



EFFECT OF FINANCIAL INCLUSION ON ECONOMIC GROWTH IN NIGERIA

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ABSTRACT

This study investigates the effect of financial inclusion on economic growth in Nigeria from 2010 to 2024. Financial inclusion has increasingly been recognized as a key driver of economic development, particularly in emerging economies such as Nigeria (World Bank, 2020). Despite efforts by the Central Bank of Nigeria (CBN) and financial institutions to deepen financial access through mobile banking, agent banking, and fintech innovations, a significant proportion of the Nigerian population remains financially excluded (EFInA, 2022). This research employs a quantitative descriptive design, using secondary data sourced from the World Bank, CBN, and National Bureau of Statistics (NBS). The study utilizes multiple regression analysis to examine the relationship between financial inclusion indicators (e.g., number of bank accounts, credit to the private sector, and mobile money usage) and Gross Domestic Product (GDP) growth. The findings reveal a statistically significant and positive relationship between financial inclusion and economic growth. It concludes that improved access to financial services facilitates investment, consumption, and job creation, which are critical to Nigeria's economic expansion. The study recommends that government policies should prioritize digital financial literacy, rural banking infrastructure, and regulatory support for fintech companies. It also emphasizes the need for collaboration between financial institutions and telecommunication firms to promote innovative financial products.

Keywords: Financial Inclusion, Economic Growth, Gross Domestic Product (GDP), Financial Institutions, Financial Access

INTRODUCTION

Financial inclusion, defined as the provision of access to a diverse array of beneficial, affordable, and sustainable financial products and services for individuals, households, and businesses, especially those historically marginalised from the formal financial system, is increasingly acknowledged as a vital catalyst for economic growth and sustainable development in both developed and developing nations (Demirgüç-Kunt et al., 2018; World Bank, 2020). These financial goods and services include savings accounts, credit facilities, insurance products, pension schemes, and payment systems, all of which significantly contribute to strengthening financial

stability, mitigating susceptibility to shocks, and fostering entrepreneurial activity. Financial inclusion is crucial since it integrates marginalised groups into the mainstream economy, hence increasing involvement in productive economic activities, raising income creation, and promoting overall wellbeing.

The significance of financial inclusion in Nigeria is paramount. The nation's economy persists in confronting several structural issues, including elevated unemployment rates, extensive poverty, double-digit inflation, and considerable regional economic inequalities between the northern and southern regions (CBN, 2018). These issues have impeded Nigeria's capacity to fully use its people and material resources for sustainable development. Consequently, policymakers and development practitioners have increasingly focused on financial inclusion as a feasible approach to tackle these socio-economic issues. Nigeria aims to enhance access to financial services to empower people and companies, especially in rural and low-income areas, equipping them with the necessary instruments to better their lives, invest in productive enterprises, and develop resilience against financial disruptions. Consequently, enhancing financial inclusion is seen not just as a catalyst for comprehensive economic development but also as an essential element of Nigeria's long-term strategy for inclusive and sustainable growth.

Nigeria's official financial system has traditionally favoured urban residents, paid employees, and persons engaged in the formal economic sector. This approach resulted in a substantial segment of the population, especially those residing in rural regions and engaged in the informal sector, being deprived of access to even fundamental financial services (EFInA, 2022). This exclusion not only restricted their ability to save safely or get finance for productive endeavours but also perpetuated cycles of poverty, inequality, and economic marginalisation. Rural families often depended on informal financial mechanisms, like rotating savings clubs, moneylenders, or familial assistance, which, while beneficial, were often inadequate, unstable, and insufficient for sustained economic empowerment. In acknowledgement of the adverse consequences of this extensive exclusion, the Central Bank of Nigeria (CBN), in partnership with several stakeholders, initiated the National Financial Inclusion Strategy (NFIS) in 2012. The approach was ambitious, targeting a reduction in the financial exclusion rate from 46.3 percent in 2010 to 20 percent by 2020 (CBN, 2012). This policy move highlighted the government's recognition that financial inclusion extends beyond just enhancing banking infrastructure; it is an essential tool for poverty alleviation, wealth generation, and inclusive economic development.

Following the implementation of the NFIS, Nigeria's financial environment has seen considerable changes. The advent of mobile banking services, the rapid expansion of agency banking networks, and the rise of fintech innovations like Paga, Opay, and Kuda have enhanced access to financial goods and services. These advancements have facilitated account opening, payment processing, and transfer reception for persons in distant places, eliminating the need of visiting conventional bank facilities. Moreover, fintech solutions have enhanced convenience, diminished transaction costs, and offered more customised services to historically disadvantaged demographics.

Nevertheless, despite these advances, the challenge of financial exclusion persists. In 2022, almost 38 million Nigerian people were excluded from the official financial system, underscoring the disparity between policy objectives and actual results (EFInA, 2022). This scenario highlights the need for ongoing innovation, enhanced regulatory assistance, and persistent endeavours to tackle obstacles such as insufficient financial literacy, poor digital infrastructure in rural areas, and diminished confidence in financial institutions. Consequently, while advancements have occurred, financial inclusion in Nigeria continues to be an ongoing endeavour, with considerable ramifications for the nation's overarching economic growth and development objectives.

Moreover, financial inclusion is essential for stimulating economic development by fulfilling many crucial roles inside the economy. A notable addition is its capacity to mobilise savings from people and families that would otherwise retain their funds in non-productive forms, such as cash reserves or informal savings organisations. When these savings are aggregated inside the formal financial system, they become accessible for lending, so augmenting the total availability of credit for both investment and consumption (Adelakun, 2015). This procedure enhances capital creation and facilitates access to essential finance for small firms and entrepreneurs, allowing them to grow operations, generate employment, and contribute to productive economic sectors. Moreover, financial inclusion enhances the efficiency of resource allocation by directing funds to their most productive use. By connecting savers with borrowers via efficient financial institutions, resources may be reallocated from surplus units to deficit units in the economy, so guaranteeing that idle capital is used in manners that provide greater economic returns. In addition to promoting investment, financial inclusion improves consumption by giving households better access to credit, therefore increasing aggregate demand and driving economic activity.

A crucial aspect of financial inclusion is its role in enhancing social protection and alleviating poverty. Digital financial platforms provide governments a more effective and transparent means for distributing cash transfer programs, subsidies, and other types of social assistance. This

guarantees that resources are delivered to the designated recipients promptly while also mitigating leakages and corruption that often compromise the efficacy of conventional welfare distribution techniques. Financial inclusion directly facilitates the reduction of poverty, diminishes income disparity, and fosters inclusive development (Allen et al., 2016). Empirical evidence substantiates these assertions. The International Monetary Fund (IMF, 2021) indicates a robust positive correlation between financial inclusion, GDP growth, and overall economic stability, especially in emerging nations like Nigeria. Countries with elevated financial inclusion levels often exhibit accelerated economic development, enhanced resilience to external shocks, and significant advancements in living standards.

Consequently, for Nigeria, enhancing financial inclusion is not just a question of social equality but also a macroeconomic need for sustained economic growth and enduring development. Notwithstanding its well recognised advantages, the attainment of financial inclusion in Nigeria has been markedly inconsistent. The advancements seen in the last 10 years have been inconsistently allocated throughout regions, gender demographics, and income brackets, thereby limiting the ability of financial inclusion benefits to foster widespread economic development. Specifically, women, low-income individuals, and rural inhabitants continue to be disproportionately marginalised from the formal banking system (Adeniran et al., 2020). This disproportionate distribution illustrates both structural and socio-cultural obstacles that persistently influence access to financial services nationwide.

Notwithstanding the execution of many attempts to enhance financial inclusion in Nigeria, the nation persists in confronting significant obstacles that impede advancement. Insufficient financial literacy, insufficient financial and digital infrastructure, feeble consumer protection regimes, diminished confidence in financial institutions, and ongoing regulatory problems have impeded the advancement of inclusion (Adeniran et al., 2020). These obstacles not only hinder millions of Nigerians from obtaining inexpensive and dependable financial services, but also restrict the efficacy of financial inclusion measures in yielding concrete developmental results. The ongoing nature of these issues prompts essential questions about the effectiveness of Nigeria's financial inclusion initiative in achieving its economic objectives.

The relationship between financial inclusion and economic development is widely established in worldwide literature; however, its expression in Nigeria is little investigated and recorded. Numerous previous studies often use a generalised approach, concentrating on worldwide comparisons or regional assessments, which do not adequately reflect the distinct institutional,

socio-cultural, and structural aspects of Nigeria's economy. Moreover, much of the preceding literature either neglects the recent surge of digital financial innovations, including mobile money platforms, fintech-driven micro-lending, and agent banking, or does not utilise robust empirical methodologies that can accurately discern the direct impact of financial inclusion on economic growth. This creates a significant void in comprehending the actual economic ramifications of Nigeria's financial inclusion policy. This research aims to address these gaps by examining the impact of important financial inclusion indicators namely bank account penetration, mobile money use, and access to credit on Nigeria's economic development, as measured by Gross Domestic Product (GDP), from 2010 to 2024.

LITERATURE REVIEW

Financial inclusion

Financial inclusion, characterised by the availability of a wide range of advantageous, affordable, and sustainable financial products and services for individuals, households, and enterprises particularly those historically excluded from the formal financial system is increasingly recognised as a crucial driver of economic growth and sustainable development in both developed and developing countries (Demirgüç-Kunt et al., 2018; World Bank, 2020). These financial products and services include savings accounts, credit options, insurance policies, pension plans, and payment systems, all of which substantially enhance financial stability, reduce vulnerability to shocks, and promote entrepreneurial endeavours. Financial inclusion is essential since it incorporates disadvantaged populations into the mainstream economy, hence enhancing participation in productive economic activities, augmenting revenue generation, and fostering general well-being.

The importance of financial inclusion in Nigeria is critical. The nation's economy continues to face several structural challenges, including high unemployment rates, widespread poverty, double-digit inflation, and significant regional economic disparities between the northern and southern areas (CBN, 2018). These challenges have hindered Nigeria's ability to effectively use its human and material resources for sustained development. As a result, policymakers and development practitioners have increasingly prioritised financial inclusion as a viable strategy to address these socio-economic challenges. Nigeria seeks to improve access to financial services to empower individuals and businesses, particularly in rural and low-income regions, providing them with essential tools to boost their livelihoods, engage in productive ventures, and build resilience against financial disturbances. Thus, improving financial inclusion is seen not just as a driver of holistic

economic development but also as a crucial component of Nigeria's long-term plan for inclusive and sustainable growth.

Nigeria's official financial system has historically rewarded urban inhabitants, salaried workers, and anyone involved in the formal economy. This method led to a significant portion of the population, particularly those living in rural areas and participating in the informal sector, lacking access to basic financial services (EFInA, 2022). This exclusion not only limited their capacity to save securely or get financing for productive ventures but also perpetuated cycles of poverty, inequality, and economic marginalisation. Rural households often relied on informal financial systems, such as rotating savings clubs, moneylenders, or family support, which, while advantageous, were often inadequate, unstable, and insufficient for enduring economic empowerment. Recognising the detrimental effects of this widespread exclusion, the Central Bank of Nigeria (CBN), in collaboration with many stakeholders, launched the National Financial Inclusion Strategy (NFIS) in 2012. The initiative aimed to decrease the financial exclusion rate from 46.3 percent in 2010 to 20 percent by 2020 (CBN, 2012). This policy shift underscored the government's acknowledgement that financial inclusion transcends mere banking infrastructure enhancement; it is a crucial instrument for poverty alleviation, wealth creation, and inclusive economic growth.

Since the adoption of the NFIS, Nigeria's financial landscape has seen significant transformations. The emergence of mobile banking services, the rapid proliferation of agency banking networks, and the ascent of fintech innovations like as Paga, Opay, and Kuda have improved access to financial products and services. These improvements have streamlined account establishment, payment processing, and transfer receipt for individuals in remote locations, negating the need of visiting traditional banking institutions. Furthermore, fintech solutions have improved ease, reduced transaction costs, and provided more tailored services to historically marginalised populations. Nonetheless, despite these advancements, the issue of financial exclusion endures. In 2022, about 38 million Nigerians remained marginalised from the formal financial system, highlighting the gap between policy goals and actual outcomes (EFInA, 2022). This situation underscores the need for continuous innovation, improved regulatory support, and sustained efforts to address challenges such as inadequate financial literacy, subpar digital infrastructure in rural regions, and eroded trust in financial institutions. As a result, despite progress, financial inclusion in Nigeria remains a persistent challenge, significantly impacting the country's overall economic growth and development goals.

Furthermore, financial inclusion is vital for fostering economic growth by performing several critical functions inside the economy. A significant enhancement is its ability to mobilise savings from individuals and families that would otherwise keep their monies in unproductive forms, such as cash reserves or informal savings groups. When these savings are consolidated into the official financial system, they become available for lending, hence increasing the overall availability of credit for both investment and consumption (Adelakun, 2015). This process improves capital generation and enables small businesses and entrepreneurs to obtain vital financing, hence facilitating operational expansion, job creation, and contributions to productive economic sectors.

Also, financial inclusion improves the efficiency of resource allocation by channelling funds to their most productive use. By linking savers with borrowers via efficient financial institutions, resources may be redistributed from surplus units to deficit units within the economy, ensuring that idle capital is used in ways that provide higher economic returns. Financial inclusion enhances consumption by providing households with improved access to credit, hence augmenting aggregate demand and stimulating economic activity, in addition to fostering investment. An essential element of financial inclusion is its contribution to improving social protection and mitigating poverty. Digital financial platforms provide governments a more efficient and transparent method for administering cash transfer programs, subsidies, and other kinds of social assistance. This ensures that resources are quickly allocated to the intended beneficiaries while also reducing leakages and corruption that often undermine the effectiveness of traditional welfare distribution methods. Financial inclusion significantly contributes to poverty alleviation, reduces income inequality, and promotes inclusive development (Allen et al., 2016).

Empirical data supports these claims. The International Monetary Fund (IMF, 2021) demonstrates a strong positive association among financial inclusion, GDP growth, and overall economic stability, particularly in developing economies such as Nigeria. Countries with high financial inclusion levels often demonstrate rapid economic growth, improved resilience to external shocks, and significant improvements in living standards. Thus, for Nigeria, improving financial inclusion is not just a matter of social equity but also a macroeconomic need for sustained economic growth and long-term development. Despite its acknowledged benefits, the achievement of financial inclusion in Nigeria has been somewhat erratic. The progress seen over the last decade has been unevenly distributed across geographies, gender demographics, and income levels, so limiting the potential of financial inclusion advantages to promote extensive economic growth. Women, low-income persons, and rural residents are disproportionately excluded from the official banking

system (Adeniran et al., 2020). This unequal distribution demonstrates both structural and socio-cultural barriers that continually affect access to financial services throughout the country. Despite several efforts to improve financial inclusion in Nigeria, the country continues to face substantial challenges that hinder progress. Inadequate financial literacy, deficient financial and digital infrastructure, weak consumer protection frameworks, reduced trust in financial institutions, and persistent regulatory challenges have hindered the progress of inclusion (Adeniran et al., 2020). These barriers not only impede millions of Nigerians from accessing affordable and reliable financial services but also limit the effectiveness of financial inclusion initiatives in producing tangible developmental outcomes. The persistent prevalence of these challenges raises critical enquiries about the efficacy of Nigeria's financial inclusion strategy in fulfilling its economic goals.

The correlation between financial inclusion and economic progress is well documented in global literature; nevertheless, its manifestation in Nigeria remains underexplored and inadequately recorded. Many prior studies often use a generalised methodology, focusing on global comparisons or regional evaluations, which fail to accurately represent the unique institutional, socio-cultural, and structural characteristics of Nigeria's economy. Furthermore, much of the existing literature either overlooks the recent proliferation of digital financial innovations, such as mobile money platforms, fintech-driven micro-lending, and agent banking, or fails to employ rigorous empirical methodologies capable of accurately identifying the direct influence of financial inclusion on economic growth. This results in a substantial gap in understanding the true economic implications of Nigeria's financial inclusion program. This study seeks to fill existing gaps by analysing the influence of key financial inclusion indicators specifically bank account penetration, mobile money use, and credit accessibility on Nigeria's economic progress, as quantified by Gross Domestic Product (GDP), from 2010 to 2024.

Economic Growth

Economic growth is conventionally defined as the sustained increase in a country's production of goods and services per capita, typically measured by gross domestic product (GDP) or gross national income (GNI) adjusted for inflation. The concept encompasses both the expansion of aggregate output and, more meaningfully, the growth of output per person, which reflects improvements in material living standards. The Britannica definition emphasizes that growth "can best be described as a process of transformation," involving uneven and unbalanced changes across

economic sectors. This transformational perspective recognizes that growth is not merely quantitative expansion but qualitative change in how economies function. Historical patterns reveal that growing economies typically experience a declining share of agriculture in output and employment, rising industrialization, and subsequent expansion of services—a structural transformation pathway observed across successful developing economies.

A critical conceptual distinction exists between economic growth and economic development, though the terms are often used interchangeably in policy discourse. According to Nafziger (2005), economic growth refers specifically to increases in a country's production or income per capita, while economic development encompasses growth accompanied by "changes in output distribution and economic structure". These changes include improvements in the material well-being of poorer populations, declining agricultural shares in GNP, rising educational attainment, and domestically-originating technical advances. As Nafziger aptly observes through analogy, "with children, growth involves a stress on quantitative measures (height or GNP), whereas development draws attention to changes in capacities (such as physical coordination and learning ability, or the economy's ability to adapt to shifts in tastes and technology)". This distinction carries profound implications for policy: growth-focused strategies may achieve output expansion without addressing inequality, structural transformation, or institutional capacity, while development-oriented approaches prioritize the qualitative dimensions that determine whether growth translates into improved human welfare.

Foley, Michl, and Tavani (2019) further elaborate that modern growth theory must grapple with distributional outcomes, noting that the rise of inequality alongside technological change represents a central challenge for contemporary capitalist economies. Their work emphasizes that growth theory cannot remain confined to aggregate output but must engage with how the gains from growth are distributed across income groups—a concern particularly relevant to Nigeria's context of persistent poverty amid aggregate growth.

Economic Growth in Nigeria

Nigeria's growth experience over the past two decades illustrates both the potential and fragility of resource-dependent economies. The World Bank's Nigeria Country Economic Memorandum (2022) documents that between 2001 and 2010, "Nigeria ranked among the top 15 fastest growing economies in the world, with an average annual growth rate of 8.2 percent". This impressive performance reflected structural reforms, high oil prices, and economic liberalization following decades of military rule and economic stagnation. However, these hard-won gains "evaporated

between 2011 and 2021, due to the lack of deeper structural reforms, global shocks, conflicting macroeconomic policies, and increased insecurity". Growth slowed dramatically, and per capita income declined as population growth outpaced output expansion. The economy entered recession in 2016, recovered weakly, and contracted again during the COVID-19 pandemic.

The post-pandemic period has witnessed modest recovery. IMF (2022) reported that "output growth at 3.4 percent (y/y) in 2022Q2 marked the seventh consecutive quarter of growth driven by various services sectors, especially information technology, trade, and finance". However, this growth remained below population growth rates in per capita terms, and oil production continued its secular decline due to "low investment and significant leakages associated with poor maintenance and theft". Recent data from the World Bank indicates that "growth slowed further from 3.3% in 2022 to 2.9% in 2023, mainly due to weak crude oil output," before accelerating to 3.4% in 2024 "driven by strong performance in financial and telecommunications services". This pattern—growth led by services rather than industry or agriculture—raises questions about the sustainability and transformative potential of Nigeria's current growth model.

Nigeria's growth stagnation reflects deep-seated structural challenges that constrain productive transformation. The World Bank (2022) identifies "declining private investment and demographic pressure" as central concerns, noting that limited job creation "pushes young Nigerians to pursue opportunities overseas". Despite its vast natural resources and entrepreneurial population, "development in Nigeria has stagnated over the last decade and the country is failing to keep up with the GDP growth of its peers".

The May 2023 administration change marked a significant policy shift, with authorities implementing bold reforms to restore macroeconomic stability. Key measures include removing the gasoline subsidy, unifying exchange rates, tightening monetary policy, refocusing central bank operations on price stability, and ending deficit monetization. These reforms address long-standing distortions that undermined investment and growth.

Initial results are encouraging: "The Federal Government's fiscal deficit narrowed from 5.3% of GDP in 2023 to an estimated 4.3% in 2024, driven by higher non-oil revenues following forex subsidy removal and reforms improving revenue transparency from state entities". The World Bank projects GDP growth to reach 3.7% by 2026, though this remains below the rates needed for substantial per capita income gains given population growth of approximately 2.1% annually.

However, significant challenges persist. Inflation remains elevated—estimated at 31.7% in 2024—eroding purchasing power and increasing poverty. The IMF projects that "the poverty rate is expected to increase to 56% of the population by 2026 as labour incomes are not keeping pace with inflation". Additionally, "political and implementation risks may slow progress" on revenue mobilization, while security spending and pre-election expenses pressure fiscal accounts.

Financial Inclusion and Economic Growth in Nigeria

Nigeria has made notable progress in financial inclusion over the past decade. According to EFINA's Access to Financial Services in Nigeria 2023 Survey, "formal financial service usage growing from 30 per cent to 57 per cent" between 2016 and 2023, while "the adoption of financial service agents has also skyrocketed, from 4.4 per cent in 2018 to 54 per cent in 2023". Overall financial inclusion penetration reached 64% in 2023, up from 56% in 2020.

However, significant gaps persist. Approximately 40 million Nigerian adults remain outside the formal financial system, with exclusion concentrated in the Northeast region and among women, youth, farmers, and rural communities. The EFINA report emphasizes that "poverty is a major reason for financial exclusion, saying nearly 50 per cent of adults have no financial account because they have no income". This observation underscores the bidirectional relationship between financial inclusion and economic growth: inclusion facilitates growth, but growth creates the income that makes inclusion meaningful.

Moreover, the report cautions that the rapid growth of access to payment is not translating to significant improvement in access to credit, savings pensions, and insurance where the social impact of financial inclusion would be bigger". This pattern suggests that while Nigeria has succeeded in extending basic transaction services, deeper financial inclusion encompassing savings mobilization, credit provision, and risk management remains incomplete. The IMF (2022) similarly noted that "Nigeria continues to fall short of its inclusion targets, particularly in access to financial products," with "financial exclusion rate at 36 percent remains high relative to peers in SSA". However, the mission welcomed "further expansion of the agent network, the rising uptake of mobile money and electronic payments, and granting of payment service bank licenses to large mobile operators".

Theoretical Framework

Financial Intermediation Theory

The Financial Intermediation Theory, pioneered by Gurley and Shaw (1960), emphasizes the role of financial institutions in bridging the gap between surplus units (savers) and deficit units (borrowers or investors). According to the theory, financial institutions such as banks, microfinance institutions, and, more recently, fintech platforms act as intermediaries that facilitate the flow of funds from those with excess liquidity to those who require capital for productive investment. By mobilizing scattered and idle funds within the economy, financial intermediaries play a vital role in promoting efficient resource allocation, supporting investment activities, and stimulating overall economic growth.

A central tenet of the theory is that financial intermediaries help to overcome key market frictions that hinder direct transactions between savers and investors. Specifically, they reduce transaction costs, mitigate information asymmetries, and increase liquidity within the financial system. For example, banks assess credit risks on behalf of savers, provide deposit insurance, and create a payments infrastructure that enhances trust in financial transactions. These functions not only facilitate investment but also expand the productive capacity of the economy. In the context of financial inclusion, the theory suggests that extending the reach of financial intermediaries to underserved populations ensures that savings from low-income households and rural dwellers can be mobilized and channeled into productive sectors of the economy. This broadening of participation increases the volume of funds available for lending, thereby stimulating entrepreneurial activities, supporting micro and small businesses, and enhancing household welfare. Moreover, inclusive intermediation reduces reliance on informal and often exploitative financial arrangements by providing individuals with secure, affordable, and sustainable access to financial services.

In Nigeria, the Financial Intermediation Theory underscores the importance of inclusive financial policies in deepening capital mobilization and stimulating economic activities. Nigeria's informal sector, which contributes a significant share of the country's GDP, remains largely excluded from the formal financial system. By integrating this sector through inclusive financial intermediation such as agency banking, mobile money platforms, and microfinance institutions the country can expand access to credit, encourage savings, and facilitate investments that drive economic growth. Thus, the theory provides a useful framework for understanding how financial inclusion can act as a catalyst for resource mobilization, poverty reduction, and sustainable economic development in Nigeria.

Endogenous Growth Theory

The Endogenous Growth Theory, developed by Romer (1986) and Lucas (1988), emerged as a response to the limitations of classical and neoclassical growth models, which emphasized exogenous factors such as technological progress as the primary drivers of long-term growth. In contrast, the endogenous growth framework argues that economic growth is generated from within the economy, particularly through deliberate investments in human capital, innovation, knowledge accumulation, and institutional development. The theory emphasizes that policies and structural reforms that enhance these factors can sustain growth in the long run, rather than relying on external or unexplained drivers.

Within this framework, financial inclusion is viewed as a critical mechanism for fostering economic growth. By expanding access to financial services such as savings, credit, insurance, and payment systems, financial inclusion empowers households and businesses to make productive investments. For instance, access to credit enables individuals to finance education and health expenditures, thereby building human capital; while savings and micro-loans can support the establishment and expansion of small-scale enterprises, which serve as important engines of innovation and employment creation. Over time, these activities enhance productivity, stimulate entrepreneurial dynamism, and contribute to knowledge-based economic development, all of which are central to endogenous growth processes.

In the Nigerian context, the relevance of the endogenous growth perspective is particularly significant. A large share of the population, especially those in rural areas and the informal sector, remains financially excluded, thereby limiting their ability to accumulate capital or invest in productivity-enhancing activities. For example, many small businesses struggle to scale due to lack of credit, while households face difficulties in funding education or healthcare, which hinders human capital development. By improving financial inclusion, Nigeria can unlock the economic potential of these marginalized groups, stimulate self-employment opportunities, and foster innovation within the informal sector. This would not only contribute to poverty reduction but also drive sustained, inclusive economic growth by leveraging domestic resources and capacities.

The Endogenous Growth Theory provides a useful lens for understanding how financial inclusion can serve as a catalyst for long-term growth in Nigeria. It highlights the fact that inclusive financial systems are not merely tools for short-term welfare improvement but are essential foundations for innovation, productivity enhancement, and sustainable economic transformation. Both theories underscore the importance of well-functioning financial systems in driving economic development and provide a strong rationale for policies that broaden access to financial services.

2.3 Empirical Review

Ibrahim and Sanni (2022) investigated the influence of mobile banking services on financial inclusion, with a particular emphasis on rural dwellers in Nigeria who constitute one of the most financially excluded groups. The study utilized survey data drawn from selected rural communities and applied a logistic regression framework to examine the probability that mobile banking adoption would increase financial service usage among the unbanked. The findings revealed that mobile banking significantly improved access to financial services, as rural residents who adopted mobile platforms were more likely to engage in savings, transfers, and credit transactions compared to non-users. This supports the argument that mobile banking can effectively substitute for the absence of traditional bank branches in underserved areas, thereby reducing both physical and socio-economic barriers to inclusion. Nevertheless, the study identified persistent obstacles that hinder widespread adoption. These included unreliable network connectivity, especially in remote regions; low levels of digital and financial literacy, which limit users' ability to fully maximize available services; and security concerns such as fraud and identity theft, which reduce confidence in mobile banking platforms. These challenges highlight the structural and institutional weaknesses that must be addressed if mobile banking is to achieve its full potential in Nigeria. The study concluded that mobile banking holds substantial potential to revolutionize financial access in Nigeria, particularly if aligned with the government's social investment programs such as conditional cash transfers and poverty alleviation schemes.

Okoye, Adediran, and Aluko (2021) conducted an empirical investigation into the direct relationship between financial inclusion and poverty reduction in Nigeria, using annual data covering the period 2011 to 2020. The study employed a panel regression model to analyze how different dimensions of financial inclusion affected poverty levels, with particular attention to savings, micro-credit access, and financial service penetration. The results demonstrated that financial inclusion exerted a significant poverty-reducing effect in Nigeria. Among the variables analyzed, savings and access to micro-credit emerged as the most influential drivers, suggesting that enabling households to save securely and access affordable credit is central to lifting individuals out of poverty. By providing a safety net and facilitating small-scale investments, these services enhanced household resilience, reduced vulnerability to economic shocks, and promoted income-generating activities. The study also acknowledged the continued relevance of informal financial mechanisms such as cooperatives, rotating savings groups, and thrift societies, which remain deeply embedded in Nigeria's socio-economic fabric. The authors argued that rather than

sidelining these systems, policymakers should explore ways to integrate them into the formal financial sector, thereby enhancing efficiency, security, and reach. Furthermore, the findings highlighted gender disparities as a critical barrier to inclusion. Women in Nigeria were found to be disproportionately excluded due to systemic obstacles such as lack of collateral, limited property rights, and entrenched cultural biases that restrict their participation in financial markets. The authors proposed targeted interventions such as financial literacy campaigns for women and youth, as well as government incentives for banks and microfinance institutions to extend services to underserved regions.

Adeniran, Yusuf, and Azeez (2020) investigated the role of digital financial inclusion in driving economic growth in Nigeria, using the Vector Error Correction Model (VECM) to capture both short- and long-term dynamics between financial inclusion variables and GDP growth over the period 2010–2018. The study employed indicators such as mobile money transactions, the number of Point-of-Sale (POS) terminals, and the volume of agent banking operations to measure digital inclusion. The results revealed a long-run positive relationship between digital financial inclusion and economic growth, indicating that sustained improvements in digital access contribute to Nigeria's economic expansion. Specifically, the findings suggested that digital platforms reduce transaction costs, ease constraints on financial access in remote and underserved areas, and promote entrepreneurship by enabling small businesses and individuals to participate in the formal financial system. Among the digital innovations assessed, agent banking was identified as a “game-changer,” particularly for its ability to extend banking services to previously excluded populations without the need for costly brick-and-mortar infrastructure. The study also underscored the importance of regulatory support, recommending that the Central Bank of Nigeria (CBN) intensify fintech regulation to safeguard consumer trust and ensure system stability, while simultaneously encouraging public–private partnerships to accelerate the development of financial infrastructure. These recommendations are highly relevant in the context of Nigeria's ongoing digital transformation, where fintech solutions such as mobile wallets, agency banking, and POS systems are rapidly reshaping the financial landscape. The study provides timely insights into how digital finance can serve not only as a tool for inclusion but also as a catalyst for broader macroeconomic development.

Nwanko & Ojemeni, (2019) employed time series econometric models to empirically examine the relationship between financial inclusion and economic growth in Nigeria over the period 2005 to 2017. Indicators of financial inclusion such as the number of bank branches, the number of ATMs

per 100,000 adults, mobile money usage, and credit to the private sector were used to capture the level of inclusion. The results revealed a statistically significant and positive relationship between financial inclusion and GDP growth, suggesting that improvements in access to financial services contribute meaningfully to Nigeria's economic performance. A major finding of the study, however, was the uneven distribution of financial infrastructure across the country. Banking facilities were found to be heavily concentrated in urban centers and the southern regions, while the northern and rural areas lagged significantly behind in terms of bank branch penetration and ATM density. This regional disparity not only limited access to financial services but also deepened socio-economic inequalities across different parts of the country. The study further highlighted the underrepresentation of women and the informal sector in formal financial systems. Despite their significant role in household economies and small-scale trade, women remained disproportionately excluded from financial services due to cultural, institutional, and educational barriers. Similarly, the informal sector, which contributes a large share to Nigeria's GDP, lacked adequate access to credit and savings mechanisms. The study therefore recommended that financial institutions, with support from government and regulators, should develop targeted financial products tailored to the needs of these marginalized groups, alongside sustained financial literacy campaigns to boost awareness and trust. To address infrastructural gaps, the study suggested a stronger reliance on digital banking models, including agency banking networks and mobile money platforms, as scalable and cost-effective solutions for extending financial services to underserved communities. By leveraging technology, Nigeria could reduce regional disparities in financial access, empower marginalized groups, and harness the full potential of financial inclusion as a driver of inclusive economic growth.

Gap in the Literature

Despite the growing body of research on financial inclusion and its relationship with economic growth, several critical gaps remain unaddressed in the existing literature. First, there are significant temporal limitations. Most of the literature suffers from a lack of disaggregated analysis. Findings are often presented at the national or macroeconomic level, overlooking the variations that exist across gender, geographic regions, income categories, and sectoral composition. This aggregation not only obscures the unique challenges faced by vulnerable groups such as women, rural dwellers, and low-income earners but also risks creating policy recommendations that are too broad to be effective. For instance, financial exclusion in urban areas may be driven primarily by unemployment or informal sector constraints, whereas in rural areas it

may be linked more directly to poor infrastructure and limited access to banking services. Without properly disaggregated analysis, it becomes difficult to design targeted interventions that address these distinct realities.

Also, relatively few studies provide robust insights into the mechanisms through which financial inclusion translates into economic growth. Much of the empirical work stops at establishing correlations between financial inclusion indicators and macroeconomic outcomes, without examining the underlying causal pathways. Yet, these pathways are critical to understanding how inclusion fosters growth. For example, access to credit may promote entrepreneurial activity and job creation, increased savings could strengthen household resilience and consumption, and broader access to payment systems may enhance market participation and efficiency. By neglecting these transmission mechanisms, the literature leaves a major gap in understanding how financial inclusion can serve as a sustainable driver of economic growth.

The rapid pace of technological advancement in the financial sector remains underexplored in current scholarship. Emerging innovations such as blockchain applications, artificial intelligence (AI)-powered credit scoring, open banking APIs, and digital lending platforms are redefining the possibilities of inclusive finance. These tools not only expand access but also improve efficiency, reduce transaction costs, and mitigate risks associated with traditional banking models. Yet, empirical studies in Nigeria and other developing economies have only begun to scratch the surface of these developments. The failure to integrate these technological shifts into analytical frameworks creates a disconnect between research and practice, leaving policymakers and industry stakeholders with outdated insights.

Policy evaluation remains another underdeveloped area in the literature. Although several governments, including Nigeria's, have introduced bold initiatives aimed at deepening financial inclusion such as the National Financial Inclusion Strategy (NFIS), the Central Bank of Nigeria's (CBN) regulatory sandbox, and the specific inclusion targets set for Deposit Money Banks and Mobile Money Operators, few studies rigorously assess the actual outcomes of these interventions. Without systematic evaluation, it is difficult to determine whether these initiatives are effective, whether they require modification, or whether unintended consequences may be undermining their success. This creates a knowledge gap that limits evidence-based policymaking and undermines the ability of regulators to refine strategies for maximum impact. In response to these identified gaps, the present study seeks to provide a more holistic and up-to-date analysis of the relationship between financial inclusion and economic growth in Nigeria. It draws on recent data covering the

period 2010–2024, thereby capturing both pre- and post-COVID-19 dynamics as well as the rapid expansion of fintech solutions during this timeframe.

METHODOLOGY

This study adopts a descriptive and quantitative research design to investigate the effect of financial inclusion on economic growth in Nigeria. The target population for this study includes the entire adult Nigerian population (aged 18 and above), which forms the basis for assessing financial inclusion. Additionally, the study considers financial service providers such as commercial banks, microfinance institutions, mobile money operators, and other regulated financial entities. The sampling period spans from 2010 to 2024, ensuring a sufficient time series to capture significant policy changes, technological evolution, and economic transformations. This purposive sampling of financial data is justified by the need to use variables directly aligned with the research objectives. Aggregate national-level data are used in place of individual survey responses to ensure robustness and to avoid respondent bias or regional inconsistencies. This study relies exclusively on secondary data due to the nature of its research objectives and the national scope of its analysis. The analysis in this study was conducted using a combination of descriptive statistics, correlation analysis, and particularly multiple regression analysis. Descriptive statistics (e.g., mean, standard deviation, trend charts) will be used to summarize and visualize the dataset. Correlation analysis will help determine the degree and direction of association between financial inclusion variables and economic growth. However, correlation does not imply causality, which is why regression analysis will also be employed to establish predictive relationships. Multiple regression analysis will be applied to measure the effect of financial inclusion indicators (independent variables) on GDP (dependent variable). Statistical tools such as PYTHON will be utilized to process the data, test hypotheses, and generate robust results. These software applications are appropriate for handling large datasets and applying advanced econometric techniques such as Ordinary Least Squares (OLS) regression, autocorrelation checks, multicollinearity diagnostics, and model fit evaluations (Gujarati & Porter, 2009).

Model Specification

To quantitatively capture the relationship between financial inclusion and economic growth, the following econometric model is specified:

$$\text{GDP} = \beta_0 + \beta_1(\text{FI1}) + \beta_2(\text{FI2}) + \beta_3(\text{FI3}) + \varepsilon$$

Where: GDP = Gross Domestic Product (indicator of economic growth); FI1 = Percentage of adults with access to a formal bank account; FI2 = Volume of mobile money transactions (in Naira); FI3 = Number of bank branches and ATMs per 100,000 adults; β_0 = Intercept term; β_1 – β_3 = Coefficients of the explanatory variables; ε = Error term

DATA PRESENTATION, ANALYSIS, AND INTERPRETATION OF RESULTS

Descriptive Statistics

Table 1 presents the descriptive statistics of the study variables for the period 2010–2024. The dataset comprises 15 annual observations, capturing trends in financial inclusion indicators, macroeconomic controls, and economic growth performance in Nigeria.

The mean year in the dataset is 2017, with coverage ranging from 2010 to 2024. This period coincides with the rollout of key financial sector reforms, such as the National Financial Inclusion Strategy (NFIS) of 2012, and the expansion of digital payment infrastructure in Nigeria.

Bank account penetration, measured as the percentage of adults with a formal account, averaged 50.01% over the study period, with a minimum of 25.5% in 2010 and a peak of 73.3% by 2024. The steady rise in account ownership suggests the effectiveness of inclusion strategies, although the relatively high standard deviation (15.40) indicates significant changes across the years.

Mobile money transaction volume shows the sharpest variation among the indicators, with an average of ₦3.76 trillion and a large standard deviation (₦5.74 trillion). The minimum recorded was ₦50 billion in 2010, while the maximum rose to over ₦19.7 trillion by 2024. This exponential increase reflects the rapid diffusion of mobile payment platforms and the shift from cash-based transactions to digital channels, positioning mobile money as a transformative force in Nigeria's financial system. Bank branch and ATM density grew more modestly, averaging 11.45 per 100,000 adults. The minimum observed value was 8.0, while the maximum reached 14.7. The relatively low variability (standard deviation of 2.17) suggests gradual expansion of traditional banking infrastructure, which contrasts sharply with the faster adoption of digital alternatives.

With respect to macroeconomic indicators, the average inflation rate stood at 14.09% during the period, fluctuating between 8.7% and 17.2%. This reflects Nigeria's persistent price instability challenges. Similarly, unemployment averaged 10.59%, ranging from 6.0% in 2010 to a high of 16.6% in later years, highlighting structural labor market issues. Credit to the private sector as a share of GDP averaged 24.94%, with moderate dispersion (standard deviation of 6.43), indicating gradual deepening of financial intermediation.

The constructed Financial Inclusion Index averaged 0.49, ranging from 0.26 to 0.88. The index demonstrates an upward trend in inclusion, with considerable improvement after 2015, consistent

with policy reforms and fintech growth. Turning to economic performance, real GDP growth averaged 3.49% during the period, with significant fluctuations. The economy recorded a contraction of -2.0% during the 2016 recession but rebounded to as high as 6.2% in earlier years. Real GDP in absolute terms averaged ₦88.05 trillion, with steady expansion from ₦70 trillion in 2010 to ₦112.99 trillion by 2024.

Overall, the descriptive statistics suggest steady improvements in financial inclusion, particularly through digital channels, alongside fluctuating macroeconomic performance. These dynamics underscore the importance of investigating whether deepening financial inclusion, especially via mobile money and account ownership, has had a measurable impact on Nigeria’s economic growth trajectory.

Table 1: Summary Statistics of Variables (Mean, Std. Dev., Min, Max)

Variable	N	Mean	Std. Dev.	Min	25%	50%	75%	Max
Bank Account (% of adults)	15	50.01	15.40	25.50	38.15	50.80	62.05	73.30
Mobile Money Volume (₦ Billion)	15	3756.67	5738.38	50.00	214.50	1003.0	4425.5	19708.0
Bank Branches & ATMs (per 100k adults)	15	11.45	2.17	8.00	9.75	11.10	13.30	14.70
Inflation Rate (%)	15	14.09	2.53	8.70	12.30	15.00	16.30	17.20
Unemployment Rate (%)	15	10.59	3.35	6.00	7.95	10.60	12.60	16.60
Credit to Private Sector (% of GDP)	15	24.94	6.43	15.80	19.05	25.90	30.20	35.00
Financial Inclusion Index	15	0.49	0.18	0.26	0.35	0.44	0.58	0.88
Real GDP Growth (%)	15	3.49	2.04	-2.00	3.10	4.40	4.55	6.20
Real GDP (₦ Trillion)	15	88.05	12.57	70.00	79.00	86.29	95.24	112.99

Source: Researcher computation, 2026

Correlation Analysis

Correlation analysis was conducted and visualized in form of heatmap to determine the strength and direction of association among the variables. The correlation heatmap illustrates the relationships between key financial inclusion indicators (bank account percentage, branches and ATMs per 100,000 population, mobile money transaction volume in billion NGN, and financial inclusion index) and economic growth measures (real GDP in trillion NGN and real GDP growth

percentage) in Nigeria from 2010 to 2024. Overall, the heatmap reveals strong positive correlations among most financial inclusion metrics and between these metrics and real GDP levels, indicating that advancements in financial access and usage are closely aligned with expansions in the economy's total output. However, correlations with real GDP growth rates are notably weaker and positive but modest, suggesting that while financial inclusion supports broader economic scale, its direct influence on year-over-year growth may be more limited or mediated by other factors.

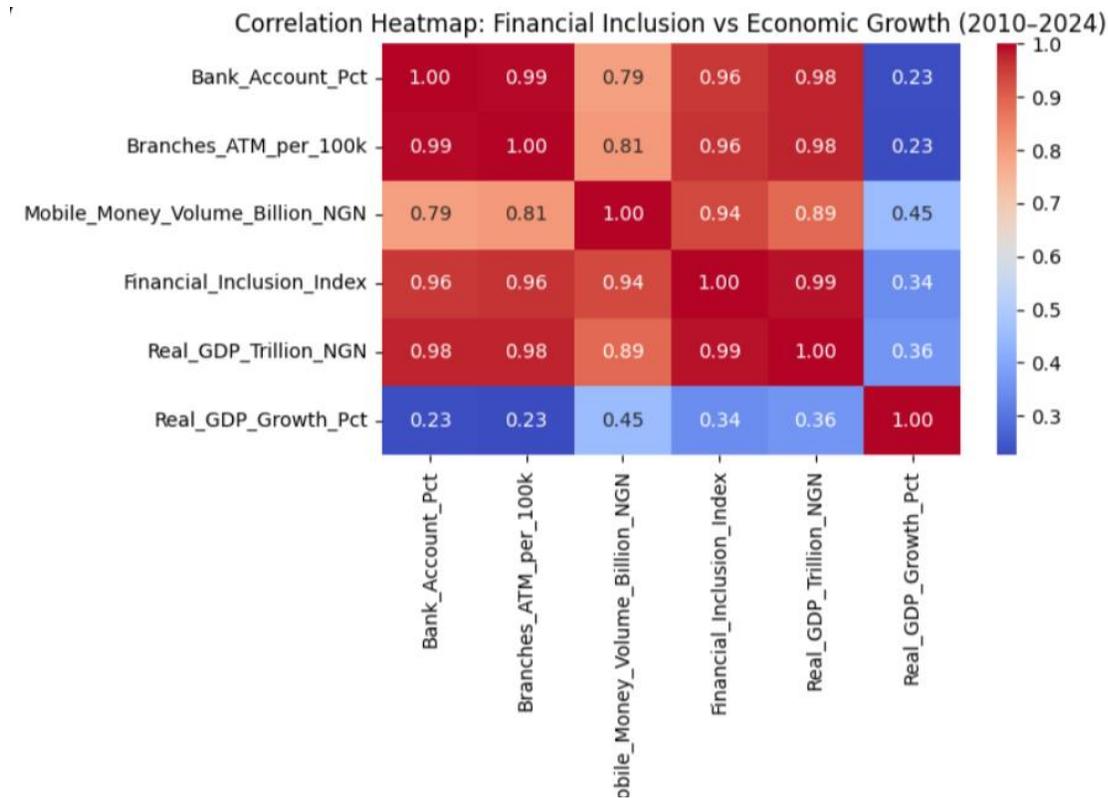


Figure 4.1: Correlation Matrix of Study Variables

Bank account percentage shows near-perfect positive correlations with branches/ATMs per 100k (0.99), financial inclusion index (0.96), and real GDP (0.98), but only a moderate link to mobile money volume (0.79). Branches/ATMs per 100k similarly correlates highly with bank accounts (0.99), financial inclusion index (0.96), and real GDP (0.98), with a slightly lower but still strong tie to mobile money volume (0.81). Mobile money volume has solid positive correlations with the financial inclusion index (0.94) and real GDP (0.89), though these are somewhat weaker compared to traditional banking metrics, reflecting its complementary role in digital financial expansion. The financial inclusion index, as a composite measure, exhibits high positive correlations across all

indicators (0.94–1.00) and with real GDP (0.99), underscoring its robustness as a holistic proxy for financial access.

Real GDP (trillion NGN) displays very strong positive correlations with all financial inclusion indicators (0.89–0.99), implying that improvements in banking penetration, physical infrastructure, digital transactions, and overall inclusion have historically driven substantial increases in Nigeria's economic output over the period. This aligns with empirical evidence from studies on Nigeria, which consistently find positive associations between financial inclusion proxies (e.g., account ownership and mobile money usage) and GDP levels. In contrast, real GDP growth percentage shows only weak positive correlations (0.23–0.36) with financial inclusion indicators. For instance, bank account percentage correlates at 0.23, mobile money volume at 0.34, and the financial inclusion index at 0.36. This suggests that while financial inclusion contributes to long-term economic expansion, its impact on short-term growth rates may be diluted by external factors like inflation, policy volatility, or commodity price fluctuations in Nigeria's oil-dependent economy.

The pattern highlights a robust nexus between financial inclusion and the scale of economic activity (real GDP), driven by reforms such as the Central Bank of Nigeria's National Financial Inclusion Strategy (launched in 2012) and the rise of mobile money, which have boosted account ownership from around 31.5% in 2010 to over 70% by 2024. However, the weaker ties to GDP growth rates indicate potential challenges, including uneven regional access (e.g., rural vs. urban) and the need for complementary policies to translate inclusion into accelerated growth. Research supports this, showing positive short-run effects of inclusion on growth but sometimes negative long-run dynamics if not paired with broader economic diversification. To enhance these correlations, policymakers should prioritize digital infrastructure, financial literacy, and targeted credit for SMEs to amplify growth impacts.

Regression Analysis

In order to empirically determine the impact of financial inclusion on economic growth in Nigeria, an Ordinary Least Squares (OLS) regression model was employed. The dependent variable was Real GDP (₦ Trillions), serving as a proxy for economic growth. The independent variables included Bank Account Ownership (% of adults), Mobile Money Transaction Volume (₦ Billion), and Bank Branches/ATMs per 100,000 adults. Together, these variables capture the main dimensions of financial inclusion over the study period (2010–2024). The regression output (Table

2) provides critical insights into the relationship between financial inclusion and economic growth. Below is a breakdown of the results:

Table 4.2 OLS Regression Results

Variable	Coefficient	Std. Error	t-Statistic	p-Value	Significance
Constant	-15.2732	12.145	-1.258	0.230	Not significant
Bank Account Ownership (% of adults)	0.5415	0.231	2.345	0.034	Significant
Mobile Money Volume (₦ Billion)	0.0007	0.0001	6.982	0.000	Highly significant
Branches/ATMs per 100k adults	0.3999	1.700	0.237	0.812	Not significant

Statistic	Value
R-squared	0.990
Adjusted R-squared	0.987
F-statistic	355.6
Prob (F-statistic)	0.000
Durbin-Watson	1.915
Jarque-Bera Normality (p)	0.920
Condition Number	1.44e+05

R-squared (0.990) Indicates that 99% of the variation in Nigeria’s real GDP is explained by the financial inclusion variables. Suggests the model is extremely robust and captures the dynamics of the data very well. Adjusted R-squared (0.987) Confirms that even after adjusting for the number of predictors, the model remains strong. Reduces concerns about overfitting. F-statistic (355.6, $p < 0.001$) Demonstrates that the model as a whole is statistically significant. Confirms that the independent variables jointly influence economic growth. Bank Account Ownership (Coefficient = 0.5415, $p = 0.034$). this implies that higher access to bank accounts contributes to increased GDP. Supports the theory that formal financial access encourages savings, investment, and efficient capital allocation. Mobile Money Transaction Volume (Coefficient = 0.0007, $p < 0.001$), Though the coefficient is numerically small, its effect is large given the scale of mobile money

volumes (billions of Naira). Demonstrates the transformative role of digital finance in reducing transaction costs, promoting entrepreneurship, and deepening financial penetration. Bank Branches and ATMs per 100,000 adults (Coefficient = 0.3999, $p = 0.812$) Suggests that physical expansion of bank infrastructure alone does not significantly drive economic growth. Structural barriers such as financial illiteracy and high service charges, Unequal distribution of branches between urban and rural areas, increasing preference for digital financial platforms reducing reliance on traditional banking halls.

The significance of bank account penetration suggests that formal financial access remains an essential foundation for economic participation, as it allows individuals and firms to save, borrow, and transact more efficiently. However, the results also reveal that the greatest driver of growth in Nigeria is digital financial inclusion, particularly through mobile money adoption. This supports the findings of Acha, Ikpefan, and Owojori (2020), who observed that mobile money expansion in Africa has broadened financial access and contributed to GDP growth. In contrast, the insignificance of banking infrastructure (branches and ATMs) implies that the expansion of brick-and-mortar banking outlets may no longer be the primary mechanism of financial inclusion in Nigeria. Instead, digital platforms are bridging gaps, especially in rural and underserved areas where physical branches are sparse. This aligns with Demirgüç-Kunt et al. (2018), who argued that financial technology provides scalable inclusion pathways in developing economies. Overall, the findings confirm that financial inclusion (particularly digital financial services) has a strong, positive, and significant effect on economic growth in Nigeria.

Conclusion and recommendation

From the analysis, it can be concluded that financial inclusion plays a critical role in driving economic growth in Nigeria. The evidence from this study indicates that expanding access to financial services, particularly through digital channels such as mobile money, has a direct and positive impact on GDP growth. This underscores the argument advanced by Schumpeter (1911) that financial systems are fundamental to economic development by mobilizing resources and facilitating innovation. Similarly, the findings support the endogenous growth theory, which posits that inclusive access to finance promotes entrepreneurship, human capital development, and technological advancement (Romer, 1986). The results further suggest that while Nigeria has made progress in deepening inclusion, structural challenges such as inadequate infrastructure, low financial literacy, and regional disparities remain significant barriers. The statistical insignificance of physical financial infrastructure highlights that the future of inclusion lies in digital and mobile

platforms that can overcome geographical and cost-related barriers more effectively. This aligns with global evidence which shows that countries that embraced digital finance recorded faster progress in financial inclusion and stronger growth outcomes (Demirgüç-Kunt et al., 2018; Allen et al., 2016). Therefore, the study concludes that financial inclusion is not only a social equity issue but also a macroeconomic necessity for Nigeria's sustainable development.

In light of the findings, several recommendations are advanced. Policymakers, particularly the CBN and the Federal Government, should strengthen the implementation of the NFIS by ensuring region-specific targets that address the unique needs of underserved areas. Greater investment in digital infrastructure, especially in rural communities, is critical for supporting mobile money and fintech adoption (EFInA, 2022). Furthermore, public-private partnerships between banks, fintech companies, and telecommunications firms should be encouraged to deepen outreach and broaden financial access. Financial institutions should design inclusive financial products that meet the needs of marginalized groups, including women, youth, and small-scale entrepreneurs. Building trust in the financial system is equally important and can be achieved through stronger consumer protection frameworks, transparency in operations, and the adoption of technologies that enhance security. Agency banking and point-of-sale (POS) networks should be scaled up to complement mobile services and extend coverage in areas where physical branches are unfeasible. Civil society organizations and development practitioners should prioritize financial literacy campaigns, as knowledge gaps remain one of the biggest constraints to effective financial participation. Integrating informal savings and credit groups into the formal financial system can also help build on existing trust and provide a smoother transition for excluded populations.

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