

Original Article

# Financial Development And Its Role In Driving Economic Growth In Nigeria

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**ABSTRACT:** *This study investigated the effect of financial development on economic growth in Nigeria from 1984 to 2024. Financial development was measured by the number of banks, credit to the private sector, monetary policy rate, and gross fixed capital formation, while economic growth was measured by real gross domestic product. The variables were subjected to unit root test using the Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP), and the result showed that all the variables were stationary at the first difference. Johansen co-integration was employed, and the result denoted that there was a significant long-run relationship between the variables. The Vector Error Correction model was employed for data analysis, and inferences were made at 5% significant level. The regression result showed that monetary policy rate had a negative significant effect on economic growth in the short-run while in the long-run, it had a positive significant effect. Furthermore, the number of banks and credit to the private sector had a significant and positive effect on economic growth in Nigeria in the long-run. The study concludes that the number of banks, credit to the private sector, and monetary policy rate spur growth in the long-run in Nigeria. Therefore, the study recommends that the Nigerian government should improve efficiency in the banking sector and ensure better allocation of credit to productive sectors like agriculture, SMEs, and manufacturing, and reduce lending constraints.*

**KEYWORDS:** *Financial Development, Economic Growth, Credit To The Private Sector, Number Of Banks, Monetary Policy Rate.*

## 1. INTRODUCTION

Sustainable Economic Growth is defined as a phase of economic development characterized by a continuous increase in a nation's productive capacity that is financed by genuine savings rather than debt or currency degradation (Espinosa et al., 2021). From a broader developmental perspective, this concept is often rooted in the Brundtland Commission's foundational principle, meaning the needs of the present without compromising the ability of future generations to meet their own needs (Asefa, 2005). Financial Development is defined as a process that involves improvements in the quantity, quality, and efficiency of financial intermediary services. According to the World Bank, it is a multifaceted concept that occurs when financial instruments, markets, and intermediaries work together to reduce the costs of information, enforcement, and transactions (World Bank, n.d.).

In the global discourse of economic development, the financial system is no longer passive; it is a vital aspect of national prosperity. For Nigeria, being Africa's most populous nation, the transition from economic stabilisation to sustainable expansion has become a priority. As of early 2026, Nigeria's economy is projected to grow by 4.4% to 4.7%, a notable change from previous years (CBN). However, the quality of this growth remains questionable. Sustainable economic growth, defined as the pursuit of increasing a nation's GDP and improving living standards without exhausting natural resources or causing environmental damage (UNSDGs), requires a financial system that does more than just facilitate transactions.

In Nigeria, while banks and financial markets seem to be growing and making huge profits, many Nigerians and local businesses are not feeling the impact. We often see news about banks reaching record-breaking heights in digital transactions and profits, yet the real parts of the economy, like agriculture and manufacturing, are still struggling to survive. Most small business owners in Nigeria find it nearly impossible to get a loan because interest rates are too high, often over 25%-30%. Because of this, instead of banks helping new businesses grow (Supply-leading), they seem to be waiting for already successful sectors like Oil and Gas to ask for services. Furthermore, Sustainable growth means growth that lasts and helps everyone, but right now, most of our financial activity is short-term-centred rather than long-term projects like clean energy. If our financial system is just making money for itself rather than aiding employment and economic development, then it isn't truly working. This study, therefore, empirically examined the effect of financial development on economic growth in Nigeria, owing to the fact that growth and sustainable growth are pertinent to every government.

## 2. LITERATURE REVIEW

### 2.1. THE SUPPLY-LEADING HYPOTHESIS

The Supply-Leading Hypothesis is a theory in financial development that states that the development of the financial sector leads to economic growth. This hypothesis suggests that the development of financial institutions and services precedes and actively induces economic growth (Ronald, 1970). This theory was propounded by Patrick (1966) as the primary scholar credited with formalizing this distinction. The theory states that financial institutions are created in advance of the demand for them. They mobilize savings from traditional, low-growth sectors and transfer them to modern, high-growth sectors (Schumpeter, 1911). The theory assumes that financial services stimulate entrepreneurship, the existence of financial markets lowers the cost of capital, which encourages investment, and growth is pushed by the financial sector rather than pulled by the real economy. This is often seen in the early stages of development, when the government or the private sector establishes banks to jump-start the economy (McKinnon, 1973).

#### 2.1.1. THE DEMAND-FOLLOWING HYPOTHESIS

This theory suggests the opposite of the latter. This hypothesis argues that the demand for financial services is a byproduct of economic growth. The Demand-following hypothesis suggests that financial development occurs as a result of economic growth because expanding economic activities create greater demand for financial services such as loans, savings, and investments (Robinson, 1952). The theory was also propounded by Hugh T. Patrick (1966), building on ideas from earlier economists like Joan Robinson. As the real economy (agriculture, manufacturing, etc.) expands, it generates demand for more sophisticated financial services, such as insurance, credit, and complex payment systems. The theory assumes that finance responds to the needs of the real sector, economic growth creates its own demand for financial intermediaries, and banks tend to wait for successful businesses to emerge before offering services (Shaw, 1973). Recent studies highlight the significant role of financial development in promoting sustainable economic growth. For instance, in Nigeria, Nwakanma (2014) conducted several research studies focused on the relationship between financial development and economic growth in Nigeria and found a long-run relationship between financial depth and economic growth using the ARDL approach.

### 2.2. EMPIRICAL REVIEW

Olowofeso et al. (2017) investigated agricultural credit and found that although credit is available, the sustainable component is missing due to high interest rates and poor infrastructure. Also, some researchers argue that Nigeria suffers from a resource curse, where the oil sector grows, but the financial sector fails to support the manufacturing and real sectors, leading to “jobless growth. Abbas, Afshan, and Mustifa (2022) conducted a panel ARDL study using data from 44 countries, finding that financial development significantly promotes economic growth in the long run. The study also finds an inverted U-shaped relationship between financial development and income inequality.

Weli, Okereke, and Nnamdi (2022) used time-series econometric techniques to show that financial development indicators, such as banking sector credit and financial deepening, significantly influence economic growth in both Nigeria and South Africa.

Adekunle & Tonia (2023) carried out an ARDL analysis of financial sector indicators (credit to private sector, market capitalization, total savings, monetary policy rate, credit to government) and their impact on Nigeria’s GDP growth and discovered that a long-run relationship exists, but credit to government hampers growth. Ibrahim and Al Naim (2024) examined the impact of financial development on economic growth and environmental sustainability across African countries using a heterogeneous econometric analysis to assess different country conditions, finding that financial development improves economic growth, but environmental outcomes depend on financial sector policies and green investments.

Mlambo (2024) uses panel data (2000-2022) and Dynamic Common Correlated Effects (DCCE) estimation and finds a positive relationship between financial development and economic growth, suggesting improving financial institutions and credit access to stimulate long-term development. Ayorinde (2024) employed an ARDL model to assess the impact of monetary policy and macroeconomic variables, including GFCF as a proxy for investment, on Nigeria’s economic development, illustrating how financial conditions and capital formation interact with growth dynamics. Olunuga and Ashoghon (2024) show that financial innovation improves capital allocation and supports productive investment, highlighting the role of digital finance and financial sector modernization in sustainable growth.

### 2.3. LITERATURE GAP

The empirical literature above shows that there is existing literature on financial development and economic growth in Nigeria. However, despite these studies, gaps exist. The study of Olowofeso et al (2017) used agricultural credit, highlighting interest rate and infrastructure as indicators for financial development, failing to use gross fixed capital formation and the number of banks as also measures for financial development in Nigeria. The studies by Abbas, Afshan, and Mustifa (2022) and Ibrahim and Al Naim

(2024) were not country-specific, as they conducted panel data analysis. Furthermore, Weli, Okereke, and Nnamdi (2022) conducted a comparison study between Nigeria and South Africa. Given Nigeria's economic growth trajectory with respect to financial development, there is a need to empirically investigate how the economy has been affected by financial development and, therefore, provide a recommendation that, if implemented, would lead to positive growth outcomes in Nigeria.

### 3. MATERIALS AND METHODS

The study employed an ex post facto research design. Data were sourced from the Central Bank of Nigeria statistical bulletin (2024) and the World Development Indicators database. The variables were subjected to unit root tests using the Augmented Dickey-Fuller and Phillips-Perron tests, and the results indicated that all variables are integrated in the same order of integration 1(1). The Vector Error Correction model was employed for the analysis, and inferences were made at 5% significant level.

**TABLE 1 Variables, Data Sources, and A Priori Expectations**

Variables	Description	Data Source	A Priori Expectation
Credit to the Private Sector (CPS)	Measures how much support businesses are getting from banks through loans and advances.	CBN Statistical Bulletin (2024)	Positive (+): More credit to businesses should stimulate investment, production, and GDP growth.
Monetary Policy Rate (MPR)	The benchmark interest rate set by the Central Bank of Nigeria influences borrowing and savings.	World Development Indicators (WDI)	Negative (-): Higher MPR raises borrowing costs, discourages investment, and slows GDP growth.
Gross Fixed Capital Formation (GFCF)	Value of investment in fixed assets (machinery, infrastructure, buildings) in the economy.	World Development Indicators (WDI)	Positive (+): Higher GFCF reflects more productive investment, boosting GDP growth.
Number of Banks (NOB)	Tracks the development and expansion of commercial bank branches over the years.	CBN Statistical Bulletin (2024)	Positive (+): More banks increase financial inclusion, credit access, and support economic growth.
Gross Domestic Product (GDP)	The dependent variable measures Nigeria's overall economic output.	National Accounts / WDI	—

#### 3.1. EQUATIONS

**GDP = f(CPS, MPR, GFCF, NOB).....Equation 1**

**LNGDP = β<sub>0</sub> + β<sub>1</sub>CPS + β<sub>2</sub>MPR + β<sub>3</sub>GFCF + β<sub>4</sub>NOB + ε.....Equation 2**

$$\Delta \ln GDP_t = \alpha_0 + \alpha_{1t} \sum_{i=1}^p \Delta \ln GDP_{t-1} + \alpha_{2i} \sum_{i=1}^p \Delta CPS_{t-1} + \alpha_{3t} \sum_{i=t}^p \Delta MPR + \alpha_{4t} \sum_{i=1}^p \Delta GFCF + \alpha_{5t} \sum_{i=1}^p \Delta NOB + \beta_1 CPS_{t-1} + \beta_2 MPR + \beta_3 GFCF + \beta_4 NOB + \epsilon_t \dots\dots 3.3$$

Where

GDP = real gross domestic product

CPS = credit to the private sector

MPR = monetary policy rate

GFCF = gross fixed capital formation

NOB = number of banks

β<sub>0</sub> = Intercept

μ<sub>t</sub> = Error term

(t) = Time period

α<sub>j</sub> (1, 2, 3, 4, 5) are the short-run parameters

β<sub>j</sub> (1, 2, 3, 4) are the long-run parameters

## 4. RESULTS AND DISCUSSION

**TABLE 2 Descriptive Statistics**

	<b>LNGDP</b>	<b>CPS</b>	<b>GFCF</b>	<b>MPR</b>	<b>NOB</b>
Mean	10.51498	13.74937	19.55366	13.99390	3408.293
Median	10.50319	9.036717	13.00000	13.50000	3231.000
Maximum	11.29733	28.97336	72.80000	27.50000	5570.000
Minimum	9.693476	6.442343	5.400000	6.000000	1242.000
Std. Dev.	0.548616	6.759443	16.71706	4.310049	1450.593
Skewness	0.043624	0.560467	1.747583	1.080896	0.113195
Kurtosis	1.411804	1.888686	4.972485	4.998805	1.487924
Jarque-Bera	4.322045	4.256335	27.51593	14.80880	3.993442
Probability	0.115207	0.119055	0.000001	0.000609	0.135780
Sum	431.1143	563.7241	801.7000	573.7500	139740.0
Sum Sq. Dev.	12.03916	1827.603	11178.40	743.0610	84168752
Observations	41	41	41	41	41

Source: Authors' Computation Using Eviews 12 (2026)

**TABLE 3 ADF Unit Root Test**

<b>AUGMENTED DICKEY FULLER TEST (ADF)</b>						
<b>AT LEVELS</b>			<b>AT 1<sup>ST</sup> DIFFERENCE</b>			
<b>INTERCEPT</b>			<b>INTERCEPT</b>			
<b>VARIABLES</b>	<b>ADF STATS</b>	<b>AT LEVEL 5%</b>	<b>VARIABLES</b>	<b>ADF STATS</b>	<b>AT LEVEL 5%</b>	<b>ORDER OF INT.</b>
CPS	-0.202778	-2.936942	CPS	-5.721422	-2.938987	I(1)
GDP	-0.371361	-2.938987	GDP	-4.182747	-2.938987	I(1)
GFCF	-1.807454	-2.954021	GFCF	-3.512786	-2.957110	I(1)
NOB	-1.380820	-2.936942	NOB	-4.520075	-2.938987	I(1)
MPR	-2.279887	-2.936942	MPR	-7.477560	-2.938987	I(1)

Source: Authors' Computation Using Eviews 12 (2026)

**TABLE 4 Phillips Perron Unit Root Test Result**

<b>PHILLIPS-PERRON TEST</b>						
<b>AT LEVELS</b>			<b>AT 1<sup>ST</sup> DIFFERENCE</b>			
<b>INTERCEPT</b>			<b>INTERCEPT</b>			
<b>VARIABLES</b>	<b>PP STATS</b>	<b>AT LEVEL 5%</b>	<b>VARIABLES</b>	<b>PP STATS</b>	<b>AT LEVEL 5%</b>	<b>ORDER OF INT.</b>
CPS	0.197384	-2.936942	CPS	-5.804200	-2.938987	I(1)
GDP	-0.485401	-2.936942	GDP	-4.261584	-2.938987	I(1)
GFCF	-2.709337	-2.936942	GFCF	-6.686683	-2.938987	I(1)
NOB	-1.357114	-2.936942	NOB	-4.530394	-2.938987	I(1)
MPR	-2.194082	-2.936942	MPR	-7.488897	-2.938987	I(1)

Source: Authors' Computation Using Eviews 12 (2026)

Results from Tables 3 and 4 show that all the variables are stationary at the first difference. This shows that the variables have the same order of integration.

**TABLE 5 Correlation Matrix**

	<b>LNGDP</b>	<b>CPS</b>	<b>GFCF</b>	<b>MPR</b>	<b>NOB</b>
<b>LNGDP</b>	1.000000				
<b>CPS</b>	0.892139	1.000000			
<b>GFCF</b>	-0.305063	-0.234942	1.000000		
<b>MPR</b>	-0.073934	-0.062589	0.397681	1.000000	
<b>NOB</b>	0.968053	0.843523	-0.275733	-0.161177	1.000000

Source: Authors' Computation Using Eviews 12 (2026)

Table 5 shows the correlation matrix, which is used to identify the strength and direction of the linear relationships between the variables. It is also a way to check for multicollinearity in econometrics. There is a high correlation between LNGDP and NOB at 0.968053. It implies that as the number of Banks increases, Gross Domestic Product increases almost immediately. There is a strong positive relationship between CPS and LNGDP at 0.892, and between CPS and NOB at 0.843. Correlations above 0.80 are often considered signs of severe multicollinearity, so we carry out the Variance Inflation Factor to check if there's any problem of multicollinearity.

**TABLE 6 Variance Inflation Factor (VIF)**

VARIABLE	COEFFICIENT VAR.	UNCENTERED VIF	CENTERED VIF*
CPS	2.23E-05	18.59245	3.547507
GFCF	1.29E-06	3.029839	1.261192
MPR	1.88E-05	14.39925	1.219727
NOB	4.95E-10	24.20759	3.635554
C	0.005862	20.96559	NA

Source: Authors' Computation Using Eviews 12 (2026)

From Table 6, all the values are less than 10; therefore, the VIF result above shows that there is no problem of multicollinearity since there is no violation of the rule of thumb (VIF > 10).

**TABLE 7 Lag Length Criteria**

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-660.5960	NA	1.13e+09	35.03137	35.24684	35.10803
1	-495.3875	278.2459	712053.3	27.65197	28.94480*	28.11195
2	-450.2040	64.20803*	264469.6*	26.58969*	28.95988	27.43298*
3	-428.1488	25.53997	374881.3	26.74457	30.19212	27.97118

Source: Authors' Computation Using Eviews 12 (2026)

**TABLE 8 Johansen Cointegration Test****Unrestricted Cointegration Rank Test (Trace)**

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None*	0.638938	89.42426	69.81889	0.0006
At most 1*	0.590666	50.71348	47.85613	0.0263
At most 2	0.287695	16.77094	29.79707	0.6569
At most 3	0.096244	3.879456	15.49471	0.9130
At most 4	0.000894	0.034002	3.841466	0.8537

**Unrestricted Cointegration Rank Test (Maximum Eigenvalue)**

Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.
None *	0.638938	38.71078	33.87687	0.0122
At most 1 *	0.590666	33.94253	27.58434	0.0067
At most 2	0.287695	12.89149	21.13162	0.4622
At most 3	0.096244	3.845454	14.26460	0.8753
At most 4	0.000894	0.034002	3.841466	0.8537

Source: Authors' Computation Using Eviews 12 (2026)

Table 8 shows that there is a significant long-run relationship between credit to the private sector (CPS), gross fixed capital formation (GFCF), monetary policy rate (MPR), number of banks (NOB), and GDP.

**TABLE 9 Vector Error Correction Model (VECM) Results**

SHORT-RUN DYNAMICS			
VARIABLES	COEFFICIENT	STD. ERROR	T-STATISTIC
D(LNGDP(-1))	-0.157302	0.08460	-1.85946
D(CPS)	6.098411	4.20281	1.45103
D(GFCF)	-58.33273	32.9313	-1.77134
D(MPR)	-20.99874	9.21606	-2.27849
D(NOBS)	-1263.951	671.185	-1.88316

LONG-RUN EQUATION			
VARIABLES	COEFFICIENT	STD. ERROR	T-STATISTIC
LNGDP (-1)	1.000000	--	--
CPS (-1)	0.045910	0.00565	8.12498
GFCF (-1)	-0.005494	0.00103	-5.30931
MPR (-1)	0.019780	0.00453	4.36599
NOB (-1)	0.000166	2.2E-05	7.53551
C	9.162952	--	--

Source: Authors' Computation Using Eviews 12 (2026)

Table 9 shows that in the short run, the monetary policy rate had a significant negative effect on GDP, while in the long run, it had a positive and significant effect on GDP. Furthermore, credit to the private sector and the number of banks had a significant positive effect on GDP in the long run, while gross fixed capital formation had a significant negative effect on GDP in the long run.

**TABLE 10 Post Estimation Tests**

Autocorrelation LM Test		
Lags	LM-STAT	Prob
1	26.41029	0.3860
2	28.16632	0.3003
White Heteroskedasticity Test (No cross terms)		
Chi-sq	Df	Prob
316.9754	330	0.6871
Jarque-Bera Normality Test		
Component	Df	Prob
Joint	10	0.1586

Source: Authors' Computation Using Eviews 12 (2026)

Table 10 shows that the model is free from autocorrelation, also known as serial correlation, because it doesn't violate the rule of thumb that says ( $p > 0.05$ ). This model also doesn't have a problem of heteroskedasticity ( $p > 0.05$ ). The Jarque-Bera test also signifies that the model is normally distributed ( $p > 0.05$ ).

#### 4.1. DISCUSSIONS OF FINDINGS

The result of a Johansen co-integration test, which established a long-run significant relationship between financial development and economic growth, aligns with the findings of Nwakamma (2014), who used the ARDL approach to establish a long-run relationship between financial depth and economic growth in Nigeria. Similarly, Abbas, Afshan, and Mustifa (2022) found that financial development significantly promotes economic growth across 44 countries. The consistency of these findings with this study reinforces the robustness of the finance-led growth (Supply-leading Hypothesis). However, unlike these earlier studies, which relied primarily on ARDL models, this study employs the Vector Error Correction Model (VECM), which provides a more comprehensive framework by capturing both long-run equilibrium relationships and short-run dynamics simultaneously. This represents a methodological improvement, as it allows for a deeper understanding of the adjustment process through the error correction mechanism.

Furthermore, it was found that the monetary policy rate, the number of banks, and credit to the private sector had a significant positive effect on economic growth. These findings support the findings of Weli, Okereke, and Nnamdi (2022) and Mlambo (2024), who reported a positive impact of financial development indicators on economic growth, and are also consistent with the results of this study. However, while these studies focus mainly on the magnitude and significance of relationships, the present study goes further by incorporating dynamic interactions, showing how deviations from equilibrium are corrected over time. Overall, while the findings of this study are consistent with existing literature in confirming the importance of financial development in promoting economic growth, it advances the discourse by adopting a dynamic VECM framework, integrating both supply-leading and demand-following hypotheses, and providing deeper insights into the short-run and long-run mechanisms through which financial development influences sustainable economic growth in Nigeria.

## 5. CONCLUSION

The study concludes that the number of banks, credit to the private sector, and monetary policy rate spur growth in the long-run in Nigeria. Therefore, the study recommends that the Nigerian government improve the efficiency of the banking sector, ensure better allocation of credit to productive sectors such as agriculture, SMEs, and manufacturing, and reduce lending constraints. As the number of banks is a significant determinant of growth, expanding access to financial services, especially in rural areas, encouraging digital platforms, and increasing access to credit for small businesses will be of paramount importance.

## CONFLICTS OF INTEREST

The authors declare that no personal, financial, or professional conflict of interest could have influenced the research.

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