

Financial Inclusion and the Performance of Micro, Small and Medium Enterprises (MSMES) in Ibadan Metropolis, Oyo State, Nigeria

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Abstract

Micro, Small and Medium Enterprises (MSMEs) constitute the backbone of the Nigerian economy, yet their profitability, growth and sustainability have declined in recent years despite successive financial inclusion interventions. This study examined the influence of financial inclusion on the performance of MSMEs in Ibadan metropolis, Oyo State, Nigeria. Specifically, the study examined the connection between access to credit and profitability, assessed the nexus between access to savings services and growth, evaluated the relationship between access to digital payment systems and sustainability, and determined the independent and joint effect of the three dimensions on overall MSME performance. A sample of 400 MSME owners and operators was drawn from six purposively and randomly selected Local Government Areas within Ibadan Metropolis using a multi-stage sampling technique comprising stratified, proportional, and convenience sampling technique. Pearson's Product-Moment Correlation, and multiple regression analysis with the aid of SPSS version 27. All items demonstrated acceptable internal consistency, with Cronbach's alpha coefficients ranging from 0.783 to 0.889 across constructs. The result of access to credit and the profitability of MSMEs showed a moderate, positive and significant correlation ($r = 0.371$, $p < .001$, $n = 400$), indicating that MSMEs with better access to credit facilities recorded higher levels of profitability. Also, the result of access to savings services and business growth showed ($r = 0.304$, $p < .001$), implying that access to formal savings services was significantly and positively related to growth. Again, the result of access to digital payment systems and business sustainability showed ($r = 0.264$, $p < .001$), proving that greater use of digital payment platforms was associated with more sustainable enterprises. Finally, the multiple regression result showed that independently, access to credit ($\beta = 0.226$, $t = 4.644$, $p < .001$), access to savings services ($\beta = 0.221$, $t = 4.582$, $p < .001$) and access to digital payment systems ($\beta = 0.197$, $t = 4.318$, $p < .001$) each made a statistically significant contribution to MSME performance while the three financial inclusion dimensions jointly and significantly predicted overall MSME performance ($R = 0.442$, $R^2 = 0.195$, Adjusted $R^2 = 0.189$, $F(3, 396) = 31.975$, $p < .001$). The study concluded that financial inclusion, disaggregated into access to credit, savings services, and digital payment systems, plays a significant and complementary role in enhancing the performance of MSMEs in Ibadan metropolis. This study recommended that financial institutions and

fintech lenders should design more affordable and flexible credit products; that banks and microfinance institutions should deepen the penetration of formal savings products through simplified procedures and mobile-based platforms; that digital payment providers and the Central Bank of Nigeria should reduce transaction costs and expand digital literacy support; and infrastructure to maximise the developmental impact of financial inclusion on MSMEs.

Keywords: *Microfinance, Mobile-Based Platforms, Digital Payment, Financial Inclusion, MSMEs.*

Introduction

Micro, Small and Medium Enterprises (MSMEs) are globally recognized as the engines of economic growth, innovation, and employment generation, particularly in developing economies. Their significance is even more pronounced in nations like Nigeria, which have historically grappled with the challenges of mono-product economies heavily reliant on oil revenues. The volatility of global oil prices has repeatedly exposed the fragility of this economic model, underscoring the urgent need for diversification. In this context, MSMEs are not merely economic actors but strategic imperatives for sustainable development, poverty reduction, and wealth creation (Edobor, 2023).

The MSME sector in Nigeria employs over 84% of the total workforce, makes up close to 50% of the total Gross Domestic Product (GDP), and accounts for about 96% of the registered business entities (SMEDAN, 2024). Financial services are vital for the growth of MSMEs in Nigeria. Unfortunately, the services are largely unavailable. For example, bank loans are accessible to only about 4% of MSMEs and the rest are cut off from the loans. The gap in financing available to MSMEs is among the highest in the world and is approximately US\$236 billion.

Financial inclusion has been, and continues to be, the preferred strategy aimed at addressing the financing constraints of MSMEs by the various governments along with the Central Bank of Nigeria. In the context of this study, financial inclusion consists of three dimensions: access to credit, access to savings services, and access to digital payment services. On the other hand, profitability, growth, and sustainability are the three dimensions that make up MSME performance. The existing literature has focused on financial inclusion and MSME performance as independent and integrated constructs, respectively. However, limited research has been done on the dimensions of financial inclusion and MSME performance.

This research attempts to explore the independent and interactive impact of the three financial inclusion dimensions on MSME performance in Ibadan metropolis. As the largest indigenous city in West Africa, and the commercial nerve centre of Oyo State, Ibadan is home to a dense and diverse population of MSMEs, but has not received the empirical attention that has occurred for Lagos and Abuja. As a multidimensional predictor of financial inclusion, this context helps to understand how the focus of policy and the design of financial products for credit, savings and digital payments, would be realized.

The objective this paper seeks to explore the independent and interactive impact of access to credit, savings, and digital payment services on the performance of MSMEs in Ibadan metropolis. The null hypothesis that is postulated to accomplish the objective is formulated as follows:

H₀₁: Access to credit has no significant relationship on the profitability of MSMEs in Ibadan metropolis.

H₀₂: Access to savings services has no significant relationship on the growth of MSMEs in Ibadan metropolis.

H₀₃: Access to digital payment systems has no significant relationship on the sustainability of MSMEs in Ibadan metropolis.

H₀₄: There is no independent and joint effect of access to credit, savings services and digital payment services on MSMEs performance.

Literature Review

Financial Inclusion and MSME Performance

The term ‘financial inclusion’ describes the ways that individuals and businesses, particularly those that are low-income or marginal members of society, can reach affordable and useful financial products. Examples of sustainable financial products are credit, savings, and payment services. The three critical dimensions of inclusion, according to the Global Findex of the World Bank, are access, usage and quality. For MSMEs, credit not only finances working capital but also funds financial investments. Meanwhile, savings services enable the accumulation of internal capital and the construction of a transaction history that eases the future need to borrow. Finally, digital payment systems, though cash, enable the construction of transactional operation and creditworthiness.

Numerous studies conducted in Nigeria and similar economies have shown that financial inclusion relates positively with the performance of enterprises. Usman, Muhammad and Kassim (2025) studied the performance of SMEs in Jigawa State and confirmed that financial inclusion was a significant predictor, with the perceived usefulness and ease of use of FinTech, as important mediators. Ibrahim (2025) confirmed that in North-Central Nigeria, MSME financial inclusion positively impacted profit, employment, and production. Oyewale and Alabi (2024) studied the financial inclusion of SMEs in Osun State and found that the dimensions that were measurable positively impacted SME performance. Finally, Adeniyi et al. (2025) showed that financial microservices positively impacted the profit levels of micro-enterprises in Southwest Nigeria.

When considered as a whole, these studies show that financial inclusion is positively related to MSME performance; however, much of this literature either considers financial inclusion as a unidimensional construct or fails to assess whether the other dimensions of financial inclusion retain their significance when controlled for. This study contributes to the existing literature by estimating the independent and combined effects of access to credit, savings, and digital payment systems on performance.

Theoretical Framework

This study adopts the Financial Intermediation Theory, which suggests that the main purpose of financial intermediaries is to lower the transaction costs and the costs of information asymmetries between the lenders and borrowers of savings. Financial intermediaries, through the collective savings of many people, are able to better screen potential borrowers, monitor those borrowers, and enforce the necessary contracts. For MSMEs, this involves a performance gap. Asymmetry in the financial intermediation system means that credit solves the financial constraints of MSMEs, savings are protective, and digital payment systems reduce the cost and risk of financial transactions. This theory, therefore, justifies the inclusion of all three dimensions to financial inclusion.

Empirical Review

Usman, et al. (2025) empirically investigated the effect of financial technology (fintech) on small and medium enterprise (SME) performance in Jigawa State, Nigeria, and examined whether financial inclusion mediates this relationship. The study employed a descriptive research design with a sample of 352 SMEs selected through convenient sampling. Structural equation modelling (SEM) using Smart PLS v.4.1 software was used to test inferential statistics, while SPSS v.23 was used for descriptive statistics. The results showed that among the dimensions of fintech, Perceived Usefulness (PUS) and Perceived Ease of Use (PEU)

mediated the relationship between financial inclusion and SME performance, whereas Perceived Trust (PTT) and Responsiveness (RPN) had no mediating effect. The path coefficient analysis indicated that PUS, PEU, and PTT had positive and significant influence on financial inclusion, while RPN did not.

Among fintech dimensions, PUS and RPN had positive and significant effects on SME performance, while PEU and PTT did not. Critically, the study found that financial inclusion significantly predicts SME performance. The study recommended that government should support fintech companies to develop new business solution applications and software, as their perceived usefulness is recognised by SMEs. This study is directly relevant to the present research as it confirms the mediating role of financial inclusion in the fintech-MSME performance nexus and provides empirical evidence from the Nigerian context. The finding that perceived usefulness and ease of use are critical for fintech adoption underscores the importance of user-friendly financial products for MSMEs.

Ibrahim (2025) examined the effects of financial inclusion on the performance of MSMEs in North-Central Nigeria. The research problem was grounded in the inadequacy of financial services and the exclusion of a substantial portion of MSMEs from the formal financial system. The study adopted a survey research design and specifically aimed to determine the effect of access to financial services on MSME performance and the effect of financial literacy on MSME performance. The study concluded that financial inclusion has a positive effect on the increase of MSME profit, increase of labour or employee, and increase of production among MSMEs in North-Central Nigeria.

The study recommended that financial institutions should provide more information to MSMEs, which will attract MSME business actors to conduct transactions at these financial institutions. This study is highly relevant to the present research as it directly examines the relationship between financial inclusion and MSME performance in the Nigerian context. The finding that financial literacy is a critical component of financial inclusion aligns with the objectives of the present study, which investigates pre-loan conditions and advisory services as dimensions of financial inclusion.

Oyewale, & Alabi (2024) investigated how financial inclusion affects the performance of SMEs in Osun State, Nigeria. The study used primary data collected through structured questionnaires from 450 respondents selected via simple random sampling from a population of 8,923 registered SMEs. Multiple regression analysis was used to examine the relationship between SME performance (measured by sales growth) and financial inclusion dimensions (proximity, payment infrastructure, store of value, and information storage). The results showed that financial inclusion as a whole had a 71.4% significant impact on SMEs' performance. The findings also revealed that proximity (0.987), payment infrastructure (0.871), stores of value (0.784), and information storage (0.691) all significantly impacted the performance of SMEs. The study recommended that government, financial institutions, and other stakeholders continue to enhance their delivery of financial inclusion dimensions and educate the general public about the range of financial services accessible beyond credit services. This study is relevant as it disaggregates financial inclusion into measurable dimensions, providing a methodological framework for examining the specific components of financial inclusion that most influence MSME performance.

Mohammed et al. (2024) employed a mixed-methods approach to examine the impact of alternative financing channels on the growth of MSMEs in Nigeria, with a comparative analysis of traditional financial institutions. Using a combination of quantitative data analysis and thematic qualitative insights, the research explored how various financing options, including crowdfunding and angel investors, contribute to MSME development and sustainability. The findings revealed that alternative financing channels significantly enhance MSME growth by providing accessible, flexible, and innovative funding solutions.

Microfinance institutions help businesses overcome barriers through small-scale loans, crowdfunding platforms democratise access to initial funding and foster market validation, and angel investors provide both financial resources and strategic mentorship. However, traditional financial institutions remain essential for offering larger loans and a broader range of financial services, albeit with more stringent requirements and longer approval processes. The study recommended policy measures to promote alternative financing and enhance financial literacy among MSME owners, ensuring sustainable growth. This study is relevant as it highlights the complementary roles of traditional and alternative financing channels, informing the present research's examination of diverse financial inclusion mechanisms.

Adeniyi et al. (2025) investigated the effect of microfinance services on the profit levels of micro-enterprises in Southwest Nigeria. The research employed a quantitative survey design and collected primary data from 344 owners/managers of micro-enterprises selected through stratified random sampling across urban and semi-urban areas in six states of the region. Structured questionnaires were used to gather data on microfinance usage, business operations, and profit changes. The data were analysed using descriptive statistics, t-tests, and regression analysis. Findings revealed a statistically significant and positive relationship, with microcredit access, structured savings schemes, and business advisory services contributing meaningfully to increased profit margins and operational efficiency.

Specifically, the study found a statistically significant positive effect of microfinance services on profit level of micro-enterprises in Southwest Nigeria ($\beta = 0.282$; $t = 5.586$; $p < 0.005$). The study concluded that microfinance services are not only financial interventions but also strategic enablers of micro-enterprise sustainability and income growth. This study is directly relevant to the present research as it examines the specific microfinance services (credit access, savings schemes, and business advisory services) that are central to this study's investigation of financial inclusion dimensions.

Adewale, (2024) examined the effects of microfinance bank loans on the performance of SMEs in Nigeria. Using a survey research design with a sample of SME owners across multiple states, the study found that microfinance bank loans positively influence SME performance, with the magnitude of the effect varying based on loan utilisation, repayment terms, and the availability of complementary business support services. The study recommended that microfinance banks should provide training and advisory services alongside credit to maximise the performance impact of their loans. This study is relevant as it underscores the importance of non-financial services in enhancing the effectiveness of microfinance credit, a key theme of the present research.

Ibrahim, (2025) examined the interconnected roles of microfinance access and financial literacy in enhancing business sustainability among women-led SMEs in Nigeria. Drawing on cross-sectional survey data from 3,421 women entrepreneurs across urban and peri-urban regions, the study employed a mediation analysis within an Ordinary Least Squares (OLS) framework, supported by bootstrapping procedures and robustness checks using structural equation modelling. The empirical findings revealed that access to microfinance significantly enhances business sustainability, while financial literacy independently contributes to sustainability outcomes. Importantly, financial literacy mediates the relationship between microfinance and business sustainability, with a statistically significant indirect effect, validated by the Sobel test and bootstrapped confidence intervals. Control variables such as age, education, and business location further contextualised the findings. The study recommended that policymakers and development practitioners embed financial literacy training within microfinance schemes and develop targeted programmes for rural and underserved populations. This study is highly relevant to the present research as it demonstrates the mediating role of financial literacy a key component of pre-loan training

and advisory services in the relationship between microfinance access and business sustainability.

Onyejedum, & Okoli (2024) explored the nexus between financial literacy and performance of SMEs in Anambra State, Nigeria. The study was anchored on Human Capital Theory and used a cross-sectional research design. A census of all 171 business owners and managers of selected SMEs was conducted. Data were collected using structured questionnaires, and correlation analysis was used to test the formulated hypotheses. The findings revealed a significant and positive relationship between financial literacy and performance of SMEs. The study recommended that SME owners and managers need to undergo training programmes on bookkeeping to improve their financial management practices, and that SMEs need to encourage the adoption of effective capital budgeting strategies for optimal investment decisions. This study is relevant as it provides empirical evidence on the positive relationship between financial literacy and SME performance, supporting the present research's focus on pre-loan training and financial advisory services.

Babajide, (2025) investigated the effects of micro-financing on Micro and Small Enterprises (MSEs) in South-west Nigeria. The study examined how micro-finance and non-financial micro-financing activities and features such as group membership, pre-loan training, cross-guaranteeship, loan size, technical and managerial training impact the survival, growth, productivity and performance of MSEs. The study surveyed 443 micro enterprises and 180 small enterprises selected using multi-stage random sampling. The findings revealed that micro-finance and micro-financing enhance survival of MSEs but are not sufficient for growth and expansion. The results also revealed that microfinance has positive effects on productivity and performance of local entrepreneurs. The findings from interview sessions revealed that micro-financing is not effective and substantially being practised in Nigeria as many MFBs grant more individual loans than group-based loans, thereby increasing their running cost and putting their portfolio at risk. The study recommended collective and cooperative support as a critical microfinance strategy in the form of solidarity groups at the local level. This study is directly relevant to the present research as it specifically examines pre-loan training and non-financial micro-financing activities, which are central to the present study's investigation of financial inclusion dimensions.

Umar, (2021) examined the impact of microfinance banks' services on the growth and performance of MSMEs in Kano State, Nigeria. The sample was drawn through multistage stratified random sampling and comprised 544 beneficiaries and 50 staff of 10 microfinance banks selected from 10 local governments across the state. Data were collected using questionnaires and interviews and analysed using OLS, Logit, and Probit models. The findings showed a significant positive relationship between microfinance banks' financial services and beneficiaries' business growth, but interest rate was found to have a negative relationship with business growth. Critically, it was also found that business advisory services and pre-loan trainings were the only non-financial services that had positive and significant impact on business performance, while group membership and networking meetings had positive but insignificant impact. This study is highly relevant to the present research as it provides strong empirical evidence that pre-loan training and advisory services are the most effective non-financial services for enhancing MSME performance, directly supporting the central hypotheses of this study.

Conceptual Framework

The framework of relationships between the variables, as illustrated in Figure 2.1.

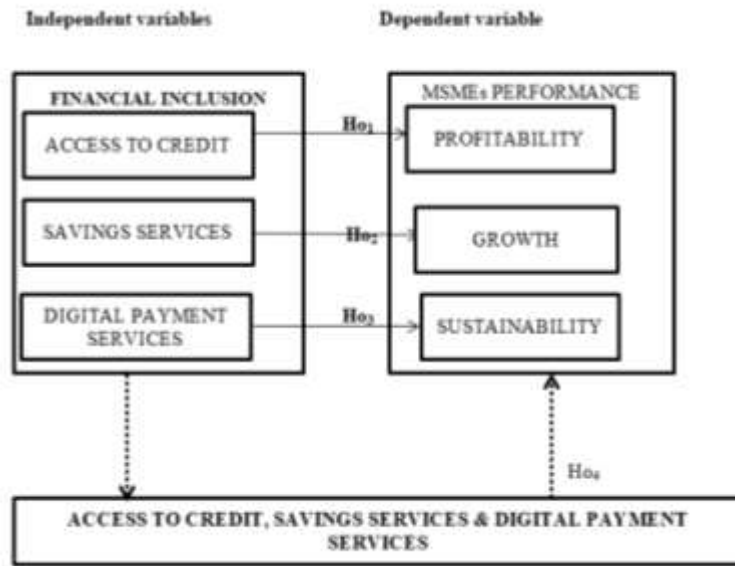


Figure 2.1: Conceptual Framework of Financial Inclusion and MSMEs Performance

Source: Authors conceptualization, 2026

Methodology

The study was conducted in Ibadan metropolis, Oyo State, Nigeria. Ibadan is the third most populous city in Nigeria after Lagos and Kano, with an estimated population exceeding 3.5 million people. The city is a major commercial hub for Southwest Nigeria, hosting a diverse range of MSME activities across manufacturing (textiles, furniture, agro-processing), trade (retail and wholesale markets including the historic Bodija Market, Oje Market, and Dugbe Market), services (hospitality, transportation, information technology), and agriculture (cocoa, cassava, poultry). Ibadan metropolis comprises eleven Local Government Areas: Ibadan North, Ibadan North-East, Ibadan North-West, Ibadan South-East, Ibadan South-West, Egbeda, Ona-Ara, Lagelu, Akinyele, Oluyole, and Ido. The concentration of MSMEs in these LGAs makes Ibadan metropolis an ideal location for this study.

The study area covered financial inclusion and performance of micro, small and medium enterprises (MSMEs) in Ibadan Metropolis.

This study adopted a descriptive survey research design. The descriptive survey design is appropriate for collecting quantitative data from a sample of respondents to describe the characteristics, opinions, and relationships among variables as they exist naturally, without experimental manipulation (Creswell & Creswell, 2018). This design is suitable because the study aimed to examine the influence of financial inclusion dimensions (access to credit, savings services, and digital payment systems) on MSME performance indicators (profitability, growth, and sustainability) within the natural setting of Ibadan metropolis, without manipulating any variables. The design will enabled the collection of primary data from a large number of MSME owners efficiently and cost-effectively, while allowing for statistical analysis of relationships between variables.

The target population of this study consisted all registered MSME owners and operators in Ibadan metropolis, Oyo State, Nigeria. According to SMEDAN (2024), there are approximately 39 million MSMEs in Nigeria, with Oyo State accounting for a significant proportion due to its large population and commercial activity. Based on data from the Oyo State Ministry of Trade, Industry, and Cooperatives and SMEDAN's 2024 MSME survey,

there are approximately 150,000 registered MSMEs in Oyo State, with about 60% (approximately 90,000) located within Ibadan metropolis. This population is considered appropriate because it represents the entire group of MSME owners who are potential users of formal financial services.

A multi-stage sampling technique was employed to select respondents.

In **Stage 1 (Stratified Sampling)**, the eleven LGAs were stratified into three strata based on commercial density: high-density (Ibadan North, Ibadan South-West, Egbeda), medium-density (Ibadan North-West, Ibadan South-East, Akinyele, Lagelu), and low-density (Ibadan North-East, Ona-Ara, Oluyole, Ido). Two LGAs were randomly selected from each stratum, yielding six LGAs.

In **Stage 2 (Proportional Allocation)**, the 400-sample size was proportionally allocated across the six selected LGAs based on their estimated number of MSMEs.

In **Stage 3 (Convenience Sampling)**, within each LGA, MSME owners were approached at their places of business (markets, industrial clusters, business premises) and those willing to participate were requested to respond to the questionnaire.

The sample size for this study was determined using Yamane's (1967) formula:

$$n = N / (1 + N(e)^2)$$

Where:

n = sample size,

N = population size (90,000),

e = margin of error (0.05 at 95% confidence level).

$$n = 90,000 / (1 + 90,000 \times 0.05^2)$$

$$= 90,000 / (1 + 90,000 \times 0.0025)$$

$$= 90,000 / (1 + 225)$$

$$= 90,000 / 226$$

$$\approx 398.23$$

Rounding up, the minimum sample size is 400 respondents.

The instrument for data collection was a structured questionnaire titled "Financial Inclusion and MSME Performance Questionnaire (FIMPQ)", adopted from validated instruments previously used in studies on financial inclusion and enterprise performance. The questionnaire was divided into five sections:

In order to ensure **reliability**, the questionnaire was pilot-tested on 50 MSME owners in Ibadan metropolis who were not part of the main sample. While Cronbach's alpha coefficients was computed using SPSS version 27.

Reliability

Access to Credit

No. of Items	Cronbach's Alpha
10	0.889

Access to Savings Services

No. of Items	Cronbach's Alpha
10	0.885

Access to Digital Payment Systems

No. of Items	Cronbach's Alpha
8	0.848

Profitability

No. of Items	Cronbach's
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	Alpha
5	0.778

Growth

No. of Items	Cronbach's Alpha
5	0.796

Sustainability

No. of Items	Cronbach's Alpha
5	0.783

All Items

No. of Items	Cronbach's Alpha
43	0.913

Source: Field Survey (2026).

Data Collection and Analysis

The questionnaires were administered personally by the researcher. The respondents were assured of the confidentiality and anonymity of their responses. Data were analysed with both descriptive and inferential statistical techniques, with the aid of SPSS version 27. Descriptive statistics (frequencies, percentages, mean, and standard deviation) were used to summarise the demographic and business characteristics of respondents, as well as their responses to items on access to credit, savings services, digital payment systems, and MSME performance. Inferential statistics was used to test the research hypotheses. Pearson's Product-Moment Correlation (PPMC) was used to analyse hypotheses one to three and examine the bivariate relationships between the independent and dependent variables. While multiple regression analysis was used to test hypothesis four to determine the influence of the independent variables (access to credit, access to savings services, access to digital payment systems) on dependent variable (MSMEs performance). All hypotheses were tested at a 0.05 significance level.

Model Specification

The multiple regression model for this study is specified as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

Where:

Y = MSME performance (measured separately for profitability, growth, and sustainability)

X₁ = Access to credit

X₂ = Access to savings services

X₃ = Access to digital payment systems

β₀ = Constant (intercept)

β₁, β₂, β₃ = Regression coefficients (slopes) representing the change in Y for a unit change in each X

ε = Error term (accounting for other factors not included in the model)

4.0 Results

Table 4.1: Reliability Statistics

Construct	Number of Items	Cronbach's Alpha
Access to Credit	10	0.889
Access to Savings Services	10	0.885
Access to Digital Payment Systems	8	0.848

Profitability	5	0.778
Growth	5	0.796
Sustainability	5	0.783

Source: Authors computation (2026),

Table 4.1 presents the internal consistency reliability of the six constructs measured in the questionnaire, computed using Cronbach's alpha coefficient. Following Hair et al. (2019), an alpha coefficient of 0.70 and above is considered acceptable for social science research, while coefficients above 0.80 indicate good reliability. All six constructs in this study met or exceeded the acceptable threshold, confirming that the FIMPQ instrument possessed adequate internal consistency for the purpose of hypothesis testing.

Test of Hypotheses

H₀₁: Access to credit has no significant relationship on the profitability of MSMEs in Ibadan metropolis.

Table 4.3 shows a correlation coefficient of 0.371 between access to credit and profitability, with a two-tailed significance value of .000 based on 400 valid cases. The coefficient is positive and falls within the moderate range, indicating that MSMEs that reported better access to credit facilities also reported higher levels of profitability. Since the significance value (.000) is less than the 0.05 level of significance, the first null hypothesis (H_{01}), which states that access to credit has no significant relationship with the profitability of MSMEs in Ibadan metropolis, is rejected. This implies that access to credit has a positive and statistically significant relationship with the profitability of MSMEs in Ibadan metropolis.

Table 4.3: Pearson Product-Moment Correlation

		Access to Credit	Profitability
Access to Credit	Pearson Correlation	1	0.371**
	Sig. (2-tailed)		.000
	N	400	400
Profitability	Pearson Correlation	0.371**	1
	Sig. (2-tailed)	.000	
	N	400	400

** . Correlation is significant at the 0.01 level (2-tailed).

Source: Authors computation, 2026

Correlation is significant at the 0.01 level (2-tailed).

H₀₂: Access to savings services has no significant relationship on the growth of MSMEs in Ibadan metropolis.

Table 4.4: Pearson's Product-Moment Correlation

		Access to Savings Services	Growth
Access to Savings Services	Pearson Correlation	1	0.304**
	Sig. (2-tailed)		.000
	N	400	400
Growth	Pearson Correlation	0.304**	1
	Sig. (2-tailed)	.000	

	Access to Savings Services	Growth
N	400	400

****.** Correlation is significant at the 0.01 level (2-tailed).

Source: Authors computation, 2026

Correlation is significant at the 0.01 level (2-tailed).

Interpretation: Table 4.4 reveals a correlation coefficient of 0.304 between access to savings services and business growth, with a two-tailed significance value of .000 based on 400 valid cases. The coefficient is positive and moderate, showing that MSMEs with greater access to formal savings services also recorded higher growth in their operations. Since the significance value (.000) is below the 0.05 threshold, the second null hypothesis (H_{02}), which states that access to savings services has no significant relationship with the growth of MSMEs in Ibadan metropolis, is rejected. Access to savings services therefore has a positive and statistically significant relationship with the growth of MSMEs in the study area.

H_{03} : Access to digital payment systems has no significant relationship on the sustainability of MSMEs in Ibadan metropolis.

Table 4.5 presents a correlation coefficient of 0.264 between access to digital payment systems and business sustainability, with a two-tailed significance value of .000 based on 400 valid cases. The coefficient is positive, though weaker than those obtained for the preceding hypotheses, indicating that MSMEs that make greater use of digital payment platforms tend to be more sustainable in their operations. Since the significance value (.000) is less than 0.05, the third null hypothesis (H_{03}), which states that access to digital payment systems has no significant relationship with the sustainability of MSMEs in Ibadan metropolis, is accordingly rejected. This confirms that access to digital payment systems is positively and significantly related to the sustainability of MSMEs in Ibadan metropolis.

Table 4.5: Pearson Product-Moment Correlation

		Access to Digital Payment Systems	Sustainability
Access to Digital Payment Systems	Pearson Correlation	1	0.264**
	Sig. (2-tailed)		.000
	N	400	400
Sustainability	Pearson Correlation	0.264**	1
	Sig. (2-tailed)	.000	
	N	400	400

****.** Correlation is significant at the 0.01 level (2-tailed).

Source: Authors computation, 2026

Correlation is significant at the 0.01 level (2-tailed).

H_{04} : There is no independent and joint effect of access to credit, savings services and digital payment services on MSMEs performance.

The result showed that the three financial inclusion dimensions jointly and significantly predicted overall MSME performance, $F(3, 396) = 31.975$, $p < .001$, with a multiple correlation coefficient of $R = 0.442$. The model accounted for approximately 19.5 percent of

the variance in performance ($R^2 = 0.195$, Adjusted $R^2 = 0.189$). Independently, access to credit ($B = 0.140$, $\beta = 0.226$, $t = 4.644$, $p < .001$), access to savings services ($B = 0.141$, $\beta = 0.221$, $t = 4.582$, $p < .001$), and access to digital payment systems ($B = 0.117$, $\beta = 0.197$, $t = 4.318$, $p < .001$) each made a statistically significant independent contribution to the model, with access to credit and access to savings services showing broadly comparable effect sizes, followed closely by digital payment systems. Since the p-value of the overall model (0.000) is less than 0.05, the fourth null hypothesis (H_{04}) is rejected. This confirmed that access to credit, savings services, and digital payment systems independently and jointly exerted a statistically significant effect on the performance of MSMEs in Ibadan metropolis, although approximately 80.5 percent of the variance in performance is attributable to factors outside the three financial inclusion dimensions examined in this study, such as managerial capability, market competition, infrastructure, and macroeconomic conditions.

Table 4.6: Multiple Regression

Table 4.6: Multiple Regression								
Model Summary								
Model		R	R Square		Adjusted R Square		Std. Error of the Estimate	
1		.442 ^a	.195		.189		.24785	
ANOVA ^a								
Model		Sum Squares	of df	Mean Square	F	Sig.		
1	Regression	5.894	3	1.965	31.975	.000 ^b		
	Residual	24.328	396	.061				
	Total	30.222	399					
Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients		Collinearity Statistics		
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	2.294	.138		16.608	.000		
	Access to Credit	.140	.030	.226	4.644	.000	.857	1.167
	Access to Savings Services	.141	.031	.221	4.582	.000	.870	1.149
	Access to Digital Payment Systems	.117	.027	.197	4.318	.000	.978	1.023

a. Dependent Variable: Overall MSME Performance

Source: Authors computation, 2026

5. Conclusion and Recommendations

The three financial inclusion dimensions studied were found to be important independent and combined predictors of MSME performance in the Ibadan metropolis. Their independent contributions to MSME performance are comparably large. This evidence supports the view that financial inclusion is a multidimensional construct. It suggests that government policy, which focuses more on financial service provision and especially the credit line, while

neglecting the savings line and the digital payment infrastructure, is unlikely to achieve the desired outcome from financial inclusion for the MSME sector. Therefore, financial institutions are encouraged to develop credit products that are more affordable and flexible; banks and microfinance institutions are encouraged to offer formal savings products with less complex requirements and greater availability through mobile technology; payment service providers, the Central Bank of Nigeria, are encouraged to lower service costs and enhance payment service and digital literacy; and other stakeholders, especially MSME operators and development partners, are encouraged to design a more integrated MSME support approach that combines financial inclusion with multiple advisory services.

References

- Adeniyi, O., Epetimehin, F., Onimole, S., & Ogunjemilua, E. (2025). Microfinance services and profit levels of micro-enterprises in Southwest Nigeria. *Nigerian Journal of Management Studies*, 22(1), 45-62.
- Central Bank of Nigeria. (2025). *Financial stability report: First half 2025*. CBN.
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.
- Edobor, O. (2023). MSMEs as strategic imperatives for sustainable development in Nigeria. *Nigerian Journal of Economic Policy*, 15(2), 34-51.
- Financial Reporting Council of Nigeria. (2025). *MSME sustainability and failure rates in Nigeria*. FRC.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate data analysis* (8th ed.). Cengage Learning.
- Hasan, M., Le, T., & Hoque, A. (2024). Dimensions of financial inclusion: Access, usage and quality. *World Development*, 175, 106-119.
- Ibrahim, M. S. (2025). Effect of financial inclusion on the performance of micro, small and medium enterprises in North-Central Nigeria. *Nigerian Journal of Business and Economics*, 14(1), 78-96.
- Kolawole, O. (2025). Dynamic nexus between macroeconomic variables and SME development in Nigeria. *CBN Journal of Applied Statistics*, 16(1), 89-112.
- Masuka, T. (2025). Financial inclusion definitions and dimensions: A contemporary review. *African Development Review*, 37(1), 56-74.
- Moniepoint. (2025). *Informal economy report 2025*. Moniepoint Microfinance Bank.
- Nwokike, C., Udeoba, E., & Udegbuma, O. (2024). Financial intermediation theory and MSME development in Nigeria. *Nigerian Journal of Monetary Economics*, 11(2), 78-95.
- Small and Medium Enterprises Development Agency of Nigeria. (2024). *MSME national survey report*. SMEDAN.
- Usman, A., Muhammad, A., & Kassim, S. (2025). The effect of financial technology on MSMEs performance in Jigawa State, Nigeria. *Journal of Islamic Finance*, 14(1), 23-45.
- World Bank. (2024). *Global Findex database 2024: Measuring financial inclusion*. World Bank.
- World Bank. (2025). *Global Findex 2025 report: Financial inclusion progress and economic growth*. World Bank.
- Yamane, T. (1967). *Statistics: An introductory analysis* (2nd ed.). Harper and Row.