Financial Inclusion and Inclusive Growth in Nigeria: A Critical Appraisal for Evidence Based Policy

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ABSTRACT

Economic growth, both local and global, is no longer regarded as a measure of a state or country's wealth, this is because economic growth is usually accompanied by inequality, poverty, and joblessness, which becomes a poor measure of a country's wealth, hence the need for economic growth that is inclusive. This study examines the impact of financial inclusion on inclusive growth in Nigeria from 1990 to 2024 using the Non-Linear Autoregressive Distributed Lag technique; the study utilized insurance and financial services, monetary sector credit to private sector and remittances as measures of financial inclusion while real GDP per capita captures inclusive growth. This study used time series data sourced from the Federal Reserve Economic Data, NBS, CBN database, and WDI with the new growth theory as its theoretical framework. The findings reveal that infrastructural investment and insurance financial services exhibited a significant relationship with RGDP per capita in both the long and short run terms. The long-term analysis established a significant positive relationship which posits that inclusive financial policies contribute positively to GDP per capita, albeit in the long run, while the short run was statistically insignificant, signifying that the immediate effects of financial inclusion might not be prominently observed in increasing GDP per capita. This study highlights potential nuances within the Nigerian economic landscape and suggests that despite the current lack of discernible effects on RGDP per capita in the short-run, financial inclusion initiatives could be instrumental in laying the groundwork for future economic stability at the long run, which will generate a more conducive environment for inclusive growth in Nigeria.

Keywords: Financial inclusion, Inclusive Growth, Financial Deepening, Rural Bank Deposits, Nigeria.

JEL: E44, F24, G21, O47

INTRODUCTION

Global focus is increasingly moving away from growth and development to sustainable growth and development (United Nations Development Programme, 2015; International Institute for Sustainable Development, 2023). The United Nations' 2030 sustainable development goals made this evident and inclusive growth is one of the suggested strategies for attaining sustainable growth and development (Olarewaju, 2020). It is pertinent to know that many countries in the developing world have achieved impressive economic growth rates in recent times, but unfortunately, it has not resulted in the desirable reduction in the poverty rate and significant increase in the overall quality of life in these countries (World Bank, 2018). Such growth has not been inclusive because it has not broadened access to sustainable socio-economic opportunities for the majority of the people, countries and regions. Growth is inclusive if it supports high employment levels, rising wages, and improved living standards (Jombo, 2021; Banik, 2023).

Admittedly, economic growth both globally and per capita is no longer considered a suitable measure of a state's or country's prosperity, because growth alone does not guarantee sustainable development unless it is accompanied by greater equality. Moreover, economic expansion does not necessarily ensure that everyone benefits, nor does it prevent the widening of income disparities. With a deliberate emphasis on inclusivity, nations can aim to build more resilient, wealthy, and socially harmonious societies (IODC, 2018; Orekoya,2022).

According to Corrado & Corrado, (2017), inclusive growth refers to policies that enable individuals from various sectors such as agriculture, manufacturing, services and groups, gender, ethnicity and religion to contribute to and benefit from economic growth. Inclusive growth was established as a challenge to the conventional concept of economic growth, which promotes inequality and does not cause beneficial improvements in nations with a low level of development (Saher, Tabak, Lyeonov, &Vasa,2024). Indeed, Asghar & Naveed, (2021); McKinsey, (2025) emphasized the need for sustainable and inclusive growth, noting that growth, sustainability and inclusion are interconnected and can reinforce each other.

Several arguments highlighted the necessity of adopting inclusive growth paradigms in order to promote sustainable and fair development, surpassing the constraints imposed by conventional ideas of economic growth, Saher et al. (2024). With a deliberate emphasis on inclusivity, nations can aim to build more resilient, wealthy, and socially harmonious societies (Orekoya, 2022). Maybe this is the reason why inclusive growth, according to the OECD (2018), is sustainable and effective in reducing poverty and unemployment rate. Inclusive growth therefore is economic growth that opens doors for all societal segments and fairly distributes the benefits of increased prosperity, both materially and intangibly, throughout society.

For a developing country like Nigeria, achieving inclusive growth requires building competitiveness in new sectors, fostering entrepreneurial skills, creating financial inclusiveness, and adopting advanced technologies (Afolabi, 2020; Asghar & Naveed, 2021**).** As Olayiwola (2022) have stated, inclusive growth is both an outcome and a process and generally perceived as the development paradigm for many developing countries. Thus, in Nigeria, Inclusive growth has remained a mirage. A critical look in Figure 1.1 and 1.2 provides the state of affairs concerning financial inclusion and inclusive growth.

Stylized Facts

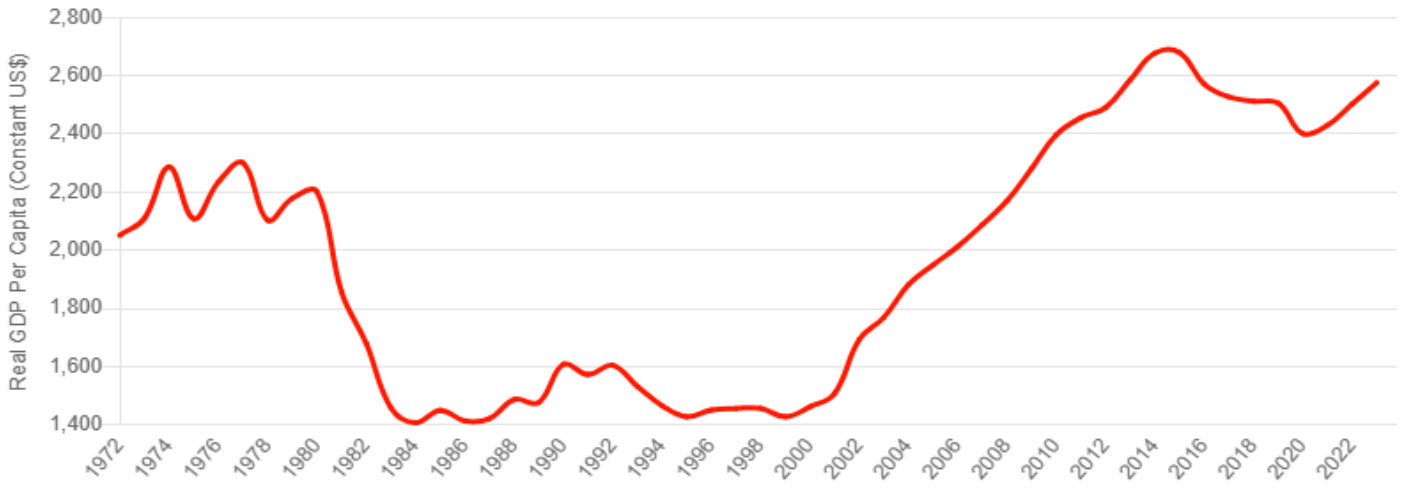

Fig. 1. Trend in Nigeria's Inclusive growth

Source: World Bank, (2024).

Figure 1.: The trend depicts the real GDP per capita (constant US$) over time, showing the pattern of inclusive growth prevalent in Nigeria. The country witnessed fluctuations ineconomic prosperity, with distinct periods of decline and recovery. From the early 1970s to the mid-1980s, her real GDP per capita exhibited volatility, followed by a sharp decline in the mid-1980s, indicating economic distress. This downturn persisted through the

1980s and 1990s, suggesting a prolonged economic stagnation or external shock (eg, declining oil prices, policy challenges, or global financial instability) beforea slow recovery, followed by a significant growth trend from the early 2000s to around 2015, marking a period of strong economic expansion and rising prosperity that later declined drastically and still struggles to improve.

According to World Bank (2018), Financial inclusion is a state in which all people and businesses have access to use quality financial services provided at affordable prices, in a convenient manner, with respect and dignity. These services include transactions, payments, savings, credit, and insurance (The Center for Financial Inclusion, (CIF), 2013). It is a powerful tool for lowering extreme poverty and promoting economic prosperity (Ejefobihi et al 2019; Kumari, 2021; World Bank, 2024).

The Global Partnership for Financial Inclusion stated in 2017. According to them, financial inclusion is one of the core components of the global sustainable development agenda (Odeleye,2016). In 2012, the CBN launched its financial inclusion strategy with a target to reduce the percentage of adults excluded from financial services to 46.3%. There are still 1.7 billion unbanked people worldwide as of 2017, despite a noticeable increase in the proportion of adults opening financial accounts with institutions or mobile financial service providers growing from 56% to 69% between 2014 and 2017 (Banik, 2023).

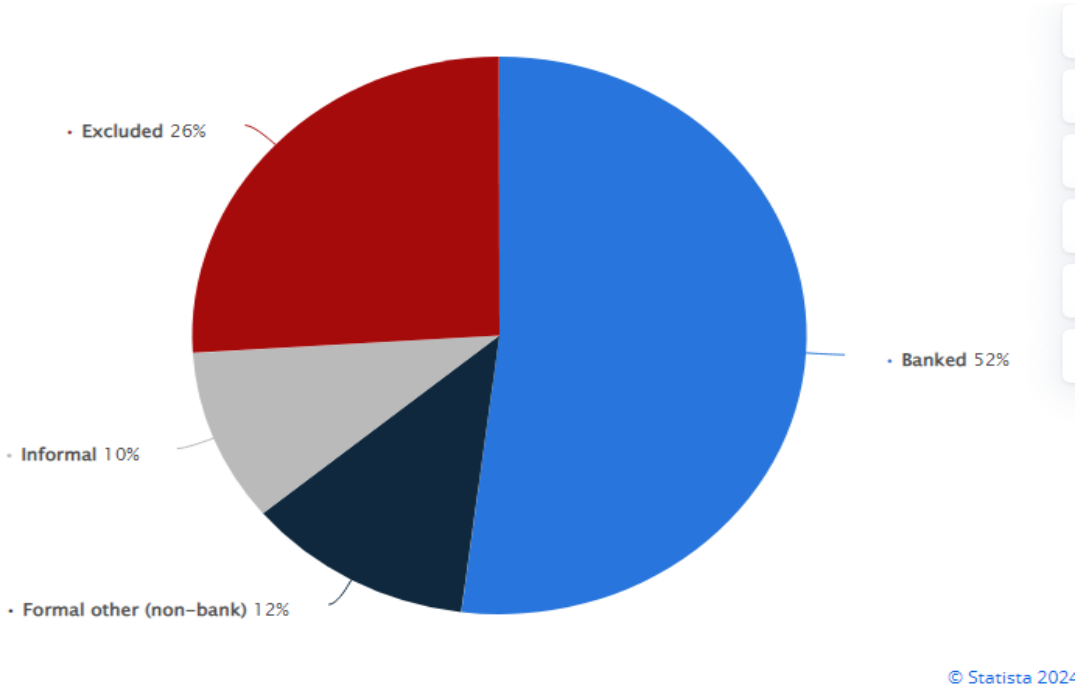

Fig. 2. Financial Inclusion Rate in Nigeria.

Source: Statista, (2024).

As shown in Figure 2, the distribution of financial inclusion in Nigeria, shows that about 52% of the population has access to formal banking services and about 26% remains financially excluded, lacking access to any financial services, while 12% utilize non-bank formal financial services such as mobile money and microfinance institutions. The remaining 10% rely on informal systems like savings groups, ISUSU groups, or loan thrifts. This trajectory shows the disparity in financial access, with a significant portion of the population still unbanked. One of the major links through which financial inclusion transforms to inclusive growth, especially in developing countries like Nigeria, is via the key pillars availability, accessibility, and usability, in entrepreneurial activities and investment (Ziyao & Huand,2021; Orekoya, 2022). Thus, the Nigeria Financial Inclusion Strategy (NFIS) needs to set a proper target to improve entrepreneur activities and reduce financial exclusion to 25% by 2025 through access to digital financial solutions like online and mobile banking, point of sale services, e-payments using credit and debit cards, and other fintech technologies (Imoagwu & Ezeanyeji, 2019; Eze & Mark Jackson, 2020). Hence, access to financial services in our contemporary society remains a catalyst that speeds up the rate of economic diversification of inclusive economic growth (Ehiedu, Onuorah, & Owonye,2022).

However, some researchers believe that financial inclusion can accelerate economic diversification in the country, yield economic gains and bring about shared prosperity in Nigeria (Adeola &Evans, 2017; Afolabi, 2020; Olarewaju, 2020). Others believe that financial inclusion can promote economic development through poverty reduction, wealth creation, and improved standard of living (Igwe, Magaji, &Darma,2022; Ehiedu et al., 2022; Imoagwu, Nwokoye & Ozodiegwu, 2024). However, inclusive finance is closely related to the more general concepts of inclusive economic growth and sustainable development, as highlighted in the 2015 United Nations Global Sustainable Development Report, it is an innovative concept whose central role has been widely acknowledged by world leaders and policymakers as a necessary condition to sustained economic growth (Corrado & Corrado, 2017). **Fig. 1.3:** Depicts the Annual Percentage Change in the real Goss Domestic Product per capita for Nigeria.

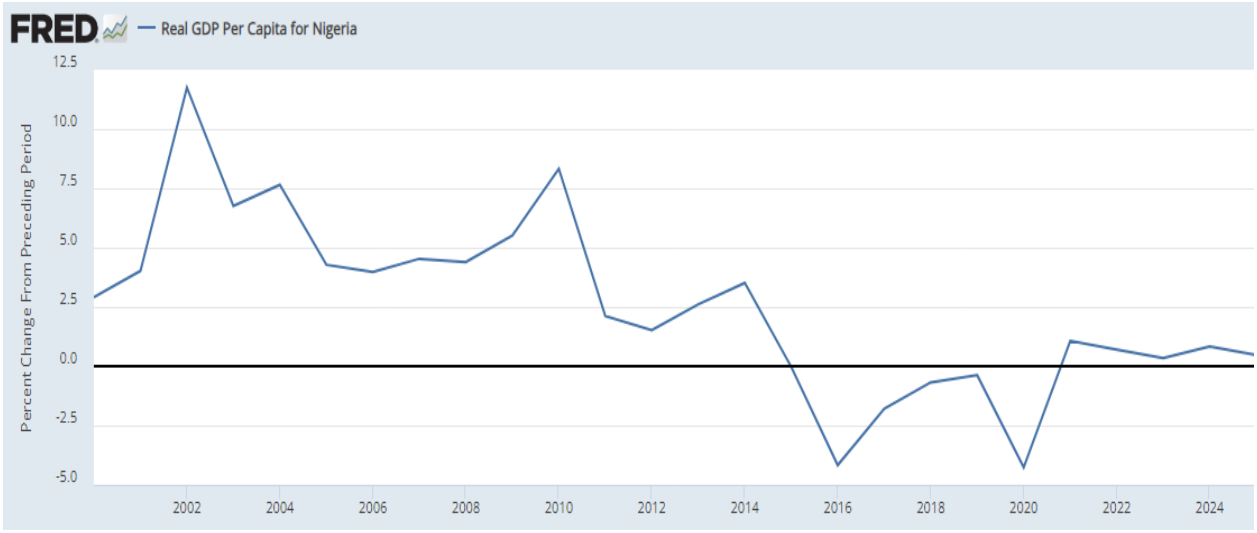

Fig. 3: Annual % Change in RGDP per capita of Nigeria from 2000-2024.

Source: International Monetary Fund (2024).

Figure 3, The above graph shows the percentage change in Nigeria's real GDP per capita over time. It depicts the pattern of growth in the economy around early 2000s, which was followed by fluctuations and a gradual slowdown. After a period of moderate expansion, between 2000 and 2010, it recorded a sharp decline around 2016, caused by the economic recession. The economy showed signs of recovery between 2016 and 2019, though the growth was inconsistent, possibly due to the COVID-19 pandemic. However, the growth rate has hovered around zero, indicating stagnation and economic difficulties in recent times.

Nigeria's economy has expanded without creating the conditions necessary for everyone to have equal chances, which has led to enduring disparities that cut across generations and regions, most especially the rural region of the country (Kalu, 2018; Afolabi, 2020). As of 2023, the total population of Nigeria is estimated at 218,541,212 Million (World Bank, 2023). Nigeria, the most populous nation in Africa, is home to over 180 million people, of which 40.1 million, or 41.6 percent, do not have access to financial services (United Nations Environment Programme (UNEP), 2020). This applies most especially to people dwelling in the rural regions or areas of the country. The growth experienced in Nigeria cannot be ascribed or described as inclusive growth, but rather a half-baked one. This is because the rural areas or regions of the country are left out. There is a limited or non-availability of adequate financial services in those areas. Due to its ability to allocate productive assets efficiently, hence lowering the cost of capital, financial inclusion is a vital weapon that the government utilizes to promote inclusive economic growth (Nwafor & Aremu, 2018).

Over the years, successive government has attempted to tackle the issue of inclusiveness in the economy through substantial efforts such as the implementation of strategic policies, programmes and initiatives: National social investment program, Economic recovery and growth plan, Small and medium enterprises development agency, Trader Moni and Market Moni initiatives, Micro, small and medium enterprises, Community banks program among others, minimum achievement has been made with regards to attainment of inclusive economic growth.

Despite these attempts, statistics on inclusive growth in Nigeria arestartling, and this issue is generating more attention than ever. Therefore, there is much room for improvement in the economic wellbeing of Nigerians, hence the study, through structural policies, diversified efforts, inclusive economic measures to ensure/promote inclusive financial system and equitable growth.

Extant Literatures

Financial inclusion is said to be a process that assures the ease of access, availability and usage of the formal financial system by all members of an economy with the capacity of achieving inclusive growth and sustainable development, and thus build resilience against economic shocks. The theoretical framework of this study is based on New growth theory postulated by Romer (1986), which emphasizes the role of knowledge, technology, and human capital in driving economic growth and the finance-led hypothesis by Schumpeter (1911) who argued that real growth in an economy is driven by activities of the financial system (intermediaries) especially banks in facilitating technological innovation, and economic development.

Several studies have at different times, examined the impact of financial inclusion variables mostly on economic growth and development in different economies for example Ozili(2020) examined the relationship between financial inclusion on economic growth in Nigeria using data from CBN, the result revealed that the level of financial inclusion was affected by the level of financial innovation, poverty, financial literacy and regulation. Ehiedu, et al (2022) examined the effect of financial inclusion on inclusive growth in Nigeria between the periods of 1981-2020, Multiple Regression analysis was employed. The study concludes that financial inclusion has a significant effect on inclusive growth in Nigeria.

Asghar & Naveed (2021) examine the state of financial inclusion and its significance for inclusive growth in Pakistan. Data for this study is taken from the Global Findex database (2014). The study utilizes probit estimation technique. The results suggest that lack of money and requisite formalities are significant barriers to access financial services. Ibrahim and Aliero (2020) found a strong positive relationship between the level of financial inclusion and the size of per capita income. Jombo, (2021) explored the effect of financial inclusion and depth on inclusive growth for 26 sub-Saharan Africa countries. Using the random effects panel regressions, the results suggest that financial inclusion positively affects inclusive growth in the sub-Saharan region, while the financial depth variable does not. Corrado&Corrado, (2017) analyze the role of inclusive finance for inclusive growth and development. The survey evidence shows that access to financial products has a direct impact on innovation and productivity, which is found to enhance economic growth.

Kumari, (2012) in a study focused on the research employed a regression model using E-views to analyze time series data from the period of 1985 to 2019. ed on identifying the significant impact of financial inclusion on inclusive growth in Sri Lanka. results revealed that there is a significant positive impact made by the financial inclusion on the inclusive growth of the country. Banik, (2023) explores the influence of financial inclusion (FI) on long-term economic growth within a dataset comprising 50 developing countries over the period from 2010 to 2022. Generalized Method of Moments (GMM) approaches were also employed, and our results consistently indicate that financial inclusion, as measured by bank branches and ATM outreach, does not appear to be a significant driver of economic growth.

However, scanty studies focused on financial inclusion and inclusive growth using RGDP as a measure for inclusive growth, like in the work of Odeleye & Olusoji (2018) that captured inclusive growth using RGDP as a proxy. However, RGDP is not a good representation or proxy for inclusiveness, as it can only account for the value of national output at a constant price. Hence, the study will fill the gap by using RGDP per capita as a proxy for inclusive growth, as it takes cognizance of the increase in the contribution of the average citizen to national output in real terms. and will also investigate the short run and long run impact of financial inclusion on inclusive growth in Nigeria from 1990 to 2024.

DATA AND METHODOLOGY

This study analyzed the distinctive impact of financial inclusion on inclusive growth in Nigeria from 1990 to 2024. It employed secondary time series data extracted from the World Bank's Global financial inclusion

(FINDEX) database, the Central Bank of Nigeria, the National Bureau of Statistics, the Federal Reserve Economic Data and the World Bank. Moreover, the descriptive statistics and the correlation analysis were used and the hypotheses were tested with Multiple Regression model, using E-views software version 10.0.

Model specification

This study adapts the model of Afolabi (2020) because it incorporated some of the variables used in this current study's model, and it is expressed as: GDP = f (RUL, NBB, MS2, PSC) (1)

Where: RUL = rural loan, NBB= number of bank branches, MS2 = money supply-GDP ratio, PSC = private sector credit to GDP ratio, GDP = GDP per capita.

To achieve the objective of the study, the functional relationship between dependent variable and independent variable expressed in equation 1: INCG = f(FIN) (2)

Equation 1 is the linear functional relationship between inclusive growth and financial inclusion that this study estimated.

INCG = f (RBDS, FIDI, MSCPS, IFIV,SMEs, INFS) (3)

The model is modified as: RGDPPC = f (RBDS, FIDI, MSCPS, IFIV, SMEs, INF) (4)

The model is econometrically expressed as follows: $RGDPPC = \beta_0 + \beta_1 RBDS + \beta_2 FIDI + \beta_3 MSCPS + \beta_4 IFIV + \beta_5 SMEs + \beta_6 INFS + \mu_t$ (5)

However, inclusive growth proxy by real GDP per capita (RGDPPC), and financial inclusion measure rural bank deposits (RBDS), Infrastructure investment (IFIV), financial deepening indicator (FIDI), Small and medium enterprises (SMEs), insurance financial services (INFS), monetary Sector Credit to Private Sector (MSCPS), μ - Random disturbance/error term, β_0–β6 = the Parameters, β_0 – Intercept/constant term, $\beta_{1\text{-}6}$ – Slope coefficients for the explanatory variables. **A priori Expectation:** The coefficient β_1 is anticipated to have a positive sign $\beta_{1>0}$, so that an increase in rural bank deposits should increase inclusive growth ceteris paribus. Therefore, $\beta_2, \beta_3, \beta_4, \beta_5, \beta_{6>0}$.

Data Analysis Techniques

The paper adopts the Autoregressive and Distributed Lag (ARDL) model, which is a good statistical technique to analyze the dynamic relationships between variables that was developed by M. Hashem Pesaran, Yongcheol Shin & Smith in 1999 to capture both the short and long term effects. This method is suitable even with mixed order of intergration such as I(0) and I(1). Similarly, when the sample size is small, it also yields estimates that are more accurate. To do this, we checked the consistency and objectivity of our estimations utilizing the Augmented Dickey Fuller (ADF) unit root test. To determine whether the variables are related over the long term, the ARDL bounds test was also employed. Following the Pesaran et al. (1999) specifications, the model is given as:

$$\begin{aligned}\Delta InRGDPPC_t = {} & \beta_0 + \beta_1 \mathrm{InRGDPPC}_{t-1} + \beta_2 \mathrm{InRDBS}_{t-1} + + \beta_3 \mathrm{InFIDI}_{t-1} + + \beta_4 \mathrm{InMSCPS}_{t-1} \\ & + \beta_5 InIFIV_{t-1} + \beta_6 InINFS_{t-1} + \sum_{i=1}^{p} \beta_1 \Delta \mathrm{lnRGDPPC}_{t-1} + \sum_{i=1}^{p} \beta_2 \Delta \mathrm{lnRDBS}_{t-1} \\ & + \sum_{i=1}^{p} \beta_3 \Delta \mathrm{lnFIDI}_{t-1} + \sum_{i=1}^{p} \beta_4 \Delta \mathrm{lnMSCPS}_{t-1} + \sum_{i=1}^{p} \beta_5 \Delta \mathrm{lnIFIV}_{t-1} \\ & + \sum_{i=1}^{p} \beta_6 \Delta \mathrm{lnINFS}_{t-1} - \emptyset \mathrm{ECM}_{t-1} \\ & + £_t \end{aligned} \quad 6$$

Table1: Description, Measurement and Sources of Data

Variables	Description and Measurement	Sources of Data
Real GDP per capita (RGDPPC)	A measure of a country's economic output per person, adjusted for inflation, used as a proxy for inclusive growth. It is measured in US dollars	NBS, IMF, World Bank, 2024.
Rural Bank Deposits (RBDS)	The total value of savings and deposits held in rural banking institutions. It is measured in billions of naira	CBN, World Bank, 2024.
Infrastructure Investment (IFIV)	The allocation of financial resources to develop physical and digital infrastructure, measured in percentage	NBS, World Bank, International Monetary Fund, 2024.
Financial Deepening Indicator (FIDI)	The ratio of credit to the private sector to GDP is the measure.	NBS, World Bank, 2024.
Insurance Financial Services (INFS)	The provision of risk management and financial protection services, such as life and health insurance, to individuals and businesses. It is measured as a percentage of GDP spent on insurance services	CBN, NBS, World Bank ,2024.
Monetary Sector Credit to Private Sector (MSCPS)	The total amount of credit extended by financial institutions to businesses and individuals. It is measured in billions of naira	World Bank, CBN statistical Bulletin ,2024.

Source: Researcher's Compilation 2025.

RESULTS AND ANALYSIS

Table 2: Descriptive Statistics

	RGDPPC	FIDI	INFS	MSCPS	RBDS	IFIV
Mean	2028.707	1.297598	5.135900	11.06661	13.76993	47.83805
Median	2050.939	1.288550	4.966602	10.06369	13.18567	48.98446
Maximum	2679.554	2.900249	8.237776	33.50000	21.83342	59.50000
Minimum	1429.012	-0.039522	2.548709	4.957522	5.843586	27.30000
Std. Dev.	462.7116	0.840699	1.751415	5.281278	5.357889	8.100718
Skewness	-0.054889	0.168157	0.174157	2.398786	0.108652	-0.505086
Kurtosis	1.335856	1.897105	1.820413	10.71975	1.497878	2.467545
Jarque-Bera	3.940354	1.883436	2.143061	117.0325	3.263423	1.847273
Probability	0.139432	0.389957	0.342484	0.000000	0.195595	0.397072
Sum	68976.05	44.11833	174.6206	376.2647	468.1776	1626.494

Sum Sq. Dev.	7065368.	23.32357	101.2260	920.4326	947.3301	2165.514
Observations	34	34	34	34	34	34

Source: Researchers' Computation based on EViews 10.0 output (2025).

The table above depicts the descriptive characteristics of the series in the model. The results show that real GDP per capita over the period of study stood at 2028.707USD, obtaining a maximum of 2679.554USD and a minimum of 1429.012USD. Foreign direct investment accounts for 1.29%, Insurance and financial services accounts for 5.14%, monetary sector credit to private sector accounts for 11.07%, rural bank deposits accounts for 13.77%, infrastructure investment accounts for 47.84%. Furthermore, it shows that real GDP per capita, financial deepening, insurance and financial services, bank deposits and infrastructural investment are all platykurtic while monetary sector credit to private sector is leptokurtic or positive kurtosis while the probability of the Jarque-Bera statistics for all the variables except MSCPS are greater than the significance level of 0.05, proving that these variables are normally distributed while MSCPS is not normally distributed.

Table 3: Summary of the Unit Root Tests

Variables	**ADF Test Statistic**	**Test Critical Value @ 5%**	**Order of Integration**
RGDPPC	-3.011363	-2.957110	1(1)
FIDI	-6.973612	-2.957110	1(1)
INFS	-9.842454	-2.967767	1(0)
MSCPS	-3.968753	-2.957110	1(l)
RBDS	-4.113584	-3.557759	1(0)
IFIV	-3.692026	-2.967767	1(0)

Source: Computed from EViews 10.0 (2025).

Table 3 shows the unit root test result using ADF and PP was done on level series and first differenced series. The decision rule is to reject the null hypothesis if the ADF statistic value exceeds the critical value at a chosen level of significance (in absolute terms). Given that there is a mixed order of level and first difference, this study moves forward with the F-bound test to check for co-integration.

Table 4: Summary of Co-integration Tests.

F-Bounds Test		Null Hypothesis: No levels relationship		
Test Statistic	Value	Significance	I(0)	I(1)
			Asymptotic: n=1000	
F-statistic	3.842215	10%	2.26	3.35
K	5	5%	2.62	3.79
		2.5%	2.96	4.18
		1%	3.41	4.68

Source: Researcher's computation based on EViews 10.0 (2025).

From table 4. the value of the F-statistic, which is 3.842215, is greater than the upper bound test at the 5% level of significance. This shows that there is a long run relationship between financial inclusion and real GDP per capita.

Panel A: Long Run Estimates: Since we have established that there is a long-run relationship amongst the variables under study, the ARDL model long-run form will be used to determine the coefficients of the regression model. The result is presented in Appendix IX and summarized in Table 5.

Table 5: Summary of ARDL Long run Test.

Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
FIDI	0.159622	0.085394	1.869240	0.0744
LNINFS	0.260665	0.255540	1.020057	0.3183
LNMSCPS	-0.005219	0.166393	-0.031367	0.9752
LNRBDS	0.024809	0.250573	0.099010	0.9220
LNIFIV	1.028707	0.508526	2.057909	0.0449

Source: Researchers' Computation from EViews 10 (2025).

Table 5 shows that in the long run, 1 percent increase in financial deepening (FIDI), insurance financial services (INFS), rural bank deposits (RBDS) and infrastructure investment (IFIV) would increase RGDPPC by 0.15%, 0.26%, 0.02% and 1.03%. However, monetary sector credit to private sector (MSCPS) shows negative coefficient, indicating that on average, 1 percent increase in MSCPS will decrease RGDPPC by 0.0052%. These variables are also statistically insignificant except IFIV as their p values are greater than 5 percent level of significance.

Table 6: Short Run Estimate Results Summary

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.453823	0.083272	5.449855	0.0000
D(LNINFS)	0.166980	0.039210	4.258648	0.0003
D(LNRBDS)	-0.060874	0.030993	-1.964100	0.0617
D(LNIFIV)	-0.030733	0.065044	-0.472495	0.6410
CointEq(-1)*	-0.149706	0.028259	-5.297629	0.0000
R-squared	0.582955	Mean dependent var		0.012874
Adjusted R-squared	0.523377	S.D. dependent var		0.034899
S.E. of regression	0.024093	Akaike info criterion		-4.475023
Sum squared resid	0.016254	Schwarz criterion		-4.248279
Log likelihood	78.83787	Hannan-Quinn criter.		-4.398730

F-statistic	9.784751	Durbin-Watson stat		1.609559
Prob(F-statistic)	0.000044			

Source: Computed from EViews 10.0 (2025).

Table 6 indicates a negative intercept (C = 0.45) in the regression line. This signifies that in a scenario where all variables remain constant or at zero, the GDP per capita in Nigeria would increase by 0.45% annually. This aligns with the theoretical expectation, considering the prior anticipation that the intercept could manifest as either positive or negative. Also, the coefficient of the error correction term (CointEq(-1)) is -0.15, suggesting that the speed of adjustment from the short run back to the long run if there is disequilibrium in the model is 15%

Upon examining the regression results, it is evident that insurance financial services (INFS) had a positive influence on real GDP per capita in Nigeria in the short run. In simpler terms, a 1 percent increase in this index could potentially lead to an increase of 0.17% in the real GDP per capita. On the other hand, rural bank deposits and infrastructure investment had a negative influence on real GDP per capita in the short run. This implies that as RBDS and IFIV are increased by 1 percent on average, RGDPPC will decrease by 0.06% and 0.03% respectively.

The R^2 also shows the coefficient of determination of about 0.58%, suggesting that 58% variations in the RGDPPC are explained by the variables of interest in this study. The F-statistic of 9.7847 with the significant value of 0.000044 shows that all the variables are jointly statistically significant at 5 percent. The Durbin-Watson statistic of 1.6095 indicates that the value tends to 2 and it means that there is no autocorrelation in the model.

Table 7: Summary of Multicollinearity Test

Variable	VIF Coefficient	Remark
FIDI	1.400820	No Multicollinearity
LNINFS	7.152993	No Multicollinearity
LNMSCPS	4.031687	No Multicollinearity
LNRBDS	5.054322	No Multicollinearity
LNIFIV	9.891759	No Multicollinearity

Source: Researchers' Computation (2025).

From Table 7 above, it can be seen that all the VIF coefficients are less than 10. Therefore, we decide that there is no multicollinearity, which implies that regression coefficients are reliable and precise.

DISCUSSION

The results show that financial deepening, insurance financial services, rural bank deposits, and infrastructure investment have strong positive impacts on inclusive growth in Nigeria, but only infrastructure investment is significant. This is an indication of the very important role of infrastructure in raising economic growth. The finding is consistent with Ehiedu et al. (2022) and Corrado & Corrado (2017), who justified that increased access to finance increases innovation and productivity. Nonetheless, monetary sector private sector credit has negative impact to real GDP per capita, indicating fund abuse, unproductive loan domination, or credit misallocation inefficiencies. This is contrary to Ibrahim and Aliero (2020), whose work established a high positive relationship between financial inclusion and income levels. Insurance financial services positively influence economic growth, reinforcing the role of financial security in economic stability, as supported by Afolabi (2020). However,

rural bank deposits and infrastructure investment show negative effects in the short run, possibly due to the delayed benefits of infrastructure projects and low banking penetration in rural areas. This aligns with Asghar & Naveed (2021), who identified financial literacy and bureaucratic barriers as key challenges to financial access.

CONCLUSION AND POLICY IMPLICATIONS

In conclusion, this study highlights the pertinent role of financial inclusion in driving inclusive growth in Nigeria. Examining its relationship with real GDP per capita reveals that financial inclusion has immediate and long-term benefits for economic development and sustainability, while short-term gains are equally evident. Thus, the true impact lies in its ability to foster sustainable growth and reduce economic disparities.

To maximize these benefits, policymakers must adopt inclusive and adaptive financial policies that ensure wider access to financial services, particularly for underserved populations. A well-structured financial system can enhance economic resilience, promote equality, and support long-term socioeconomic progress. Sustained efforts toward financial inclusion will be essential in building a more inclusive and prosperous Nigeria.

However, based on the findings of the study, several policy recommendations are made:

i. This study recommends a policy initiative to effectively utilize financial inclusion as a strategy for inclusive growth in Nigeria, which should focus on expanding access to financial services, particularly for the vulnerable and poor communities. This can be achieved through the expansion of banking networks, mobile banking, and bank agents.

ii. Moreover, promoting digital financial solutions such as mobile money, e-wallets, and digital lending platforms will help bridge financial gaps and enhance economic participation through investment in digital infrastructure that supports the growth of financial technology and ensures widespread accessibility.

iii. The Nigerian government should embark on financial literacy programs to strengthen and improve awareness and empower individuals and small businesses to make informed financial decisions and create access to affordable credit to small businesses and entrepreneurs to thrive.

iv. Collaboration between the government, private sector, and development organizations should be encouraged to drive financial inclusion initiatives, especially the gender-inclusive financial policies to ensure that the women are financially empowered through targeted credit schemes and support for female entrepreneurs.

v. Finally, continuous monitoring and evaluation of financial inclusion policies are very necessary to measure their effectiveness and refine strategies based on economic trends and societal needs. These measures can help build a more inclusive financial system, reduce economic disparities, and achieve sustainable economic growth in Nigeria.

Competing Interest

The authors declared that they have no competing interests.

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