

## The Moderating Role of MSME Performance in the Financial Inclusion-Economic Growth in FCT, Abuja, Nigeria

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### **Abstract:**

*Financial inclusion has been widely recognized as a catalyst for sustainable economic development, yet its effectiveness often depends on how firms, particularly micro, small, and medium enterprises (MSMEs), harness financial resources to drive productivity. This study investigates the moderating role of MSME performance in the relationship between financial inclusion and economic growth in the Federal Capital Territory (FCT), Abuja. Specifically, it evaluates the effect of digital finance adoption and financial service usage on economic growth, while testing whether MSME performance strengthens these interactions. A quantitative research design was employed, using survey data from 400 MSME operators in Abuja. Partial Least Squares Structural Equation Modeling (PLS-SEM) was applied to assess the measurement and structural models. The results show that digital finance adoption ( $\beta = 0.255$ ,  $p < 0.01$ ), financial service usage ( $\beta = 0.087$ ,  $p < 0.01$ ), and MSME performance ( $\beta = 0.418$ ,  $p < 0.01$ ) significantly and positively influence economic growth. MSME performance did not significantly moderate the digital finance-growth relationship but showed a positive moderation on the financial service usage-growth nexus. These findings highlight the central role of MSMEs as drivers of growth and the importance of strengthening their capacity to effectively leverage financial services. The study recommends targeted policies that enhance MSME digital literacy, expand access to user-friendly fintech products, and improve structural infrastructure to maximize the growth potential of financial inclusion.*

**Keywords:** *Financial inclusion; Digital finance adoption; Financial service usage; MSME performance; Economic growth*

## 1.0 Introduction

Economic growth remains a central objective of national development strategies, as it reflects the ability of an economy to improve productivity, generate employment, and raise the standard of living (Christopher et al., 2023). In Nigeria, particularly within the Federal Capital Territory (FCT) Abuja, growth performance has been uneven despite sustained policy interventions. While Abuja is often regarded as a hub of commercial and administrative activities (Odeh et al., 2025), challenges such as rising unemployment, high poverty incidence, and structural inefficiencies persist, thereby constraining inclusive growth outcomes. Scholars (Maku et al., 2022; Soyemi et al., 2020) have noted that Nigeria's economic expansion has not always translated into broad-based welfare improvements, largely because growth has historically been driven by extractive industries rather than broad participation from micro, small, and medium enterprises (MSMEs) or enhanced financial integration. This reality explains the need to identify mechanisms that can strengthen the growth process by empowering enterprises and enhancing the role of financial systems in supporting productive activities.

The recognition that economic growth requires not only macroeconomic stability but also broad financial participation has elevated financial inclusion to the forefront of development discourse (Obayori & Chidinma, 2020). Financial inclusion, defined as access to and effective use of formal financial services (Christopher et al., 2023) has been shown to contribute significantly to capital formation, poverty reduction, and long-term economic resilience (Adegboyega, 2024; Christopher et al., 2023). In Nigeria, despite the progress achieved through financial sector reforms, millions of individuals and enterprises still lack sufficient access to formal credit and essential financial services. MSMEs, in particular, face barriers such as collateral constraints, high transaction costs, and weak institutional linkages, all of which limit their capacity to benefit from and contribute to the economy (Malam et al., 2024; Obayori & Chidinma, 2020). Recent financial inclusion strategies in Nigeria have emphasized two critical pathways: digital finance adoption and financial service usage (Maku et al., 2022). Digital finance, through innovations such as mobile money platforms, electronic banking, and fintech solutions, has revolutionized how individuals and businesses access credit, transfer funds, and manage financial transactions (Odeh et al., 2025). These tools expand outreach, reduce operational costs, and bypass physical barriers associated with traditional banking, thereby increasing participation among marginalized populations (Adegboyega, 2024). Similarly, the effective usage of financial services, beyond mere access, ensures that individuals and firms can leverage savings accounts, insurance, credit facilities,

and payment systems to improve economic outcomes. Research (Okunlola et al., 2020; Obayori & Chidinma, 2020). has demonstrated that economies with higher levels of financial service utilization record stronger growth impacts than those where services remain underutilized. In Abuja, ongoing initiatives such as the Central Bank of Nigeria's cashless policy and fintech-led interventions have encouraged digital finance adoption and deepened service usage among MSMEs. However, the effectiveness of these measures in contributing to growth is conditional on firm-level performance, as enterprises with stronger managerial and operational capacity are better positioned to harness financial opportunities (Odeh et al., 2025).

Despite these initiatives, critical gaps remain in the literature and practice. Empirical studies (Christopher et al., 2023; Maku et al., 2022; Soyemi et al., 2020) confirmed that financial inclusion positively influences economic growth, but they often fail to capture the moderating role of MSME performance, particularly in Abuja where firms are central to economic activities. Previous study (Obayori & Chidinma, 2020) has examined the direct effects of inclusion measures such as access to credit, digital finance, and service usage on macroeconomic indicators, overlooking how firm-level capacity can amplify or weaken these effects. Furthermore, research conducted in Nigeria has typically been nationwide or state-level, with little focus on FCT Abuja, despite its unique role as a political and economic hub. The current study addresses this gap by investigating whether MSME performance moderates the relationship between financial inclusion proxies (financial service usage and digital finance adoption) and economic growth in Abuja.

The aim of this paper is to examine how MSME performance moderates the effect of financial inclusion on economic growth in Abuja. Specifically, the study seeks to: assess the effect of digital finance adoption on economic growth in FCT Abuja; evaluate the effect of financial service usage on economic growth in FCT Abuja; determine whether MSME performance moderates the interaction between digital finance adoption and economic growth in FCT Abuja; and evaluate whether MSME performance moderates the interaction between financial service usage and economic growth in FCT Abuja.

The study makes three contributions. First, it provides empirical evidence on the inclusion-growth relationship at the sub-national level, focusing on Abuja, where MSMEs play an increasingly central role in economic diversification efforts. Second, it introduces MSME performance as a moderating variable, extending existing research that has largely considered only direct effects. Third, the paper contributes to policy discussions on the design of financial inclusion strategies that align with enterprise development and growth.

## **2.0 Literature Review**

### **2.1 Conceptual Review**

Financial service usage represents the extent to which individuals and firms actively engage with available financial products, including savings, credit, insurance, and payment systems (Okunlola et al., 2020). Studies (Obayori & Chidinma, 2020; Maku et al., 2022) emphasized that mere access to financial services is insufficient if usage remains limited. Instead, the economic benefits are realized when households and firms utilize these services to manage resources, invest in productive activities, and mitigate risks. Okunlola et al., (2020) and Obayori and Chidinma (2020) emphasized that financial service usage is a critical mechanism through which inclusion translates into broader economic development.

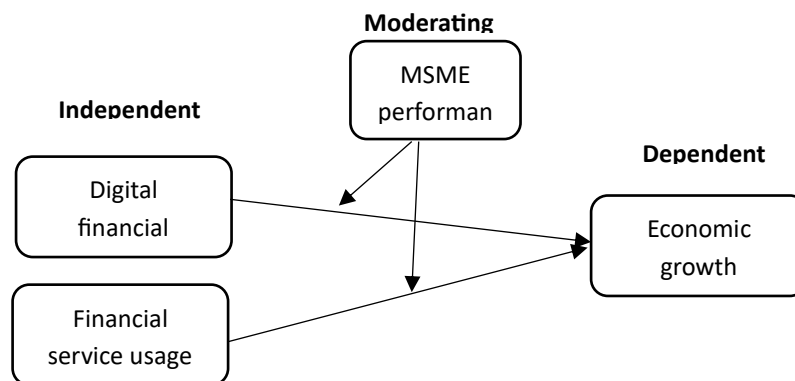
The advent of digital finance has transformed the financial environment globally, and Nigeria is no exception. Digital finance adoption represents the uptake of mobile banking, fintech platforms, and electronic payment systems. These innovations reduce barriers such as geographical distance, transaction costs, and time constraints, thereby enabling broader financial participation (Adegboyega, 2024). Digital channels such as mobile banking, fintech applications, and electronic payment systems have significantly reduced barriers to financial participation by offering convenience, speed, and cost efficiency (Adegboyega, 2024; Odeh et al., 2025). Adegboyega (2024) highlighted that digital finance adoption enhances rural development outcomes by reducing geographic exclusion, a finding that resonates with Abuja's peri-urban settlements where formal banking infrastructure remains limited. Likewise, Odeh et al. (2025) demonstrated that financial technology significantly improved SMEs' financial inclusion in Abuja, thereby enhancing their growth potential. At the macroeconomic level, Christopher et al. (2023) confirmed that financial inclusion, particularly through digital channels, had a measurable impact on Nigeria's economic growth. These studies converge on the view that digital finance adoption is both a driver and enabler of economic growth.

MSMEs are widely recognized as the backbone of Nigeria's economy, contributing significantly to employment creation, poverty alleviation, and innovation. Their performance is crucial in determining how financial inclusion efforts impact economic outcomes. Malam et al. (2024) found that financial inclusion significantly improved SME performance in Sokoto State, but the magnitude of the effect depended on the enterprises' managerial capacity and operational efficiency. This suggests that MSMEs not only benefit from inclusion but also act as conduits through which financial participation translates into growth. Similarly, Maku et al. (2022) argued that inclusive growth in Nigeria is strongest

in regions where MSMEs are robust, indicating that firm-level strength magnifies the macroeconomic impact of financial policies. Although a growing body of work has investigated financial inclusion and growth in Nigeria, three key gaps remain. First, most studies have treated financial inclusion variables, such as service usage, credit access, and digital adoption, primarily as independent drivers of growth, without exploring interaction effects with firm-level dynamics (Soyemi et al., 2020).

### Figure 1: Conceptual Model for Economic growth Model

The conceptual framework for this study is designed to capture how financial inclusion drives economic growth within the Federal Capital Territory (FCT) Abuja, while highlighting the moderating role of Micro, Small, and Medium Enterprise (MSME) performance. The framework is anchored on two independent variables (digital finance adoption and financial service usage) and one dependent variable (economic growth). MSME performance is introduced as a moderator that conditions the strength and direction of the relationships between the independent and dependent variables



## 2.2 Theoretical Review

The link between financial inclusion, MSME performance, and economic growth has been widely discussed in development and finance literature, and several theories provide useful perspectives for analyzing this relationship. This study is anchored on three central theoretical frameworks: the Schumpeterian Growth Theory, the Financial Intermediation Theory, and the Resource-Based View (RBV) of the firm.

### **Schumpeterian Growth Theory**

The Schumpeterian Growth Theory emphasizes innovation, entrepreneurship, and firm-level productivity as key drivers of economic development (Maku et al.,

2022). According to Schumpeter, economic growth occurs when entrepreneurs leverage new financial resources to innovate and expand productive capacity. Financial inclusion enhances this process by providing individuals and firms with access to credit, savings, and payment systems necessary for entrepreneurial activities (Christopher et al 2023). Access to and use of financial services can promote innovation and job creation in Abuja, where MSMEs control the majority of the economy (Malam et al., 2024).

### ***Financial Intermediation Theory***

The Financial Intermediation Theory, advanced by Goldsmith (1969) and later extended by McKinnon (1973), posits that financial institutions serve as channels through which savings are mobilized and allocated to productive investments. This theory highlights the importance of effective usage of financial services, not just access. Digital finance adoption further expands this role by lowering transaction costs, improving efficiency, and extending services to previously excluded populations (Adegboyega et al 2024; Ozili & Adamu, 2021). In Abuja, mobile banking, fintech platforms, and electronic payment systems enable more inclusive participation in formal finance, thereby fostering broader capital formation. However, the efficiency of this intermediation process depends on the ability of firms, particularly MSMEs, to effectively absorb and utilize financial resources (Christopher et al., 2023).

### ***Resource-Based View (RBV) of the Firm***

The Resource-Based View (Barney, 1991) provided a micro-level perspective by emphasizing that firm performance depends on unique resources and capabilities that are valuable, rare, inimitable, and non-substitutable (Wernerfelt et al., 2021; Malam et al., 2024). Within this framework, MSME performance is not simply an outcome but a determinant of how financial inclusion translates into growth. Financial services and digital finance provide external resources, but their economic impact depends on internal firm capabilities such as managerial competence, operational efficiency, and technological adaptability (Christopher et al., 2023). Thus, MSMEs act as the “fulcrum” through which financial inclusion policies translate into broader economic outcomes in Abuja. Strong-performing MSMEs leverage financial inclusion to scale, while weak-performing firms may fail to convert access into measurable growth.

## **2.3 Empirical Review**

Adeniji (2025) investigated the impact of digital payment platforms (Point-of-Sale (POS) systems, Automated Teller Machines (ATMs), web payments, and mobile payments) on economic growth in Nigeria from 2012 to 2024. Using the Autoregressive Distributed Lag (ARDL) model, the study examines both short-run and long-run relationships between digital payment transactions and real

Gross Domestic Product (RGDP). Findings revealed that digital payment systems positively influence economic growth, with mobile payments having the strongest impact. The results suggest that the adoption of cashless payment methods enhances transaction efficiency, improves liquidity, and boosts economic activities. Despite initial challenges such as low financial literacy and infrastructural deficits, digital payments have contributed to the country's financial inclusion and economic expansion. The study recommended national awareness campaigns, financial literacy programs, and improved infrastructure to enhance the efficiency and reliability of digital transactions. The study recommends adoption and efficiency of digital payment systems, public awareness campaigns, government collaboration with financial institutions for training, and improved infrastructure.

Obayori and Chidinma (2020) examined financial inclusion and economic growth in Nigeria from 1981-2018. The ARDL model was used to analyze the annual time series data collected from the CBN Statistical Bulletin and the World Bank report. The augmented Dickey Fully (ADF) unit root test, to test for stationarity of the variables preceded the ARDL model. The ADF unit root test results showed that the dependent variable was stationary at order zero  $I(0)$ , while the independent variables were stationary at order one  $I(1)$ . Based on the first-hand results, it was revealed that both in the short-run and long-run, access and effective usage of financial services bring about a significant increase in economic growth. But per capita income has a negative but significant relationship with economic growth. The study conforms to finance-led growth theory which averred that the financial system is a positive function of economic growth and recommended that more efforts needed to be done to enhance and extend financial inclusion services such as electronic transaction in the form of POS, ATM, mobile money, etc to all rural communities in Nigeria as well as financial literacy and engagement of low-income people in the formal financial services in order to increase economic growth.

Christopher et al. (2023) employed an ex-post facto study design to evaluate data on elements like banking penetration, usage of financial services, and access to financial services, concerning GDP growth. Relationships and interactions among these factors were scrutinized using the Autoregressive Distributed Lag Model (ARDL), which displayed strong explanatory capabilities and statistical validity. The research revealed that, without inputs from access to financial services, the usage of financial services, and banking penetration, the self-sustaining gross domestic product (GDP) is negative and statistically noteworthy. Over the short term, a negative link is observed between GDP and access to financial services (AFS); however, in the long term, AFS manifests a positive

correlation with real GDP (RGDP). The usage of financial services (UFS) demonstrates a favorable relationship with GDP, accentuating the necessity of bolstering financial literacy and inspiring individuals and enterprises to effectively make use of financial services.

Okunlola et al. (2020) empirically examine how economic growth is impacted upon through financial inclusion. Economic growth per capital income is the study's explained variables while, rural deposits, private sector deposits, rural loans, private loans, and number of banks branches are proxies for the explanatory variable. Secondary data was sourced from the Central Bank of Nigeria statistical bulletin and World Bank financial indicator and span thirty-five years (1982 to 2017). From the augmented dickey fuller (ADF) test results, autoregressive distributed lag (ARDL) regression was adopted. Findings shows that individually, rural deposits, and number of banks branches are significant in the short-run while, only the former is significant in the long-run. However, jointly, and from the Wald test result, a no significant relationship is established between the variables in the long-run. The study thus recommends a nurturing approach from primary to tertiary level of financial inclusion.

Adegboyega (2024) employed Johansen cointegration, Error Correction Model (ECM), and Granger causality test methods of analyses on data collected from the Central Bank of Nigeria and World Bank database from 1981 to 2022 to ascertain both the long and short-run relationships among the variables. The result revealed that both the short and long-run relationships confirmed the significant impact of financial inclusion on rural development in Nigeria. The ECM value of -0.45 is statistically significant and indicates a satisfactory speed of adjustment, indicating that 45 percent of the errors are corrected in each period. The study concludes that a low level of financial deepening and the small number of rural bank branches in Nigeria are retarding the promotion of financial inclusion which invariably stunts rural development.

### **3.0 Methodology**

This study adopts a quantitative research design to examine how MSME performance moderates the relationship between financial inclusion and economic growth in the Federal Capital Territory (FCT) Abuja. The population comprises registered Micro, Small, and Medium Enterprises (MSMEs) operating within Abuja and according to the Small and Medium Enterprises Development Agency of Nigeria (SMEDAN), the population is 507,154. Using Yamane's formula at a 95% confidence level and 5% margin of error, a sample of approximately 400 MSMEs was drawn. A stratified random sampling technique was employed to ensure representation across different sectors such as trade, manufacturing,

and services. Primary data was collected using a structured questionnaire divided into four sections: demographic information, digital finance adoption, financial service usage, and MSME performance. Items were measured using a five-point Likert scale ranging from “strongly disagree” to “strongly agree.” The study employed Partial Least Squares Structural Equation Modeling (PLS-SEM) using SmartPLS 4.0 for hypothesis testing. This technique was deemed suitable for predictive analysis and for examining complex relationships involving moderating variables. Descriptive statistics was first used to summarize the demographic characteristics, then followed by measurement model evaluation (convergent and discriminant validity) and structural model testing. Hypotheses was tested at a 5% significance level.

#### 4.0 Result and Discussion

The demographic results (Table 1) showed that out of 400 respondents, 55% were male and 45% female. Most respondents (62%) were aged between 25–40 years, while 28% were above 40 years and 10% below 25 years.

**Table 1: Demographic Characteristics of Respondents**

<b>Variable</b>	<b>Category</b>	<b>Frequency (n)</b>	<b>Percentage (%)</b>
<b>Gender</b>	Male	220	55%
	Female	180	45%
		400	100%
<b>Age</b>	Below 25 years	40	10%
	25–40 years	248	62%
	Above 40 years	112	28%
		400	100%
<b>Educational Level</b>	No formal education	20	5%
	Secondary education	220	55%
	Tertiary education	160	40%
		400	100%
<b>Business Sector</b>	Agriculture	100	25%
	Retail	120	30%
	Services	120	30%
	Manufacturing	60	15%
		400	100%
<b>Years in Business</b>	Less than 1 year	48	12%
	1–3 years	92	23%
	More than 3 years	260	65%
		400	100%

In terms of education, 55% had secondary education, 40% tertiary, and 5% no formal education. Business sector distribution revealed 30% each in retail and

services, 25% in agriculture, and 15% in manufacturing. Regarding business experience, 65% had operated for more than three years, 23% for one to three years, and 12% for less than a year, reflecting a predominance of relatively established MSMEs indicating some level of business maturity and experience with financial systems.

#### 4.2 Measurement Model

The results are presented using both the measurement and structural models to evaluate construct reliability, validity, and path relationships. The measurement model was first examined through factor loadings, composite reliability (CR), and average variance extracted (AVE). All constructs demonstrated adequate reliability, with item loadings generally exceeding the 0.70 threshold recommended by Hair et al. (2021). Specifically, digital finance adoption (DFA) recorded loadings ranging from 0.512 to 0.838, financial service usage (FSU) from 0.596 to 0.848, MSME performance from 0.689 to 0.809, and economic growth (ECGN) from 0.618 to 0.795. Although DFA2 (0.512) and FSU1 (0.596) fell slightly below the ideal 0.70 cutoff (Table 2), they remain above the acceptable 0.50 minimum, justifying their retention for further analysis given their theoretical relevance (Sarstedt et al., 2014; Afthanorhan et al., 2020). Convergent validity was confirmed as the average variance extracted (AVE) for all constructs exceeded 0.50, indicating that more variance was explained by the constructs than error variance.

**Table 2: Measurement model.**

		<b>Cronbach's alpha</b>	<b>Composite reliability (rho_a)</b>	<b>Composite reliability (rho_c)</b>	<b>Average variance extracted (AVE)</b>
<b>Digital Finance adoption</b>		0.789	0.851	0.846	0.530
DFA1	0.657				
DFA2	0.512				
DFA3	0.806				
DFA4	0.779				
DFA5	0.838				
<b>Finance Service Usage</b>		0.725	0.756	0.825	0.545
FSU 1	0.596				
FSU 2	0.739				
FSU 3	0.848				
FSU 4	0.748				

<b>MSME Performance</b>		0.754	0.761	0.844	0.576
MSME 1	0.809				
MSME 2	0.749				
MSME 3	0.689				
MSME 4	0.784				
<b>Economic Growth</b>		0.708	0.722	0.820	0.536
ECGN 1	0.618				
ECGN 2	0.782				
ECGN 3	0.795				
ECGN 4	0.719				

Discriminant validity was also evaluated using the Fornell–Larcker criterion (Table 3), where the square root of AVE for each construct was greater than inter-construct correlations, confirming distinctiveness among DFA, FSU, MSME, and ECGN. Cronbach’s alpha and composite reliability values also exceeded the 0.70 benchmark, establishing satisfactory internal consistency.

**Table 3: Fornell-Larcker criterion**

	<b>DFA</b>	<b>ECGN</b>	<b>FSU</b>	<b>MSME</b>
<b>DFA</b>	0.728			
<b>ECGN</b>	0.570	0.732		
<b>FSU</b>	0.649	0.464	0.738	
<b>MSME</b>	0.577	0.629	0.511	0.759

The collinearity statistics (Table 4) shows that all variance inflation factor (VIF) values range between 1.207 and 1.981, well below the threshold of 5 recommended by Hair et al. (2021).

**Table 4: Collinearity statistics (VIF)**

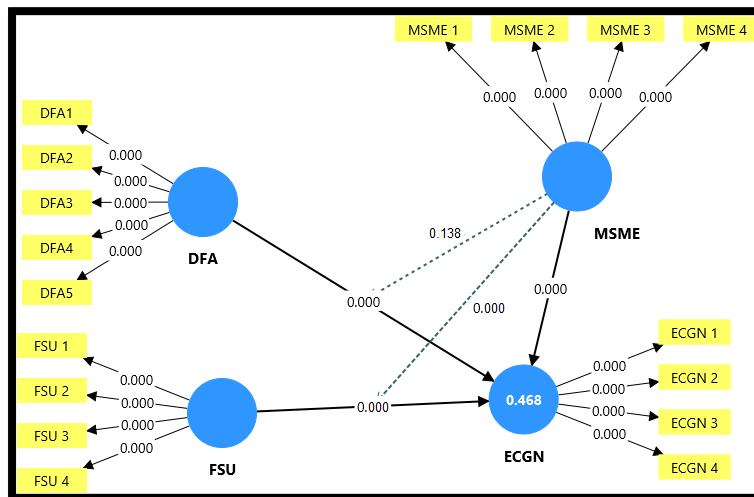
	VIF
DFA1	1.981
DFA2	1.598
DFA3	1.911
DFA4	1.627
DFA5	1.765
ECGN 1	1.207
ECGN 2	1.553
ECGN 3	1.636

ECGN 4	1.283
FSU 1	1.314
FSU 2	1.588
FSU 3	1.728
FSU 4	1.323
MSME 1	1.621
MSME 2	1.594
MSME 3	1.344
MSME 4	1.561

The result in Table 4 indicated that multicollinearity is not a concern among the indicators of digital finance adoption, financial service usage, MSME performance, and economic growth. Hence, the constructs demonstrate acceptable levels of independence, supporting the reliability of the measurement and structural models for further analysis.

**4.3 Structural Model**

The findings of the measurement model showed that discriminant validity, convergent validity, and construct reliability are all within acceptable threshold. Consequently, the finding went further to analyses the effect of financial inclusion on economic growth. The result of the structural (inner) model is presented in Figure 1.



**Figure 1: PLS-SEM bootstrapping model relating financial inclusion and economic growth using MSME as a moderator**

**Source: Author’s calculation through the help of PLS-SEM**

The structural model results (Table 5) show that digital finance adoption (DFA) has a positive and statistically significant effect on economic growth ( $\beta = 0.255$ ,  $p = 0.000$ ). This suggests a unit increase in digital finance adoption will lead to increased economic growth by 25% showing that digital finance adoption contributes substantially to fostering growth in Abuja. Similarly, financial service usage (FSU) has a significant positive influence on economic growth ( $\beta = 0.087$ ,  $p = 0.000$ ), confirming that effective utilization of financial services enhances capital formation and productivity. This suggests a unit increase in utilization of financial services will lead to increased economic growth by 8.7%. MSME performance also exerts a strong positive and significant effect on economic growth ( $\beta = 0.418$ ,  $p = 0.000$ ), highlighting the crucial role of firm-level productivity in driving economic outcomes.

**Table 5: Structural Model Analysis**

	$\beta$	Std dev	T statistics	P values
<b>digital finance adoption -&gt; economic growth</b>	0.255	0.061	4.179	0.000
<b>financial service usage -&gt; economic growth</b>	0.087	0.009	3.476	0.000
<b>MSME performance -&gt; economic growth</b>	0.418	0.055	7.643	0.000
<b>MSME performance x digital finance adoption -&gt; economic growth</b>	0.087	0.059	1.482	0.138
<b>MSME performance x financial service usage -&gt; economic growth</b>	0.025	0.009	5.363	0.000

For the moderating effects, MSME performance  $\times$  DFA on economic growth is positive but not statistically significant ( $\beta = 0.087$ ,  $p = 0.138$ ), indicating that MSME performance does not significantly strengthen the relationship between digital finance adoption and economic growth in this study. Conversely, the interaction of MSME performance and FSU on economic growth is positive and statistically significant ( $\beta = 0.025$ ,  $p = 0.000$ ), though the effect size is small. This suggests that high-performing MSMEs can marginally enhance the growth effects of financial service usage.

## Discussion of Findings

The findings revealed that digital finance adoption significantly and positively affects economic growth in Abuja which aligns with the report of Odeh et al. (2025), who showed that fintech tools like mobile banking enhance SMEs' participation in the formal financial system, leading to broader growth. Similarly, Usman et al. (2025) confirmed that financial technology improves MSME performance through improved access to credit and savings, indirectly stimulating growth. Obayori and Chidinma (2020) also reported that increased adoption of digital financial platforms has direct positive spillovers on Nigeria's economic development. Furthermore, financial service usage exerts a significant positive influence on economic growth ( $\beta = 0.087$ ,  $p = 0.000$ ). This corroborates Umzurike et al. (2023), who demonstrated a strong long-run association between financial service utilization and national growth. Obayori and Chidinma (2020) likewise noted that the effective use of savings, credit, and insurance services strengthens economic performance. Further, Echendu et al. (2024) highlighted that access to and use of financial services by MSMEs in Abuja facilitates employment creation, a critical channel of growth. MSME performance directly and strongly contributes to economic growth ( $\beta = 0.418$ ;  $p = 0.000$ ). This supports Odeh et al. (2025) and Akanbi et al. (2022) who emphasized that SMEs' ability to harness financial innovations is a determinant of firm growth and, by extension, economic progress. Usman et al. (2025) similarly found that MSME productivity enhances the effectiveness of financial inclusion strategies in Nigeria. Echendu et al. (2024) also confirmed that MSMEs are critical in employment and output generation in Abuja, making their performance a vital driver of economic growth.

For moderation role, MSME performance did not significantly moderate the relationship between digital finance adoption and economic growth ( $\beta = 0.087$ ,  $p = 0.138$ ). This deviates from expectations in prior studies, such as Usman et al. (2025), who argued that MSMEs with high absorptive capacity are more likely to leverage digital platforms effectively. One possible explanation is that many MSMEs in Abuja still face structural barriers such as poor digital literacy and inadequate infrastructure, which limit their ability to maximize digital finance for growth. Conversely, MSME performance significantly moderated the relationship between financial service usage and economic growth ( $\beta = 0.025$ ,  $p = 0.000$ ). This aligns with Echendu et al. (2024), who found that well-performing MSMEs in Abuja are better positioned to reinvest financial resources into expanding operations and generating jobs. Umzurike et al. (2023) also emphasized that the benefits of financial inclusion are magnified when firms possess the capacity to effectively use financial resources. Odeh et al. (2025)

further highlight that MSMEs' efficiency determines how financial usage translates into long-term growth.

## 5.0 Conclusion and Recommendations

This study examined the moderating role of MSME performance in the interaction between financial inclusion (measured through digital finance adoption and financial service usage) and economic growth in FCT Abuja. The findings showed that digital finance adoption and financial service usage significantly promote economic growth, while MSME performance itself emerged as a strong driver of growth. However, MSME performance did not significantly moderate the link between digital finance adoption and growth, suggesting that barriers such as digital literacy gaps and infrastructural deficits may hinder firms from fully leveraging technology. Conversely, MSME performance positively moderated the relationship between financial service usage and economic growth, though with a modest effect, indicating that high-performing firms are better positioned to translate financial resources into sustainable expansion and job creation. These results align with Schumpeterian Growth Theory and the Resource-Based View, confirming that financial inclusion alone is insufficient without the productive capacity of MSMEs to channel resources into economic development. The model points out MSMEs' pivotal role as the fulcrum through which utilisation of financial services and digital finance adoption translate into economic growth.

Based on these insights, several recommendations are proposed.

- i. First, policymakers should prioritize capacity-building programs for MSMEs, particularly in digital literacy and technological adoption, to enhance their ability to benefit from fintech platforms.
- ii. Second, financial institutions should design user-friendly, affordable, and MSME-oriented digital finance products that address the operational realities of small businesses in Abuja.
- iii. Third, government and development partners should provide infrastructural support—such as reliable internet access and electricity—to reduce structural barriers that limit the effectiveness of digital finance.
- iv. Finally, MSMEs themselves should strengthen internal capabilities, including managerial competence and operational efficiency, to maximize the benefits of financial services. By combining inclusive finance policies with targeted MSME support, Abuja can achieve more broad-based and sustainable economic growth.

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