EXAMINING THE EFFECT OF INVESTMENT ON NIGERIA'S ECONOMIC GROWTH

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ABSTRACT

This study examined the effect of investment on economic growth in Nigeria from1994 to 2023. Ex- facto research design was used with the use of secondary data extracted from Central Bank of Nigeria Statistical Bulletin 2024. Data collected was diagnosed with Descriptive Statistics Analysis, Augmented Dickey-Fuller (ADF) unit root test, Bound test Co-integration method, Granger Causality Test, Stability test and the Autoregresive Distributed Lag (ADRL) Model. The finding, shows that Private Foreign direct investment has negative significant effect on economic growth in Nigeria, Stock market investment has "positive but insignificant effect" on economic growth in Nigeria, Agricultural investment has "negative but significant effect on economic growth in Nigeria and Private equity investment has positive significant effect on economic growth in Nigeria. The study recommended amongst other that the government should implement policies that ensure foreign investments contribute to local economic development. This includes strengthening local content policies, encouraging reinvestment of profits within the country, and ensuring that FDI projects align with national development priorities. Additionally, streamlining regulatory frameworks will attract quality investments that have a positive impact on GDP and the government and regulatory bodies should improve corporate governance, enforce transparency, and incentivize local participation in the stock market. Strengthening financial literacy programs will also encourage more Nigerians to invest in equities.

1. INTRODUCTION

Investments are the engine of economic growth (Liesbeth et al., 2009) and human development (Torabi, 2015), due to that it is an effective means to increase wealth in national economy, and human community. Amongst the multiple investments, foreign direct investment (FDI) has a vital influence on the economic growth of a nation, as a condition to attract investors to develop and improve the economy and the quality of human resources (Simionescu & Naros, 2019). The FDI contains many management dimensions, such as bonds, portfolio investment in foreign stocks. Since FDI can bring much-needed additional foreign capital, and advanced technology and improved managerial skills, it is considered as an essential part of economic growth and the financial globalization process (Alfarro, 2017).

African received $48 billion in FDI flows in 2023, accounting for 3.5% of global FDI. Egypt, South Africa and Nigeria were the largest recipients of FDI in Africa (World Bank, 2024) In Nigeria, investment has been identified as a key determinant of economic growth, influencing various sectors such as agriculture, manufacturing, infrastructure, and services (Ogunleye, 2018). However, despite its importance, Nigeria has faced persistent challenges in mobilizing adequate investments to sustain economic growth. Nigeria's economic growth has been largely dependent on oil revenue, which has contributed significantly to government revenue and foreign exchange earnings. However, fluctuations in global oil prices have exposed the vulnerabilities of an oil-dependent economy, leading to periods of economic recession and stagnation (Udoh & Ogbuagu, 2020). As a result, there has been increasing interest in examining the role of investment both public and private in fostering sustainable economic growth and diversification in Nigeria.

Foreign direct investment (FDI) has also been identified as a major driver of economic growth in Nigeria. Studies suggest that FDI inflows contribute to job creation, technology transfer, and industrial development (Asiedu, 2019). However, Nigeria's ability to attract and retain foreign investments has been affected by issues such as political instability, security concerns, and weak institutional frameworks (Okonkwo & Uchenna, 2021). Despite these challenges, the Nigerian government has implemented several policies and reforms to enhance investment inflows and promote economic diversification, such as the Economic Recovery and Growth Plan (ERGP) and the National Development Plan (NDP) (CBN, 2022). Based on the above the study investigate the effect of investment (FDI and Stock Market Investment) on economic growth in Nigeria.

This study has two major objectives: To Examine the effect of foreign direct investment on economic growth in Nigeria and to Evaluate the effect of stock market investment on economic growth in Nigeria. The paper is structured into six parts; introduction, literature review, methodology, results and discussion of findings, conclusion and recommendations and references.

2. LITERATURE REVIEW

2.1 Brief Conceptual clarifications

Jumbo et al, (2018), defined investment as an increase in capital spending such as buying new machines, building infrastructures and factories. According to Iyoha & Oriakhi, (2002), It is the commitment of resources to projects or assets with expected future benefits, often directed towards infrastructural and human capital development as essential for economic progress.

According to Wondimu, (2023), Foreign direct investment (FDI) is an investment that reflects a long-term

interest and ownership in a company in another economy by a foreign direct investor based in one economy (foreign affiliate).

Stock market investment refers to the allocation of financial resources into publicly traded companies through the purchase of stocks, bonds, and other securities with the expectation of earning returns in the form of capital appreciation or dividends (Mishkin, 2021). The stock market plays a crucial role in economic development by facilitating the mobilization of savings, capital formation, and efficient allocation of financial resources to productive sectors of the economy (Eze & Okonkwo, 2022).

Economic growth refers to an increase in aggregate production in an economy (Potters, 2021). It is an increase in the production of economic goods and services, compared from one period of time to another (Joel & Onura, 2021).

Theoretical literature

Classical Growth Theory

Classical Growth Theory is one of the earliest economic theories that seeks to explain the determinants of economic growth. The theory was primarily developed by Adam Smith (1776), Thomas Malthus (1798), and David Ricardo (1817), who emphasized the roles of land, labor, and capital in driving long-term economic expansion. According to classical economists, economic growth is influenced by population dynamics, resource availability, and diminishing returns to production inputs (Smith, 1776).

Adam Smith, in *The Wealth of Nations*, argued that economic growth is driven by capital accumulation, labor productivity, and specialization. He introduced the concept of the "invisible hand", suggesting that free markets and competition lead to efficient resource allocation and long-term prosperity (Smith, 1776). Smith also highlighted the importance of division of labor, which enhances productivity by allowing workers to specialize in specific tasks, leading to greater efficiency and output.

Keynesian Growth Theory

The Keynesian growth model was advanced Thomas Palley (1996). The model posits that economic growth is significantly influenced by the dynamics of income distribution between wages and profits, emphasizing how these factors impact aggregate demand and, in turn, investment and growth.

The theory is built on the assumptions that economic growth is fundamentally driven by aggregate demand rather than just supply-side factors. This means that an increase in consumption and investment demand can stimulate growth by encouraging firms to expand output. Also, the model assumes that income distribution between wages and profits affects economic growth. Workers, who typically have a higher propensity to consume than profit earners, are essential in sustaining demand. Therefore, economies with equitable income distribution support higher consumption, which in turn sustains growth.

Investment is assumed to be endogenous, meaning it is influenced by current economic conditions, such as demand and capacity utilization. High-capacity utilization (i.e., when resources are fully employed) encourages further investment as firms anticipate continued demand. The model allows for significant government intervention through policies that stimulate demand, protect labor, and ensure fair distribution that are necessary to sustain growth. The model further assumes that short-run demand shocks can influence long-term growth through their effects on investment and capacity. Unlike neoclassical models, which focus on long-run equilibrium, Palley's model views the economy as demand-constrained even in the long run.

Theoretical Framework

The theoretical framework employed for the study is Keynesian Growth Theory. Keynesian Growth Theory, developed by John Maynard Keynes, emphasizes the role of aggregate demand in driving economic expansion. This theory is particularly relevant for analyzing Nigeria's economic growth from 1994 to 2023 due to its focus on investment as a key determinant of output and employment. Keynes posited that investment, influenced by interest rates and business expectations, plays a crucial role in shaping economic growth (Keynes, 1936).

One of the primary justifications for applying Keynesian Growth Theory to Nigeria's investment-growth nexus is the country's dependence on government expenditure and private sector investments to stimulate economic activity. The Nigerian economy has experienced various fiscal and monetary policy shifts during this period, with significant government interventions aimed at boosting investment in infrastructure, oil and gas, and manufacturing (Adeniran et al., 2020). The Keynesian framework provides a theoretical basis for understanding how these investments influence aggregate demand and, consequently, economic growth.

Additionally, Keynesian Growth Theory highlights the multiplier effect, which suggests that an initial

increase in investment leads to a more than proportionate increase in national income. This effect is evident in Nigeria, where public sector investment in infrastructure projects such as roads, electricity, and telecommunications has generated increased private sector participation and overall economic expansion (Olayemi & Lawal, 2021). The Keynesian perspective helps explain the relationship between investment spending and GDP growth, particularly in a developing economy like Nigeria that faces infrastructural deficits.

Moreover, Keynesian Growth Theory accounts for the cyclical nature of economic fluctuations, which aligns with Nigeria's historical economic trends. Between 1994 and 2023, Nigeria has undergone multiple economic cycles, including booms driven by oil revenue windfalls and downturns caused by global oil price crashes and fiscal imbalances (Uchenna & Okonkwo, 2022). Keynesian analysis provides insight into how investment patterns have influenced these cycles and how countercyclical fiscal policies, such as increased government spending, have been used to stabilize the economy.

Finally, the Keynesian model is suitable for evaluating the impact of foreign direct investment (FDI) on Nigeria's economy. Given the role of foreign capital inflows in financing infrastructure and industrial expansion, Keynesian Growth Theory aids in understanding how external investment complements domestic investment to foster economic growth (Okafor et al., 2023).

Empirical Review

Abduvaliev (2023) examined the impact of investments on economic growth: Evidence from Tajikistan. Annual time series data for the period 2005 to 2021 was used to infer the causal relationship between foreign direct investment and per capita GDP growth in the study. The Vector Error Correction Model (VECM) was used to analyze the elicited data after the result of Johansen co- integration showed evidence of a long-term relationship in the model. The result showed a positive and significant relationship between FDI and economic growth in Tajikistan. Post-estimation test of auto-correlation showed no evidence of auto-correlation in model. However, the study failed to estimate variance decomposition which is germane in ascertaining the reaction to innovations in the model with heteroscedasticity test relevant in ascertaining whether there is constant variance in the model. The recommends that strong emphasis should be placed in ensuring that FDI policies do not adversely affect economic growth policies, and efforts must be made to reorient FDI in order to enhance economic growth and social development, with the objective of maximizing the impact of FDI on economic development.

Ogunjinmi (2022) analyzed the impact of domestic investment on economic growth in Nigeria: Further evidence. Annual time series data spanning from1986 to 2019was used to specify the model $GDP_t = \pi_o + \pi_1 INV_t + \pi_2 FD_t + \pi_3 MPR_t + \pi_4 INF_t + \pi_5 TOPEN_t + e$ with GDP as Gross Domestic Product, INV as Investment, FD as Financial Deepening, MPR as Monetary Policy Rate, INF as inflation, and TOPEN as trade openness. The ADF test for unit root showed a mixed order of integrationwiththeARDLBoundtestestablishingevidenceoflong-runrelationship. Given the mixed order of integration with evidence of a long run relationship, the Error Correction Mechanism was used to show a speed of adjustment of 14.75%, signifying that disequilibrium in the model will be corrected at a low speed of 14.75. In the long run, all the variables except financial deepening exerted a negative relationship with economic growth in Nigeria. Relevant post-estimation tests such as serial correlation, normality, and heteroscedasticity were estimated to show no evidence of autocorrelation, existence of normality, and homoscedasticity, respectively. The study recommends the need for government to put effort on accumulation of productive capital so as to enhance expansion and effectiveness of investment activities which in turn speed up sustainable growth of the Nigerian economy.

Babalola, Mohd, Ehigiamusoe and Onikola (2019) assessed the impact of foreign direct investment, aid and trade on economic growth in Nigeria. The study used annual time series data covering the 1980-2015 period on the trends of growth rate of GDP per capita (PCG), official foreign aid inflow (AID), gross capital formation as a percentage of GDP (GCF), and foreign direct investment (FDI). The ADF unit root test found a mixed integration with the F-Bound cointegration test establishing a long-run relationship in the model. Given the mixed integration, the ARDL was employed as analytical technique to show that foreign direct investment, foreign aid and foreign trade have positive long-run impacts on economic growth in Nigeria. In the short-run, only foreign aid has positive impact on economic growth. In line with the finding, the study recommends that the government should strengthen policies that can accelerate foreign direct investment, foreign aid and foreign trade in Nigeria.

Alabi (2019) analyzed the impact of foreign direct investment on economic growth: Nigeria experience. Annual time series data from 1986 to 2017 sourced from Central Bank of Nigeria Statistical Bulletin (2017) and World Development Indicator on the trends of Gross Domestic Product (GDP), Foreign Direct Investment (FDI), Interest Rate (INT), Real Exchange Rate (REXR), and Domestic Investment (DI) were used for the study. Despite the mixed order of integration from the ADF unit root test, the OLS was estimated

to show a significant positive impact of FDI and EXTR economic growth, while DI and INT exerted a no significant positive impact of economic growth for the period under investigation. The study failed to perform cointegration test and relevant post-estimation tests to uphold the classical assumptions. The study recommends the government and the policy makers should create more avenues to attract foreign investors which will enhance technology transfer, job opportunities, and increase productivity in Nigeria.

Bidami, Robinson, Olulu and Pual (2018) investigated the impact of private domestic investment on economic growth in Nigeria. The study covered the period of 1980-2016 with the anal time series data subjected to Kwiatkowski–Phillips–Schmidt–Shin (KPSS) for stationarity and Johansen test for cointegration to show integration at first difference and evidence of long-run relationship respectively. Although VECM is suitable for integration at first difference with cointegrating relationship, the Error Correction Mechanism (ECM) was utilized as analytical method. The parsimonious Error Correction Mechanism showed that private domestic investment is significantly related to economic growth. The result indicated that holding other variables, 10 percent increase in the current value of private domestic investment, on the average, stimulates economic growth by 2.08 percent. Similarly, the value of financial sector credit to private sector is positively related to economic growth. On the average, a percent increase in financial sector credit to private sector boost growth in Nigeria by 2.27 percent. Owing to the findings, it is recommended among others that Private domestic investment should be promoted across key sectors of the economy, especially agriculture and manufacturing activities in order to stimulate rapid and sustained growth in Nigeria.

Nketsiah and Quaidoo (2017) investigated the effect of foreign direct investment on economic growth in Ghana. This study used annual time series for 1983 to 2012 on variables such as inflation, gross fixed capital formation, trade openness and government spending in Ghana. The Least Squares technique was used to examine the possible effects among the investigated series. The results showed a significantly positive impact of foreign direct investment on economic growth in Ghana. It recommends that there should be economic as well as foreign policy reforms aimed at attracting more investors to boost the Ghanaian economy.

Nwanne (2016) studied the implication of investment on economic growth in Nigeria. Annual time series on the variables; Gross Domestic Product (GDP), Gross Domestic Savings (GDS), and Gross Domestic Investment (GDI) for the period 1981 to 2014 were used for the study. Relying on the Augmented Dickey Fuller (ADF) and Phillip-Peron (PP) as tests for existence of unit root, the result showed existence of unit

root at level with no evidence at first difference, signifying that the data set is integrated of order I(1). Using the Johansen test for cointegration, the study found an evidence of long run relationship in the model. Although VAR model is most suitable for order one integration, the study used the OLS method for data analysis to show a significant negative relationship between GDS and GDP in Nigeria, while investment exerted a significant positive impact on GDP in the study. The study failed to carryout post-estimation tests but recommended the Nigerian Government should create an enabling environment to foster domestic saving that will help to increase the level of economic growth in Nigeria.

Gaps in Literature

Several studies are skewed towards the effectiveness of FDI than a broader assessment of the effect of investment on economic growth (John, 2016; Abdulaliev, 2023; Alabi, 2019). This study differs as it adds the effect of stock market investment on economic growth rather than a limited scope.

3. METHODOLOGY

Model for the study

The study adopted Autoregressive Distributed Lag (ARDL) model developed by Pesaran and Pesaran (1997) and Pesaran and Shin (2001). The model is popular for assessing both short-term dynamics and long-term equilibrium relationships between variables, making it valuable in fields like economics, finance, and social sciences. The general form of the ARDL model is stated thus: $y_t=\beta_0+\beta_1 y_{t-1}+\beta_2 y_{t-2}....+\beta_k y_{t-k}+\beta_0 x_t+\beta_1 x_{t-1}+\beta_2 x_{t-2}+.....+\beta_q x_{t-k}+u_t$, -(3.1)

Where: β_0 is the constant intercept; β_1–β_q are estimate parameters, t-k is the lag length and u_t is the error term. The model estimates (p+k) k number of regressors to obtain optimal lag length where p is the maximum number of lags to be used and k is the number of variables in the model.

Model Specification

The study adopted the ARDL model employed by Babalola et al. (2019) who investigated the impact of foreign direct investment, aid and trade on economic growth in Nigeria from 1980 to 2022.

$GDPt =\beta_o+\beta_1 GDP+\beta_2 AID+\beta_3 GCF+\beta_4 FDI+ e_{it-}$ - (3.2)

Where:

GDP=Gross Domestic Product

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AID=official foreign aid inflow

GCF=gross capital formation as a percentage of GDP FDI = foreign direct investment

The ARDL form of the model was specified as;

$$GDP_t = \alpha_0 + \Sigma(\alpha_1^{(i)}GDP_{t-i}) + \Sigma(\alpha_2^{(j)}AID_{t-j}) + \Sigma(\alpha_3^{(k)}GCF_{t-k}) + \Sigma(\alpha_4^{(l)}FDI_{t-l}) + \varepsilon_t \quad (3.3)$$

Equation 3.3 is however modified to suit the current study by retaining RGDP and FDI, while introducing SMI into the model. Thus, the current study includes the trends of Real Gross Domestic Product (RGDP), private foreign direct investment (PFDI), and stock market investment (SMI).

Thus, the implicit model is specified as; $RGPDt = (PFDI_t, SMI_{t,})$ - - (3.4)

The linear Model as $RGDP_t = \beta_0 + \beta_1 PFDI_t + \beta_2 SMI_t + \varepsilon_t$ - - - (3.5)

Equation 3.5 the ARDL model is specified as

$$RGDP_t = \alpha_0 + \Sigma(\alpha_1^{(i)}RGDP_{t-i}) + \Sigma(\alpha_2^{(j)}PFDI_{t-j}) + \Sigma(\alpha_3^{(k)}SMI_{t-k}) + \varepsilon_t. \quad - \quad - \quad -(3.6)$$

To convert all the values to the same unit's equation 3.6 to logarithms is written as:

$$\ln RGDP_t = \beta_0 + \beta_1 \ln PFDI_t + \beta_2 \ln SMI_t + \beta_3 \ln AGI_t + \beta_4 \ln PEI_t + \varepsilon_t \quad - \quad - \quad (3.7)$$

A priori Expectation

The a priori expectation provide expected signs and significant of the value of the coefficient of the model parameters to be estimated in the light of economic theory and empirical evidence. Investment is expected to contribute positively to economic growth in Nigeria, either in the long run or short run period. Based on economic theory, the a priori expectations of $\beta 1, \beta 2$ are all positively signed (> 0), indicating that increases in each of these explanatory variables are expected to lead to an increase in real GDP.

Definitions and Measurement of Variables

Real Gross Domestic Product (RGDP)

Real Gross Domestic Product (RGDP) constitutes an inflation-adjusted metric that encapsulates the aggregate value of all goods and services generated by an economy within a specified annual timeframe (Ganti, 2024). Consequently, it is represented in monetary terms (Naira) within the framework of this study.

Foreign Direct Investment (PFDI)

Private Foreign Direct Investment (PFDI) refers to investments made by private foreign entities in a country's economy. These investments can include acquiring local businesses, establishing new companies, or providing capital for expansion.

Stock Market Investment (SMI)

Stock Market Investment (SMI) refers to the allocation of financial resources into publicly traded stocks with the expectation of earning returns through capital appreciation, dividends, or both. It involves buying shares of companies listed on a stock exchange, allowing investors to gain ownership stakes. SMI can be influenced by economic conditions, market trends, company performance, and investor sentiment. It serves as a wealth-building strategy for individuals, businesses, and institutions, playing a crucial role in economic growth and capital formation.

Pre-estimation Tests

Unit Root Test

A unit root test is a statistical test used to determine whether a time series data is stationary or non- stationary, which is a fundamental step in analyzing time-series data.

Co-Integration Test

Co-integration refers to a statistical relationship between two or more non-stationary time-series variables that move together over the long term. The main reason for the use of co-integration in this study is that it provides a formal background for testing and estimating short-run and long-run relationships among the economic variables.

Post-estimation Test

Causality Test

The data collected will be subjected to causality test using Granger Causality test statistic in order to determine the direction of causality between the macroeconomic variables intended in the regression analysis.

Stability Test

To detect random movement, especially those that do not necessarily come from a structural change in

coefficients, Brown, Durbin, and Evans (1975) suggest the Cumulative Sum (CUSUM) and the Cumulative Sum of Squares Test (CUSUMSQ). These tests are used to show whether the model is stable and is suitable for making a long-run decision.

RESULTS AND DISCUSSION OF MAJOR FINDINGS

Table 1: Augmented Dickey-Fuller (ADF) Test at Level Results

Series	ADF Test Statistics	5% Critical T-Value	P-Value	Order of Cointegration
RGDP	-3.549207	-2.967767	0.0136	I(0)
PFDI	-1.554256	-2.967767	0.4925	I(0)
SMI	-1.556905	-2.967767	0.4912	I(0)

Source: Author's Computation 2025, using E-view 12.0 version

The unit root test results in table 4.3.1 shows the ADF test result for RGDP shows a statistic of -3.549207, which is lower than the 5% critical T-value of -2.967767. The p-value of 0.0136 is below the 5% significance level, indicating that the null hypothesis of a unit root is rejected. This means that RGDP is stationary at level, I(0). The implication of this result is that RGDP does not exhibit a long-term trend or stochastic drift and remains mean-reverting in the long run. The ADF test for PFDI reports a statistic of -1.554256, which is greater than the 5% critical T-value of -2.967767. The p-value of 0.4925 is well above the 5% significance level, meaning that the null hypothesis of a unit root cannot be rejected. This suggests that PFDI is non-stationary at level, I(0). A non-stationary PFDI implies that foreign direct investment inflows do not exhibit a stable mean-reverting pattern over time but are influenced by persistent trends, external economic conditions, and long-term policy decisions. The ADF test for SMI yields a statistic of -1.556905, which is higher than the 5% critical T-value of -2.967767. The p-value of 0.4912 is much greater than the 5% significance level, indicating that the null hypothesis of a unit root cannot be rejected. This means that SMI is non-stationary at level, I(0). A non-stationary stock market index suggests that stock prices follow a stochastic trend and do not revert to a constant mean.

Table 2: Augmented Dickey-Fuller (ADF) Test at First Difference

Series	ADF Statistics	5% Critical T-Value	P-Value	Order of Cointegration
RGDP	-3.675603	2.976263	0.0106	I(1)
PFDI	-6.708757	-2.971853	0.0000	I(1)
SMI	-8.479076	-2.971853	0.0000	I(1)

Source: Author's Computation 2025, using E-view 12.0 version

The unit root test results in table 4.3.2 the ADF test result for RGDP reports a statistic of -3.675603, which is lower than the 5% critical T-value of -2.976263. Additionally, the p-value of 0.0106 is below the 5% significance level, indicating the rejection of the null hypothesis of a unit root at the first difference. This implies that RGDP is integrated of order one, I(1), meaning it is non-stationary at levels but becomes stationary when first differenced. The stationarity at first difference makes RGDP suitable for inclusion in an ARDL model, where its long-run and short-run relationships with economic indicators like investment and public expenditure can be examined. The ADF test for PFDI shows a statistic of -6.708757, which is significantly lower than the 5% critical T-value of -2.971853. The p-value of 0.0000 strongly rejects the null hypothesis of non-stationarity at first difference. This confirms that PFDI is integrated of order one, I(1). The result indicates that private foreign direct investment is non-stationary in its natural form but becomes stable when first differenced. Since PFDI is I(1), it can be modeled in an ARDL framework to determine its long-run impact on RGDP. The ADF test for SMI reports a statistic of -8.479076, which is far below the 5% critical T-value of -2.971853. The p-value of 0.0000 confirms the rejection of the null hypothesis at the first difference, meaning that SMI is integrated of order one, I(1). The stationarity after first differencing suggests that market fluctuations can be better analyzed through changes rather than absolute values. Since SMI is I(1), it can be used in an ARDL model to explore its relationship with RGDP. If a long-run equilibrium is found, it implies that stock market performance has a stable and predictable impact on economic growth over time, reinforcing the significance of capital market development in economic planning. The ADF test for AGI presents a statistic of -4.822855, which is lower than the 5% critical T-value of -2.976263. The p-value of 0.0006 confirms the rejection of the null hypothesis at the first difference, meaning AGI is integrated of order one, I(1). This result indicates that agricultural investment follows a trend at levels but becomes stationary once differenced. The stationarity at first difference suggests that AGI's impact on RGDP can be meaningfully analyzed using an ARDL approach. The ADF test result for PEI shows a statistic of -4.599533, which is lower than the 5% critical T-value of -

2.971853. The p-value of 0.0011 confirms the rejection of the null hypothesis at the first difference, implying that PEI is integrated of order one, I(1). The I(1) nature of PEI suggests that public expenditure does not exhibit a natural tendency to revert to a mean but follows the government's long-term fiscal policies. The stationarity after first differencing makes PEI a candidate for inclusion in an ARDL model, where its long-run impact on GDP can be assessed. All variables—RGDP, PFDI, SMI are found to be I(1), meaning they are non-stationary at levels but become stationary after first differencing. This confirms the appropriateness of using an ARDL Bounds Test to examine long-run relationships between these variables and RGDP.

ARDL Bounds Test Result

Table 3: ARDL Bounds Test result

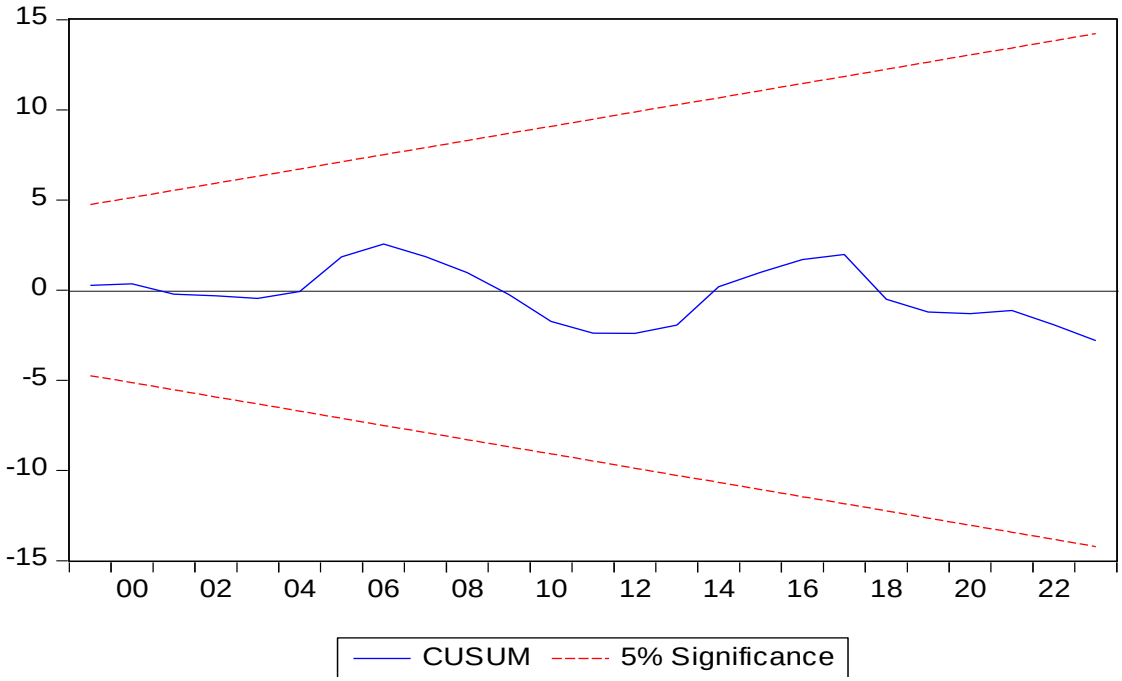
Test Statistic	Value	K
F-statistic	6.274747	4

Critical Value Bounds		
Significance	I0 Bound	I1 Bound
5%	2.86	4.01

Source: Author's Computation 2024, using E-view 12.0 version

From table 3 showed that the F-statistic from the ARDL Bounds Test is 6.2747, and the test was conducted with **k = 4** (which indicates the number of independent variables in the model). Critical Value Bounds: I(0).

CUSUM Test



The **CUSUM (Cumulative Sum) test** is used to assess the stability of a regression model by examining whether the estimated coefficients remain stable over time. The blue line represents the cumulative sum of recursive residuals, while the red dashed lines indicate the 5% significance level boundaries.

In this graph, the CUSUM line remains within the two red significance boundaries throughout the sample period. This suggests that the regression model is stable, meaning that there are no significant structural breaks in the relationship between the dependent and independent variables. A model is considered unstable if the CUSUM line crosses the red boundaries, indicating that structural changes have occurred in the dataset.

The stability of the model implies that the estimated parameters are reliable for forecasting and policy analysis. Since the CUSUM test confirms stability, any inferences drawn from the model can be trusted over time. In summary, the model appears to be well-specified and does not exhibit major structural shifts, making it suitable for long-term economic analysis and policy formulation.

Test of Hypothesis

ARDL model

Dependent Variable: RGDP

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
RGDP	0.774549	0.067903	11.40675	0.0000
PFDI	-0.003931	0.003142	-1.251099	0.0240
SMI	0.044104	0.032858	1.342273	0.0932
C	1.011487	0.197262	5.127623	0.0000

R-squared	0.997774	Mean dependent var	4.541982
Adjusted R-squared	0.997167	S.D. dependent var	0.586971
S.E. of regression	0.031242	Akaike info criterion	-3.887582
Sum squared resid	0.021474	Schwarz criterion	-3.557545
Log likelihood	63.36993	Hannan-Quinn criter.	-3.784218
F-statistic	1643.560	Durbin-Watson stat	1.974511
Prob(F-statistic)	0.000000		

Source: Author's Computation 2024, using E-view 12.0 version

H_{o1}: Foreign direct investment has no significant effect on economic growth in Nigeria.

The coefficient of PFDI is -0.003931, suggesting a negative relationship with RGDP. This implies that an increase in private foreign direct investment may slightly reduce RGDP, possibly due to capital outflows, profit repatriation, or inefficiencies in investment utilization. The t-statistic is -1.251099, and the p-value is 0.0240, which is significant at the 5% level. This suggests that the impact of PFDI on RGDP is statistically significant, though the effect size is small. We accept the alternate hypotheses that Private Foreign direct investment has negative significant effect on economic growth in Nigeria. The negative impact of FDI on economic growth suggests that foreign investments may not be effectively translating into economic development.

H_o2: Stock market investment has no significant effect on economic growth in Nigeria.

The coefficient of SMI is 0.044104, indicating a positive relationship with RGDP. This suggests that an increase in Stock market investment contributes to economic growth. However, the **t-**statistic of 1.342273 and a p-value of 0.0932 indicate that this relationship is not statistically significant at the conventional 5% level but is significant at the 10% level. This suggests a weak but positive impact of SMI on RGDP. That is, we accept the null hypotheses that Stock market investment has positive insignificant effect on economic growth in Nigeria. The insignificant effect of stock market investment implies that Nigeria's capital markets may not be adequately contributing to real economic expansion.

Discussion of Findings

The findings reveal that Private Foreign Direct Investment (PFDI) has a negative and statistically significant effect on Nigeria's economic growth, as evidenced by the coefficient of -0.003931 and a p-value of 0.0240. This suggests that an increase in PFDI results in a slight decline in Real Gross Domestic Product (RGDP), contradicting the traditional expectation that foreign investment should enhance economic development. The findings align with previous empirical studies that have documented a negative or insignificant impact of FDI on economic growth in Nigeria. For instance, Okonkwo et al. (2021) found that foreign direct investment had a detrimental effect on economic growth due to capital flight and low reinvestment rates. Similarly, Akinlo (2016) argued that the dominance of FDI in the oil sector has not significantly contributed to industrial growth or employment generation in Nigeria. However, some studies present a mixed view, indicating that while FDI might have a negative short-term effect, it could lead to long-term benefits if accompanied by strong domestic policies (Obadan, 2018).

The findings indicate that stock market investment has a positive but insignificant effect on economic growth in Nigeria. This implies that while stock market investment contributes positively to Real Gross Domestic Product (RGDP), its impact is not statistically significant in driving overall economic expansion. Several factors may explain this result. Nigeria's stock market is still developing and characterized by low participation rates, market volatility, and structural inefficiencies (Owolabi & Ajayi, 2021). A large proportion of the economy remains informal and heavily reliant on non-market financial sources, such as commercial bank lending, cooperative societies, and foreign remittances, rather than equity financing. As a result, stock market activities may not directly translate into substantial economic growth. The stock market's role in economic growth is

often dependent on factors such as market depth, liquidity, and investor confidence (Oke & Adeusi, 2019). Empirical studies have provided mixed evidence regarding the relationship between stock market investment and economic growth in Nigeria. Oke and Adeusi (2019) found that while stock market development enhances economic activities, its overall effect remains insignificant due to structural bottlenecks. Similarly, Atoyebi et al. (2021) concluded that stock market performance does not have a significant short-term impact on GDP growth in Nigeria, although it may contribute positively in the long run if appropriate reforms are implemented.

4. CONCLUSION AND RECOMMENDATIONS

Conclusion

The study examined the effect of investment on economic growth in Nigeria from 1994 to 2023.Giventhe result of the unit root test and the co-integration test, it was revealed that the variables are co-integrated. Consequent to the co-integration result, the model was analysed using the ADRL analysis. Based on the analysis, the long run regression estimate revealed that Private Foreign Direct Investment (PFDI) has a negative and significant effect on economic growth in Nigeria. This suggests that foreign investments may not have contributed positively to economic development, possibly due to profit repatriation, weak linkages with domestic industries, or unfavorable investment climates.

Stock Market Investment (SMI) has a positive but insignificant effect on economic growth. This implies that while stock market activities theoretically support economic expansion, their impact remains weak in Nigeria. Factors such as low market capitalization, limited investor confidence, and inefficiencies in stock trading may hinder its contribution to GDP growth.

Recommendations

Based on the empirical results of the study, the following recommendations are considered:

i. Since PFDI has a negative and significant effect on economic growth in Nigeria, the government should implement policies that ensure foreign investments contribute to local economic development. This includes strengthening local content policies, encouraging reinvestment of profits within the country, and ensuring that FDI projects align with national development priorities.

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Additionally, streamlining regulatory frameworks will attract quality investments that have a positive impact on GDP.

ii. Despite its positive but insignificant effect on economic growth, stock market investments can be made more impactful by deepening market liquidity, enhancing investor confidence, and reducing market volatility. The government and regulatory bodies should improve corporate governance, enforce transparency, and incentivize local participation in the stock market. Strengthening financial literacy programs will also encourage more Nigerians to invest in equities.

5. REFERENCE

Abduvaliev, A. (2023). The impact of investments on economic growth: Evidence from Tajikistan. *Journal of Economic Studies*, *45*(2), 123-137.

Adegbite, A., & Olayemi, S. (2021). Private equity and economic diversification in Nigeria: A review of investment trends and challenges. *Journal of Finance and Economic Development*, 8(2), 112-130.

Adegbite, T., & Olayemi, A. (2021). *Economic growth and development: Theory and practice*. Oxford University Press.

Adeniran, O. A., & Yusuf, S. A. (2021). The impact of agricultural financing on economic growth in Nigeria. *African Journal of Economic Review*, *9*(2), 45-60.

African Development Bank (AfDB). (2020). *African economic outlook 2020: Developing Africa's workforce for the future*. AfDB.

African Development Bank (AfDB). (2021). *Infrastructure development in Africa: Progress, challenges, and solutions*. AfDB.

Alabi, O. (2019). The impact of foreign direct investment on economic growth: Nigeria experience. *International Journal of Development Studies*, *40*(1), 51-68.

Alfarro, R. (2017). Foreign direct investment and economic growth: The role of financial markets. *Journal of International Economics, 89*(1), 77-95.

Asiedu, E. (2019). Foreign direct investment in Africa: The role of natural resources, market size, government policy, institutions and political instability. *World Development, 25*(3), 449–460.

Babalola, M., Mohd, S., Ehigiamusoe, J., &Onikola, R. (2019). The impact of foreign direct investment, aid, and trade on economic growth in Nigeria. *Journal of International Economics*, *28*(4), 243-259.

Bidami, P., Robinson, T., Olulu, O., & Pual, A. (2018). The impact of private domestic investment on economic growth in Nigeria. *African Journal of Business and Economic Research*, *10*(2), 215-232

Central Bank of Nigeria (CBN). (2022). *Economic Recovery and Growth Plan: A policy framework for sustainable development in Nigeria*. CBN.

Central Bank of Nigeria (CBN). (2022). Foreign direct investment inflows and economic growth in Nigeria. *CBN Economic Review*, 60(1), 22-41.

Eze, C., & Okonkwo, O. (2022). Foreign direct investment and business environment stability in emerging economies. *Nigerian Journal of Economic Research*, 14(2), 75-93.

International Monetary Fund (IMF). (2023). *Investment trends and sustainable economic growth*. IMF.

Iyoha, M. (2003). *Macroeconomic policy and economic growth in Nigeria*. Benin City Press.

Iyoha, M. A., &Oriakhi, D. E. (2002). *Explaining African economic growth performance: The case of Nigeria*. African Economic Research Consortium.

Joel, T., & Onura, P. (2021). *Macroeconomics: Concepts and applications*. Pearson.

John, F. (2016). The effect of foreign direct investment on economic growth in Nigeria. *Journal of Economic Policy, 21*(3), 198-213.

Liesbeth, A., Van Pottelsberghe, B., & Nicolas, V. (2009). Investments as the engine of economic growth: An empirical approach. *European Economic Review, 53*(6), 771-790.

Mishkin, F. S. (2021). *The economics of money, banking, and financial markets* (13th ed.). Pearson.

Nketsiah, A., &Quaidoo, B. (2017). The effect of foreign direct investment on economic growth in Ghana. *Journal of Ghanaian Economics, 15*(2), 80-92.

Nwanne, I. (2016). The implication of investment on economic growth in Nigeria. *African Journal of Economics, 18*(3), 98-115.

OECD. (2022). *Foreign direct investment and global economic trends*. OECD Publishing.

Ogunjinmi, T. O. (2022). The impact of domestic investment on economic growth in Nigeria: Further evidence. *Journal of Economic Growth, 32*(4), 451-468.

Ogunleye, T. (2018). The role of investment in economic growth: Evidence from Nigeria. *Journal of African Economic Development, 5*(1), 59-76.

Okonkwo, C., & Uchenna, E. (2021). The determinants of foreign direct investment in Nigeria: A macroeconomic perspective. *Nigerian Journal of Economic Studies, 13*(2), 112-135.

Okonkwo, R. C., & Eze, C. M. (2022). Climate change and agricultural productivity in Nigeria: Implications for investment in the sector. *Journal of Environmental Economics, 14*(2), 133-145.

Potters, C. (2021). *Principles of economics and economic growth*. McGraw-Hill.

Shiller, R. J. (2019). *Narrative economics: How stories go viral and drive major economic events*. Princeton University Press.

Simionescu, M., &Naros, M. (2019). The role of foreign direct investment in economic growth: Evidence from the European Union. *Economic Research Journal, 12*(3), 178-190.

Smith, A. (1776). *An inquiry into the nature and causes of the wealth of nations*. W. Strahan and T. Cadell.

Solow, R. M. (1956). A contribution to the theory of economic growth. *Quarterly Journal of Economics, 70*(1), 65-94.

Tee Larbi, K., & Johnson, K. (2017). The effect of foreign direct investment (FDI) on the Ghanaian economic growth. *African Economic Journal, 34*(3), 169-180.

Torabi, M. (2015). Human development and economic investment: A cross-country analysis. *International Journal of Development Studies, 9*(2), 47-63.

Udoh, E., &Ogbuagu, C. (2020). Policy inconsistencies and endogenous growth in Nigeria: An empirical review. *Nigerian Journal of Economic Development, 15*(2), 75–92.

Wondimu, S. (2023). Foreign direct investment and economic growth in Ethiopia: Evidence from 1992-2019. *Journal of Economic Studies, 32*(1), 122-136.

World Bank. (2022). *Foreign direct investment: Global trends and implications*. World Bank Economic Outlook Report.

World Bank. (2022). *Investment and sustainable economic development in Africa*. World Bank Publications.

World Bank. (2022). *World development indicators 2022*. World Bank.

World Economic Forum. (2022). *Investment policy reforms and economic growth in Africa.*