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RESEARCH ARTICLE

ANALYSIS OF FINANCIAL INCLUSION AND DOMESTIC INVESTMENT IN NIGERIA's EMERGING ECONOMY

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Abstract: This research work investigates the impact of financial inclusion on domestic investment in Nigeria's emerging economy using secondary data from 1982 to 2020. The Classical Linear Regression Methodology with variables such as Domestic Investment, Rural Deposits in Commercial banks, Number of commercial bank branches, Inflation, Credit to Private Sector, and Foreign Direct Investment were employed in the study. The study shows that financial inclusion has a significant impact on domestic investment in the Nigeria economy. The results also show that Number of Commercial bank branches, Credit to Private Sector and Inflation are contributes positively to Domestic investment while Rural Deposits in Commercial Banks and Foreign Direct Investment revealed otherwise. The study therefore, concludes that the Nigerian government and policy makers still has much work to do in order to consciously pursue more measures to increase financial inclusion especially in the rural areas so that the economy can begin to reap the full benefits of financial inclusion and greater domestic investment.

Keywords: *Financial Inclusion, Domestic Investment, Emerging Economy, Empirical.*

JEL Classification: B26, D14, E22, G21, O16, O47.

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INTRODUCTION

The debate on finance and economic growth has been dominant among practitioners and researchers since the time of Schumpeter (1912). Financial inclusion has become very important in development literature because it can lead to financial development and economic growth if properly managed (Ifediora *et. al,* 2022, Anthony-Orji, Orji, Ogbuabor, Onwe, 2022). People who are not included in formal financial services-most of whom are low-income earners-would be given the opportunity to enter a new world of formal financial services, potentially leading to the formation of a massive pool of savings and investable funds.

When formal financial services are made available and affordable to economic agents, it hints at overall economic growth.

Financial inclusion allows both ends of the income spectrum (rich and poor) to find common ground in the financial system for inclusive growth. Martinez (2011) identified financial access as a key policy tool that the government can use to encourage growth due to its ability to allot useful resources, resulting in a lower cost of capital (Gourène and Mendy, 2019 and Anthony-Orji, Orji Ogbuabor, Mba and Onwe, 2021).

The government and monetary authorities have developed several policies aimed at increasing financial inclusion in the Nigerian economy over the years. Some of the policies included the establishment of community and microfinance banks to make financial services more accessible to the financially

excluded. Private banks, not to be left behind, are working to involve more people in the financial process. The rural banking program was one of the government's first policies to increase financial inclusion in 1977. The goal was for each bank to have one branch in each of the country's local government areas to make financial services more accessible and available to rural dwellers and to encourage rural dwellers to participate in modern banking practices, thereby bringing about balanced development in the nation and reducing rural-urban migration to a minimum.

One of the effects of this scheme was increased access to financial services for the rural population, as well as more rural residents using banks for savings and money transfer services. Furthermore, the ratio of cash outside of banks to the Stock of Narrow Money Supply in the economy decreased from 61.1 percent in 1969 to 40.9 percent in 1989 (Oluba, 2008).

Although the frequency of bank and political distress in the 1990s diluted these effects or gains, the Central Bank of Nigeria has been providing support for financial products that are specifically aimed at low-income earners and the financially excluded since 2005, and the government is committed to both interventionist financing arrangements and fostering long-term institutions and agendas that promote financial inclusion. Nigeria launched its own National Financial Inclusion Strategy (NFIS) in October 2012, with the primary goal of reducing the population of Nigerians without access to formal financial services from 46.3 percent in 2010 to 20 percent by 2020.

According to the Enhancing Financial Innovation and Access (EFInA) initiative, approximately 36.8 percent of Nigeria's adult population is financially excluded. One of the key goals of the Nigerian Financial System Strategy 2020 is financial inclusion (FSS 2020). This policy demonstrates an all-inclusive and tactical plan for facilitating the economy's growth, with the goal of becoming one of the 20 largest economies through the financial sector (Kama, 2013). It also identifies six key stakeholders, which include banking institutions, non-bank financial institutions, capital market players, insurance companies, pension institutions, and technology providers.

Despite over 40 years of practical measures to improve financial inclusion, existing statistics show dismal results. When compared to similar countries, Nigeria's financial inclusion index is low. For example, approximately 32 percent of South Africans have access to credit, whereas only 2 percent of Nigerians have access to formal credit (World Bank, 2014). In terms of access to formal payment systems, only 21.6 percent of Nigerians have it, compared to 46 percent in South Africa (Mckinsey, 2014, Anthony-Orji, Orji, Ogbuabor and Uka, 2021)).

Gross Domestic Investment (also Gross Capital Formation) according to World Bank (2018) consists of additions to the fixed assets of the economy and net variations in the level of stocks. It is well established in economics that investment is critical to the advancement of a nation's economy, as demonstrated by the Asian Tigers. Nigeria has been trapped in a vicious cycle of low domestic investment due to a low level of savings, which is due to the nation's low per capita income of $2244 (this means that is low propensity to save as people want to at least afford the necessities of life).

The government can invest domestically through autonomous investment, which is the primary driver of other types of investment, but the Nigerian economy is not promising in that regard, government investment has plummeted because it is not delivering as expected, and the government prefers to invest in projects that have no economic ties to the productive sectors of the economy.

The government's current expenditure is more on recurrent expenditure than capital expenditure (which is in factories, machines, increasing the stock of finished goods, and so on), which is not the right direction or move for a country that wants to advance in growth and development. The private sector can also engage in domestic investment through financial investment.

However, the government appears to favor foreign investment over domestic investment, even though, in the event of a financial crisis, foreign investors, like HSBC and UBS, are the first to abandon ship (two global banks). Although foreign investment is important, discussions about domestic investment should not be overlooked. Some researchers have argued that the multiplier effect of foreign direct investment is far more than its direct benefit.

This demonstrates the importance of domestic investment for developing economies, as excessive foreign borrowing can result in a balance of payment deficit that must be serviced with domestic funds. Borrowing from the International Monetary Fund (IMF) will once again result in currency depreciation, which is one of their requirements (and this is a foreign exchange risk).

Against this backdrop, several studies have been conducted to investigate the empirical relationship between financial inclusion and various economic variables and concepts such as economic growth (Nwanne, 2015), financial stability (Anthony-Orji, Orji, Ogbuabor, and Nwosu, 2019), monetary policy (Anthony-Orji, Orji Ogbuabor and James, 2019), and information and communication technology (ICT) (Ogbuabor; Eigbiremolen Orji, Manasseh and Onuigbo, 2020) Thus, from 1982 to 2020, this paper investigates the impact of financial inclusion on domestic investment in Nigeria's emerging economy. The empirical results show that financial inclusion is relevant in driving domestic investment.

Thus, monetary authorizes and policy makers should evolve significant policies that will enhance financial inclusion in Nigeria. This is the contribution of this paper. The remaining portion of the paper is organized as follows: Section 2 discusses the literature review, and Section 3 discusses methodology. Section 4 contains the results and discussion, while Section 5 concludes the paper.

LITERATURE REVIEW

Liquidity Constraints, Credit Channels, and Financial Liberalization (Campbell - Mankiw)

According to Campbell and Mankiw (1990), the hypothesis of all households having access to credit was debated as wrong. They also stated that households not having access to credit (liquidity-constrained households) could not smoothen their income over time, thus, making their consumption a function of their current income. They claimed that households are of two types: Type one household, λ, is liquidity constrained and their consumption a function of their current income only, while the second type of household $(1 - \lambda)$, has unrestricted access to capital markets and can smoothen their consumption decisions inter-temporarily.

If their claims are true for a large part of the populace, this implies that a decline in the number of liquidity-constrained household units (because of financial liberalization) will lead to a fall in the savings rate because of the improved access to capital and money markets leading to a rise in consumption.

This made them to oppose the implicit McKinnon-Shaw assumptions, which is based on a homogenous household set. This homogenous household set has the assumption of free access to capital markets for all relevant households within the domestic economy (Bayoumi, 1993 and Jappeli and Pagano, 1994). In summary, if the Campbell-Mankiw condition holds (i.e. liquidity-constrained households are a large part of the pre-liberalization households), then the liberalization will in turn lead to a

large number of households benefitting from an increased access to capital markets resulting in a rise in consumption and accordingly, adversely affecting the private savings rate (Gemech and Struthers, 2003).

Gurley-Shaw Liquidity Theory of Money

Gurley-Shaw (1960) believed in the savings and investment process the operation of financial intermediaries can boost the financial capacity of the borrower. They put forward that the quantity theory of money of the income theory of money cannot fully describe the causal links between money and the general price level. They believe that the important link between the price level and the monetary conditions is provided by liquidity, not income.

Liquidity or the ease with which an individual can raise money, according to Gurley and Shaw (1960) is dependent not only on the amount of liquid assets the spender has but also on his borrowing power as well as on the profit expectations, hopes, and moods of the public and financial institutions. They argue that for the accuracy of the theory of money, the demand for cash or bank money should also include any form of liquid asset i.e., an easy proxy for money when there is a need and hence, can sway spending decisions.

Therefore, as the level of financial intermediation rises, more savings are mobilized leading to an increase in investments and consequently leading to increases in the level of growth in the economy. This led to the revision, modification, and generalization of Keynes's ideas on money and prices and a broadening of the whole chain of liquid assets concept rather than to money or near money only.

Neo Classical Theory of Investment

The Neoclassical investment theory by Jorgeson in 1967 was developed to depict investment behaviour. The theory is based on the determination of optimal capital stock and how business decisions affect the stock of equipment or structure. It looks at the determinants of the firm's optimal capital stock and how the firm adjusts from its actual capital stock to its optimal or desired capital stock.

The desired capital is dependent on the rental cost of capital (which is determined by the real interest rate and depreciation rate) and the level of income. In the neoclassical theory of investment, the addition of capital is determined by marginal product of capital (MPK) and rental cost of capital.

Table 1: Sequencing of financial inclusion in Nigeria from 2010-2018

2010	• EFInA's A2F Baseline Survey reveals that 46 % of adult Nigerians financially excluded
2011	• Nigeria signs MAYA declaration and commits to an 80% financial inclusion rate by 2020
2012	• Nigeria launches the National Financial Inclusion Strategy with specific targets • Central Bank of Nigeria launches the Cashless Policy
2013	• Financial Inclusion Secretariat set up to coordinate NFIS implementation • Financial Inclusion pilot launched in Borno State • CBN releases the Guidelines for the Regulation of Agent Banking • CBN publishes three-tiered KYC requirements
2014	• Financial Inclusion Secretariat fully staffed • Bankers' Committee launches Bank Verification Number (BVN) • NIMC launches National Identification Number
2015	• National Financial Inclusion Governing Committees and Working Groups inaugurated • Financial Inclusion desks set up at implementing agencies • CBN releases the Regulatory Framework for Licensing Super-Agents • NDIC extends deposit insurance to mobile money customers
2016	• CBN releases the Consumer Protection Framework • National Council on Education approves Financial Education Curriculum • National Collateral Registry goes live • Bankers' Committee approves financial inclusion targets for commercial banks
2017	• Setting up and inauguration of Financial Inclusion State Steering Committee in all 36 states and the F.C.T. • The National Insurance Commission released revised guidelines for Micro insurance

	operations in Nigeria. The Takaful Guidelines was also released and two stand-alone operators were licensed. • Establishment of a Programme Management Unit for Digital Financial Services • The National Identity Management Commission (NIMC) completed and released five (5) gazetted regulations in support of the Federal Government's policy on National Identity • The Securities and Exchange Commission completed its Capital Market Strategy Document for deepening financial inclusion in the capital market.

Source: Alliance for Financial Inclusion (2018)

There is a plethora of studies that have investigated the relationship between financial inclusion, financial development and economic growth (Anthony-Orji *et. al.,* 2023a, Anthony-Orji *et. al.,* 2023b, Balcilar, Usman and Ike, 2022a, 2022b, Ifediora *et. al*., 2022, Onifade, Ay, Asongu & Bekun 2020, Usman, Olorunmolu & Ekanem, 2019, Gourène and Mendy, 2019). However, only few studies have been devoted to analyse the relationship between financial inclusion and domestic especially in Nigeria. This current study fills this gap. For example, Ifediora, et al (2022) adopted the system Generalized Method of Moments (GMM) to examine the the impact of financial inclusion on economic growth using panel data of 22 sub-Sahara African (SSA) countries from 2012 to 2018.

Using individual financial inclusion indicators and a composite index of financial inclusion, the study found that the availability dimension of financial inclusion, penetration dimension of financial inclusion and composite financial inclusion (all indicators put together) impact economic growth positively and significantly while the usage dimension of financial inclusion supports economic growth but not significantly. In another study, Iorember, Jelilov, Alymkulova & Yua, (2022) analyzed the nexus between monetary policy and economic growth in Nigeria while accounting for the roles of interest rate, money supply, and financial inclusion from 2004q1 to 2020q4.

Using the dynamic simulation autoregressive distributed lag (ARDL) model, the study found that in the long run, interest rate, money supply, and financial inclusion have statistically significant effects on economic growth, while in the short run, only the effect of money supply on economic growth is statistically significant. Furthermore, Liu, Zhang, Hafeez, Ullah (2022) investigated the impact of financial inclusion on the economic growth and the environmental quality of OBOR economies. The study selected four different proxies of financial inclusion, two from the perspective of the supply side and two from the perspective of the demand side. The study applied 2SLS and GMM methods. In the economic growth model, among the variables of financial inclusion, only the variable of ATMS is positively significant in the 2SLS approach; however, when we apply the GMM approach, two variables, i.e., ATMS and branches, are positively significant implying that supply-side financial inclusion is vital for economic growth in OBOR countries.

On the other side, the variables of financial inclusion, whether supply side or demand side, exerted a positive impact on the CO2 emissions irrespective of the estimation techniques, i.e., 2SLS and GMM. These findings imply that financial inclusion, in general, causes CO2 emissions to rise. Gourène and Mendy (2019) combined the heterogeneity panel causality test with the Maximal Overlap Discrete Wavelet Transform (MODWT) to analyze the bi-directional causality between Financial Inclusion and economic growth in the West African Economic and Monetary Union (WAEMU) from 2006 to 2015.

The study used two Financial Inclusion indicators: the overall rate of demographic penetration of financial services (Financial Inclusion supply) and the overall rate of use of financial services (Financial Inclusion demand). The results show that at scale 1 (2 - 4 years), there is no causality between economic growth and Financial Inclusion indicators. However, at scale 2 (4 - 8 years), the study found a bi-directional causality between economic growth and Financial Inclusion.

In an earlier study, Olusegun (2010) investigated the pattern of domestic investment that is consistent with the Nigerian economy from 1970 to 2006. Using Johansen estimation techniques, the study discovered that real output, user cost of capital, and level of financial development all have a significant impact on domestic investment. In another study, Obafemi, Oburota, and Amoke (2016) used time series data from 1970 to 2013 to examine the relationship between financial deepening and domestic investment in Nigeria.

The study used the Gregor-Hansen Endogenous structural break methodology as well as the Granger Causality Test to discover that the causality between the two variables is unidirectional, running from financial deepening to investment, and that the effect of financial deepening on domestic investment is statistically significant.

Furthermore, Odeniran and Udeaja (2010) used the Granger causality test to investigate the relationship between financial development and economic growth in Nigeria. The findings indicate that the causal link between proxies of financial development and domestic investment is bidirectional. Adigbite and Adetiloye (2012) investigated the relationship between financial globalization and domestic investment in Nigeria using the Capital Opening Index and average exchange rate measures of financial globalization. Their findings revealed that the greater the level of financial globalization, the more capital flows out of Nigeria, resulting in a reduction of domestic financial resources and a negative impact on investment.

Maduka (2012) examined the impact of financial deepening on domestic investment in Nigeria from 1970 to 2008. The research examined both the short and long run relationships between financial deepening and domestic investment. The results show that financial deepening has no effect on domestic investment in Nigeria in both the long and short run.

This means that the financial system is not adequately responding to the needs of domestic investors. This problem can be solved by increasing financial depth by making loans available to the private sector and increasing infrastructure development.

Okafor, Onwumere, and Chijindu (2016) investigated the relationship between financial deepening and economic growth in Nigeria from 1981 to 2013. The study employed the use of Johansen cointegration test for long run relationship, Granger causality test and error correction model for impact analysis. Financial deepening was proxied by broad money supply and credit to the private sector. The results show that there is a long-run relationship between economic growth and financial deepening; additionally, the Granger causality test revealed that both variables used as proxies are not granger causal for economic growth.

It also demonstrated that the impact of broad money supply on economic growth is positive but insignificant, and that the impact of credit to the private sector on economic growth is negative and non-significant. The latter contradicts the a priori expectation that credit drives growth, highlighting the need for credit to be made readily available, accessible, and reasonably priced to the private sector to stimulate economic growth.

Ewetan, Ike, and Urhie (2015) used time series data from 1980 to 2012 to investigate the relationship between financial sector development and domestic saving in Nigeria. The study used the ADL estimation and a composite index based on three financial development indicators. The findings indicate that there is a long-run relationship between financial sector development and domestic saving, and that financial sector development (as measured by the composite index) has a positive and significant impact on domestic savings.

This demonstrates that the government should implement policies to encourage domestic saving to reduce reliance on foreign

direct investment through foreign saving, as higher domestic savings lead to higher domestic investment.

From 1981 to 2015, Okaro (2016) estimated the impact of deposit money bank credit on economic growth and development in Nigeria. To test for a long-run relationship between economic growth, development, and DMB credit, the study used Ordinary Least Square (OLS) regression and the Phillip-Qualiris co-integration. The findings show that DMB's credit to all sectors has a positive and significant impact on economic growth and development.

The study also found that credit to the private sector boosted economic growth by encouraging more investment, whereas credit to the public sector slowed growth due to the crowding-out effect. According to the study, DMBs should prioritize credit to the private sector, and the government should reduce domestic borrowing to avoid crowding out the private sector investment.

Anokwuru (2017) examined the relationship between interest rates and domestic private investment using time series data from 1980 to 2015 and the Ordinary Least Squares method. The findings revealed that the effect of interest rates on domestic private investment is negative and statistically significant; additionally, the R2 (coefficient of determination) was 23 percent, implying that only 23 percent of the variations in domestic private investment were explained by interest rates, which is very poor. The study concluded that improving domestic private investment is not solely based on interest rates, and that government policies to improve domestic private investment should be established.

Ojimadu, Aniebo, and Ogu (2016) investigated the impact of bank credit on capital formation in Nigeria from 1980 to 2014. Using the Error Correction Model (ECM), the results revealed that bank credit has a positive but non-significant impact on capital formation at the 5 percent level of significance, but a positive and significant impact at the 10 percent level of significance. This is due to the stringent rules governing borrowing credit from banks, which have caused growth in critical sectors to stagnate or slow.

Njimanted, Molem, and Nkwetta (2016) investigated the interactions between financial intermediation, domestic investment, and economic growth in Cameroon using time series data from 1975 to 2014 and the Vector Auto regression approach. The findings show that domestic investment has no effect on economic growth in Cameroon. They also discovered that there was no causal relationship between domestic investment and financial intermediation in Cameroon.

In another study, Dutta and Roy (2009) used a quantile regression methodology to examine the role of financial development on domestic investment in a large sample of developing and developed countries over a 24-year period. The findings indicate that the response of investment to development in the financial sector is influenced by the current investment climate. This means that countries with low investment, such as developing countries, require a well-developed financial system.

Furthermore, Ndikumana (2003) used the instrumental variable approach with two-stage least squares to investigate the international evidence between financial structure, financial development, and domestic investment of 99 countries as a sample, including developed and developing countries, from 1965 to 1997. The findings show that financial intermediation has a significant impact on domestic investment by easing financing constraints, allowing firms to increase their investment in response to changes in output.

Rodgers, Esman, and Eliud (2014) used data from fifty African countries from 1980 to 2008 to investigate the relationship between financial development and economic growth. As substitutes for financial development, the study used the credit-to-private-sector-to-

GDP ratio and the broad-money-to-GDP ratio. The findings revealed that there is a positive relationship between financial development and economic growth, and the causality between financial development and economic growth is bi-directional. The link between credit to the private sector and economic growth is strong and positive, indicating that credit to the private sector promotes economic growth in Africa, and thus loans should be made more accessible to the private sector.

Tabi, Njong, and Neba (2011) calculated the relationship between financial development and economic growth in Cameroon from 1970 to 2005. The Johansen Cointegration test was used in the study, which revealed that the relationship between financial development and economic growth exists in the long run and is also positive. Tahir, Ali, Shehzadi, and Ullah (2015) investigated the relationship between bank credit to the private sector and economic growth in Pakistan using time series data from 1973 to 2013.

Economic growth and credit to the private sector are the dependent variables, while interest rates, inflation, GDP investment, and government consumption are the independent variables. Employing the Error Correction Model (ECM) the result showed that the impact of bank credit on economic growth is negative and significant. Although, this is because of the restriction imposed on credit facilities to give a percentage of credit to the private sector. This shows that impact of credit in the economy is based in the country which is being researched on.

METHODOLOGY

Theoretical Framework

The building block for this study is the McKinnon complementarity's hypothesis. This can be represented by the following equations:

$(\frac{M}{P})^d = f(Y, r, d\text{-}\pi^*)$ ---------- (1a) - standard long-run real money demand function.

Where *Y*: Real income r: real return on physical capital

$(\frac{I}{Y})^p$: Investment rate *d*: Nominal interest rate

π^*: Anticipated inflation rate $d\text{-}\pi^*$:Real interest rate

However due to practicality and inability of developing countries to really compute real return on physical capital, *r*, Mckinnon (1973) suggested that it can be replaced with $(\frac{I}{Y})^p$ which is expected to vary directly with the change in real return on capital. He also proposed the use of Wholesale Price Index as a suitable index for the Price level (Rehman and Gill, 2013). Hence, the money demand function is written as

$(\frac{M}{P})^d = f(Y, (\frac{I}{Y})^p, d\text{-}\pi^*)$ ---------- (1b)

→ $\frac{\partial(\frac{M}{P})}{\partial Y}>0$: represents the money demand of transaction. An increase in the income causes increase in savings.

→ $\frac{\partial(\frac{M}{P})}{\partial(\frac{I}{Y})}>0$: This partial derivative represents the money demand for investment. An increase of investment rate increases savings.

→$\frac{\partial(\frac{M}{P})}{\partial(d-\pi*)}>0$: a positive real interest rate causes an increase in money demanded.

However, McKinnon complementarity's hypothesis appears in the investment function below:

$\frac{I}{Y}=f(r, (d\text{-}\pi^*))$ ---------- (2) Private Investment function

Where $\frac{\partial(\frac{I}{Y})}{\partial r}>0$ and $\frac{\partial(\frac{I}{Y})}{\partial(d-\pi*)}>0$

Thus, the complementarity's hypothesis can be seen in the following partial derivatives:

$\frac{\partial(\frac{M}{P})}{\partial(\frac{I}{Y})}>0$ ---------- (3) and $\frac{\partial(\frac{I}{Y})}{\partial(d-\pi*)}>0$ ---------- (4)

Equations (3) and (4) suggest that it is not the cost of capital but the availability of

finance that constrains investment in financially repressed economies. When the real deposit rate increases, investment increases as well because the financial constraint is relaxed. However, the traditional theory suggests the reverse, that is, that an increase in interest rate reduces investment.

For Shaw, Investment (I) is a decreasing function of real interest rate (r) and the saving is an increasing function of economic growth rate (g) and real interest rate (r):

$I = I(r)$ ----- (5) $\frac{\partial(I)}{\partial(r)} < 0$

$S = S(r, g)$ ------ (6) $\frac{\partial(S)}{\partial(r)} > 0; \frac{\partial(S)}{\partial(r)} > 0$

Model Specification

The model is specified based on the a priori economic theory consistency and data. In this model, domestic investment (DINV) serves as the dependent variable while bank branches (BBRANCH), Credit to Private Sector (CPS), Financial Inclusion proxied by Rural Deposits in Commercial Banks (FINC), Foreign Direct Investment (LFDI) and Inflation (INFL) are the independent variables. The econometric specification for the model is:

$$LDINVt = \alpha_0 + \alpha_1 BBranch_t + \alpha_2 CPS_t + \alpha_3 FINC_t + \alpha_4 LFDI_t + \alpha_5 INFL_t + \mu_t$$

Where;

LDINV = Log of Gross Domestic Investment

BBranch = Number of commercial bank branches in Nigeria

FINC = Financial Inclusion (proxied by Rural Deposits in Commercial banks

LFDI = log of Foreign Direct Investment

LCPS = Log of Credit to private sector

INFL = Inflation rate

μ = Stochastic term or error term

α_0 = Intercept term

α_1, α_2, α_3, α_4, α_5 are the parameters or coefficients of the exogenous variables

Justification of Model Variables

Gross Domestic Investment **(**DINV**)**: This is the overall change in the value of fixed assets plus change in stocks. It includes the private investment made by citizens and public investment made by government. It is the dependent variable in the model. According to Obafemi et al (2016) and Olusegun (2010), financial inclusion development should improve domestic investment.

Number of commercial bank branches in Nigeria (Branch): Financial inclusion refers to making formal financial services accessible and affordable to people. This variable captures the number of commercial bank branches in Nigeria thus, ensuring that rural areas enjoy free access to financial services. This is a measure of financial inclusion. This means that an increase in bank branches is expected to lead to increase in domestic investment as people have access to banks and financial products.

Financial Inclusion: This is proxied by Rural Deposits in Commercial banks. This refers to the amount of money that people in rural areas keep in commercial banks. The ease with which rural dwellers have access to loans, deposits, and other financial products and service is an indication of the level of financial inclusion in the system. An increase in rural deposits is expected to increase domestic investment in Nigeria as people gain access to banks and financial products.

Credit to private sector (CPS): This refers to the amount of financial capitals given to the private sector by financial institutions such as loans and trade credits. A positive relationship between CPS and DINV is anticipated since a rise in CPS will bring about a rise in domestic investment as people will be more financially enabled to invest. This is a financial deepening index. According to Okafor et al (2016) and Okaro (2016), Credit to private sector as a ratio of GDP has a positive relationship with domestic investment.

Foreign Direct Investment (FDI): Foreign Direct Investment is one of the major sources

from which a country, especially developing countries, can finance and sustain long-term growth. FDI is the net inflow investment of foreign nationals in an economy mostly through the establishment of multinationals in the domestic economy using funds from outside the economy. This helps in injecting funds into the economy as well as aid the development of the domestic economy. FDI also leads to growth through technological and knowledge transfer, increase in stock of capital and enhancing competition and productivity.

Inflation rate (INFL): Inflation rate measures the general rise in price level. It can be used as an index for macroeconomic instability. A country with consistent increasing inflation rate can be said to be experiencing macroeconomic instability because of price variability thus, leading to a more cautious view to investment that in turn leads to lower levels of investment and economic growth. The higher the inflation, the lower real domestic investment and hence a decrease in the economic growth or industrial output in real terms. But an inflation rate of moderate value such as 5 per cent may cause output increase by 1 per cent or more.

RESULT AND DISCUSSION

Unit Root Test Result

Table 2 shows the unit root results for all the variables. From the table above it is clear that all the variables are integrated at order 1 or at first difference. Comparing the ADF test statistics and the 5% critical values, we can see that the ADF statistics for all the variables are greater than the 5% critical values. Thus in line with our decision rule, we reject H_0 and conclude that there is no unit root. Thus, CPS, FINC, and FDI variables are stationary at level while DINV, BBRANCH and INFL variables are stationary at first difference.

Table 2: Unit Root Result

Variable	ADF-statistic	5 % Critical value	Level of integration	Decision
DINV	-6.553247	-2.943427	I (1)	Stationary
BBRANCH	-4.519145	-2.943427	I (1)	Stationary
CPS	3.341711	-2.976263	I (0)	Stationary
FINC	-3.397637	-2.941145	I (0)	Stationary
FDI	13.44346	-2.967767	I (0)	Stationary
INFL	-3.131603	-2.941145	I (1)	Stationary

Source: E-Views Analysis

Cointegration Test Result

To test for cointegration, the Johansen Cointegration Test which permits at least one cointegrating relationship was used to determine whether there exists a long-run relationship between the dependent variable (DINV) and the independent variables for the model.

Test of Hypothesis: Ho: $\delta=0$ (there is no co integration)

Decision Rule:

Reject H_0, if trace statistic > 0.05 critical value, α= 5%, for at least one rank, if otherwise do not reject.

Table 3: Cointegration test result

Hypothesized No. of CE(s)	Trace statistic	0.05 Critical values	Prob
NONE*	129.50	117.71	0.01
AT MOST 1	76.95	88.80	0.26
AT MOST 2	42.89	63.88	0.74
AT MOST 3	23.59	42.92	0.85
AT MOST 4	12.78	25.87	0.76
AT MOST 5	5.41	12.52	0.54

Source: E-Views Analysis

Since there is one cointegrating relationship in the model. At the rank (None*) with the trace statistic (129.50) > 0.05 critical value (117.71) at 5% level of significance.

In line with the decision rule, we reject the H_0, and conclude cointegration exists among the variables.

Table 4: Presentation of OLS regression results

Dependent Variable: LDINV				
Variable	**Coefficient**	**STD. Error**	**t-Statistic**	**Probability**
BBRANCH	0.580980	0.234923	2.473071	0.0191
CPS	0.778009	0.056148	13.85640	0.0000
RDEP	0.034522	0.014443	2.390195	0.0231
LFDI	-1.046199	0.397655	-2.63	0.013
INFL	0.009779	0.009067	1.078544	0.2891
CONSTANT	4.930873	0.688146	7.165440	0.0000
R^2 = 0.894487		F-stat = 52.56062	DW = 1.598236	
Adjusted R^2 = 0.877469		Prob. (F-stat) = 0.0000		

Source: E-Views Output (2022)

Discussion of Results

The value of the coefficient of BBRANCH is 0.580980, which implies that holding all other variables constant, a unit increase in commercial bank branches in Nigeria will on the average increase domestic investment by 0.580980%. The regression result shows that number of commercial bank branches in Nigeria (BBRANCH) has a positive relationship with domestic investment (LDINV), thus conforming with the a priori expectation that an increase in the BBRANCH will lead to an increase in domestic investment.

This is because as banks open up more branches around the nation, it improves financial inclusion i.e. more people having access to formal financial services, thus more deposits which means more funds for banks to loan out for investment. This result is consistent with the work of Obafemi et al (2016) and also with that of Ndikumana (2003) which investigated the international evidence between financial structure, financial development and domestic investment of 99 countries as sample with developed and developing countries inclusive for the period of 1965 to 1997, with the results revealing that financial intermediation impacts domestic investment remarkably by easing financing restraints, giving firms a chance to raise their investment in reaction to changes in output.

The value of the coefficient of CPS is 0.778009, which implies that holding all other variables constant, a 1% increase in credit to private sector will on the average increase domestic investment by 0.778009% point change. The regression result shows that credit to private sector (CPS) has a positive relationship with domestic investment (LDINV), thus conforming with the a priori expectation that an increase in CPS will lead to an increase in domestic investment. This is consistent with the work of Rodgers et al (2014) which examined the relationship between financial development and economic growth in Africa using fifty countries data from 1980-2008. The study used ratio of credit to private sector to GDP as one of the substitutes for financial development.

The link between credit to private sector and economic growth is strong and positive, this shows that credit to private sector encourages economic growth in Africa; thus, loans should be made more accessible to the private sector. The regression results also show that the impact of credit to private sector (LCPS) is not statistically significant. This is consistent with the work of Ojimadu et al (2016) which studied the impact of bank credit on capital formation from 1980 to 2014 in Nigeria and revealed that bank credit has a positive but non-significant impact on capital formation at 5 per cent level of

significance but had a positive and significant impact at 10 per cent level of significance. They attributed this to the stringent rules tied to borrowing credit from banks which have made growth in much needed sectors to be stagnant or slow. Another reason for this could be the low presence of private sector firms eligible for bank credit.

The value of the coefficient of FINC is 0.034522, which implies that holding all other variables constant, a 1% increase of rural deposits in commercial banks will on the average reduce domestic investment by 0.034522%. The regression result shows that financial inclusion has a positive relationship with domestic investment (LDINV). This supports the a priori expectation that an increase in the rural loans and deposits will lead to an increase in domestic investment. This may be because the funds from rural deposits borrowed and invested in the economy, and this shows the need for credit to be made readily available, accessible, and relatively affordable to the private sector so as to encourage economic growth. .

The value of the coefficient of LFDI is -1.0462, which implies that holding all other variables constant, a 1% increase in foreign direct investment will on the average reduce domestic investment by 1.0462%. The regression result shows that foreign direct investment (LFDI) has a negative relationship with domestic investment (LDINV), thus conforming with a priori expectation that an increase in the LFDI will lead to a decrease in domestic investment.

Because Nigerian economy is not promising in domestic investment, this can be seen by the extent at which government investment have declined profoundly as they are not delivering as expected and the government chooses to invest in projects that have no economic linkages to productive sectors of the economy. With the Nigerian government always on the hunt for foreign direct investment, this has a negative impact on domestic investment.

This can be explained by the crowding out effect of investment, as the inflow of foreign direct investment will cause domestic investment to decrease. This happens when foreign investment in balance with domestic investment, causing local firms to incur losses and shut down. Also, foreign direct investment can also crowd out domestic investment through competition in the product market, financial market, or using a superior technology.

The value of the coefficient of INFL is 0.009779, which implies that holding all other variables constant, a 1% increase in inflation will on the average relatively increase domestic investment by 0.009779%. The regression result shows that inflation (INFL) has a positive relationship with domestic investment (LDINV), thus conforming to a priori expectation that an increase in the INFL will lead to a decrease in domestic investment (as the effect of inflation is not static). With the drive towards financial inclusion, as more people are brought into the formal banking institution, this means more money supply, thus, higher inflation. This explains the positive effect of inflation on domestic investment.

Macroeconomic stability is simply inflation managed efficiently, internal, and external debt at controllable levels, and solving the macroeconomic crisis that occurred within a year or two. International experience recommends that inflation rate below 20% can be sustained for long periods without producing macroeconomic instability (Dornbusch and Fisher, 1993).

POLICY RECOMMENDATIONS AND CONCLUSION

According to our findings, a country's financial system or sector is critical in determining the strength of its economy, as evidenced by our review of countries such as the United States of America and China. As a result, a country with a strong, well-adjusted, and well-managed financial sector will have a stable economy and an enabling environment

for domestic and foreign investment, leading to consistent and stable economic growth. However, the value of a system or institution is the people who participate in it. Financial inclusion entails providing formal banking services to everyone. Even though financial inclusion has had an impact on the Nigerian economy, the magnitude of the impact and the short-run effects have not been as anticipated.

Some of the policy recommendations needed in the economy to consolidate financial inclusion in Nigeria include: first, the procedures for opening an account or using a financial service should be simplified to encourage people who are hesitant to open bank accounts or use financial services.

Furthermore, bank requirements for using a financial service should be tailored to meet the needs of people from various economic social strata. Second, the government should develop policies that make formal banking services more accessible and available in rural areas. This analysis demonstrates the significant impact of the number of commercial bank branches on domestic investment. Thus, expanding financial services to rural areas will increase rural deposits in commercial banks. Third, commercial banks must be truthful with their customers.

Many people distrust banks because of erroneous charges deducted from their accounts. The Central Bank of Nigeria (CBN) must increase public awareness about commercial banks and ensure that only CBN-authorized charges are deducted. Fourth, financial institutions should embark on sensitization and awareness concerning owning bank accounts or having access to formal financial services specially directed towards low-income earners and, mobilizing funds to ensuring that their financial services become less tedious to obtain.

Fifth, as demonstrated by the analysis, credit to the private sector was not statistically significant. The government should develop and maintain policies that make credit available to the private sector, particularly small and medium-sized businesses. Finally, the government should be more committed to resolving the country's insecurity issue. As, areas that are susceptible to attacks would most likely not have access to financial services, thus reducing the impact of financial inclusion.

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