

Financial Inclusion and Poverty Reduction in Nigeria

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Abstract

Financial inclusion has been widely promoted as a strategy for poverty reduction in developing economies, yet empirical evidence on its effectiveness in Nigeria remains mixed due to structural barriers and heterogeneous channels. This study examines the impact of financial inclusion on poverty levels in Nigeria from 2009 to 2024 using an autoregressive distributed lag (ARDL) bounds testing approach. Financial inclusion is proxied by total bank branches (TBR), total bank credit (TCR), total bank deposits (TDP), automated teller machines (ATM), point-of-sale terminals (POS), and mobile pay (MPY), with poverty level (POV) as the dependent variable. Data were sourced from the Central Bank of Nigeria, EFInA, NBS, and World Bank. Results reveal heterogeneous effects across channels. Mobile pay demonstrates the strongest poverty-reducing impact in both short-run (lagged) and long-run (elasticity of -0.407, $p < 0.05$). Bank branches and credit show directionally negative (pro-poor) but mostly insignificant effects. In contrast, deposits, ATMs, and POS exhibit significant positive long-run effects on poverty, highlighting persistent urban bias, infrastructural constraints, and digital divides. The error correction term indicates rapid adjustment to long-run equilibrium. These findings underscore that financial inclusion is not automatically pro-poor; its effectiveness depends on equitable design and complementary infrastructure. The study contributes to policy discourse on Nigeria's National Financial Inclusion Strategy (NFIS) and offers lessons for other developing countries. Targeted digital expansion, rural focus, and literacy programs are essential for achieving the 95 per cent inclusion target by 2030 and advancing SDG 1.

Keywords: Financial inclusion, poverty reduction, mobile money, ARDL model, Nigeria, digital finance

1. INTRODUCTION

Financial inclusion, broadly defined as the availability, accessibility, and effective use of a wide range of affordable and responsible formal financial services, including savings, credit, insurance, payments, and transfers, by all segments of society, particularly underserved and low-income populations, has emerged as a cornerstone of contemporary development policy (Demirgüç-Kunt et al., 2025; Alliance for Financial Inclusion (AFI), 2023). Globally, financial inclusion is recognized not merely as a financial sector objective but as a powerful lever for poverty alleviation, economic empowerment, and the achievement of the United Nations Sustainable Development Goals (SDGs), especially SDG 1 (No Poverty) and SDG 10 (Reduced Inequalities). By enabling individuals to manage risks, smooth consumption, invest in human capital and productive activities, and participate more fully in the formal economy, inclusive financial systems contribute to broader economic resilience and shared prosperity (Levine, 2005; Demirgüç-Kunt et al., 2018). In Nigeria, Africa's most populous nation and largest economy with a GDP of approximately \$477 billion in 2024, the imperative for financial inclusion is particularly acute (World Bank, 2024).

Despite its vast economic potential, Nigeria grapples with entrenched multidimensional poverty. Approximately 38.9 per cent of its population, around 83 million people, lived below the international poverty line of \$2.15 per day in 2023, while multidimensional poverty affects over 63 per cent of citizens, manifesting in deprivations across health, education, and living standards (World Bank, 2023; National Bureau of Statistics (NBS), 2024). The country's heavy reliance on oil (accounting for about 70 per cent of government revenue), combined with high unemployment (15.2 per cent in 2024), elevated inflation (34.19 per cent in 2024), and pronounced inequality (Gini coefficient of 0.35), exacerbates vulnerability among rural dwellers, women, youth, and northern populations (CBN, 2024; NBS, 2024). Progress in financial inclusion has been notable yet insufficient. The adult financial inclusion rate improved from 58.4 per cent in 2010 to 74.2 per cent in 2024, largely driven by the Central Bank of Nigeria's (CBN) National Financial Inclusion Strategy (NFIS), first launched in 2012 and revised in 2018, alongside the rapid expansion of digital financial services and fintech innovations such as mobile money platforms (EFInA, 2024; CBN, 2024). Key enablers include the proliferation of point-of-sale (POS) terminals, automated teller machines (ATMs), and mobile payment systems. However, substantial gaps persist: 25.8 per cent of adults (approximately 27 million people) remain financially excluded, with stark disparities evident across geography and gender. Only 15 per cent of rural Nigerians have access to formal financial services compared to 45 per cent in urban areas, while women face a 30 per cent exclusion rate and northern regions (particularly the North-East) record exclusion rates as high as 65 per cent (AfDB, 2024; EFInA, 2024). Low financial literacy (affecting only 35 per cent of adults), inadequate digital infrastructure, high transaction costs, and regulatory constraints continue to undermine the transformative potential of these initiatives (EFInA, 2024).

The relationship between financial inclusion and poverty reduction is theoretically compelling but empirically complex. Proponents argue that access to formal financial services enables poor households to accumulate savings, access credit for entrepreneurial activities, smooth consumption during shocks, and build resilience, mechanisms that align with Amartya Sen's (1999) capability approach, which frames poverty as a deprivation of substantive freedoms and opportunities to achieve valued functionings. Similarly, the financial systems approach (Levine, 2005) underscores how inclusive financial intermediation mobilizes resources, reduces transaction costs, and allocates capital more efficiently, fostering economic growth that can trickle down to the poor. In Nigeria's context, where small-scale farmers and informal traders constitute about 70 per cent of the workforce, financial inclusion is hypothesized to empower productive activities and mitigate the effects of economic volatility (AfDB, 2024).

Despite these theoretical expectations and policy commitments, Nigeria's poverty levels have remained stubbornly high even as financial inclusion metrics improve. This paradox raises critical questions about the effectiveness of current strategies and the extent to which different channels of financial inclusion, traditional (bank branches, credit, deposits) versus digital (ATMs, POS, mobile pay), translate into tangible poverty reduction. Prior studies, such as Adeola and Evans (2017) and Ogunleye (2017), have documented positive associations, yet many report mixed or inconclusive findings attributable to urban bias, regional disparities, implementation gaps, and the failure to disaggregate inclusion proxies (Orji et al., 2024; Olaoye & Zerihun, 2023). Most existing research relies on composite indices rather than channel-specific analysis, uses outdated data

predating major fintech expansions and shocks (e.g., the 2023 naira redesign and COVID-19), and pays limited attention to short-run versus long-run dynamics.

This study addresses these gaps by investigating the impact of specific financial inclusion channels, total bank branches (TBR), total bank credit (TCR), total bank deposits (TDP), automated teller machines (ATM), point-of-sale terminals (POS), and mobile pay (MPY), on poverty levels (POV) in Nigeria over the period 2009–2024. This timeframe captures critical policy shifts, including the launch of the NFIS in 2012 and the acceleration of digital finance post-2015. Employing the autoregressive distributed lag (ARDL) bounds testing approach, the study examines both short-run dynamics and long-run equilibrium relationships while accounting for stationarity properties of the time-series data. The primary objective is to provide robust empirical evidence on how these channels influence poverty, with specific sub-objectives focusing on each proxy. The research is theoretically anchored in Sen's (1999) capability approach and Levine's (2005) financial systems approach, positing that financial services enhance individual capabilities and systemic efficiency, though outcomes are moderated by factors such as digital infrastructure, financial literacy, and regional disparities. By offering channel-specific insights and policy recommendations, the study seeks to support Nigeria's ambition of achieving 95 per cent financial inclusion by 2030 under the NFIS and to contribute to the global discourse on inclusive finance in resource-dependent emerging economies.

2. LITERATURE REVIEW

The theoretical foundation of this study is anchored on three complementary perspectives that elucidate the mechanisms linking financial inclusion to poverty reduction: the capability approach (Sen, 1999), the financial systems approach (Levine, 2005), and institutional economics (North, 1990). The capability approach, pioneered by Amartya Sen (1999) and extended by Nussbaum, shifts the focus of development analysis from traditional income or resource-based metrics to the substantive freedoms and opportunities individuals have to achieve valued functionings, such as being healthy, educated, economically secure, and socially engaged. Poverty, in this framework, is conceptualized as capability deprivation rather than mere income shortfall. Financial inclusion enhances capabilities by removing barriers to economic participation. For instance, access to savings and credit expands the capability to invest in productive activities, smooth consumption during shocks, and exercise agency in decision-making. In Nigeria's context, where multidimensional poverty affects over 63 per cent of the population, financial services act as conversion factors that transform resources into real opportunities, particularly for rural dwellers, women, and informal sector workers who constitute the majority of the labour force (Alkire & Foster, 2011; EFinA, 2024).

Complementing this is the financial systems approach (Levine, 2005), which posits that well-functioning financial systems promote economic growth by mobilizing savings, allocating capital efficiently, reducing information asymmetries, and facilitating risk management. Financial inclusion is viewed as an integral component of this system, enabling low-income households and micro-enterprises to participate in formal financial intermediation. By lowering transaction costs and expanding access to credit, payments, and insurance, inclusive finance creates virtuous cycles of investment, productivity, and poverty reduction. In developing economies like Nigeria, where financial markets are often fragmented and exclusionary, systemic reforms, including digital innovation and agent banking, are essential to address market failures that disproportionately constrain the poor (CGAP, 2015).

Institutional economics (North, 1990) provides an additional layer by emphasizing how formal and informal institutions, governance quality, regulatory frameworks, and infrastructure shape the effectiveness of financial inclusion. Weak institutions, corruption, poor digital infrastructure, and regional disparities can undermine the poverty-reducing potential of financial services, leading to “inclusion traps” where access exists but meaningful usage and benefits do not (Asongu & Odhiambo, 2019). Together, these theories suggest that while financial inclusion has strong theoretical potential to reduce poverty, its actual impact is contingent on complementary factors such as financial literacy, digital infrastructure, gender-sensitive policies, and equitable geographic outreach.

The conceptual framework guiding this study posits financial inclusion as a multidimensional construct comprising access, usage, and quality of financial services (Sarma, 2008; Demirgüç-Kunt et al., 2022). These dimensions directly influence poverty reduction through several pathways: income generation (via credit for entrepreneurship), risk mitigation (through savings and insurance), and human capital investment (facilitated by reliable payment systems). Digital financial channels, particularly mobile pay, are hypothesized to exert stronger effects by overcoming traditional physical and geographical barriers prevalent in Nigeria. The framework incorporates moderating variables, digital infrastructure, financial literacy, and regional disparities, that either amplify or attenuate the relationship between financial inclusion and poverty. For example, reliable internet and electricity enhance the effectiveness of mobile money, while low literacy or urban-rural divides limit benefits. The study’s conceptual model (adapted from the researcher’s conceptualization) positions six key proxies of financial inclusion, total bank branches (TBR), total bank credit (TCR), total bank deposits (TDP), automated teller machines (ATM), point-of-sale (POS), and mobile pay (MPY), as independent variables influencing the dependent variable, poverty level (POV). This disaggregated approach allows for nuanced analysis of how different channels perform in Nigeria’s unique socio-economic context.

Empirical evidence from across the globe largely supports a negative relationship between financial inclusion and poverty. Cross-country studies indicate that a 1 per cent increase in financial inclusion is associated with a 0.3–0.5 per cent reduction in poverty headcount ratios (Li et al., 2022; Demirgüç-Kunt et al., 2025). The World Bank’s Global Findex Database (2025) highlights how digital financial services, especially mobile money, have lifted millions out of poverty by facilitating remittances, enabling small business growth, and enhancing resilience during crises such as COVID-19. Successful cases include Kenya’s M-Pesa, which reduced poverty by approximately 2 per cent annually (Suri & Jack, 2016), and India’s Jan Dhan Yojana, which significantly expanded access and supported direct benefit transfers (Muralidharan et al., 2020). However, critiques exist. Some studies caution against over-indebtedness and highlight that benefits are often unevenly distributed, favouring urban and male populations (Bateman, 2010; Duvendack et al., 2020).

In Nigeria, the literature presents a more nuanced and sometimes mixed picture. Macro-level studies using ARDL and similar techniques generally find positive long-run effects of financial inclusion on poverty reduction (Orji et al., 2024; Oladipo et al., 2025a; Olaoye & Zerihun, 2023). Digital channels, particularly mobile money and fintech, consistently show stronger impacts, especially in urban and southern regions (Iwedi et al., 2023; Hussaini & Dikko, 2025).

Microfinance institutions have also demonstrated poverty-alleviating effects among rural and low-income households through group lending and tailored products (Ugwuoke et al., 2023). Nevertheless, several studies report insignificant or counterintuitive results for traditional channels. Factors such as urban bias in bank branch and ATM distribution, high transaction costs, low financial literacy, and infrastructural deficits often limit impact (Adeola & Evans, 2017; Ogbeide & Igbinigie, 2019; Nwachukwu & Lawal, 2023). Deposits and POS, in particular, sometimes exhibit positive (poverty-increasing) associations at the aggregate level due to formalization biases that benefit already advantaged groups. While existing studies provide valuable insights, important gaps remain. Most rely on composite financial inclusion indices rather than disaggregated channel-specific analysis. Many use outdated data that do not capture the rapid post-2015 fintech expansion or recent economic shocks. Few studies rigorously examine both short-run dynamics and long-run equilibria using robust methods like ARDL on recent time-series data (2009–2024). This study fills these gaps by providing a detailed, channel-specific investigation of financial inclusion’s impact on poverty in Nigeria, thereby contributing fresh empirical evidence to inform the NFIS 2030 agenda.

3. METHODS

This study adopted a quantitative research design based on time-series econometric analysis. The time-series approach is particularly suitable for examining the dynamic short-run and long-run relationships between financial inclusion indicators and poverty levels over an extended period. The study covers the period 2009 to 2024 (16 annual observations), a timeframe deliberately chosen to capture significant policy milestones, including the launch of the National Financial Inclusion Strategy (NFIS) in 2012, its revision in 2018, and the rapid growth of digital financial services post-2015, as well as major economic shocks such as the COVID-19 pandemic and the 2023 naira redesign (CBN, 2024). The study relied exclusively on secondary data sourced from reputable national and international institutions to ensure reliability, consistency, and comparability. Data on financial inclusion proxies were obtained from the Enhancing Financial Innovation and Access (EFInA) Access to Financial Services Surveys, Central Bank of Nigeria (CBN) Statistical Bulletins, and National Bureau of Statistics (NBS). Poverty level data were complemented with World Bank World Development Indicators (WDI). All variables were transformed into natural logarithms to reduce heteroskedasticity, interpret coefficients as elasticities, and stabilize variance, which is standard practice in time-series studies involving variables with different scales and growth rates. The dependent variable, poverty level (POV), is measured as the proportion of the population living below the international poverty line (\$2.15 per day in 2017 PPP), consistent with World Bank methodology. The independent variables, representing key dimensions of financial inclusion, are:

Total bank branches (TBR): Number of physical bank branches (access dimension).

Total bank credit (TCR): Total private sector credit by deposit money banks (usage/depth dimension).

Total bank deposits (TDP): Total deposits mobilized by deposit money banks (savings mobilization dimension).

Automated teller machines (ATM): Total number of ATMs deployed nationwide.

Point-of-sale terminals (POS): Total number of POS terminals (digital payment infrastructure).

Mobile pay (MPY): Volume/value of mobile money transactions and accounts (digital financial inclusion proxy).

These proxies were selected to capture both traditional and emerging digital channels of financial inclusion, addressing a key limitation in prior studies that often use composite indices. The functional relationship between poverty and financial inclusion is specified as:

$$POV_t = f(TBR_t, TCR_t, TDP_t, ATM_t, POS_t, MPY_t)$$

To facilitate empirical estimation and interpretation, the model was transformed into a log-linear form:

$$\log POV_t = a_0 + a_1 \log TBR_t + a_2 \log TCR_t + a_3 \log TDP_t + a_4 \log ATM_t + a_5 \log POS_t + a_6 \log MPY_t + u_t$$

where a_0 is the intercept, a_1 to a_6 are the long-run elasticities, and u_t is the stochastic error term. The a priori expectations, based on theory and empirical literature, are that $a_1, a_2, a_3, a_4, a_5, a_6 < 0$ (i.e., financial inclusion proxies are expected to reduce poverty). Prior to estimation, descriptive statistics were computed to understand the distributional properties, central tendencies, variability, and normality of the variables. Stationarity properties were examined using group unit root tests, Levin-Lin-Chu (LLC), Im-Pesaran-Shin (IPS), ADF-Fisher, and PP-Fisher, to determine the order of integration of the series. The primary estimation technique employed is the autoregressive distributed lag (ARDL) bounds testing approach developed by Pesaran et al. (2001). The ARDL model was estimated in an unrestricted error correction model (UECM) form, with optimal lag length selected using the Akaike Information Criterion (AIC). The bounds test (F-statistic) was used to test for the existence of a long-run cointegrating relationship.

4. RESULTS AND DISCUSSIONS

Descriptive statistics

The descriptive statistics provide an overview of the behaviour and distributional properties of the variables used in the study over the period 2009–2024. As presented in Table 1, all variables were analysed in their logarithmic form where applicable to facilitate interpretation.

Table 1: Descriptive statistics

Statistic	POV	TBR	TCR	TDP	ATM	POS	MPY
Mean	0.022256	5443.06	17016.65	261.77	10550.32	25788.70	50108.39
Median	0.023817	5445.50	14313.71	137.86	5712.86	1084.41	929.45
Maximum	0.026129	5809.00	50075.01	1189.52	32648.02	223272.8	392711.9
Minimum	0.012496	4861.00	6685.85	0.0197	399.71	11.03	1.27
Std. Dev.	0.003769	222.29	11441.08	328.07	11271.87	59838.40	108872.0
Skewness	-1.6404	-0.9216	1.7117	1.5058	0.9387	2.6120	2.3460
Kurtosis	4.5435	4.3215	5.4746	4.9332	2.2604	8.7452	7.4336
Jarque-Bera Prob.	0.0125	0.1800	0.0026	0.0140	0.2573	0.0000	0.0000
Observations	16	16	16	16	16	16	16

Poverty levels (POV) remained relatively stable with a mean of 0.0223, indicating persistent poverty challenges despite policy interventions. Financial inclusion indicators showed substantial growth, particularly in digital channels. Mobile pay (MPY) and point-of-sale (POS) exhibited explosive growth, high volatility (standard deviations of 108,872 and 59,838 respectively), and strong positive skewness, reflecting the rapid fintech expansion after 2015. In contrast, total bank branches (TBR) displayed remarkable stability (low standard deviation of 222.29), suggesting limited physical infrastructure expansion relative to population growth. Most variables rejected

normality (except ATM and TBR), justifying the use of logarithmic transformations and robust econometric techniques.

Unit root and cointegration tests

Group unit root tests confirmed that all variables are integrated of order one, $I(1)$. They were non-stationary at levels but became stationary after first differencing (Table 2). This property validates the application of the ARDL bounds testing approach.

Table 2: Group unit root test results (summary)

Test Method	Level (Prob.)	First Difference (Prob.)
Levin, Lin & Chu t^*	0.3643	0.0000
Im, Pesaran and Shin W-stat	0.9739	0.0000
ADF - Fisher Chi-square	0.5106	0.0000
PP - Fisher Chi-square	0.0636	0.0000

Short-run dynamics

The selected ARDL(1,1,1,1,0,1,1) model (based on AIC) reveals interesting short-run dynamics (Table 3).

Table 3: ARDL short-run dynamics

Variable	Coefficient	t-Statistic	Prob.
LPOV(-1)	-0.131296	-0.75197	0.5305
LTBR	0.039924	0.12824	0.9097
LTBR(-1)	-0.386181	-0.99094	0.4262
LTCR	0.641077	4.04684	0.0560
LTCR(-1)	-0.929228	-4.67824	0.0428
LTDP	0.102305	5.08622	0.0365
LTDP(-1)	-0.059413	-5.52977	0.0312
LATM	0.331928	4.41807	0.0476
LPOS	0.256578	4.67438	0.0428
LPOS(-1)	0.155977	2.96916	0.0972
LMPY	-0.033602	-0.83322	0.4924
LMPY(-1)	-0.426310	-5.42378	0.0324
C	-1.518310	-0.36060	0.7529

$R^2 = 0.9951$, $F\text{-stat} = 33.76$ ($p=0.0291$), $DW = 2.927$

In the short run, mobile pay (lagged) and bank credit (lagged) exhibit significant poverty-reducing effects. However, several channels (credit, deposits, ATM, and POS) show positive contemporaneous effects, indicating short-run adjustment frictions such as urban bias, learning costs, and implementation challenges.

Long-run estimates

The long-run coefficients (normalized) are presented below:

Table 4: ARDL long-run estimates and bounds test

Variable	Coefficient	t-Statistic	Prob.
LTBR	-0.306071	-0.65716	0.5786
LTCR	-0.254709	-2.73112	0.1120
LTDP	0.037914	6.68727	0.0216

LATM	0.293405	5.09517	0.0364
LPOS	0.364674	5.17806	0.0353
LMPY	-0.406536	-5.06761	0.0368
C	-1.342097	-0.35506	0.7565

Bounds F-statistic = 15.37374 (significant at 1 per cent) Error Correction Term: -1.1313 (p=0.0018)

Key findings revealed that mobile pay (LMPY) was the strongest and most robust poverty-reducing effect with a long-run elasticity of -0.407 ($p < 0.05$). A 1 per cent increase in mobile pay transactions reduces poverty by approximately 40.7 per cent. Total bank branches (LTBR) was negative but insignificant (-0.306, $p = 0.5786$), while total bank credit (LTCR) showed negative and marginally significant (-0.255, $p = 0.1120$). On the other hand, total bank deposits (LTDP) was positive and significant (+0.038, $p < 0.05$), lastly, ATM and POS both showed significant positive effects on poverty (+0.293 and +0.365 respectively, $p < 0.05$). The error correction term (-1.13, $p < 0.01$) indicates a very rapid adjustment to long-run equilibrium, over 113 per cent of any disequilibrium is corrected within one year.

Hypotheses testing (Wald tests)

Wald tests on long-run coefficients largely support the ARDL findings:

H1 (bank branches): Fail to reject (insignificant).

H2 (bank credit): Fail to reject at 5 per cent (marginally significant at 10 per cent).

H3 (deposits), H4 (ATM), H5 (POS), H6 (mobile pay): All rejected at 5 per cent level.

Discussions

The dominance of mobile pay aligns strongly with the capability approach (Sen, 1999) and global evidence on digital financial inclusion (Suri & Jack, 2016; GSMA, 2025). Mobile money leapfrogs physical infrastructure barriers, enabling remittances, micro-savings, and instant transactions, particularly beneficial for rural and informal sector households in Nigeria. The insignificant or counterintuitive results for traditional channels (branches, deposits, ATM, POS) reflect persistent structural challenges: urban bias, infrastructural deficits, low financial literacy, and weak intermediation. These findings are consistent with Nigerian studies (Adeola & Evans, 2017; Nwachukwu & Lawal, 2023) and explain why aggregate financial inclusion gains have not translated proportionally into poverty reduction. The rapid error correction speed suggests that well-targeted interventions can yield quick results, but without addressing biases, some channels may inadvertently reinforce inequality. Overall, the results demonstrate that financial inclusion is not automatically pro-poor in Nigeria. Its effectiveness is highly channel-specific and context-dependent, with digital innovations, especially mobile pay, offering the most promising pathway for poverty alleviation.

5. CONCLUSION AND RECOMMENDATIONS

This study examined the impact of financial inclusion on poverty levels in Nigeria over the period 2009–2024 using the autoregressive distributed lag (ARDL) bounds testing approach. By disaggregating financial inclusion into six key channels, total bank branches, bank credit, bank deposits, automated teller machines (ATMs), point-of-sale (POS) terminals, and mobile pay, the research provides a nuanced understanding of how different dimensions of financial access influence poverty reduction in Africa's largest economy. The findings reveal that financial

inclusion significantly affects poverty, but its impact is highly heterogeneous across channels. Mobile pay emerged as the most robust and powerful driver of poverty reduction, exhibiting a strong negative long-run elasticity of -0.407 ($p < 0.05$). This underscores the transformative potential of digital financial services in leapfrogging traditional infrastructural barriers, facilitating remittances, enabling micro-savings, supporting small-scale entrepreneurship, and enhancing household resilience, particularly in rural and underserved northern regions. The lagged short-run effects further highlight the importance of adoption dynamics and network externalities in realizing these benefits.

In contrast, traditional financial inclusion channels produced mixed results. Total bank branches and bank credit showed the expected negative (poverty-reducing) direction in the long run, but their effects were statistically insignificant, reflecting persistent urban bias, slow infrastructure expansion, and limited outreach to the poor. More concerning, total bank deposits, ATMs, and POS terminals exhibited statistically significant positive effects on poverty in the long run. These counterintuitive outcomes point to structural challenges such as formalization bias (where benefits accrue mainly to urban and better-off segments), high transaction costs, infrastructural deficits (especially in rural areas), and weak integration with pro-poor lending. The rapid speed of adjustment, as indicated by the highly significant error correction term (-1.13, $p < 0.01$), suggests that Nigeria's poverty dynamics respond quickly to changes in financial inclusion variables once equilibrium is disrupted. However, without deliberate policy interventions to address implementation gaps, some channels risk reinforcing rather than alleviating poverty and inequality. Theoretically, these results lend strong support to Amartya Sen's (1999) capability approach by demonstrating how certain financial services expand substantive freedoms and opportunities for the poor, while also validating the financial systems approach (Levine, 2005) in highlighting the critical role of efficient, inclusive intermediation. Institutionally, the findings reinforce the importance of complementary factors such as digital infrastructure, financial literacy, and equitable regulatory frameworks (North, 1990).

In conclusion, financial inclusion is not a panacea in itself but a potent tool whose effectiveness depends on design, targeting, and complementary investments. Nigeria's most promising pathway to meaningful poverty reduction lies in prioritizing scalable, low-cost digital solutions, particularly mobile pay, while simultaneously reforming traditional channels to overcome urban bias and ensure inclusive outcomes. By adopting the recommendations outlined in this study, policymakers, regulators, banks, and fintech providers can better harness financial inclusion to accelerate progress toward Sustainable Development Goal 1 (No Poverty) and foster genuinely inclusive economic growth in Nigeria and similar developing contexts. Thus;

1. Prioritize rural and northern expansion of mobile money agents with zero-fee policies and interoperability.
2. Reform traditional channels through rural branch incentives, targeted pro-poor credit quotas, and inflation-protected savings products.
3. Address urban bias in ATM and POS deployment via solar-powered rural units, merchant subsidies, and digital literacy programs.
4. Strengthen regulatory frameworks to ensure quality and consumer protection in fintech services.
5. Integrate financial inclusion with broader infrastructure and education investments to maximize poverty-reducing potential toward NFIS 2030 and SDGs.

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