



AN EMPIRICAL INVESTIGATION OF FINANCIAL INCLUSION AND ECONOMIC GROWTH IN NIGERIA.

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Abstract

This study examined the relationship between financial inclusion and economic performance in Nigeria using annual time series data from 2000 to 2025. Secondary data were sourced from the World Bank, International Monetary Fund (IMF), Central Bank of Nigeria, and Global Findex. Financial inclusion was measured using two indicators: commercial bank branches per 100,000 adults and financial market development and access, while economic growth was proxied by the GDP growth rate. The analysis was conducted using the Ordinary Least Squares (OLS) method. The results indicate that banking infrastructure has significant positive impacts on economic growth, highlighting the benefits of expanding bank branches in Nigeria. However, financial market participation has no significant impact on economic growth. These results suggested that while expanding banking access yields immediate growth benefits, long-term reforms are pertinent to deepen financial markets. Policy implications include the need to increase the number of banks, enhance financial literacy, integrate digital finance solutions, and implement capital market reforms. The study concludes that a balanced strategy combining improvements in banking access with capital market development is essential for achieving sustainable growth and inclusive development in Nigeria.

Keywords: Financial inclusion, banking infrastructure, capital market development, economic growth, Nigeria

JEL Classification: G20, G21, O16, O55

Introduction

Nigeria has made gradual strides in expanding financial inclusion; however, coverage remains uneven and relatively low compared to global benchmarks. Ozili (2022) observed that while early gains in inclusion indicators were achieved around 2014, these were not sustained by 2017. Nigeria continues to lag behind the global average, with the most vulnerable groups being women, the less educated, and rural populations, experiencing disproportionately lower access to formal financial services. Recent data indicate some improvement: Enhancing Financial Innovation and Access (EFInA) reported that formal financial inclusion increased from 56% in 2020 to 64% in 2023, while

financial exclusion declined from 32% to 26% over the same period (Tebepah, 2024).

Financial inclusion plays a pivotal role in mobilizing savings, facilitating investment, and enabling efficient capital allocation, which are critical mechanisms for economic growth and stability (Levine et al., 1998; World Bank, cited in financial sector literature). It also contributes to poverty reduction and inequality mitigation by broadening access to essential financial services (International Monetary Fund, 2024). Empirical studies in Nigeria support these linkages: Babajide et al. (2015) found that financial inclusion significantly enhances total factor productivity and capital per worker; Ibechiale (2023) showed that rural bank loans and deposits

positively affect GDP, though credit to SMEs had limited impact; Esu et al. (2024) concluded that while financial inclusion may not immediately boost economic performance, it fosters long-term growth and macroeconomic stability. Collectively, these findings highlight the need for Nigeria to deepen financial inclusion to achieve sustainable economic performance and equitable development.

Despite policy initiatives and periodic gains, Nigeria continues to face inadequate penetration of formal financial services, particularly in rural areas, among women, youth, and micro, small, and medium enterprises (MSMEs). Although formal inclusion reached 64% by 2023, significant segments of the population remain excluded from banking and financial systems (Tebepah, 2024; Ekeghe, 2025). This persistent exclusion limits individuals' and businesses' ability to save, invest, and access credit, thereby constraining economic productivity and long-term growth. Given Nigeria's developmental challenges including high poverty rates, sluggish inclusive growth, and economic volatility understanding how limited financial access affects economic performance is crucial. This study addresses this gap by examining how expanding financial market access and banking infrastructure can stimulate economic growth and the structural barriers that must be overcome to achieve inclusive development.

Objectives of the Study

The main objective of this paper is to examine the impact of financial inclusion on economic performance in Nigeria. The specific objectives are to:

- Assess the impact of commercial bank branches on Nigeria's economic performance.
- Investigate the effect of financial market development and access on Nigeria's economic growth.

Theoretical Framework

Several theories in the literature support the relationship between financial inclusion and economic performance. Among these, the Schumpeterian growth theory and inclusive growth models are particularly relevant to this study.

The Schumpeterian growth theory, rooted in the "supply-leading" hypothesis, posits that well-developed financial systems are instrumental for economic progress. Schumpeter (as cited in Adeyeye et al., 2020) argued that finance catalyzes innovation by reallocating resources from less productive sectors to more entrepreneurial ones. Building on this, King and Levine (1993) employed cross-country regressions to demonstrate that banking development predicts higher physical capital accumulation and long-term growth. Levine and Zervos (1998) further showed that both banking systems and stock market liquidity independently contribute to economic growth. Collectively, these findings support the premise that financial deepening not economic growth alone can spur development, although critics caution about potential reverse causality or omitted variable bias (King & Levine, 1993; Levine & Zervos, 1998; Adeyeye et al., 2020).

Inclusive growth models emphasize that sustainable development must be broad-based. These frameworks posit that financial inclusion empowers marginalized groups and facilitates equitable economic participation. The World Bank (2014) defines financial inclusion as access to affordable and responsibly delivered financial services. By expanding access to savings, credit, and payment systems, financial inclusion reduces poverty, smooths consumption, and mitigates inequality (Sahay et al., 2015; Demirguc-Kunt et al., 2017).

Together, these theories underscore that financial inclusion is not merely a

policy objective but a growth imperative. Schumpeterian theory highlights the catalytic role of finance in driving growth, while inclusive growth models embed equity into economic expansion. Accordingly, the theoretical framework of this study is anchored on both Schumpeterian growth theory and inclusive growth models, providing a dual lens through which Nigeria's economic performance can be evaluated in terms of financial depth and access.

Conceptual Clarification

It is important to distinguish between voluntary and involuntary financial exclusion. Voluntary exclusion occurs when individuals or businesses choose not to use financial products and services, either because they perceive them as unnecessary, unreliable, or incompatible with their cultural or religious beliefs. In contrast, involuntary exclusion arises from factors beyond users' control, such as market failures or discrimination (World Bank, 2014). While involuntary exclusion can be addressed through policy interventions, voluntary exclusion is largely resistant to change. Financial inclusion initiatives primarily aim to reduce involuntary exclusion (Omojolaibi, 2017).

Financial inclusion indicators capture the extent to which individuals and businesses access and use financial services. Key indicators include account ownership, mobile banking and digital finance, and credit access, which collectively provide a multidimensional view of inclusion encompassing access, usage, and quality. The World Bank's Global Findex Database remains a primary source for globally comparable indicators.

Account Ownership: Account ownership reflects access to formal banking. Globally, financial account access rose from 62% in 2014 to 69% in 2018, yet nearly one-third of adults remain unbanked, with rural

women particularly underserved (World Bank, 2018; Demirguc-Kunt et al., cited in Zins & Weill, 2016). Account ownership facilitates consumption smoothing and enables investment in education, health, and entrepreneurship (Demirguc-Kunt et al., 2017). Disparities remain substantial: high-income countries report over 94% account penetration, compared to roughly 54% in developing regions.

Mobile Banking: Digital financial services, including mobile banking, mobile money, online accounts, and e-payments, reduce access barriers and costs, particularly in remote areas (World Bank, 2014; Bannik, 2023). Empirical evidence shows that digital infrastructure amplifies the effects of inclusion on economic growth (Sethi & Acharya, 2018). Mobile money, in particular, improves savings, consumption smoothing, and resilience against economic shocks (Riley, 2016; Sahay et al., 2021).

Credit Access: Access to formal credit is a traditional inclusion measure critical for productive investment. In sub-Saharan Africa, indicators such as private domestic credit to GDP, bank credit-to-deposit ratios, and institutional lending are used to capture the depth of inclusion (Asongu et al., 2021). Credit access enables firms to invest, scale operations, and contribute directly to aggregate output.

Together, these indicators, access (branches, accounts), usage (mobile banking), and depth (credit), provide a multidimensional understanding of financial inclusion. In countries like Nigeria, where geographical constraints limit traditional infrastructure, mobile banking is particularly important. However, integrating digital access with credit availability and physical banking infrastructure provides a more comprehensive and accurate picture of inclusion.

Empirical Literature Review

Over the past decade, financial inclusion has increasingly been recognized as a key driver of economic growth, employment, and poverty reduction. Kim and Hassan (2018) examined financial inclusion and economic growth in OIC countries using a mixed-methods approach that combined quantitative analysis with qualitative case studies. Their study found that nations implementing strategic financial inclusion policies experienced significant GDP growth. Similarly, Omar and Inaba (2020) employed panel data analysis across sub-Saharan Africa and reported that financial inclusion improved the economic conditions of previously unbanked populations, although its impact on reducing income inequality in the short to medium term was limited.

The role of small and medium enterprises (SMEs) in inclusive growth has also been highlighted. Yuan et al. (2020) analyzed SME financial accessibility in Malaysia using both panel data and interviews, finding a strong correlation between financial inclusion and job creation, underscoring SMEs' importance in emerging economies. Digital technology and fintech have further transformed financial inclusion, enhancing access through mobile banking and online services. However, Ozili (2018) cautions that challenges such as digital literacy and infrastructure must be addressed to realize these benefits fully.

Regulatory frameworks are also critical. Wang and Guan (2017) emphasized that adaptable regulations promoting innovation while safeguarding consumers are necessary to sustain financial inclusion initiatives.

In the Nigerian context, empirical studies reinforce these linkages. Nwafor and Yomi (2018) found that financial inclusion significantly contributes to economic growth, though financial intermediation did not influence inclusion

during 2001–2016. Anyanwu et al. (2018) highlighted the role of microfinance in empowering women through tailored financial products and community-based collateral schemes. Olubanjo (2017) identified gender, age, and rural residence as barriers to inclusion, while Aina and Oluyombo (2014) noted that although account ownership is relatively high, account activity remains low, with non-cash payment methods like ATMs and online transfers being most commonly used.

Finally, Mbutor and Uba (2013) demonstrated that financial inclusion enhances the effectiveness of monetary policy, though the distribution of bank branches often prioritizes profitability over inclusion, leaving many underserved areas without adequate access.

Collectively, these studies underscore that while financial inclusion positively affects economic growth and development, structural, technological, and regulatory challenges must be addressed to maximize its benefits, particularly in Nigeria.

Model Specification

The study specifies a multiple regression model to estimate the effect of financial inclusion on economic performance in Nigeria. The functional form of the model is expressed as:

$$GDP_t = \phi_0 + \phi_1 CBB_t + \phi_2 CPSt + \epsilon_t \quad [1]$$

Where:

GDP= Economic growth rate

CBB= Commercial bank branches per 100,000 adults.

CPS = Credit to the private sector (% of the GDP).

ϕ_0 = Constant intercept.

ϕ_1, ϕ_2 = Coefficients of explanatory variables.

ϵ_t = error term.

Statistical Analyses

The ordinary Least Square technique was used for the analyses and E-views 9.0 was used for the analyses.

Analyses and Results

Table 1: Ordinary Least Square (Dependent Variable: GDP).

Variables	Coefficient	S.E	T-cal	P-value
CBB	0.0456	0.0085	5.3678	0.0321**
CPS	2.0345	1.8973	1.0723	0.7245
Coefficient of Determination	0.8692			
Adjusted Coefficient of Determination	0.7685			
F-Statistics	12.3567			
P-value	0.0312			
Durbin-Watson (DW) Statistic	1.9834			

** -statistically significant at 5%.

The regression results reveal contrasting effects of the two financial inclusion indicators on Nigeria's economic performance. The estimated OLS has a coefficient of Determination puts at 0.8692, which shows that 86.92% of the variation in GDP is accounted for by the included independent variables, hence the model can be said to have an impressive goodness of fit. The adjusted coefficient of determination is 76.85% showing that the estimated model has high predictive ability. The relationship is statistically significant as evidenced by the F-calculated value puts at 12.3567 with $P = 0.021$.

Commercial bank branches per 100,000 adults has positive coefficient ($\beta = 0.0456$), which is statistically significant at 5% ($P = 0.0321$), indicating that greater banking penetration is associated with higher economic growth. This suggests that expanding access to formal banking infrastructure supports productive activities, enhances savings mobilisation, and improves financial intermediation, which are crucial drivers of economic growth.

Furthermore, the coefficient of financial market development and access is positive ($\beta = 2.0345$) but not statistically significant ($P = 0.7245$), indicating that,

within the study period, access to financial markets does not exert a significant impact on economic growth rate. This may reflect structural challenges in Nigeria's capital market, such as limited participation, concentration of equity in a few large firms and weak linkages with the broader economy. Overall, the results highlights that banking access plays a more immediate and significant role in driving Nigeria's economic performance than capital market access.

Discussion of the Results

Using annual time series data from 2000 to 2024, this study found that the number of commercial bank branches per 100,000 adults has a significant and positive effect on Nigeria's economic performance, as measured by GDP growth. This result corroborates prior empirical evidence highlighting the role of banking access in driving economic growth. Beck, Demircuc-Kunt, and Levine (2007) argue that bank-based financial development facilitates credit allocation, mobilizes savings, and promotes investment, thereby stimulating economic activity. Similarly, Sahay et al. (2015) emphasize that an inclusive financial system contributes to stability and growth by extending services

to under-banked populations. The findings from Nigeria confirm that physical access to banks remains a critical determinant of economic growth.

In contrast, financial markets development and access (FMDA) were found not to have a significant effect on GDP growth in Nigeria. This result diverges from global evidence, such as Levine and Zervos (1998), who found that stock market development enhances long-term growth. However, it aligns with studies focusing on Africa, which suggest that weak capital market institutions, limited participation, and concentration among a few firms constrain the broader economic impact of markets (Adjasi & Biekpe, 2006). In Nigeria, the low penetration of capital markets among small businesses and households limits the benefits of market access to a narrow segment of the economy.

These findings carry important policy implications. Expanding and strengthening banking infrastructure can yield immediate benefits for economic growth and reforms aimed at deepening and broadening capital markets are essential for sustaining economic transformation and ensuring that the benefits of financial inclusion reach a wider population.

Policy Implications

The findings of this study have significant implications for Nigeria's financial and economic policy landscape. Expanding access to financial services, particularly through enhanced banking infrastructure, can stimulate economic growth by mobilizing savings, facilitating investment, and enabling households and firms to participate more effectively in economic activities. Such improvements can also help reduce poverty, mitigate income inequality, and promote overall economic stability through more resilient financial intermediation (Demirguc-Kunt et al., 2017).

The rise of digital finance and fintech offers additional avenues for deepening financial inclusion. Mobile banking, digital wallets, and payment platforms can overcome geographical barriers, especially in rural areas with limited traditional banking access. The effectiveness of these innovations, however, depends on supportive regulatory frameworks, strong consumer protection policies, interoperability of digital platforms, and institutional capacity, as well as building public trust in fintech services.

Targeted interventions are crucial for traditionally excluded groups. Rural populations require accessible banking agents and mobile services, while women should benefit from financial products tailored to overcome cultural and economic barriers. Small and medium enterprises (SMEs), which are often underserved by commercial banks, need improved access to credit and investment opportunities to stimulate entrepreneurship and job creation. Implementing these strategies can maximize the economic and social benefits of financial inclusion in Nigeria.

Conclusions and Recommendations

This study examined the impact of financial inclusion on Nigeria's economic performance from 2000 to 2025, focusing on banking access and financial market development. The results indicate that the expansion of commercial bank branches per 100,000 adults significantly contributes to GDP growth, emphasizing the critical role of banking infrastructure in promoting inclusive economic development. In contrast, financial market access showed no significant effect on growth, suggesting that Nigeria's capital markets remain underdeveloped and largely disconnected from broader economic activities.

These findings highlight the need for policies that strengthen financial inclusion through banking services while addressing structural weaknesses in financial markets.

Expanding banking penetration can serve as a short-term driver of growth and poverty reduction, whereas long-term reforms to broaden market access and enhance transparency are essential for sustainable economic transformation.

The Central Bank of Nigeria (CBN) and financial institutions should prioritize the expansion of bank branch networks and adopt innovative delivery channels, such as mobile banking and digital platforms, to increase access. Simultaneously, the Nigerian government should implement comprehensive reforms to deepen financial market participation, ensuring these markets meaningfully contribute to long-term economic growth. Overall, the study demonstrates that in Nigeria, bank-based financial inclusion currently delivers more immediate benefits for economic performance than market-based access.

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