variables, and the results were presented in tables.

Nwambeke et al. (2023) assessed the performance of the Central Bank of Nigeria's financial inclusion plan with regard to financial access, financial usage, and extent of financial inclusion. The study employed content analysis, which involves examining earlier works. The study found that financial usage has significantly expanded and that due to technological advancements, several aspects of the plan, such as point-of-sale terminals, are at present not the greatest or optimum channels for offering financial services. The inability of the NFIS to lower financial exclusion to 20% before 2020 was also determined to be a failure. The study concluded that the degree of financial inclusion is still inadequate, especially in the northern regions of Nigeria where religious and cultural variables decreased financial inclusion due to restricted access to financial services. The report suggested that NFIS should work with financial institutions to develop technological and regulatory environments to support the expansion of readily available and reasonably priced digital financial services.

Oyetoyan, Ajiboye and Popoola (2021) sought to determine the effect of savings programs, usage of agents and representatives, increased proliferation of ATMs and Mobile banking services on the financial performance of listed banks in Nigeria and to determine the effect of bank branch spread on performance of listed banks in Nigeria. The main theories reviewed in this study were the Bank Led Theory and Contemporary Banking Theory. The study adopted a descriptive research design, and the study population included management and operational level employees of the five (5) Deposit Money Banks listed on the Nigerian Securities Exchange. A census study was conducted with primary data being collected using questionnaires. The analysis of data was based on SPSS software (version 23) and the regression analysis was presented using tables. The results of the study determined that financial inclusion elements have a positive and strong impact on the financial performance of banks in terms of return on equity (ROE). The study determined that savings programs have a positive but weak impact on financial performance of selected banks. The use of agents and representatives had a positive and strong effect on performance of sampled banks. The proliferation of ATMs and mobile banking services had a positive but weak effect on financial

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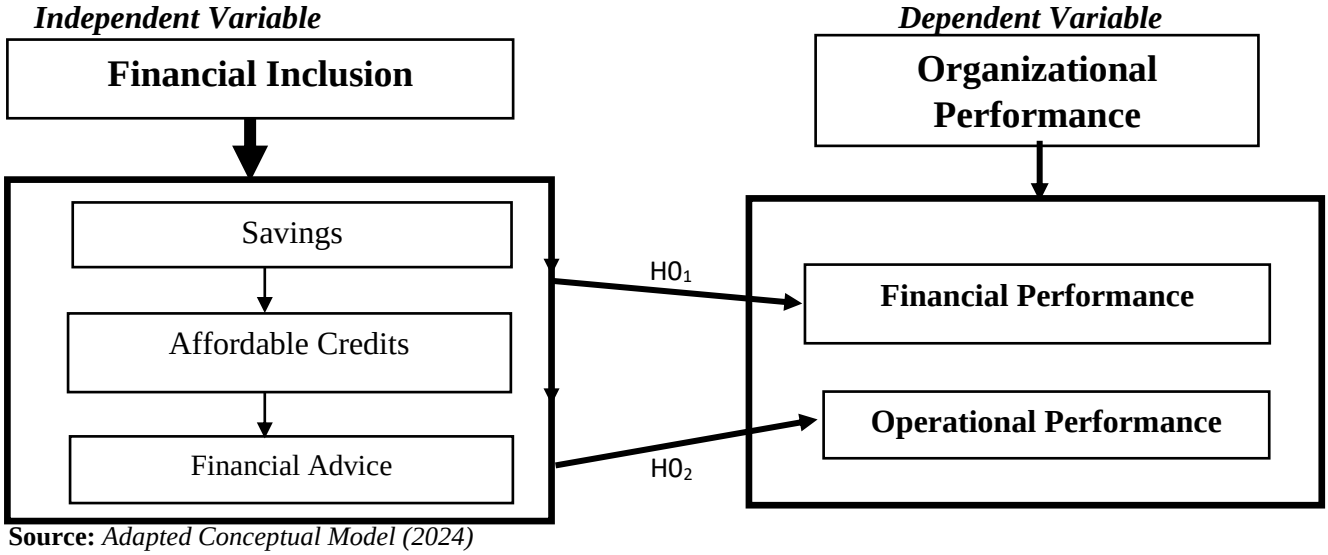
performance of selected banks. Bank branch spread had a positive but weak effect on financial performance of selected banks.

Samuel and Onyia (2021) examined the impact of microfinance banks on financial inclusion in Nigeria using time series data from 1992 to 2020. Using the bound test and the Auto Regressive Distributed Lag model, the study was set to examine the impact of microfinance banks' lending on financial inclusion in Nigeria, and to examine the impact of microfinance banks investment on financial inclusion in Nigeria. The findings indicated that microfinance banks' loans and advances have a significant impact on financial inclusion in Nigeria. Furthermore, the results showed that microfinance banks' investments have a significant impact on financial inclusion in Nigeria. The study also found that the availability of micro banking facilities and strong branch networks also impact on financial inclusion in Nigeria.

Ogidi (2021) examined financial inclusion and its effect on the growth of SMEs in Plateau State, Nigeria. Primary data was collected via questionnaires using the simple random sampling technique. Data was analysed using Chi-Square. The results show that SMEs in Nigeria have access to financial products that are made available by banks and other financial institutions. Also, financial inclusion significantly affects the growth of SMEs in Nigeria. Furthermore, SMEs customers highly accept financial inclusion and this in turn positively affects the growth of SMEs in Nigeria.

Asghar et al. (2021) surveyed a vast body of literature devoted to evaluating the relationship between the FI and FS of the banks. The literature review evaluates recent empirical research studies on the impact of FS and banks FS. The research work is divided into following parts: (i) financial inclusion (FI) (ii) financial stability (FS) (iii) the influence of FI and FS (iv) FI measurement and indicator (v) whether FI leads to enhance the FS. This paper presents the relevant review of imperialistic research on the nexus among the influence of FI on FS since the period of 1995–2020. Abundant research studies till date suggest that FI has a positive and significant impact on the FS of the banks, while few other research studies also reveal that when FI has a negative influence on the FS without having efficient management; when the credit is expanded in this time, it will increase the risk for financial stability.

Conceptual Framework



Source: *Adapted Conceptual Model (2024)*

Figure 1: Conceptual Framework between Financial Inclusion Measures and Organizational performance of Microfinance Banks in Lagos State, Nigeria

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The researcher's conceptual model depicted how financial inclusion practices (savings, affordable credits and financial advice) influence microfinance banks' performance, both financial and operational variables. The above conceptual framework aligned with specific objectives and hypotheses of the study.

METHODOLOGY

The study employed survey research design and the population of the study was 719, according to the Central Bank of Nigeria (CBN) 2023. Of these 719 MFBs, 129 had their head offices in Lagos State (Loanspot, 2023). Lagos State was chosen because it is the commercial hub and the most competitive business environment in Nigeria. The sampling techniques for this research work is using non probability sampling with respect to purposeful sampling. The sample size was twenty (20) microfinance banks operating in Lagos State's dynamic environment. About 19 copies of the questionnaire were administered on each selected microfinance banks' customers in Lagos State, giving a total of 384 copies, although there were no precise of the data for the number of micro-finance banks in Lagos state.

Purposive sampling technique was employed and Cochran (1997) formula was used for sampling size determination:

$$n = [Z^2pq]/d^2$$

where:

n = Sample size

Z = Standardized normal variable and its value that corresponds to 95 % confidence interval equals 1.96.

P = Degree of variability (0.5)

q = 1–p

d= Degree of accuracy (0.05)

$$n = \frac{(1.96)^2\ 0.5 \times 0.5}{(0.05)^2} = 384.16 = 384$$

The adapted instrument is depicted in Table 1 below; the Cronbach's alpha coefficients of the adapted questionnaire confirming their reliability and validity are shown in Table 1. The adapted questionnaire was therefore adjudged reliable and valid since the Cronbach's alpha was greater than 0.70 and the Average Variance Explained (AVE) was greater than 0.5 for validity respectively.

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Table 1: Reliability and Validity Results of the Adapted Questionnaire

Variables	Components of Dependent Variable	Cronbach's Alpha	AVE
Y = Micro-Finance Performance (Dependent Variable)	Financial Performance	0.79	0.66
	Operational Performance	0.78	0.69
X = Financial Inclusion (Independent Variable)	Savings	0.75	0.56
	Affordable Credits	0.77	0.65
	Financial Advice	0.73	0.64

Source: *Researcher's Compilation from Adapted Questionnaire Reliability and Validity Report (2024)*

The Confirmatory Factor Analysis (CFA) is measured based on Kaiser Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's Test of Sphericity at 95%, and the instrument is regarded as adequate, when the value of KMO is between 0.5 to 1.0 (Hair et al., 2010). For the Bartlett's Test of Sphericity, small values (less than 0.05) of significance level indicate that the adequate correlation exists to justify factor analysis (Hair et al., 2010). Average Variance Extracted (AVE) greater than 0.5 is treated as evidence of convergent validity. The factor loadings of these items are used to establish the AVE. The results of KMO Measure of Sampling Adequacy, Bartlett's Test of Sphericity and AVE for the variables are presented in Table 2 which indicates that the data for the study is reliable and valid.

Table 2: Reliability and Validity Results

S/N	Variables	No of Original items	No of Retained items	KMO	Bartlett's test of sphericity	AVE	Cronbach Alpha
1	Financial Performance	5	5	0.754	76.544(0.000)	0.521	0.752
2	Operational Performance	4	4	0.732	68.453(0.000)	0.667	0.731
3	Savings	4	4	0.767	75.569(0.000)	0.623	0.451
4	Affordable Credits	3	3	0.847	51.223(0.000)	0.523	0.811
5	Financial Advice	4	4	0.619	60.342(0.000)	0.612	0.635

Source: *Researcher's Computation (2024)*

Model Specification

For this study, the dependent variable was microfinance bank performance measure with financial performance and operational performance, while the independent variable was financial inclusion measure with Savings, Affordable Credits, Financial Advice and financial capability. The functional model for the study variables is denoted below:

$$Y = f(X)$$

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Y = Dependent Variable

X = Independent Variable

Y = Microfinance Bank Performance (MFBP)

X = Financial Inclusion (FI)

$Y = (y_1, y_2)$

where:

Y = Microfinance Bank Performance (MFBP)

y_1 = Financial Performance (FP)

y_2 = Operational Performance (OP)

$X = (x_1, x_2, x_3)$

where;

X = Financial Inclusion (FI)

x_1 = Savings (SAV)

x_2 = Affordable Credits (AFC)

x_3 = Financial Advice (FAD)

The models formulated for each of the hypotheses are written as:

Hypothesis One

$y_1 = f(x_1, x_2, x_3)$

$y_1 = f(SAV, AFC, FAD)$

$FP = \beta_0 + \alpha_1 SAV + \alpha_2 AFC + \alpha_3 FAD + \varepsilon_i$ Eqn1

Hypothesis Two

$y_2 = f(x_1, x_2, x_3)$

$y_2 = f(SAV, AFC, FAD)$

$OP = \beta_0 + \alpha_1 SAV + \alpha_2 AFC + \alpha_3 FAD + \varepsilon_i$ Eqn 2

where:

β_0 = Constant in the model

$\alpha_1 – \alpha_4$= Coefficient of the independent variables for objective one and two

ε_i = error or stochastic terms

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A Priori Expectations

Based on extant literature, it was expected that there would be a significant and positive effect of financial inclusion components (SAV, AFC, and FAD) on the performance of microfinance banks. The statistical notations for the *a priori* expectations and various relationships between the variables were as follows:

Table 3: A priori Expectations of the Hypotheses

Hypotheses	Models	Decision rule
H_{01}	$FP = \beta_0 + \alpha_1 SAV + \alpha_2 AFC + \alpha_3 FAD + \varepsilon_i$	Reject if $\alpha_i \neq 0$; and $P \leq 0.05$; Otherwise, do not reject
H_{02}	$OP = \beta_0 + \alpha_1 SAV + \alpha_2 AFC + \alpha_3 FAD + \varepsilon_i$	Reject if $\alpha_i \neq 0$; and $P \leq 0.05$; Otherwise, do not reject

Source: *Author's Computation (2024)*

RESULTS AND FINDINGS

The survey distributed 346 questionnaires to microfinance bank customers in Lagos State. Three hundred and forty-six (346) of the 384 copies of the questionnaire provided were correctly filled out and returned. This amounted to 90.1%. Bell et al. (2022) proposed that a response rate of 50% or above is required to examine the study's results. As a result, a response rate of 90.1% was deemed perfect retrieval of the administered instrument.

Data Treatment

Data treatment is compulsory for data generated from a survey so as to ensure that all the basic assumptions governing regression were met; the data was submitted for certain pre-diagnostic tests like normality, linearity, homoscedasticity, and multicollinearity tests.

Normality Test

Table 4: Summary of Normality Tests

Construct	Dimension	Skewness	Kurtosis
Micro-Finance Bank Performance (Y)	y_1 = Financial Performance (FP)	1.223	0.814
	y_2 = Operational Performance (OP)	1.911	0.613
Financial Inclusion (X)	x_1 = Savings (SAV)	1.577	0.315
	x_2 = Affordable Credits (AFC)	-1.679	-0.325
	x_3 = Financial Advice (FAD)	1.221	0.569
Linearity Test			
Independent Variables	**Test Results**	**P-value**	**Conclusion**
x_1 = (SAV)	12.679	0.011	Linearity
x_2 = (AFC)	15.137	0.000	Linearity
x_3 = (FAD)	11.226	0.002	Linearity
Multicollinearity Test			
Explanatory Variables	**Tolerance**	**VIF**	

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x_1 = (SAV)	0.415	1.923
x_2 = (AFC)	0.202	4.104
x_3 = (FAD)	0.480	2.292

Source: *Author's Computation (2024)*

Dependent Variables: Financial Performance (FP) and Operational Performance (OP)

The normalcy ranges of skewness and kurtosis within the range of -4 to +4 are generally deemed appropriate for determining normality in this study. This lends credence to the idea that these metrics give a reliable assessment of deviations from normalcy. Table 3 summarizes the normalcy test utilizing kurtosis and skewness tests. According to Tabachnick and Fidell (2001), the skewness and kurtosis values for the variables were determined to be between -4 and +4, which meets the criterion for data to be considered normally distributed and suitable for multiple regression analysis. Also, findings in Table 4 depicted that there exists a significant and positive linear connection between the dependent variables (FP and OP) and the sub-variables for independent variable for explanatory variables savings (SAV), affordable credits (AFC), and financial advice (FAD) at $p < 0.05$ significance level. As a result, the linearity assumption was met for the study, and the VIF (Variance Inflation Factor) values for the multicollinearity test were less than 5, showing that there was no substantial issue of multicollinearity among the predictor variables in the model. It is worth noting that while the literature typically considers a VIF score more than 5 to be a cause for concern, a threshold of 10 is commonly considered as the upper limit (Menard, 2009). Because the tolerance values were greater than 0.1, the VIF for the variables indicated the absence of multicollinearity between the variables, verifying the absence of multicollinearity.

Table 5: $H0_1$: Financial Inclusion Measures (Savings, Affordable Credits and Financial Advice) Do Not Influence the Financial Performance of Microfinance Banks in Lagos State, Nigeria

.N	Model	B	T	Sig.	ANOVA (Sig.)	R	Adj.R^2	F-stat (2, 343)
346	(Constant)	0.046	4.136	.000	0.001	0.328	0.301	120.241
	x_1 = Savings (SAV)	1.232	2.347	0.010				
	x_2 = Affordable Credits (AFC)	1.351	5.231	0.002				
	x_3 = Financial Advice (FAD)	1.129	4.923	0.012				
	a. **Dependent Variable**: Financial Performance (FP)@ 5% Level of Significance							

Source: *Researcher's Findings 2024*

Table 5 above depicts the multiple regression method of analysis of the influence of financial inclusion measures (savings, affordable credits, and financial advice) on the financial performance of microfinance banks in Lagos State, Nigeria. The table further shows that savings ($\beta = 1.232$, *t-stat* = 2.347, $p < 0.05$), affordable credits ($\beta = 1.351$, *t-stat* = 5.231, $p < 0.05$) and financial advice ($\beta = 1.129$, *t-stat* = 4.923, $p < 0.05$) have a positive and significant influence on financial performance of microfinance banks in Lagos State at 5% level of significance. Since the result of p-value is 0.000, which is less than 0.05, the study rejects the null hypothesis, which states that financial inclusion measures (savings, affordable credits and financial advice) do not affect the financial performance of microfinance banks in Lagos State,

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Nigeria and therefore accepts the alternate hypothesis which states that financial inclusion measures (savings, affordable credits and financial advice) do influence the financial performance of microfinance banks in Lagos State, Nigeria. The results reveal that these financial inclusion measures were significant predictors for financial performance among microfinance banks in Lagos State, Nigeria. This implies that sound and effective usage of savings, affordable credits and financial advice play crucial roles in achieving the financial performance of microfinance banks in Lagos State, Nigeria.

The coefficient of regression determination (Adj.R^2 = 0.301) indicated that about 30.1% of the changes that occur in the financial performance of microfinance banks during the study period are explained by savings, affordable credits, and financial advice, while the remaining 69.9% changes are accounted for by other variables not included in the study's prescriptive model. The results of the prescriptive model reveal that when savings, affordable credits, and financial advice improve by one-unit, financial performance increases by 1.232-unit, 1.351-unit, and 1.129 unit respectively; thus, this insinuates that savings, affordable credits, and financial advice positively and strongly influence microfinance banks' financial performance in Lagos State. Since the p-value is less than 5%, this implies that savings, affordable credits and financial advice as predictors used were significant to micro-finance banks financial performance. The t-values were > 1.96; hence, the value is significant. Furthermore, the results of F-statistics (2, 343) = 120.241, p = 0.001 (p<0.05) indicated that the overall model is statistically fit in predicting how financial inclusion measures like savings, affordable credits, and financial advice strongly modelled microfinance banks' financial performance. Therefore, the null hypothesis one (**H_{01}**) which states that financial inclusion measures (savings, affordable credits and financial advice) do not affect the financial performance of microfinance banks in Lagos State, Nigeria is rejected.

Table 6: $H0_2$: Financial Inclusion Measures (Savings, Affordable Credits and Financial Advice) Do Not Affect the Operational Performance of Microfinance Banks in Lagos State, Nigeria

N	Model	B	T	Sig.	ANOVA (Sig.)	R	Adj.R^2	F-stat (2, 343)
398 346	(Constant)	0.134	5.127	.003	0.001	0.431	0.399	211.814
	x_1 = Savings (SAV)	0.981	3.377	.002				
	x_2 = Affordable Credits (AFC)	1.231	5.349	.001				
	x_3 = Financial Advice (FAD)	1.762	5.544	.020				
	a. **Dependent Variable**: Operational Performance (OP)							

Source: *Researchers' Findings 2024*

Table 6 shows the multiple regression analysis of the effect of financial inclusion components (savings, affordable credits and financial advice) on operational performance in Lagos State, Nigeria. Table 6 depicts that savings (β = 0.981, *t-stat* = 3.377, p < 0.05), affordable credits (β = 1.231, *t-stat* = 5.349, p < 0.05), and financial advice (β = 1.762, *t-stat* = 5.544, p < 0.05) have a positive and significant effect on operational performance of microfinance banks in Lagos State. The results reveal that these financial inclusion components were significant predictors for operational performance among microfinance banks in Lagos State. This implies that sound and effective implementation of savings, affordable credits and

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financial advice served as crucial ingredient in achieving operational performance of microfinance banks in Lagos State.

The coefficient of regression determination (Adj.R^2 = 0.399) indicates that about 39.9% of the changes that occur in operational performance during the study period are explained by savings, affordable credits, and financial advice, while the remaining 60.1% changes are accounted for by other variables not included in the study's prescriptive model. The results of the prescriptive model show that when savings, affordable credits and financial advice positively improve by one-unit, market share increases by 0.981-unit, 1.231-unit, and 1.762-unit respectively; thus, this insinuates that savings, affordable credits and financial advice strongly influenced operational performance of microfinance banks in Lagos State. Since the p-value is less than 5%, this implies that savings, affordable credits and financial advice as predictors used were significant to operational performance of microfinance banks. The t-values were > 5.127; hence, the value is significant. Furthermore, the results of F-statistics (2, 343) = 211.814, p = 0.003 (p<0.05) indicate that the overall model is statistically predicting how savings, affordable credits and financial advice strongly influence the operational performance of microfinance banks. Therefore, the null hypothesis two (H_{02}) which states that financial inclusion measures (savings, affordable credits and financial advice) do not affect the operational performance of microfinance banks in Lagos State, Nigeria is rejected.

DISCUSSIONS OF FINDINGS

This study investigated financial inclusion using the proxies of savings, affordable credits and financial advice on microfinance banks' financial and operational performance in Lagos State, Nigeria. The findings revealed that financial inclusion measures (savings, affordable credits and financial advice) have a significant influence on financial performance and operational performance, with F-statistics (2, 343) = 120.241, p = 0.001 (p < 0.05) and F-statistics (2, 343) = 211.814, p = 0.003 (p < 0.05) respectively. Thus, both null hypotheses were rejected, although there are several related studies such as Adamu and Adaora (2024); Tameta (2024); Nwambeke et al. (2023); Oyetoyan, Ajiboye and Popoola (2021); Ogidi, E. J. (2021); Samuel and Onyia (2021); Asghar, Talat, and Mahmood (2021), etc which support the finding that savings, affordable credits and financial advice significantly affect microfinance banks' overall performance.

CONCLUSION AND RECOMMENDATIONS

Conclusion

From the findings of this study, it was concluded that financial inclusion measures influence the organizational performance of microfinance banks in Nigeria. The study concluded that financial inclusion measures like savings, affordable credits and financial advice improve microfinance banks' performance via financial and operational in Lagos State, Nigeria. The study focused on how financial inclusion such as savings, affordable credits and financial advice affect microfinance banks' performance measures like financial performance and operational performance in Lagos State, Nigeria. Thus, the study concluded that financial

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inclusion measures like savings, affordable credits and financial advice improve microfinance banks' performance via finance and operation in Lagos State, Nigeria.

Recommendations

The study recommends that microfinance banks' policymakers and management should embrace financial inclusion measures such as savings, affordable credits and financial advice in order to enhance finance and operation of microfinance performance in Lagos State. Based on the finding for hypothesis two, the study recommends that microfinance banks' management and policymakers should give maximum attention to financial inclusion measures (savings, affordable credits and financial advice) so as to save and project funds to finance their competitive operations against competitors in order to gain financial strengths ahead of competitors in the industry.

Suggestion for Further Studies

The study will guide future researchers in the area of financial and operational performances of microfinance banks not only in Lagos State but in Nigeria as a whole, and will also guide them on the importance of financial inclusion as it relates to the business holistically.

Contribution to Knowledge

The study will serve as a policy guideline and framework for policymakers, business owners, managers and investors of microfinance in Lagos State, and also assist microfinance banks management and owners to identify viable sources of financial and operational strategies. It will also be beneficial to researchers and be a basis for future stakeholders, government officials and students.

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