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Financial Inclusion and Economic Growth in Ngeria

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Abstract **Original Research Article**

Despite all the desirable reforms undertaken in the Nigerian financial sector, economic growth has remained unstable and lower than its potential, given that an enormous percentage of Nigerians are yet to be financially included, and this has limited economic growth through savings mobilization and credit allocation to different sectors of the economy. As such, this study investigates how financial inclusion impacts economic growth in Nigeria through its analysis of annual data that covers the period from 1986 to 2023. The data from World Bank and Central Bank of Nigeria and National Bureau of Statistics were used and the Vector Error Correction Model (VECM) method applied for model parameter estimation. From the findings, there existed significant positive impacts of financial technology, broad money supply, capital expenditure on transport/communication on economic growth. Although institutional quality had a negative but significant effect on economic growth, financial inclusion had a positive but insignificant effect on economic growth in Nigeria. Based on these findings, it is recommended that Nigeria focuses more on strengthening its digital financial system, better governance to strengthen its institutions, accessing more formal channels of financial services, and adapting better public investment strategies towards inclusive economic growth.

Keywords: Financial Inclusion, Financial Technology, Economic Growth, Nigeria.

1 Introduction

The quest to achieve continuous and inclusive economic growth is one of the main objectives of the developing economies that suffer from structural imbalances, high poverty rates, and lack of capacity to produce maximally. In current discourse on development, there is increased recognition that economic growth needs to be interchangeably accompanied by increases in social welfare, reductions in inequality, and contributions to economic sustainability. This understanding is also reflected in the United Nations Sustainable Development Goals (SDGs) policy, which advocates for sustainable, inclusive, and sustained economic growth through increases in productivity, employment, and resource efficiency (Organisation for Economic Co-operation and Development (OECD), 2024; van Niekerk, 2020; Cevik,

2024). Accordingly, the capabilities of domestic institutions in facilitating access to resources and supporting investments have become an important indicator of macroeconomic sustainability.

The financial sector plays a basic developmental role in mobilizing savings, accumulating capital, diversifying risk, and allocating resources effectively to productive use. The theories of classical and modern finance–growth sustain that financial intermediation provides a positive impact on economic efficiency by facilitating funds from the surplus to deficit units, resulting in increased investment and productivity. According to McKinnon (1973), Shaw (1973), and Levine (1997), financial deepening, often measured by broad monetary aggregates such as broad money supply in relation to GDP, reflects the level of liquidity and capacity of the financial system in supporting transactions and credit expansion. In this case, the level of money supply increases, which in turn enhances investments, business operations, and demand for products, hence promoting more output (World Bank, 2020; Baker et al., 2023).

Apart from financial depth, the importance of access to financial services, also known as financial inclusion, has also been recognized as an important transmission channel through which the benefits of financial development can be inclusively extended to the broader population. Financial inclusion ensures that people, households, and small and medium-sized enterprises can conveniently access financial services such as saving, credit, insurance, and payments. This means that improvements in access to financial inclusion open up opportunities for entrepreneurship, consumption smoothing, poverty reduction, and economic growth (Demirgüç-Kunt & Klapper, 2013; Joghee, Kabiraj& Bishnoi, 2022; Ezie, 2023). For a developing country like Nigeria that relies heavily on the informal economy, a higher number of people in the economy are not formally financially serviced, and this has been a major challenge to their economic participation. Therefore, the positive effect of financial institutions' access means that it will impact the real gross domestic product (RGDP).

The recent technological innovations have also changed the pattern of financial service delivery through financial technology (FinTech). Fintech consists of electronic payment systems, mobile banking, peer-to-peer banking, agent banking, among others, which have reduced financial transaction costs, deepened financial markets, and improved efficiencies of financial intermediaries. Empirical evidence indicates that fintech enables faster transactions, improves financial access, and boosts economic activity, particularly among segments that were traditionally not financially included (PricewaterhouseCoopers [PwC], 2018; Xiao &Qamruzzaman, 2022; World Economic Forum, 2023). Globally, countries like Kenya, India, and South Africa have proved that financial technology could play a vital role in enhancing financial markets. In Nigeria, for instance, the dramatic increase in Automatic Teller Machines, Point-of-Sale Terminals, Mobile Money Transfers, and Internet Payments by Nigerians is a pointer to the increasing use and role of fintech in Nigeria, particularly as a tool for enhancing effective implementation of its cashless policy and financial inclusion strategy (Central Bank of Nigeria [CBN], 2022; Enhancing Financial Innovation and Access, [EFInA], 2022).

While the role of financial inclusion and fintech is significant for growth, the effectiveness of these factors may depend on the structural environment. Urbanization, for instance, tends to concentrate economic activities, infrastructure, and financial services in cities, thereby facilitating faster fintech adoption and greater financial participation. The urban centers offer the connectivity that is necessary for digital financial services to prosper (Okon et al., 2023; World Bank, 2020). However, rapid urban growth can also create challenges in infrastructure and inequality. Consequently, the extent to which urbanization supports economic growth depends on complementary investments in public infrastructure and service delivery. Human capital development with special reference to literacy is another crucial factor that influences financial sector efficiency. Education at a basic level and technological know-how are necessary tools for using digital and financial

services effectively. Improved literacy skills help individuals manage their finances well, make sound investment decisions, and adopt new technologies that help enhance the channeling of benefits from financial sector development to economic growth (International Monetary Fund, 2022; Zuo, 2023). However, when literacy levels are low, such as in the case of some countries like Nigeria, financial services' utility in further enhancing economic growth is undermined.

In addition, the quality of institutions plays a crucial role as far as financial outcomes are concerned. Strong financial institutions are underpinned by sound regulation, rule of law, and transparency. On the contrary, poor governance structures often breed inefficiencies and instability, which are detrimental to growth prospects (CBN, 2022; Inuwa et al., 2023). Therefore, improvements in institutional quality are expected to strengthen the finance–growth nexus by strengthening the operating environment of financial institutions and fintech companies.

Besides financial and institutional factors, investment in public infrastructure is also a very important determinant of economic growth. Capital expenditure on transport and communication improves market integration, lowers transaction and logistics costs, and facilitates the diffusion of financial and digital services. In this way, efficient networks of transport and reliable communication systems deepen financial interconnectedness, stimulate trade, and foster productive activities across regions. These investment interventions complement financial development as they create an atmosphere for economic growth (World Bank, 2020; Owolabi et al., 2021).

Despite various reforms, including the National Financial Inclusion Strategy, the Payments System Vision, the use of financial regulation sandboxes to promote financial technology innovation, and the introduction of the eNaira, Nigeria still faces issues of financial exclusion, lower credit limits, infrastructure gaps, and institutional constraints (EFInA, 2023; CBN, 2023). While digital transactions and financial technology investment have risen substantially, this is not necessarily reflected in strong and sustainable economic growth. This creates a sense of concern about the role that financial inclusion, financial technology, financial depth, and structural issues collectively play in enhancing economic growth.

2 Literature Review

2.1 Theoretical Review

Romer (1986) and Greenwood and Jovanovic (1990) create endogenous growth models where the major factor in achieving sustained economic growth is the accumulation of knowledge, the innovations and financial intermediation. They put forth that non-rival, increasing-returns properties accompany knowledge and technology and credit markets play an efficient role in directing savings towards productive innovators while at the same time allowing for risk sharing. One of the major advantages of this is that finance is formally anchored as a key factor of persistent, innovation-led growth, placing long-run effects rather than short-term ones to the forefront (King & Levine, 1993; Levine, 1997). The empirical research has shown that there is strong linkage between finance and growth owing to the fact that more developed financial systems in certain countries lead to faster technological diffusion and productivity growth (Beck, Levine & Loayza, 2000; Aghion, Howitt & Mayer-Foulkes, 2005). However, the models are highly reliant on their functional form of assumptions and often neglect financial frictions like credit constraints and exclusion that may dampen the innovation-finance channel. These models have a remarkably strong relevance to the study in that financial deepening allows for long-term investment in innovation and human capital, financial inclusion expands access to innovative opportunities, while financial technology reduces transaction and information costs, thereby strengthening mechanisms through which finance causes sustainable growth.

2.2 Review of Empirical Literature

Oyadeyi (2024) analyzed the impact of FI and banking innovation on economic growth in Nigeria, based on monthly and quarterly data collected during the period from 2009 to 2021.

The research helped to extend the existing literature by the application of mixed data sampling (MIDAS) method in combination with the ARDL model. The findings revealed that ATM and mobile transactions positively impacted economic growth. Tidjani and Madouri (2024) conducted a thorough examination of the interactions between financial inclusion (FI), fintech, and sustainable development in Africa. Data from 25 countries in Africa over the years 2011 to 2019 were analyzed, using dynamic panel methods (two-step SGMM) and static panel approaches. The results confirmed negative and insignificant impact of FI and fintech on development.

Samuel et al. (2024) analyzed the effect of FinTech on the economic growth and inclusion of Nigeria in their research for the period of 1999 to 2020. They used the Johansen test for cointegration, Granger non-causality test, and the Toda–Yamamoto procedure to find the relationships among the three variables. Their findings pointed out that FinTech through the reduction of income inequality and poverty was a factor in the growth of both economic and financial sectors. Moreover, the study confirmed the presence of unidirectional, bidirectional, and feedback causality among the variables. The study conducted by Adewole et al. (2024) assessed the role of financial technology (FinTech) as a contributor to the economic growth of Nigeria during the period under review from 2013 to 2022. They used a descriptive research method and performed regression analysis, and the study results showed that financial agencies, internet banking, mobile devices, and POS banking contributed largely to Nigeria's economic growth. Zuo (2023) conducted a study on the role of fintech in the economic development of China through a fixed-effects panel data model which included data from 2011 to 2020. The research took into consideration GDP as influenced by factors like the fintech index, fiscal expenditure to GDP ratio, industrial output to GDP ratio, labor force, education, and urbanization. The results indicated that China's economic growth and development was significantly enhanced by fintech adoption.

Okon et al. (2023) examined the impact of financial inclusion and fintech on economic growth in Nigeria, using quarterly data from 2009Q1 to 2019Q4. Utilizing the autoregressive distributed lag (ARDL) model, the findings provided evidence of a long-run relationship between fintech innovations and economic growth. Agya et al. (2022) analyzed the impact of financial inclusion on Nigeria’s economic growth using annual time series data from 1980 to 2019 and applying the ARDL method. The findings indicated that financial inclusion, human capital, and investment had a significant positive impact on economic growth in both the short and long run.Abang and Ayodele (2022) used quarterly data from 2009 to 2020 to examine the effect of fintech on Nigeria's economic growth. The study employed ARDL and the study's findings showed that financial innovation significantly and favourably influenced Nigeria's economic growth.

Noor et al. (2020) explored the relationship between FI, FL, and FinTech in the Indonesian economic industry. For the study, the authors used an approach that involved an intensive examination of thirty journals and reports. In conclusion, the role played by sex, ages, education level, and occupation was found to be significant in the growth of FI, FL, and FinTech in the Indonesian economic industry. The study was based on the impact that the total picture of FinTech had on the Chinese economic industry using data from the provinces from the years 2011 to 2018 to reveal the role played by FinTech innovation and green finance in the growth of the green economic industry while having little or no impact on the region.

Financial inclusion vis-à-vis economic growth was studied by Ozili (2020), from 2014 to 2017 using descriptive analysis and econometric method. The study's main conclusion was that due to lack of confidence in Nigeria's financial institutions, financial inclusion in that country has not aided in economic growth.In Malaysia, Rosmah et al. (2020) looked into the impact of financial inclusiveness on economic growth in 63 developed and developing nations between 2014 and 2017. A cross-sectional threshold regression technique was and the study showed that there was a non-monotonic positive

relationship between financial inclusivity and economic growth. When the financial inclusion index was high, the positive effect was more noticeable. Salami and Oluseyi (2013) examined the impact of financial sector development on the Nigerian economic growth in Nigeria. The OLS method was employed and the study found that only the real interest rate was negatively related and all the explanatory variables were statistically insignificant.

3. Methodology

3.1. Model Specification

This study adapts and modifies the model of Salami and Oluseyi (2013). The model was adapted because some of the variables of this study were included in their model and they are good in explaining the relationship between financial development and sustainable economic growth in Nigeria.The model ofSalami and Oluseyi (2013)adapted for this study is thus specified functionally as;

$$RGDP = f\ (M2GDP, RINTR, CRGDP)$$

Where, GDP = Real Gross Domestic Product; M2GDP = Percentage on money supply to GDP; CRGDP = Credit to private sector as a share of GDP.This current study therefore modifies the model and it is stated as;

$$RGDP = f\ (FINO, FINTEC, BMS, URBN, LITR, INSQ, CAPT)$$

Where, RGDP = Real Gross Domestic Product, proxy for economic growth; FINO = Financial inclusion, proxied with financial institutions access index; FINTEC = Financial technology, proxied with financial technology index; BMS = Broad Money Supply URBN = Urbanisation; LITR = Literacy rate; INSQ = Institutional quality; CAPT = Capital expenditure on transport and communication. The model can be expressed econometrically as in equation3.3.

$$\mathrm{RGDP}_t = \beta_0 + \beta_1 \mathrm{FINO}_{t-1} + \beta_2 \mathrm{FINTEC}_{t-1} + \beta_3 \mathrm{BMS}_{t-1} + \beta_4 \mathrm{URBN}_{t-1} + \beta_5 LITR_{t-1} + \beta_6 \mathrm{INSQ}_{t-1} + \beta_7 CAPT_{t-1} + \mu_t \quad 3.3$$

Where, t-1 is the lagged value of the variables; ln = Natural logarithm; μ_t is the stochastic error terms which explain other variables that cannot be captured in the model; β_0, β_1 to β_8 are the slopes of the coefficients.

3.2. Estimation Techniques and Procedure

This section discusses the estimation technique employed to measure our variables and the procedures taken to do this. The study adopted the Vector Error Correction Model (VECM) for the models which were used to estimate the parameters. The VECM model employed in this study is efficient in establishing significant relationship, elasticity and impact between the variables of the study. The time series data in the study was tested for stationarity using the Augmented Dickey-Fuller (ADF) unit root test. The long-term relationship between the dependent and independent variables was also examined using Johansen co-integration.

4. Presentation of Results and Discussion of Findings

4.1 Results' Presentation

4.1.1 Augmented Dickey Fuller Stationarity Test

Table 1: Summary of the ADF Unit Root Test

Variables	ADF Statistics	Critical Value @5%	Order of Integration	Remarks
RGDP	-3.6277	-2.9458	I(1)	Stationary
FINO	-7.0030	-2.9540	I(1)	Stationary
FINTEC	-3.9261	-2.9458	I(1)	Stationary
BMS	-3.9469	-2.9458	I(1)	Stationary
URBN	-3.5288	-2.9458	I(1)	Stationary
LITR	-4.8062	-2.9458	I(1)	Stationary
INSQ	-6.1024	-2.9458	I(1)	Stationary
CAPT	-9.2457	-2.9458	I(1)	Stationary

Source: Author's Compilation using Eviews 13.0

From the ADF test results, all the variables—real GDP, financial inclusion, fintech, broad money supply, urbanization, literacy rate, institutional quality, and capital—are found to be stable at first differences and hence are I (1) processes. This shows same order of integration, and Johansen cointegration analysis becomes suitable for long-run check.

4.1.2 Lag Length Selection

The appropriate lag length is presented in this section before the long and short run coefficients of the model are estimated.

Table 2: Summary of VAR Lag Order Selection Criteria

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-259.7066	NA	0.001537	16.22464	16.58743	16.34671
1	65.98056	93.97268*	6.23e-10*	7.364814*	3.629922*	0.463424*
2	162.9143	473.9636	2.47e-11	-1.631170	4.536255	1.443981

Source: Author's Compilation using Eviews 13.0

The lag selection results show that most criteria identify lag 1 as the optimal lag length, as indicated by the asterisks. This implies that a one-period lag provides the best model fit, capturing the dynamic relationships among the variables efficiently without over-parameterization.

4.1.3 Cointegration Test

Table 3 presents the Johansen co-integration test results, which examine the existence of long-run equilibrium relationships among the variables in the model.

Table 3: Johansen Cointegration Test

Hypothesized No of CE(s)	Eigenvalue	Trace statistic	Critical value @ 5%	Max-Eigen statistic	Critical value @ 5%
None*	0.9101	271.4755	159.5297	79.5143	23.8769
At most 1*	0.8194	191.9612	125.6154	56.4823	27.5843
At most 2*	0.7723	135.4780	95.7537	48.8423	40.0776
At most 3*	0.6316	86.6357	69.8189	32.9525	33.8769
At most 4*	0.4923	53.6833	47.8561	22.3709	27.5843
At most 5*	0.3865	31.3124	29.7971	16.1242	21.1316
At most 6*	0.3543	15.1883	15.4947	14.4328	14.2646
At most 7	0.0226	0.7555	3.8415	0.7555	3.8415

Source: Author's Compilation using Eviews 13.0

The result shows strong cointegration evidence for the variables. The trace statistic consistently exceeds the critical values across all ranks, indicating the presence of six cointegrating equations. The max-eigen statistic further supports this conclusion, with four cointegrating equations. This shows a very interdependent system with strong long-run equilibrium relationships among the variables. This outcome means that any deviation from equilibrium will be adjusted in the long term, justifying the existence of stable long-run dynamics within the system.

4.1.4 Vector Error Correction Mechanism (VECM)

The VECM is employed to capture both the short-run dynamics and the long-run equilibrium adjustments among the co-integrated variables.

Table 4: Summary of VECM Result

	Coefficient	Std. Error	t-Statistic	Prob.
COINTEQ1	-0.230199	0.213679	-3.054181	0.0038
D(RGDP(-1))	0.421089	0.198052	2.726150	0.0348
D(FINO(-1))	0.023948	0.022456	0.175827	0.8606
D(FINTEC(-1))	0.029456	0.031134	3.402035	0.0001
D(BMS(-1))	0.095833	0.050605	2.893730	0.0398
D(URBN(-1))	0.021546	0.020828	1.034484	0.3022

D(LITR(-1))	-0.161766	0.202436	-0.314572	0.7534
D(INSQ(-1))	-0.011216	0.011209	-3.005352	0.0060
D(CAPT(-1))	0.058487	0.057906	3.073530	0.0044
C	-0.413714	0.217002	-2.806600	0.0209
R-squared	0.629918	F-statistic	5.821211	
Adjusted R-squared	0.516137			
S.E. of regression	0.013578			
Durbin-Watson stat	1.995996			

Source: Author's Compilation using Eviews 13.0

From the result in Table 4, the coefficient of the lagged value of RGDP is 0.4211 and it implies that 1 per cent increase in the lagged one value of RGDP increases its present value by 0.42%. The coefficients of FINO, FINTEC, BMS, URBNand CAPT are 0.0239, 0.0295, 0.0958, 0.0215, and 0.0585, implying that a 1% increase in FINO, FINTEC, BMS, URBN and CAPT increases economic growth by 0.024%, 0.03%, 0.09%, 0.022% and 0.059% respectively. On the contrary, LITR and INSQ have negative coefficient values of -0.1618 and -0.0112, meaning that 1% increase in LITR and INSQ increases RGDP by 0.16% and 0.011% respectively. Similarly, FINTEC, BMS, INSQ and CAPT are statistically significant, while FINO and URBN are insignificant. The coefficient of the error correction term (COINTEQ1) is -0.2302, indicating that 23.02% of deviations from the long-run equilibrium are corrected in each period. From the result, R^2 of 0.6299 reveals that about 63 percent of the variations in RGDP are explained by FINO, FINTEC, BMS, URBN, LITR, INSQ and CAPT while the remaining 37 percent can be attributed to other variables which influence RGDP but are captured by error term. The percentage is quite high and it shows out model is a good fit. The Durbin-Watson statistic is close to 2, indicating that the residuals are normally distributed, and there is no significant autocorrelation. This suggests that the model is adequately specified, and the errors are independently distributed. This result enhances the reliability of the regression estimates.

4.1.5 Post-Estimation Test

Table 5: Summary of Serial Correlation Test

Lag	LRE* stat	Df	Prob.	Rao F-stat	Df	Prob.
1	55.06776	64	0.7793	0.766295	(64, 52.6)	0.8458
2	51.95057	64	0.8600	0.708171	(64, 52.6)	0.9063

Source: Author's Compilation using Eviews 13.0

The result suggests that for lags 1 and 2, there exists no serial correlation because all the p-valuesare significantly larger than 0.05, the model residuals are uncorrelated and aligned with the white noise assumption, which is necessary for valid estimation and inference.

Table 6: Summary of Heteroscedasticity Test

Joint test:		
Chi-sq	Df	Prob.
294.9519	294	0.4734

Source: Author's Compilation using Eviews 13.0

The heteroscedasticity test shows a p-value of 0.4734, which is greater than 0.05, indicating that the null hypothesis of homoscedasticity cannot be rejected; hence, the model's residuals have constant variance and are free from heteroscedasticity.

Table 7: Summary of Normality Test

Component	Jarque-Bera	Df	Prob.
1	0.103135	2	0.9497
2	0.485697	2	0.7844
3	0.051249	2	0.9747
4	1.199720	2	0.5489
5	15.75158	2	0.0004
6	0.714557	2	0.6996
7	0.836622	2	0.6582

Source: Author's Compilation using Eviews 13.0

The normality test results show that most components have p-values greater than 0.05, indicating normally distributed residuals, except for component 5, which shows a significant deviation from normality; overall, the model largely satisfies the normality assumption.

4.2 Discussion of Findings

The findings suggest that financial inclusion (FINO) has a statistically insignificant but positive effect on economic growth, which is similar to the argument by Oyadeyi (2024), and Tidjani and Madouri (2024), Adewole et al. (2024), and Samuel et al. (2024), who all concluded a positive relationship between financial inclusion and economic growth. Financial technology (FINTEC) and broad money supply (BMS) contribute positively and significantly to economic growth, in agreement with the priori expectations and lending credence to the findings of Salami and Oluseyi (2013) in the case of BMS, as well as the beneficial effect of fintech as posited by literature. Though, urbanization (URBN) is positively related with economic growth but statistically not significant, a position which is partially maintained with Zuo (2023) who similarly detected an extremely high positive relationship between GDP and urbanization. Institutional quality (INSQ) and literacy rate (LITR), however, negatively impact economic growth, contrary to expectation that they would be positive. The negative impact of literacy concurs with Noor et al. (2020), suggesting possible inefficiencies in translating literacy improvements into economic

productivity. The negative impact of institutional quality shows the inefficiencies of the institutions that has impeded the economic performance in Nigeria. Capital formation (CAPT) affects economic growth positively. This is consistent with a priori expectations and with the findings of Abang and Ayodele (2022).

5. Conclusion and Policy Recommendations

The findings suggest that financial inclusion has a positive impact on economic growth, but the effect is not statistically significant, which means that the access to financial services has yielded benefits, and their impact is still limited. This implies that although more and more people and companies are able to use the formal financial system, the breadth and quality of financial inclusion are still not enough to support large-scale economic growth. This is due to the structural problems, like insufficient financial literacy, lack of institutional support, poor credit access for small and medium enterprises, and uneven distribution of digital financial services in different areas. Consequently, financial inclusion needs to be supported by policy measures, which will not only establish the financial infrastructure but also make credit cheaper, teach the public about finance, and use technology more in financial services, in order to have a substantial economic growth.

In light of the findings of the study, it is recommended that the government, in collaboration with financial institutions and fintech companies should establish targeted microcredit and digital finance programs for low-income earners and small businesses, supported by financial literacy training and simplified onboarding processes, to ensure effective utilization of financial services that can drive measurable economic growth.

References

Abang, S. O., & Ayodele, O. (2022). Financial innovation and economic development in Nigeria. *International Journal of Innovative Research and Advanced Studies*, *9*(4), 60–72.

Adewole, J. A., Adeyemo, A. A., & Adewale, A. A. (2024). Effect of financial technology on economic growth in Nigeria. *BERJAYA Journal of Services and Management, 22*, 52–66. https://journal.berjaya.edu.my/wp-content/uploads/2024/08/05-EFFECT-OF-FINANCIAL-TECHNOLOGY-ON-ECONOMIC-GROWTH-IN-NIGERIA.pdf

Aghion, P., Howitt, P., & Mayer-Foulkes, D. (2005). The effect of financial development on convergence: Theory and evidence. *Quarterly Journal of Economics, 120*(1), 173–222. https://academic.oup.com/qje/article-abstract/120/1/173/1931451

Agya, A. A., Ojiya, E. A., &Ushie, H. E. (2022). Financial Inclusion and Economic Growth in Nigeria: Further Evidence from ARDL Model. *NDIC Quarterly*, *38*(1), 30–48. Retrieved from https://www.researchgate.net/publication/393653999_Financial_Inclusion_and_Economic_Growth_in_Nigeria

Baker, H., Thair, A. K., Nassar, M. D., &Muqattash, R. S. (2023). Impact of Financial Technology on Improvement of Banks' Financial Performance. *Journal of Risk and Financial Management*, *16*(4), 1–20. https://doi.org/10.3390/jrfm16040230

Beck, T., Levine, R., & Loayza, N. (2000). Finance and the sources of growth. *JFE*, 58(1–2), 261–300.

Central Bank of Nigeria (2022). Financial inclusion. https://www.cbn.gov.ng/fininc/

Central Bank of Nigeria. (2022). *Payments System Vision 2025*. https://www.cbn.gov.ng/PaymentsSystem/PSV2025.html

Cevik, S. (2024). Is Schumpeter Right? Fintech and Economic Growth. *IMF Working Paper*, WP/24/20.

Demirgüç-Kunt, A., & Klapper, L. (2013). Financial inclusion and inclusive growth:

A review of recent empirical evidence. *World Bank Economic Review, 28*(3), 1–23.

Enhancing Financial Innovation & Access (EFInA). (2022). *Access to financial services in Nigeria: EFInA 2022 report*. https://www.efina.org.ng/publication/access-to-financial-services-in-nigeria-2022/

Enhancing Financial Innovation & Access. (2023). *Access to financial services in Nigeria survey 2023*. EFInA. https://www.a2f.ng/efina-report-nigerias-formal-financial-inclusion-grows-to-64-in-2023/

Ezie, O., Oniore, J., &Ajaegbu, P. C. (2023). Financial Technology and Economic Growth in Nigeria: 2012Q1-2022Q4. *American Journal of Financial Technology and Innovation, 1*(1), 35–45. https://doi.org/10.54536/ajfti.v1i1.2325

Greenwood, J., & Jovanovic, B. (1990). Financial development, growth, and the distribution of income. *Journal of Political Economy, 98*(5, Part 1), 1076–1107. https://doi.org/10.1086/261720

International Monetary Fund (2022). Financial access survey. https://data.imf.org?sk=E5DCAB7E-A5CA-4892-A6EA-598B5463A34C

Inuwa, A.S., Shuaib, K.M., Gambo, B.B., Shehu, U.R., &Shehu, U.Y. (2022). Effect of financial technology (FinTech) on Nigeria's development amid Covid-19 recovery. *Baze University Journal of Entrepreneurship and Interdisciplinary Studies, 1*(2), 74-85.

Joghee, S., Kabiraj, S., & Bishnoi, M. M. (2022). Fintech Innovations in the Financial Service Industry. *Journal of Risk and Financial Management, 15*(7), 1-19. https://doi.org/10.3390/jrfm15070287

King, R. G., & Levine, R. (1993). Finance and growth: Schumpeter might be right. *The Quarterly Journal of Economics, 108*(3), 717–737. https://doi.org/10.2307/2118406

Levine, R. (1997). Financial development and economic growth: Views and agenda. *Journal of Economic Literature, 35*(2), 688–726. https://www.jstor.org/stable/2729790

McKinnon, R. I. (1973).*Money and capital in economic development.* Washington, DC: Brookings Institution.

Noor, M., Fourqoniah, F., &Aransyah, M. F. (2020). The Investigation of financial inclusions, financial literation, and financial technology in Indonesia. *JurnalPerspektifPembiayaan Dan Pembangunan Daerah*, *8*(3), 257 - 268. https://doi.org/10.22437/ppd.v8i3.9942

Okon, E. V., Umoh, E. D., & Samuel, U. E. (2023). Effect of Fintech and Financial Inclusion on Economic Growth in Nigeria. *International Journal of Economics, Commerce and Management*, *11*(9), 282–301.

Organisation for Economic Co-operation and Development. (2024). *Development Co-operation Report 2024: Tackling poverty and inequalities through the green transition*. OECD Publishing. https://doi.org/10.1787/357b63f7-en

Owolabi, O. A., Oku, A.-R. O., Alejo, A., Ogunbiyi, T., & Ubah, J. I. (2021). Access to electricity, information and communications technology (ICT), and financial development: Evidence from West Africa. *International Journal of Energy Economics and Policy, 11*(2), 247–259. https://econjournals.net.tr/index.php/ijeep/article/view/10344

Oyadeyi, O. (2024). Banking innovation, financial inclusion and economic growth in Nigeria. *Journal of the Knowledge Economy, 15*(2), 7014–7043. https://doi.org/10.1007/s13132-023-01396-5

Ozili, P.K. (2020). Financial inclusion in Nigeria: Determinants, challenges and achievements. *Munich Personal RePEc Archive, MPRA Paper No. 99173,* 1-16.

https://mpra.ub.uni-muenchen.de/99173/MPRAPaperNo.99173

PricewaterhouseCoopers (2018). *Financial focus: Confronting the big talent challenge in financial services.*https://www.pwc.com/ng

Romer, P. M. (1986). Increasing returns and long-run growth. *Journal of Political Economy, 94*(5), 1002–1037. https://doi.org/10.1086/261420

Rosmah, N., Zulkefly, A.K., Tamat, S., &Aisyah, A.R. (2020). Financial inclusion and firm growth in ASEAN-5 countries: A new evidence using threshold regression. Center for Sustainable and Inclusive Development Studies (SID), Faculty of Economics and Management, UniversitiKebangsaan Malaysia, Bangi, Selangor, Malaysia.

Salami, G. O., & Oluseyi, O. A. (2013). Impact of financial sector development on the Nigerian economic growth. *American Journal of Business and Management*, *2*(4), 347–356. https://doi.org/10.11634/216796061706361

Samuel, U. E., Onwumere, J. U. J., Prince, A. I., Edet, I. V., Ogbodo, I., & Jack, A. E. (2024). Effect of financial technology on economic growth in Nigeria (1999Q1–2020Q4). *Journal of Xi'an Shiyou University, Natural Science Edition*, *18*(3), 390–401.

Shaw, E. S. (1973).*Financial deepening in economic development.* New York: Oxford University Press.

Tidjani, C., &Madouri, A. (2024). Fintech, financial inclusion, and sustainable development in the African region. *Frontiers in Applied Mathematics and Statistics*, *10*, 1-25. https://doi.org/10.3389/fams.2024.1276218

van Niekerk, A. J. (2020). Inclusive economic sustainability: SDGs and global inequality. *Sustainability, 12*(13), 5427. https://doi.org/10.3390/su12135427

World Bank (2020). Beyond economic growth: An introduction to sustainable development. *WBI Learning Resources Series 24894*, Washington D.C. https://www.worldbank.org/depweb

World Economic Forum. (2023). *How Are Emerging Technologies Transforming Financial Services?*https://www.weforum.org.

Xiao, J., &Qamruzzaman, M. (2022). The impact of financial development on economic growth: Evidence from emerging economies. *Journal of Economic Studies*, *49*(3), 456–478.

Zuo, J. (2023). How Fintech Affects Economic Development. *Academic Journal of Business and Management*, *5*(5), 9–16. https://doi.org/10.25236/AJBM.2023.050502