



Investigating the Financial Inclusion, Domestic Investment, and Financial Development Nexus in Nigeria

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ABSTRACT

Nigeria is a developing nation with a population of over 200 million. Of this aggregate, approximately 106 million are aged 18 years and above. Of this adult population, 70 million live in rural areas, and many do not have adequate access to relevant financial products and services. The proportion of individuals and firms that use or have access to financial services can be referred to as financially inclusive. This study analyzes the impact of financial inclusion and domestic investment on Nigeria's financial development. Multiple regression analysis was employed in this study which spanned over the period, 1982-2021. The empirical results reveal that financial inclusion and domestic investment have positive impacts on financial development; however, domestic investment has a more significant impact to a larger extent. The study recommended that policies should be directed towards creating a more inclusive financial system to improve the current level of financial inclusion to achieve better financial development in Nigeria. This study concludes that governments should formulate policies that boost financial inclusion and investment to deepen the level of financial development in the economy.

Keywords

financial inclusion; financial development; investment, deposits

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INTRODUCTION

Nigeria is a developing nation with a population of over 200 million. Of this aggregate, approximately 106 million are aged 18 years and above. Of this adult population, 70 million people live in rural areas. This indicates that two-thirds of the adult population resides in rural areas, of which 19% do not have formal education and are also limited in their level of financial literacy ([Enhancing Financial Innovation & Access \(EFInA\), 2022](#)). EFInA (2022) further observed that, between 2018 and 2020, entrepreneurship in the formal sector, privately owned businesses, and farming fell by 1%, -0.4% and 3.1%, respectively.

Over time, the financial authorities in Nigeria have enacted policies to ensure that all citizens have access to modern banking systems. For example, in 2005, financial authorities introduced policies that ensured that commercial banks owned and operated branches in rural areas ([Kama & Adigun, 2013a](#)). This policy came into effect as a preventive measure after the banking crisis in the 1990s. Prior to 2005, there was great disparity in the number of banks domiciled in urban and rural areas. Urban areas in 2004 had 2765 branches, while rural areas had 722 branches. From 2002 to 2004, the number of bank branches in the urban centers increased by more than 500 branches, while the rural centers maintained the same number until 2005, when the bank consolidation program was implemented ([Central Bank of Nigeria, 2018](#); [National Bureau of Statistics, 2021](#); [Wezel & Ree, 2023](#)).

This policy gave birth to microfinance banks that were established to provide loans to micro, small, and medium enterprises. Studies have also shown that well-functioning financial systems serve a vital purpose by offering savings, payments, credit, and risk management services to individuals and firms. The proportion of individuals and firms that use or have access to financial services can be referred to as financially included ([The International Monetary Fund, 2014](#)). Anthony-Orji et al. (2019) observed that there has been a major increase in the activities of the financial sector through conscious government efforts. For example, the Central Bank ensured that banks established their outlets in villages to help the elderly have access to banking facilities. Again, the government also enabled these banks to establish their outlets by ensuring that they had the necessary facilities in newly established areas.

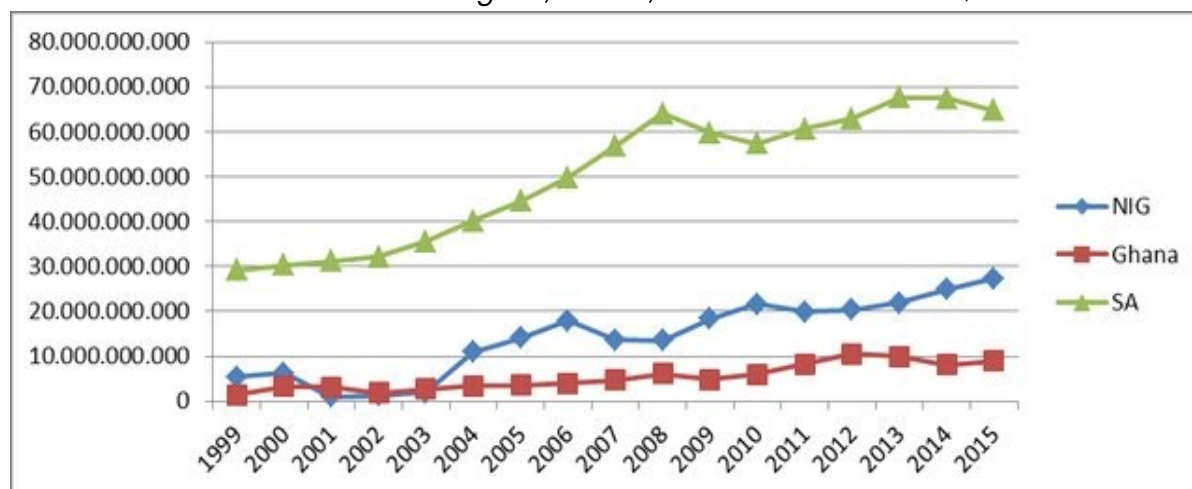
Expanding the financial net has now become another vital channel through which the economy can grow. As observed by Orji et al. (2019), this discovery has been a quantum leap through which government policies are adopted and implemented for better economic prosperity globally. Despite this, there is still a global cash out-of-bank hovering around 54% of the ages 35 and above. This percentage does not even have any form of modern banking services close to them. For continents such as Africa, the percentage is 70%, which is far higher than the global average.

In terms of domestic investment, Akanbi (2012) noted that domestic investment in Nigeria has experienced both economic and political issues. These issues have inhibited the growth of domestic investment. Since 1970, the average growth in local investment has been 11%, and within that period, Nigeria's financial development was less than 5%, and even economic growth at this period was seven percent. Within this period, local investment was unstable but continued to increase. Seven years later, local investment jumped to forty-one percent an increase of over 110 %. It further increased by 25 percent between 1977 and 1993.

This unstable growth in domestic investment could be traced to Nigeria's political situation, which was largely controlled by military coups and indirectly affected investment in Nigeria (Adepoju, 1981; Agbese, 1992; Obioha, 2016). The investment climate in Nigeria has experienced some level of volatility, as shown in Figure 1. However, it is still trailing behind the South African economy (The World Bank, 2018). The figure also shows an upward movement of the investment curve in Nigeria from 2012 to 2015 due to the economic recession that hit Nigeria in 2016.

Figure 1

Trend of domestic investment of Nigeria, Ghana, and South Africa in US\$



Source: The World Bank (2018)

Following Kama & Adigun (2013b), a large depository of savings, investable funds, investment, and global wealth generation can be enhanced by providing access to hundreds of millions of men and women across the globe, who are currently excluded from financial services. This is also true for Nigeria, because the accumulation of capital and the rise in investment can occur when low-income earners are given access to financial products and services. This is because low-income earners contribute to a larger share of the population in developing countries, especially in Nigeria (Adedeji & Olotuah, 2012; Kapsos & Bourmpoula, 2013).

It is worth noting that the financial inclusion agenda has become pivotal in many economies (Beck, 2016). Many countries have adopted clear-cut financial inclusion

patterns and policies with specific goals, including every household in its financial system. Sudden attention to inclusive financing has increased because it has been argued that nations can experience positive growth, reduce poverty, promote a saving culture, and reduce the number of financially exclusive persons in the economy. Furthermore, 1.7 billion or more persons are financially excluded from the financial system ([The World Bank, 2022](#)). This means that this huge number has no bank accounts, experience in modern banking, etc. The cause of this exclusion is due to distance, terrain, over-concentration in urban centers, and, most importantly, very high interest rates for borrowing ([Gloukoviezoff, 2007](#); [Koku, 2015](#); [Kramer-Nevo et al., 2017](#)). These challenges pose a serious threat to the attainment of inclusive financial goals. The table below shows the financial inclusion index.

Table 1

Financial Inclusion Index of some countries

No.	Countries	Financial Inclusion index
1	Nigeria	0.048
2	Brazil	0.209
3	South Africa	0.209
4	Egypt	0.216
5	Kenya	0.218
6	China	0.297
7	Jordan	0.352

Source: Enhancing Financial Innovation & Access (EFInA) ([2022](#))

From [Table 1](#), it can be observed that most countries are still below the benchmark for high financial inclusion. However, other emerging economies, such as Brazil, South Africa, Egypt, Kenya, China, and Jordan seem to perform better than Nigeria in terms of Financial Inclusion Index. However, [Dacanay et al. \(2011\)](#) admit that financial inclusion does not only include allocation of resources in the economy but also useful in comparing economies, their opportunities, and how the poor and rich households gain from the financial system. The scholar further opined that some countries have pushed forward financial inclusion.

Local and foreign scholars have studied financial development and economic growth ([Adu et al., 2013](#); [O. I. A. Orji et al., 2019](#); [A. Orji et al., 2022](#)). However, it is still not clear how financial inclusion and investment contribute to financial development in these economies, particularly in Nigeria. Based on this background, the broad objective of this study investigates how financial inclusion and domestic investment impact financial development in Nigeria. The remainder of the paper reviews the literature, captures the methodology, presentation of results, conclusion, and recommendations.

LITERATURE REVIEW

Studies on the contribution of financial inclusion and financial development to the economy have been carried out by different researchers and economists using different econometric models and techniques (Anthony-Orji et al., 2021); however, no study has investigated how financial inclusion and financial investment contribute to financial development in Nigeria. For example, Rafindadi & Yusof (2015) analyzed the dynamics of financial development and how it spurs economic growth in Nigeria. This study adopted the ARDL bounds testing approach and found a positive relationship between financial development and economic growth in Nigeria.

Rasheed et al.'s (2016) study the role of financial inclusion in financial development in different countries. The study utilized the generalized method of moments (GMM) technique and found that financial inclusion contributes to financial development in the economies investigated. The study focused on a panel of 97 countries from 2004–2012 and the results showed that financial development was determined by the financial inclusion levels of those countries. Thus, the role of financial inclusion in the financial development of these countries is positive and significant. The results remain robust even when alternative measures of financial development are used.

Adeola & Evans (2017) investigated the impact of financial inclusion and financial development on economic diversification in Nigeria from 1981 to 2014. This study adopted the fully modified least squares (FMOLS) technique and found that financial inclusion and financial development have a positive effect on economic diversification. Other studies also investigated the relationship between financial development and economic growth. Allen, et al. (2014) adopted the OLS technique to investigate the impact of African financial development on financial inclusion gaps. The findings show a positive relationship between financial development and inclusion. Lenka (2022), in another study, also adopted Principal Component Analysis (PCA) to analyse the relationship between financial inclusion and financial development in India. The results show that financial inclusion and development are positively related in India.

In an earlier study, Dacanay et al. (2011) also analysed the empirical relationship among microfinance, financial inclusion and financial development utilizing the Generalized Least Squares (GLS) approach. The results showed a positive relationship between the variables of interest. Similarly, Evans (2015) empirically underscores the effects of Economic and Financial development on financial inclusion in Africa. Adopting the Fully Modified OLS (FMOLS) technique, this study revealed that economic and financial development are positively related to financial inclusion. More recently, Odugbesan et al. (2022) investigate the causality between financial inclusion, financial development, and sustainable development in sub-Saharan African economies, focusing on the mediating role of foreign direct investment and utilizing panel Granger

causality. The results of the analysis showed a bidirectional relationship between the core variables of the study.

In another related study based on the effects of financial inclusion on financial Development in Kenya, Karanja (2020) adopted the autoregressive distributed Lag (ARDL) model and concluded that financial inclusion has a positive effect on financial development. Furthermore, in another study on financial inclusion, institutional quality and financial development in OIC countries, Ali et al. (2022) also argued that financial included and institutional quality are positively related to financial development, all things being equal. The Arrelano-Bond GMM and two-stage least squares methods were used, while the data began from 2000 to 2016.

Kapingura (2018) evaluated the relationship between foreign capital flows, domestic investments, and savings in the SADC region using the dynamic ordinary least squares (DOLS) method. This finding indicates that domestic investment and savings are positively linked. The results also show that foreign direct investment influences domestic investment, which improves the financial sector. Asif et al. (2020) evaluated the dynamic interaction between financial development and natural resources using the resource curse hypothesis as the theoretical framework and the ARDL bounds test technique as the econometric approach. The data were collected from 1975 to 2017. The results show that in the short run, a positive relationship exists between financial development and natural resources. However, in the long term, a negative relationship is evident. In another study,

Tougem et al. (2022) analyzed domestic investment, foreign direct, and economic growth in SSA countries using panel lapse methods for the year 1990–2018. The study observed that domestic investment positively influences economic growth, and that the financial sector improves when foreign direct investment increases in these countries. Recently, Abbas et al. (2023) investigated the impact of income from international tourism and domestic investment in South Asia. The data used were from 1995 to 2019, and the econometric approach was the cross-sectional autoregressive distributed lag (ARDL) method. The empirical outcome indicates that economic growth and international tourism earnings influence domestic investment, while financial development also influences domestic investment in the long run. In addition, Dash (2022) ascertained whether remittances crowd out domestic investments. This study used second-generation panel methodology for estimates. The data collection began in 2004 and ended in 2018. The findings show that for developing countries, remittances improve domestic investment, which indirectly influences the financial sector.

Essentially, many empirical studies have been carried out to determine and evaluate the impact of financial inclusion on economic growth; however, most of these studies are geared towards ascertaining the impact of financial inclusion on the economic growth of Nigeria or ascertaining the level of financial inclusion in Nigeria.

None of these studies have reviewed the impact of financial inclusion and domestic investment on financial development in Nigeria. To fill this gap, this study focuses on the impact of financial inclusion and domestic investment on financial development in Nigeria.

METHOD

This study uses quantitative method to analyzes the impact of financial inclusion and domestic investment on Nigeria's financial development. Multiple regression analysis was employed in this study using E-Views ([IHS Global Inc., 2022](#)). The data used in this study spanned over the period of 1982 until 2021. The model is specified based on the financial liberalization theory and available information related to the impact of financial inclusion and investment on financial development. In modeling the impact of financial inclusion and domestic investment on financial development, it is pertinent to note that the ratio of Credit to Private Sector to Gross Domestic Product (CPS/GDP) represents financial depth, which is used as a proxy for financial development. This choice is due to the availability of data and closeness to the measure of financial development.

The econometric model is as follows:

$$LFID_t = \beta_0 + \beta_1 LDRCB_t + \beta_2 LINV_t + \beta_3 LFDI_t + \beta_4 LLDR_t + \beta_5 RINTR_t + \mu_t$$

where:

β_0 is the intercept term for the regression.

μ_t is the stochastic error term

L is Logarithm

FID is Financial Depth measured as CPS/GDP. We also use it as a proxy for financial development ([Okere et al., 2021](#)). Essentially, financial sector development is about reducing "costs" that are obtainable in the financial system. The idea of reducing the costs of acquiring information, making transactions, and enforcing contracts has resulted in the emergence of financial intermediaries, markets, and contracts. Nkoro & Uko (2016) and Osuji & Chigbu (2012) used the variable to capture financial development in their study because of their consensus that it is one of the closest to the measure of financial development.

DRCB is the deposit of rural branches of commercial banks. This is the total deposit from the rural branches of commercial banks. This is a measure of financial inclusion because these deposits help us determine the accessibility of rural dwellers (financially excluded) to finance ([Mbutor & Uba, 2013](#)). INV is a domestic investment that results

generally from acquiring an asset, also called investment. As investments increase, income will also increase, and subsequently, finance will develop as participation in the financial system increases.

FDI is foreign direct investment (FDI). Foreign Direct Investment is the sum of equity capital, other long-term capital, and short-term capital, as shown in the balance of payments. Foreign Direct Investment involves the use of financing. Thus, the more foreign direct investments is on the increase, the more access to finance is available (Borensztein et al., 1998; Dries & Swinnen, 2004). LDR is the loan-to-deposit ratio, which is the ratio of loans to deposits made available to the private sector. If the loan-to-deposit ratio is high, it is expected that there will be an increase in the development of finance because financial inclusion will be expanded (Han & Melecky, 2013; Ibekwe et al., 2021).

RINTR is the real interest rate. It is a percentage fee charged by a lender to a borrower for the use of assets. When this interest rate has been deflated from inflation (price changes), it becomes the real interest rate. Interest can be either in savings or borrowings. If the interest rate on loans is high, credit to the private sector will fall and subsequently reduce the rate of financial development, while a low interest rate on credit to private firms will be stimulated, subsequently increasing the rate of financial development (De Gregorio & Guidotti, 1995; Asamoah, 2008).

RESULTS AND DISCUSSION

Unit Root Test

Table 2 presents Unit Root Tests results from the estimation. From data in the table, it can be observed that LDR and RINTR are integrated at order zero $I(0)$. LINV is integrated at order zero, $I(0)$, using the Phillips-Perron test for stationarity. This means that LINV, LDR, and RINTR are integrated in level form, while LFDI and LDRCB are integrated in order one $I(1)$.

Table 2

Unit Root Test Results

Variable	ADF Test Statistic	Phillips-Perron Test Statistic	Mackinnon Critical Value at 5%	Order of Integration
LDRCB	-4.935363	-	-3.557759	$I(1)$
LINV		-3.756454	-3.552973	$I(0)$
LFDI	-5.360797	-	-3.562882	$I(1)$
LDR	-3.999667	-	-3.568379	$I(0)$
RINTR	-4.380358	-	-3.603202	$I(0)$

Source: Authors' Estimation.

Cointegration Test

The cointegration test seeks a long-run relationship between variables of interest. It is also used to test whether the variables are fit for the model when tested jointly. The residuals for the equations above were obtained, and the ADF test was also employed to test for cointegration. From Table 3, it can be observed that the error term is stationary at the 5% level of significance since $|-4.201927| > |-3.557759|$.

Table 3

Cointegration Test Results

Value Residual term μ_t	ADF Test Statistic	Critical values
	-4.201927	1%
		-4.273277
		5%
		-3.557759
		10%
		-3.212361

Source: Authors' Estimation.

Since the ADF test statistics are greater than the ADF critical value at the 5% level of significance, we fail to accept the null hypothesis, and thus say that a long-run link is present between the dependent and independent variables. This implies that LFDI, LFDI, LDRCB, LINV, LDR and RINTR are all co integrated at lag length one (1) and at level form.

Regression Results

The empirical results on the impact of inclusion on Nigeria's financial development are presented in Table 4. The coefficient of the constant is (-4.923904). This shows that the dependent variable decreases by 4.923904 units on average when all explanatory variables are fixed.

Table 4

Regression Results

Variables	Coefficient	Standard Error	t-Value	Probability
CONSTANT	-4.923904	2.455911	-2.004919	0.0547
LDRCB	0.451054	0.454280	0.992899	0.3280
LINV	5.432026	2.516623	2.158459	0.0383
LFDI	1.593781	0.732067	2.177096	0.0367
LDR	0.124525	0.064586	1.928045	0.0625
RINTR	-0.478377	0.589175	-0.811945	0.4230
R-squared	0.698260			
Adjusted R-squared			0.691357	
Durbin-Watson statistic			1.540495	
F-statistic			10.23993	

Source: Authors' Estimation.

The coefficient of LDRCB is 0.451054, which shows a positive relationship between the funds deposited by rural dwellers in banks and financial development in Nigeria. Holding all other explanatory variables constant, on average, a 1% increase in the deposits of rural money deposit banks results in an increase in financial development by 0.45%. This result agrees with Onaolapo ([Onaolapo, 2015](#)), who studied the effects of financial inclusion on economic growth. This finding supports Oyewo & Oyewole ([2014](#)), who studied Nigeria's financial system, financial inclusion, and economic development.

The coefficient of domestic investment (LINV) was 5.432026. This finding shows a positive relationship between domestic investment and financial development in Nigeria. Therefore, holding all the other explanatory variables constant, on average, a one percent (1%) increase in investment will increase financial development by 5.4%. This conforms to prior expectations. As investments continue to increase, it would reflect in the income of individuals and improve their ability to save and have more access to finance. When the level of financial inclusion has increased through access to finance, participation in the financial system also improves, and finance is developed. Statistically, the investment figure has been on the increase in Nigeria since the mid-1980s and is responsible for the positive link between investments and financial development in Nigeria ([Brownbridge, 1998](#); [Alene, 2010](#); [Iyoboyi & Muftau, 2014](#)).

Furthermore, the slope coefficient of FDI was 1.593781. This shows a positive relationship between FDI and financial development in Nigeria. Holding all other explanatory variables constant, on average, a one percent rise in FDI leads to a 1.59% increase in financial development. This variable conforms to the prior expectations. FDI in developing countries (e.g., Nigeria) has risen sharply over the past 20 years. The FDI inflow into Nigeria, as in 2003 was US\$2.23 billion. It rose to US\$5.31 billion a year later (a 138 % increase), it increased furthermore to US\$9.92 billion (an 87% increase) the following year, FDI slightly reduced to US\$9.44 billion in 2006 ([LOCOMonitor.com](#)). The sudden and consistent rise in FDI has which reflected in income, to an extent has improved the access to finance and subsequently developed finance. The positive relationship between FDI and financial development in Nigeria can be largely attributed to the persistent increase in FDI inflow into Nigeria, despite a slight decline in 2006. This conforms with the work of [Olugbenga & Grace \(2015\)](#) in their study on the impact of FDI on Nigerian capital market development.

The coefficient of the explanatory variable LDR is 0.124525, which implies that there is a positive relationship between loans and the ratio of deposits and financial development in Nigeria. Holding the other explanatory variables constant, on average, a one percent (1%) increase in the loan to deposit ratio will result in a 0.12% increase in Nigeria's financial development. Evidence from Nigeria shows that the loan-to-deposit ratio has been relatively high to some extent ([Toby, 2014](#); [Toby & Peterside, 2014](#)). A high

loan-to-deposit ratio means that a good number of the population has access to financial services and also has a high participation in the financial system. This helps to develop finance to a great extent and explains the reason for the positive relationship between the loan-to-deposit ratio and financial development. This conforms to prior expectations. In his study on the effects of inclusive financing on economic growth, Onaolapo (2015) obtained a similar result when he regressed financial intermediation in terms of loans to deposits among other variables.

The slope coefficient of the explanatory variable, real interest rate, was -0.478377 . This finding shows an indirect relationship between the real interest rate and financial development in Nigeria. Holding all other explanatory variables constant, on average, a one-unit increase in the real interest rate will decrease financial development by 0.47%. This conforms to prior expectations. However, the investment/savings relationship established by Keynes (2017) does not agree with this because a high interest rate discourages investments. This will reduce participation in the financial system and access to finance because of a fall in income.

CONCLUSION

This study investigated the impact of financial inclusion and domestic investment on financial development in Nigeria. The results show that financial inclusion and domestic investment have direct impacts on financial development. Domestic investment is significant; thus, it underscores its relevance in enhancing the level of financial development in the economy. Government should formulate policies that boost financial inclusion and investment to deepen the level of financial development in the economy.

Based on the empirical results, the following recommendations are necessary to improve the economy. First, more financial inclusion strategies should be formulated such that growth in rural areas is supported by deposit money banks. Therefore, becomes pertinent that, banks should take steps to properly perform their roles in the financial inclusion process. Monetary authorities should formulate more targeted policies to enhance the financial system and encourage rural residents to embrace the modern banking system.

Second, the Nigerian government should engage in massive improvements and investment in Nigerian infrastructure. Investments in accessible roads, steady power supply, and so on are critical in the economy because domestic investments have a direct link with both the financial development and financial stability of Nigeria and are significant variables affecting the level of financial development in Nigeria. It is expedient for the government to update the infrastructure in the country because it will help stimulate domestic investments.

Third, rural dwellers should be given proper financial education on how to manage their finances, in line with global practices. The government should also develop policies to improve the financial literacy level of individuals in the country. This will also improve a country's level of financial development. Again, there is a need to invest more in financial infrastructure to support citizens in gaining access to more financial products and services.

Author Contributions

Conceptualization: O.I.A-O., A.O., I.O.J., & J.E.O.; Data curation: O.I.A-O., A.O., I.O.J., & J.E.O.; Formal analysis: O.I.A-O., A.O., I.O.J., & J.E.O.; Funding acquisition: O.I.A-O.; Investigation: O.I.A-O., A.O., I.O.J., & J.E.O.; Methodology: O.I.A-O., A.O., I.O.J., & J.E.O.; Project administration: O.I.A-O.; Resources: O.I.A-O., A.O., I.O.J., & J.E.O.; Software: O.I.A-O., A.O., I.O.J., & J.E.O.; Supervision: O.I.A-O. & A.O.; Validation: O.I.A-O., A.O., I.O.J., & J.E.O.; Visualization: O.I.A-O., A.O., I.O.J., & J.E.O.; Writing – original draft: O.I.A-O., A.O., I.O.J., & J.E.O.; Writing – review & editing: O.I.A-O., A.O., I.O.J., & J.E.O. All authors have read and agreed to the published version of the manuscript.

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The study was approved by Department of Economics, University of Nigeria, Nsukka, Nigeria.

Informed Consent Statement

Informed consent was not required for this study.

Data Availability Statement

The data presented in this study are available on request from the corresponding author. The data are not publicly available due to institution's policy.

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Conflicts of Interest

The authors declare no conflicts of interest.

REFERENCES

- Abbas, S., Sohag, K., & Suleman, S. (2023). Income from international tourism and domestic investment in South Asia: Evidence from heterogeneous panel econometrics. *Current Issues in Tourism*, 26(11), 1845–1860. <https://doi.org/10.1080/13683500.2022.2071681>
- Adedeji, Y. M. D., & Olotuah, A. O. (2012). An evaluation of accessibility of low-income earners to housing finance in Nigeria. *European Scientific Journal*, 8(12), 80–95. [https://www.idosi.org/aejsr/7\(1\)12/5.pdf](https://www.idosi.org/aejsr/7(1)12/5.pdf)
- Adeola, O., & Evans, O. (2017). Financial inclusion, financial development, and economic diversification in Nigeria. *The Journal of Developing Areas*, 51(3), 1–15. <https://doi.org/10.1353/jda.2017.0057>

- Adepoju, A. (1981). Military rule and population issues in Nigeria. *African Affairs*, 80(318), 29–47. <https://www.jstor.org/stable/721429>
- Adu, G., Marbuah, G., & Mensah, J. T. (2013). Financial development and economic growth in Ghana: Does the measure of financial development matter? *Review of Development Finance*, 3(4), 192–203. <https://doi.org/10.1016/j.rdf.2013.11.001>
- Agbese, P. O. (1992). With fingers on the trigger: The military as custodian of democracy in Nigeria. *Journal of Third World Studies*, 9(2), 220–253. <https://www.jstor.org/stable/45197260>
- Akanbi, O. A. (2012). Role of governance in explaining domestic investment in Nigeria. *South African Journal of Economics*, 80(4), 473–489. <https://doi.org/10.1111/j.1813-6982.2012.01320.x>
- Alene, A. D. (2010). Productivity growth and the effects of R&D in African agriculture. *Agricultural Economics*, 41(3–4), 223–238. <https://doi.org/10.1111/j.1574-0862.2010.00450.x>
- Ali, M., Nazir, M. I., Hashmi, S. H., & Ullah, W. (2022). Financial inclusion, institutional quality and financial development: Empirical evidence from OIC countries. *The Singapore Economic Review*, 67(1), 161–188. <https://doi.org/10.1142/S0217590820420084>
- Allen, F., Carletti, E., Cull, R., Qian, J. Q., Senbet, L., & Valenzuela, P. (2014). The African financial development and financial inclusion gaps. *Journal of African Economies*, 23(5), 614–642. <https://doi.org/10.1093/jae/eju015>
- Anthony-Orji, O., Orji, A., Ogbuabor, J., & James, E. (2019). Financial inclusion and monetary policy shocks nexus in Nigeria: A new empirical evidence. *Journal of Academic Research in Economics*, 11(2), 364–388. http://www.jare-sh.com/downloads/jul_2019/orji2.pdf
- Anthony-Orji, O., Orji, A., Ogbuabor, J., Mba, P., & Onwe, I. (2021). Financial inclusion and financial stability in Nigeria: A new empirical evidence. *Journal of Xi'an Shiyou University, Natural Science Edition*, 17(12), 138–160. <https://www.xisdxjsu.asia/v17i12-17-1.pdf>
- Asamoah, G. N. (2008). The impact of the financial sector reforms on savings, investments and growth of gross domestic product (GDP) in Ghana. *International Business & Economics Research Journal (IBER)*, 7(10), Article 10. <https://doi.org/10.19030/iber.v7i10.3302>
- Asif, M., Khan, K. B., Anser, M. K., Nassani, A. A., Abro, M. M. Q., & Zaman, K. (2020). Dynamic interaction between financial development and natural resources: Evaluating the 'Resource curse' hypothesis. *Resources Policy*, 65, 101566. <https://doi.org/10.1016/j.resourpol.2019.101566>
- Beck, T. (2016, November 21). *Financial Inclusion – Measuring progress and progress in measuring*. Fourth IMF Statistical Forum “Lifting the Small Boats: Statistics for Inclusive Growth.” https://www.imf.org/external/np/seminars/eng/2016/statsforum/pdf/beck_paper.pdf
- Borensztein, E., De Gregorio, J., & Lee, J.-W. (1998). How does foreign direct investment affect economic growth? *Journal of International Economics*, 45(1), 115–135. [https://doi.org/10.1016/S0022-1996\(97\)00033-0](https://doi.org/10.1016/S0022-1996(97)00033-0)
- Brownbridge, M. (1998). Financial distress in local banks in Kenya, Nigeria, Uganda and Zambia: Causes and implications for regulatory policy. *Development Policy Review*, 16(2), 173–188. <https://doi.org/10.1111/1467-7679.00057>
- Central Bank of Nigeria. (2018). *National financial inclusion strategy (Revised)*. Central Bank of Nigeria.
- Dacanay, J., Nito, B., & Buensuceso, P. (2011, July 13). Microfinance, financial inclusion and financial development: An empirical investigation with an international perspective. *MSKE 2011- II International Conference on Managing Services in the Knowledge Economy*.

- https://www.researchgate.net/publication/216506808_Microfinance_Financial_Inclusion_and_Financial_Development_An_Empirical_Investigation_with_an_International_Perspective
- Dash, R. K. (2022). Do remittances crowd-in or crowd-out domestic investment? An empirical analysis of 24 low-income countries. *Journal of the Knowledge Economy*. <https://doi.org/10.1007/s13132-022-00948-5>
- De Gregorio, J., & Guidotti, P. E. (1995). Financial development and economic growth. *World Development*, 23(3), 433–448. [https://doi.org/10.1016/0305-750X\(94\)00132-1](https://doi.org/10.1016/0305-750X(94)00132-1)
- Dries, L., & Swinnen, J. F. M. (2004). Foreign direct investment, vertical integration, and local suppliers: Evidence from the Polish dairy sector. *World Development*, 32(9), 1525–1544. <https://doi.org/10.1016/j.worlddev.2004.05.004>
- Enhancing Financial Innovation & Access (EFInA). (2022, November 24). EFInA Report on MSME financing. *EFInA: Enhancing Financial Innovation and Access*. <https://efina.org.ng/publication/efina-report-on-msme-financing/>
- Evans, O. (2015). The effects of economic and financial development on financial inclusion in Africa. *Review of Economics and Development Studies*, 1(1), 21–32. <https://doi.org/10.26710/reads.v1i1.113>
- Gloukoviezoff, G. (2007). From financial exclusion to overindebtedness: The paradox of difficulties for people on low incomes? In L. Anderloni, M. D. Braga, & E. M. Carluccio (Eds.), *New frontiers in banking services: Emerging needs and tailored products for untapped markets* (pp. 213–245). Springer. https://doi.org/10.1007/978-3-540-46498-3_6
- Han, R., & Melecky, M. (2013). *Financial inclusion for financial stability: Access to bank deposits and the growth of deposits in the global financial crisis* (SSRN Scholarly Paper No. 2312982). <https://papers.ssrn.com/abstract=2312982>
- Ibekwe, A. O., Anusui, A. O., & Ibekwe, A. I. (2021). Financial inclusion and entrepreneurship development in Nigeria. *JOURNAL OF EMERGING TRENDS IN MANAGEMENT SCIENCES AND ENTREPRENEURSHIP*, 3(1), Article 1. <https://metatags.io/>
- IHS Global Inc. (2022). *EViews 12 University Edition for Windows*. IHS Global Inc.
- Iyoboyi, M., & Muftau, O. (2014). Impact of exchange rate depreciation on the balance of payments: Empirical evidence from Nigeria. *Cogent Economics & Finance*, 2(1), 923323. <https://doi.org/10.1080/23322039.2014.923323>
- Kama, U., & Adigun, M. (2013a). *Financial inclusion in Nigeria: Issues And challenges* [Occasional Paper No. 45]. Central Bank of Nigeria. <https://www.cbn.gov.ng/out/2014/rsd/occasional%20paper%20no.%2045%20issues%20and%20challenges.pdf>
- Kama, U., & Adigun, M. (2013b). Financial inclusion in Nigeria: The journey so far. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.2365209>
- Kapingura, F. M. (2018). Relationship between foreign capital flows, domestic investment and savings in the SADC region. *Development Southern Africa*, 35(4), 554–568. <https://doi.org/10.1080/0376835X.2018.1487279>
- Kapsos, S., & Bourmpoula, E. (2013). *Employment and economic class in the developing world* (No. 994855123402676; ILO Working Papers No. 6). International Labour Office. https://www.ilo.org/wcmsp5/groups/public/---dgreports/---inst/documents/publication/wcms_216451.pdf

- Karanja, T. W. (2020). *Effect of financial inclusion on financial development in Kenya* [Thesis, School of Business, University of Nairobi]. <http://erepository.uonbi.ac.ke/handle/11295/154644>
- Keynes, J. M. (2017). *The general theory of employment, interest and money. With the economic consequences of the peace* (D. M. G. Spencer & T. Griffith, Eds.). Wordsworth Editions. (Original work published 1936)
- Koku, P. S. (2015). Financial exclusion of the poor: A literature review. *International Journal of Bank Marketing*, 33(5), 654–668. <https://doi.org/10.1108/IJBM-09-2014-0134>
- Krumer-Nevo, M., Gorodzeisky, A., & Saar-Heiman, Y. (2017). Debt, poverty, and financial exclusion. *Journal of Social Work*, 17(5), 511–530. <https://doi.org/10.1177/1468017316649330>
- Lenka, S. K. (2022). Relationship between financial inclusion and financial development in India: Is there any link? *Journal of Public Affairs*, 22(S1), e2722. <https://doi.org/10.1002/pa.2722>
- Mbutur, M. O., & Uba, I. A. (2013). The impact of financial inclusion on monetary policy in Nigeria. *Journal of Economics and International Finance*, 5(8), 318–326. <https://doi.org/10.5897/JEIF2013.0541>
- National Bureau of Statistics. (2021). *Selected banking sector data: Sectorial breakdown of credit, payment channels and staff strength (Q4 2020)*. National Bureau of Statistics. <https://nigerianstat.gov.ng/elibrary/read/1241018>
- Nkoro, E., & Uko, A. K. (2016). Autoregressive Distributed Lag (ARDL) cointegration technique: Application and interpretation. *Journal of Statistical and Econometric Methods*, 5(4), 63–91. https://www.scienpress.com/Upload/JSEM/Vol%205_4_3.pdf
- Obioha, E. E. (2016). Role of the military in democratic transitions and succession in Nigeria. *International Journal of Social Sciences and Humanity Studies*, 8(1), 251–268. <https://dergipark.org.tr/tr/pub/ijsshs/issue/26211/275967>
- Odugbesan, J. A., Ike, G., Olowu, G., & Adeleye, B. N. (2022). Investigating the causality between financial inclusion, financial development and sustainable development in Sub-Saharan Africa economies: The mediating role of foreign direct investment. *Journal of Public Affairs*, 22(3). <https://doi.org/10.1002/pa.2569>
- Okere, K. I., Ogbulu, O. M., Onuoha, F. C., & Ogbodo, I. (2021). What drives the energy consumption mix in Nigeria? The role of financial development, population age groups, urbanization and international trade: insight from ARDL Analysis. *OPEC Energy Review*, 45(2), 161–190. <https://doi.org/10.1111/opec.12193>
- Olugbenga, A. A., & Grace, O. O. (2015). Impact of foreign direct investment on Nigerian capital market development. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 5(1), 136–144. <https://doi.org/10.6007/IJARAFMS/v5-ii/1503>
- Onalapo, A. R. (2015). Effects of financial inclusion on the economic growth of Nigeria (1982–2012). *International Journal of Business and Management Review*, 3(8), 11–28. <http://www.eajournals.org/wp-content/uploads/Effects-of-Financial-Inclusion-on-the-Economic-Growth-of-Nigeria-1982-2012.pdf>
- Orji, A., Ogbuabor, J. E., Okolomike, C. F., & Anthony-Orji, O. I. (2022). Capital inflows, financial development and growth in ECOWAS countries: A new empirical insight. *Applied Econometrics and International Development*, 22(1), 61–80. <http://www.usc.es/~economet/reviews/aeid2214.pdf>
- Orji, O. I. A., Orji, A., Ogbuabor, J. E., & Nwosu, E. O. (2019). Do financial stability and institutional quality have impact on financial inclusion in developing economies? A new evidence from Nigeria. *International Journal of Sustainable Economy*, 11(1), 18. <https://doi.org/10.1504/IJSE.2019.096541>

- Osuji, C. C., & Chigbu, E. E. (2012). An evaluation of financial development and economic growth of Nigeria: A causality test. *Kuwait Chapter of Arabian Journal of Business and Management Review*, 1(10), 27–44. https://www.arabianjbm.com/pdfs/KD_VOL_1_10/3.pdf
- Oyewo, B. M., & Oyewole, O. S. (2014). Financial system, financial inclusion and economic development in Nigeria. *International Journal of Management Sciences*, 2(3), 139–148. http://rassweb.org/admin/pages/ResearchPapers/Paper%202_1497128592.pdf
- Rafindadi, A. A., & Yusof, Z. (2015). Do the dynamics of financial development spur economic growth in Nigeria's contemporaneous growth struggle? A fact beyond the figures. *Quality & Quantity*, 49(1), 365–384. <https://doi.org/10.1007/s11135-014-9991-0>
- Rasheed, B., Law, S., Chin, L., & Habibullah, M. (2016). The role of financial inclusion in financial development: International evidence. *Abasyn Journal of Social Sciences*, 9, 330–348. <http://ajss.abasyn.edu.pk/admineditor/specialissue/papers/AJSS-9-2-RP2.pdf>
- The International Monetary Fund. (2014). *IMF Global Financial Stability Report (GFSR)—April 2014: Moving from liquidity- to growth-driven markets*. The International Monetary Fund. <https://www.imf.org/en/Publications/GFSR/Issues/2016/12/31/Moving-from-Liquidity-to-Growth-Driven-Markets>
- The World Bank. (2018). *World Development Indicators*. The World Bank. <https://databank.worldbank.org/source/world-development-indicators>
- The World Bank. (2022, March 29). *Financial inclusion overview* [Text/HTML]. World Bank. <https://www.worldbank.org/en/topic/financialinclusion/overview>
- Toby, A. J. (2014). Financial fragility and performance of Nigerian banking institutions: An inter-temporal analysis. *Journal of Applied Finance & Banking*, 4(6), 1–8. https://ideas.repec.org//a/spt/apfiba/v4y2014i6f4_6_8.html
- Toby, A. J., & Peterside, D. (2014, October 10). Monetary policy, bank management and real sector finance in Nigeria: Who is to blame? *First Middle East Conference on Global Business, Economics, Finance and Banking*. <https://doi.org/10.13140/2.1.2355.0408>
- Tougem, T. O., Ze, T., Amowine, N., & Adiyoh, I. S. (2022). Domestic investment, foreign direct investment, and economic growth in Sub-Saharan Africa: A case of industrial investment in Cameroon. *Journal of Industrial Integration and Management*, 7(3), 435–454. <https://doi.org/10.1142/S2424862221500032>
- Wezel, T., & Ree, J. (2023). *Nigeria—Fostering financial inclusion through digital financial services* [IMF Selected Issues Papers SIP/2023/020]. The International Monetary Fund. <https://www.imf.org/-/media/Files/Publications/Selected-Issues-Papers/2023/English/SIPEA2023020.ashx>