International Journal of Academic Management Science Research (IJAMSR)
ISSN: 2643-900X
Vol. 9 Issue 6 June - 2025, Pages: 37-50

Investment Metrics And The Nigerian Economy

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Abstract: *This study examined the effect of investment metrics on the Nigerian economy, with specific focus on Foreign Direct Investment Inflows (FDII), Government Investment Spending (GIS), Private Sector Credit to GDP Ratio (PSCGDPR), and Investment-to-GDP Ratio (IGDPR) as proxies for investment activity. The dependent variable was Nigeria's Real Gross Domestic Product (RGDP), analyzed over the period 1990 to 2024. Utilizing an ex-post facto research design, the study relied exclusively on secondary data sourced from the Central Bank of Nigeria's Statistical Bulletin and Annual Reports. The Autoregressive Distributed Lag (ARDL) model was employed due to the mixed order of integration among variables, allowing for the investigation of both short-run and long-run relationships. A series of diagnostic tests—including Descriptive Statistics, Correlation Matrix, Variance Inflation Factor (VIF), Breusch-Godfrey Serial Correlation LM Test, Breusch-Pagan-Godfrey Heteroskedasticity Test, Ramsey RESET Test, and the Augmented Dickey-Fuller (ADF) unit root test—were conducted to confirm the robustness of the model and validity of assumptions. The ARDL Bounds Test confirmed the existence of a long-run equilibrium relationship among the variables. However, the results revealed that none of the investment indicators had a statistically significant effect on RGDP in either the short run or the long run. FDII recorded a short-run p-value of 0.8923 and a long-run p-value of 0.8920, showing no significant contribution to output. GIS similarly exhibited no significant impact, with short-run and long-run p-values of 0.2488 and 0.2614, respectively. PSCGDPR had a long-run p-value of 0.9305, indicating a complete lack of significance, while the short-run estimate was affected by a formatting irregularity. IGDPR presented a long-run p-value of 0.2625, and its short-run result also showed data inconsistencies. These findings suggest that the presumed growth-enhancing effects of investment in Nigeria have not materialized, likely due to structural inefficiencies, poor absorptive capacity, misallocated resources, and weak financial intermediation. The study concludes that investment-driven growth policies must be supported by institutional reforms and targeted allocation strategies to be effective. It recommends a strategic realignment of public and private sector investment frameworks, prioritizing governance, infrastructure, and productive sectors to unlock Nigeria's economic potential.*

Keywords: Investment Metrics, Foreign Direct Investment Inflows, Government Investment Spending, Private Sector Credit to GDP Ratio, Investment-to-GDP Ratio, Real Gross Domestic Product.

Background to the Study

Investment remains a cornerstone of economic development, particularly in emerging economies like Nigeria. The nation's economic trajectory is significantly influenced by various investment metrics, including Foreign Direct Investment Inflows (FDII), Government Investment Spending (GIS), Private Sector Credit to GDP Ratio (PSCGDPR), and Investment-to-GDP Ratio (IGDPR). These indicators collectively shape the country's economic landscape, ultimately impacting its Real Gross Domestic Product (RGDP).

Foreign Direct Investment (FDI) plays a pivotal role in transferring technology, enhancing human capital, and integrating domestic markets into global value chains. However, Nigeria has experienced fluctuations in FDI inflows over recent years. In 2022, the country recorded a negative FDI inflow of -$186.79 million, a sharp decline from $3.31 billion in 2021 (PwC Nigeria, 2025). This downturn can be attributed to several structural and macroeconomic challenges, including regulatory uncertainty, security concerns, and poor infrastructure (Grant Thornton Nigeria, 2025; National Bureau of Statistics, 2025; CEIC Data, 2025). Nonetheless, a rebound occurred in 2023, with FDI inflows rising to $1.87 billion, signaling a tentative return of investor confidence. Jack and Amieye (2025) emphasize that FDI's impact on economic growth is contingent upon the presence of strong macroeconomic policy frameworks and institutional stability, which remain inconsistent in Nigeria. Government Investment Spending is another critical determinant of economic performance. Between 2015 and 2024, Nigeria's government spending averaged only 13.1% of GDP, far below the global average and insufficient for closing the country's massive infrastructure gap (Nigerian Economic Summit Group, 2025). The limited fiscal space due to declining oil revenues and high debt servicing obligations has constrained effective public investment. Wobo and Odoemelam (2025) empirically showed that targeted government expenditure, particularly in agriculture and infrastructure, significantly enhances GDP growth. However, questions remain about the efficiency and transparency of public spending in Nigeria (PwC Nigeria, 2025).

The Private Sector Credit to GDP Ratio (PSCGDPR) is a reflection of the financial system's capacity to support enterprise development. In Nigeria, this ratio stood at 17.59% in 2023—alarmingly low when compared with the standards of other developing economies (Trading Economics, 2025). Such limited credit penetration restricts the ability of firms, especially SMEs, to expand operations and contribute meaningfully to national output. The Central Bank of Nigeria (2025) has introduced several interventions

to deepen credit access, but bottlenecks such as high interest rates, collateral requirements, and credit risk persist. Olubanke, et al (2025) argue that enhanced financial intermediation and improved access to credit are vital for unlocking private sector-led growth in Nigeria. The Investment-to-GDP Ratio (IGDPR) is another fundamental metric for gauging economic health. In 2023, investments accounted for approximately 36.1% of Nigeria's nominal GDP, up from 33.0% the previous year (CEIC Data, 2025). This steady increase indicates growing capital formation, which is essential for long-term economic resilience. Nevertheless, the quality of these investments remains under scrutiny. Without a clear national investment strategy prioritizing productivity-enhancing sectors, the increase in investment may not translate into real economic gains. Jack and Amieye (2025) highlighted that Nigeria must improve the strategic allocation of investment resources to ensure sustainable development.

Real Gross Domestic Product (RGDP), as a proxy for economic performance, has shown mixed trends. The growth rate declined from 3.3% in 2022 to 2.9% in 2023, largely driven by inflationary pressures, currency volatility, and global economic uncertainty (African Development Bank, 2025). While the services and agriculture sectors continued to offer modest contributions, the oil and gas sector faced severe disruptions due to pipeline vandalism and underinvestment. The African Development Bank (2025) advocated for stronger fiscal discipline, improved public sector efficiency, and investment in human capital as viable strategies for boosting Nigeria's RGDP in the long term.

The relationship between investment metrics and economic performance is highly nuanced. While government investment can drive growth, its success is dependent on efficiency, transparency, and sectoral targeting (Wobo & Odoemelam, 2025). Similarly, increasing FDI requires more than capital inflows; it necessitates legal, institutional, and infrastructural reforms (Jack & Amieye, 2025). For the private sector, credit accessibility is essential, but Nigeria must address the structural barriers limiting the flow of funds to productive enterprises (Olubanke et al., 2025). Likewise, an improved Investment-to-GDP Ratio must be accompanied by mechanisms that ensure the productivity and long-term viability of investments (CEIC Data, 2025). Recent empirical studies have further reinforced these relationships. Jack and Amieye (2025) demonstrated that FDII has a significant, albeit conditional, positive impact on RGDP in Nigeria. Wobo and Odoemelam (2025) found that specific categories of GIS, such as capital spending on agriculture and education, produce greater economic returns compared to recurrent expenditure. Olubanke et al. (2025) provided evidence that enhanced financial intermediation not only improves private sector performance but also catalyzes economic growth. These findings align with the broader macroeconomic outlook shared by local and international institutions (African Development Bank, 2025; Nigerian Economic Summit Group, 2025). Thus, investment metrics such as FDII, GIS, PSCGDPR, and IGDPR are integral to Nigeria's economic trajectory. To harness their full potential, Nigeria must implement evidence-based policies that improve investment climate, prioritize productive spending, and deepen financial inclusion. A coherent policy framework that aligns public and private sector objectives will be essential to improving RGDP and ensuring inclusive and sustainable development.

Objectives of the Study

The primary objective of this study was to examine the effect of investment metrics on the Nigerian economy. The specific objectives are to:

1. assess the short-run and long-run effect of FDII on RGDP in Nigeria.
2. evaluate the effect of GIS on RGDP in Nigeria.
3. determine the effect of PSCGDPR on RGDP in Nigeria.
4. analyze the effect of IGDPR on RGDP in Nigeria.

Research Questions:

1. What is the short-run and long-run effect of FDII on RGDP in Nigeria?
2. How does GIS affect the RGDP in Nigeria?
3. What effect does PSCGDPR have on RGDP in Nigeria?
4. What is the effect of IGDPR on RGDP in Nigeria?

Conceptual Review
Investment metrics

Investment metrics play a central role in assessing the economic trajectory of nations, particularly in emerging economies like Nigeria. These metrics—Foreign Direct Investment Inflows (FDII), Government Investment Spending (GIS), Private Sector Credit to GDP Ratio (PSCGDPR), and Investment-to-GDP Ratio (IGDPR) are often utilized to gauge the strength and direction of economic performance. Nigeria's reliance on these indicators has grown in recent years due to their implications for national productivity, employment generation, and macroeconomic stability. According to Jack and Amieye (2025), investment metrics are essential predictors of economic growth, but their effectiveness depends heavily on the consistency of macroeconomic policies and institutional governance. Agunbiade (2025) found that fluctuations in these indicators reflect deeper structural challenges within Nigeria's fiscal and financial frameworks.

FDII is widely regarded as a catalyst for capital accumulation and economic modernization in developing countries. In Nigeria, however, the flow of FDI has remained inconsistent due to factors such as regulatory uncertainty, currency volatility, and infrastructural bottlenecks. While some studies such as Ozili (2025) concluded that FDI's impact on Nigeria's economy remains minimal, others like Agbo and Ikpe (2023) found that foreign capital inflows significantly improve domestic output, particularly in manufacturing and service sectors. Jack and Amieye (2025) further emphasized that FDII has a stronger effect when domestic absorptive capacities—such as technological readiness and labor productivity—are adequately developed. These mixed findings highlight the complexity of Nigeria's investment climate and the importance of sectoral-specific analysis when evaluating FDII outcomes.

GIS, another key metric, reflects the extent of government involvement in economic stimulation, particularly through infrastructural and social investments. Umeh, Ezudike, and Anyaegbunam (2022) argued that when government expenditure is effectively allocated, particularly in areas such as agriculture, health, and education, it tends to produce positive and lasting effects on GDP growth. Conversely, Wobo and Odoemelam (2025) identified inefficiencies in capital allocation and recurrent expenditures as major hindrances to GIS effectiveness in Nigeria. Similarly, Agbo (2025) noted that fiscal indiscipline and poor public financial management have undermined the growth-inducing potential of public spending. This underscores the call for transparency, efficiency, and priority-based budgeting in the public sector to realize the true value of GIS in economic expansion.

PSCGDPR serves as a proxy for financial sector depth and the private sector's access to credit. In Nigeria, private sector credit remains disproportionately low compared to GDP, indicating an underdeveloped financial intermediation system. Olubanke, Akanegbu, and Azu (2025) revealed that the availability of credit for small and medium enterprises (SMEs) is significantly hampered by stringent collateral requirements and unstable interest rates. In another study, Olaniyi and Olowookere (2023) emphasized the critical role of monetary policy, regulatory efficiency, and bank capitalization in improving private sector lending. Similarly, Olannye, Maku, and Adelowokan (2023) demonstrated that private sector credit significantly influences economic growth, while public sector credit showed no meaningful contribution. These findings reaffirm the role of PSCGDPR in fostering entrepreneurship, industrialization, and inclusive growth in Nigeria.

IGDPR, the ratio of total investment to GDP, reflects the volume of resources devoted to capital formation within the economy. A high IGDPR typically suggests future economic expansion if investments are channeled into productive sectors. According to CEIC Data (2025), Nigeria's IGDPR rose to 36.1% in 2023, indicating improved capital accumulation. However, Jack and Amieye (2025) cautioned that without productivity-enhancing investments and proper execution of infrastructure projects, this growth could be illusionary. Umeh et al. (2022) argued that improving investment efficiency is more important than increasing the volume of investment, especially in an economy battling inefficiencies and leakages.

Thus, while FDII, GIS, PSCGDPR, and IGDPR each contribute to Nigeria's economic development, their impact is not uniform and depends largely on the efficiency, institutional quality, and macroeconomic context within which they are applied. The consensus across recent Nigerian studies suggests that beyond quantitative inflows, the structure, direction, and governance of investments determine their true contribution to sustainable growth. Therefore, integrated and evidence-based policy reforms that enhance institutional efficiency, promote private sector access to finance, and prioritize high-impact investments are necessary to optimize these metrics for national development.

Real Gross Domestic Product (RGDP) in the Nigerian Economy

Real Gross Domestic Product (RGDP) serves as a pivotal indicator of Nigeria's economic health, reflecting the total value of goods and services produced within the country, adjusted for inflation. It provides a more accurate measure of economic performance over time by accounting for changes in price levels, thereby enabling policymakers to assess growth trends and make informed decisions (Okwu et al., 2019). In the Nigerian context, RGDP is influenced by various macroeconomic factors, including fiscal policies, monetary policies, and external economic shocks. For instance, fluctuations in oil prices have historically impacted Nigeria's RGDP, given the country's reliance on oil exports. Sami and Taiwo (2023) highlight that changes in crude oil prices and production levels significantly affect Nigeria's economic performance, emphasizing the need for economic diversification to mitigate such vulnerabilities. Monetary policy instruments, particularly interest rates, also play a crucial role in shaping RGDP. Ademola et al. (2023) conducted an empirical investigation using the Autoregressive Distributed Lag (ARDL) model and found a significant long-run relationship between interest rates and RGDP in Nigeria. Their study suggests that maintaining stable interest rates is essential for fostering economic growth.

Exchange rate dynamics further influence RGDP by affecting trade balances and investment flows. Afolabi et al. (2022) examined the impact of exchange rate volatility on Nigeria's economic growth and concluded that exchange rate stability is vital for sustaining RGDP growth. Their findings underscore the importance of coherent exchange rate policies in promoting economic stability. Fiscal policy, particularly government expenditure, is another determinant of RGDP. Jane et al. (2023) analyzed the impact of fiscal policy on Nigeria's economic growth and found that effective government spending, especially in infrastructure and human capital development, positively influences RGDP. This highlights the need for strategic allocation of public funds to sectors that drive economic growth. Financial inclusion and access to credit are also critical for enhancing RGDP. Nma and Callistus (2022) assessed

the relationship between financial inclusion and economic growth in Nigeria, revealing that increased access to financial services significantly boosts RGDP. Their study advocates for policies that promote financial inclusion to stimulate economic development. Forecasting RGDP trends is essential for economic planning and policy formulation. Bakawu et al. (2023) employed fuzzy regression models to predict Nigeria's RGDP, demonstrating the utility of advanced econometric techniques in economic forecasting. Such models aid in anticipating future economic scenarios, allowing for proactive policy responses. In summary, RGDP is a comprehensive measure of Nigeria's economic performance, influenced by a myriad of factors including oil prices, monetary and fiscal policies, exchange rates, and financial inclusion. Understanding these dynamics is crucial for implementing effective policies aimed at achieving sustainable economic growth.

Theoretical Framework

In analyzing the effect of investment metrics—namely FDII, GIS, PSCGDPR, and IGDPR—on Nigeria's Real Gross Domestic Product (RGDP), two foundational economic theories provide a suitable conceptual anchor: the Endogenous Growth Theory and the Keynesian Theory of Aggregate Demand. These theories help to explain the mechanisms through which investment metrics translate into macroeconomic performance.

The Endogenous Growth Theory, also known as the new growth theory, asserts that investment in human capital, innovation, and knowledge are significant contributors to economic growth, and that these elements are largely influenced by policy decisions and institutional structures. According to this theory, unlike exogenous growth models (such as Solow's model), long-term economic growth can be internally sustained through deliberate investment efforts. Within this framework, Foreign Direct Investment Inflows (FDII) and Investment-to-GDP Ratio (IGDPR) are critical. FDII is seen as a vehicle for technology transfer, skill development, and productivity enhancement in host economies (Romer, 1990). Empirical studies in Nigeria, such as by Jack and Amieye (2025), support this claim, showing that FDII contributes to output growth when complemented by strong absorptive capacity and stable institutions. Likewise, a higher IGDPR indicates an economy's propensity for capital formation, which directly fuels output expansion through infrastructure development and industrial capacity building (Umeh, et al, 2022).

In the same vein, the theory aligns with Private Sector Credit to GDP Ratio (PSCGDPR), as it represents the financial sector's efficiency in mobilizing and allocating resources to productive uses. A well-developed financial sector provides accessible credit to firms, stimulating entrepreneurship, innovation, and expansion—all of which contribute positively to RGDP. This is supported by Olubanke, et al (2025), who argue that a higher PSCGDPR fosters private sector-led growth, which is essential in economies striving to diversify from primary commodity dependence.

On the other hand, the Keynesian Theory of Aggregate Demand posits that total demand in the economy (aggregate demand) determines overall economic output and employment, particularly in the short run. Within this framework, Government Investment Spending (GIS) is a powerful tool for stimulating economic activity. According to Keynes, during periods of economic slack, government spending can compensate for weak private demand by injecting funds into infrastructure, education, and other public services, thereby creating jobs and raising incomes, which in turn stimulate consumption and investment. This theory is particularly relevant in Nigeria's context, where government spending plays a dominant role in capital formation. Studies such as Wobo and Odoemelam (2025) confirm the Keynesian assertion, demonstrating that targeted GIS in sectors like agriculture and power infrastructure leads to significant increases in RGDP.

Furthermore, the Keynesian model supports the view that multiplier effects from government investment can lead to broader gains in national output. Nzekwe (2025) found that capital expenditure, as a component of GIS, is more strongly correlated with RGDP growth than recurrent spending. Thus, the theory suggests that for investment metrics to positively affect RGDP, they must be strategically channeled into areas with high multiplier potential.

Thus, both the Endogenous Growth Theory and the Keynesian Theory of Aggregate Demand provide robust theoretical justification for examining the effect of FDII, GIS, PSCGDPR, and IGDPR on RGDP. While the former emphasizes structural and innovation-based pathways to growth through investment and financial intermediation, the latter underscores the role of demand stimulation through government intervention. Together, they offer a comprehensive lens for analyzing the dynamics of Nigeria's economic performance.

Empirical Review

Olubanke, et al (2025) conducted an empirical investigation on the combined impact of foreign direct investment and remittances on Nigeria's RGDP. The study used annual data from 1981 to 2022, sourced from the Central Bank of Nigeria and the National Bureau of Statistics. Through econometric modeling, the findings revealed that both FDI and remittance inflows have a statistically significant and positive impact on RGDP. The authors emphasized the importance of financial intermediation in translating these external inflows into real sector growth. They recommended policies that would improve access to finance, particularly by strengthening the banking system and incentivizing diaspora contributions.

Ozili (2024) assessed the effect of foreign direct investment inflows on economic growth in Nigeria between 2010 and 2019. The study employed the Ordinary Least Squares (OLS) regression method with data sourced from the World Bank and CBN. Results

indicated that FDI did not have a statistically significant effect on economic growth. However, other variables such as domestic credit, interest rate, and inflation were shown to influence RGDP more substantially. The study concluded that Nigeria's heavy reliance on FDI as a growth strategy may be misplaced and suggested that enhancing domestic investment climate and strengthening macroeconomic fundamentals are more viable paths to sustainable growth.

Wobo and Odoemelam (2024) examined how government investment spending affects GDP performance in Nigeria, using government expenditure data on education and agriculture. The study adopted a multiple regression approach using E-Views 10 software and covered data from 2014 to 2023. The results indicated that government spending on education had no significant effect on GDP, while spending on agriculture showed a positive impact. This led the authors to conclude that misallocation or inefficiencies in education funding could be limiting its economic impact. Consequently, they recommended a realignment of public expenditure toward agriculture and productive sectors that yield higher returns on GDP growth.

Olannye, et al (2024) analyzed the differential effects of credit allocation to the private and public sectors on Nigeria's economic growth. Their study, which utilized the Autoregressive Distributed Lag (ARDL) model, was based on data from 1981 to 2020, obtained from the CBN Statistical Bulletin. Findings showed that domestic credit to the private sector had a statistically significant and positive impact on RGDP, while credit to the public sector was not significant. The researchers concluded that Nigeria's financial system should focus more on empowering the private sector, particularly through credit facilitation to micro, small, and medium enterprises (MSMEs). They advised financial regulators to adopt sector-targeted credit policies to improve private sector performance.

Abada and Manasseh (2023) investigated the relationship between government sectoral spending and economic growth in Nigeria, focusing on expenditures in administration, defense, education, health, and internal security. The research adopted an ex post facto design, utilizing data from 2000 to 2022. Analysis was carried out using the ARDL model. The study found that while expenditure on general administration positively influenced RGDP, spending on defense and internal security had insignificant effects. The authors concluded that strategic allocation of government funds is essential to stimulate RGDP and recommended that policymakers shift more resources toward human capital development and public infrastructure.

Giwa, et al (2023) conducted a study to investigate the effect of Foreign Direct Investment (FDI) inflows on Nigeria's Real Gross Domestic Product (RGDP), with a particular focus on its implications for Sustainable Development Goal 17.3. The study applied the Generalized Method of Moments (GMM) estimation technique to time series data spanning from 1981 to 2020, sourced from the Central Bank of Nigeria (CBN) and the National Bureau of Statistics (NBS). Their analysis revealed that labor quality had a positive and significant impact on RGDP, whereas capital formation had a marginal effect. The study concluded that attracting FDI alone is not sufficient; rather, the absorptive capacity of the host economy—such as human capital and institutional strength—must be enhanced to reap the full benefits of FDI. It was recommended that policy focus should shift toward skill development and macroeconomic stability.

Research Methodology

This study adopted an ex-post facto research design, which is suitable for analyzing secondary data and identifying relationships among economic variables without manipulating them. This approach was appropriate given the nature of the study, which aimed to investigate the effect of investment metrics, specifically; Foreign Direct Investment Inflows (FDII), Government Investment Spending (GIS), Private Sector Credit to GDP Ratio (PSCGDPR), and Investment-to-GDP Ratio (IGDPR) on Nigeria's Real Gross Domestic Product (RGDP).

The population of the study comprised Nigeria's macroeconomic indicators as documented in official national records. Data were obtained from the Central Bank of Nigeria's Statistical Bulletin and Annual Reports, which provide consistent, credible, and up-to-date records of economic activity. A purposive sampling method was employed to select relevant annual time series data from 1990 to 2024, giving the study a total of 34 observations. This time frame was chosen to capture economic reforms, financial liberalization, policy shifts, and various investment regimes that have influenced Nigeria's growth trajectory over the years.

Secondary data collection techniques were employed, drawing exclusively from the Central Bank of Nigeria's official publications. These sources offered high-quality, accessible data relevant to all the variables used in the analysis. The dependent variable was Real Gross Domestic Product (RGDP), while the independent variables were FDII, GIS, PSCGDPR, and IGDPR. The selection of these variables was based on their theoretical relevance and empirical significance in explaining national output growth.

The Autoregressive Distributed Lag (ARDL) technique was used for the data analysis, which is appropriate for models involving variables of mixed order of integration, I(0) and I(1). The analysis was conducted using E-Views 9.0 software. Several diagnostic and statistical tests were conducted to ensure model reliability. These included Descriptive Statistics to summarize the data's mean, median, standard deviation, and skewness; a Correlation Matrix to examine the relationships among variables; and the Variance Inflation Factor (VIF) to test for multicollinearity. The Breusch-Godfrey Serial Correlation LM Test was used to check for the presence of autocorrelation in residuals, while the Breusch-Pagan-Godfrey test was applied to detect heteroskedasticity.

To validate the model's functional form, the Ramsey RESET Test was conducted. The Augmented Dickey-Fuller (ADF) test was employed to check for stationarity of the variables and ensure the appropriateness of the ARDL technique. The ARDL Bounds Test was applied to examine the existence of a long-run relationship among the variables. Once cointegration was confirmed, the ARDL Long-Run Form and Error Correction Model (ECM) were estimated to understand both the short-run and long-run dynamics of the model.

The general model was specified as follows:

$$LnRGDPt = \alpha_o + \Sigma\beta_1 iLnFDII\{t-i\} + \Sigma\beta_2 iLnGIS\{t-i\} + \Sigma\beta_3 i\ PSCGDPR\{t-i\} + \Sigma\beta_4 i\ IGDPR\{t-i\} + \varepsilon t$$

Where:

RGDPt = Real Gross Domestic Product at time t
FDII{t-i} = Foreign Direct Investment Inflows lagged by i periods
GIS{t-i} = Government Investment Spending lagged by i periods
PSCGDPR_{t-i} = Private Sector Credit to GDP Ratio lagged by i periods
IGDPR{t-i} = Investment-to-GDP Ratio lagged by i periods
α_0 = Intercept term
$\beta_1 i$, $\beta_2 i$, $\beta_3 i$, $\beta_4 i$ = Coefficients of the lagged independent variables
εt = Error term

Table 3.1: Variables Description

Variable	Description	Measurement Unit	Expected Sign
RGDP	Real Gross Domestic Product	Naira (₦)	Dependent
FDII	Foreign Direct Investment Inflows	Naira (₦)	Positive
GIS	Government Investment Spending	Naira (₦)	Positive
PSCGDPR	Private Sector Credit to GDP Ratio	Percentage (%)	Positive
IGDPR	Investment-to-GDP Ratio	Percentage (%)	Positive

Source: Researchers Basis of Computation, 2025.

Results and Discussion

This study investigates the effect of key investment metrics, namely; FDII, GIS, PSCGDPR, and IGDPR on Nigeria's RGDP over a 35-year period (1990–2024). The data, drawn from reliable macroeconomic sources, are annual time series spanning over three decades, allowing for a robust empirical assessment of both short-run dynamics and long-run equilibrium relationships. To achieve this, a series of diagnostic and econometric tests are employed, each serving a specific role in ensuring the validity and reliability of the regression outcomes. These tests collectively form the methodological framework necessary to understand the macroeconomic interplay between investment behaviors and economic growth in Nigeria.

Descriptive Statistics

To begin, descriptive statistics are computed to summarize the central tendency, dispersion, and distributional features of each variable. This initial step offers a foundational understanding of the investment indicators and RGDP, highlighting potential data issues such as outliers or skewness that may affect model accuracy. This was presented in Table 4.1 below:

Table 4.1: Descriptive Statistics

	RGDP	FDII	GIS	PSCGDPR	IGDPR
Mean	9.550112	2.450011	9.800011	30.27453	18.28384
Median	9.32E012	2.260011	1.040012	27.08431	19.68358
Maximum	1.470013	4.940011	1.820012	48.87128	34.56951
Minimum	5.210012	2.690010	6.080010	10.27809	5.497635
Std. Dev.	3.010012	1.520011	5.620011	12.04494	8.376664
Skewness	0.287819	0.200918	-0.235379	0.096679	0.221913
Kurtosis	1.828702	1.679431	1.711558	1.583681	2.026530
Jarque-Bera	2.483975	2.778671	2.744141	2.979882	1.669245
Probability	0.288810	0.249241	0.253581	0.225386	0.434038
Sum	3.340014	8.590012	3.430013	1059.608	639.9343
Sum Sq. Dev.	3.080026	7.880023	1.070025	4932.736	2385.729

Observations	35	35	35	35	35

Source: Econometric Views Version 9.0 (2025)

The descriptive statistics in Table 4.2 provide valuable insights into the distribution and behavior of each variable over the 35-year study period. RGDP has a mean value of approximately 9.55E+12, with a moderate level of dispersion as shown by its standard deviation of 3.01E+12. Its distribution is slightly positively skewed (0.29) and platykurtic (1.83), suggesting that economic output fluctuated moderately around the mean without extreme values, which is supported by the Jarque-Bera probability (0.29) indicating a reasonably normal distribution. FDII exhibits a mean value of 2.45E+11, with a standard deviation of 1.52E+11, pointing to notable variability in foreign investment inflows across the years. The skewness value of 0.20 and a kurtosis of 1.68 reveal a near-symmetric but light-tailed distribution, indicating occasional peaks in inflows without severe outliers. The probability value of the Jarque-Bera test (0.25) supports the assumption of normality. GIS has a mean of about 9.80E+11, but a relatively high standard deviation of 5.62E+11, indicating significant fluctuations in public investment spending over the period. The slight negative skewness (-0.24) and low kurtosis (1.71) suggest a distribution with occasional dips below the mean and relatively flat tails, with a Jarque-Bera probability of 0.25 confirming the absence of serious deviations from normality. PSCGDPR averages around 30.27%, with values ranging from a minimum of 10.28% to a maximum of 48.87%, and a standard deviation of 12.04%. Its slight positive skew (0.10) and low kurtosis (1.58) indicate a fairly symmetric and broad distribution of private credit relative to GDP, while the Jarque-Bera statistic ($p = 0.23$) supports the assumption of an approximately normal distribution. IGDPR shows a mean of 18.28%, reflecting the average share of investment in GDP, with a standard deviation of 8.38%, indicating noticeable variability across the years. The skewness (0.22) and kurtosis (2.03) values suggest a mildly right-skewed and mesokurtic distribution, implying moderate asymmetry and normality in the data, as reinforced by the Jarque-Bera probability (0.43), which suggests the distribution is not significantly different from normal.

Correlation Matrix

The correlation matrix assesses the degree of linear association among the study variables. This helps to identify potential collinearity between investment indicators, thereby informing further diagnostic steps and ensuring clarity in interpreting their individual effects on RGDP. This was presented in Table 4.2 below:

Table 4.2: Correlation Ouput

	RGDP	FDII	GIS	PSCGDPR	IGDPR
RGDP	1.000000				
FDII	-0.028159	1.000000			
GIS	-0.235289	0.188158	1.000000		
PSCGDPR	0.002728	-0.016382	-0.173418	1.000000	
IGDPR	-0.226402	0.104907	0.120669	0.188917	1.000000

Source: Econometric Views Version 9.0 (2025)

The correlation output in Table 4.2 reveals the strength and direction of linear relationships among the variables under study. The correlation between RGDP and FDII is weakly negative at -0.03, indicating an almost negligible inverse association between foreign investment inflows and economic output, suggesting that increases in FDII may not directly or consistently translate into economic growth in Nigeria over the study period. Similarly, GIS shows a more noticeable negative correlation with RGDP at -0.24, implying that increases in government investment spending may have been associated with slight declines in RGDP, possibly due to inefficiencies or lagged effects in public spending. PSCGDPR exhibits a near-zero correlation with RGDP (0.003), reflecting an extremely weak positive relationship, which suggests that private sector credit expansion did not have a strong or direct contemporaneous link with economic growth during the sample period. In the case of IGDPR, the correlation with RGDP is also mildly negative at -0.23, indicating that a higher investment share in GDP was not necessarily aligned with higher output growth, potentially hinting at misallocations or unproductive investments within the economy. Among the independent variables, FDII is positively but weakly correlated with GIS (0.19) and IGDPR (0.10), suggesting some degree of alignment between foreign inflows, public investment, and overall investment levels. Conversely, its correlation with PSCGDPR is slightly negative (-0.02), suggesting minimal overlap in their dynamics. GIS has a weak negative relationship with PSCGDPR (-0.17), possibly indicating a crowding-out effect between public and private credit activity, while its correlation with IGDPR (0.12) points to a modest alignment between government spending and total investment in the economy. PSCGDPR's positive correlation with IGDPR (0.19) shows a slight complementary relationship between private credit and overall investment intensity.

Multi-Collinearity Test

A formal test for multicollinearity is conducted to determine whether the independent variables are excessively correlated with one another. Given the overlapping roles of FDII, GIS, PSCGDPR, and IGDPR in influencing RGDP, this test safeguards against inflated standard errors and unstable coefficient estimates. This was presented in Table 4.3 below:

Table 4.3: Variance Inflation Factors

Date: 05/07/25 Time: 16:55

Sample: 1990 2024
Included observations: 34

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
RGDP(-1)	0.036872	12.21801	1.046735
FDII	13.60502	3.747049	1.045167
GIS	1.014303	4.291285	1.063363
PSCGDPR	2.310021	8.519091	1.122321
IGDPR	5.130021	6.702008	1.106167
C	7.390024	25.34118	NA

Source: Econometric Views Version 9.0 (2025)

The Variance Inflation Factor (VIF) results presented in Table 4.3 provide insights into the presence and severity of multicollinearity among the explanatory variables included in the model. The centered VIF values, which are most relevant for assessing multicollinearity in a standard regression context, all fall well below the common threshold of 10, indicating that multicollinearity is not a significant concern in this analysis. Specifically, the centered VIF for RGDP(-1) is approximately 1.05, suggesting that the lag of RGDP is not highly correlated with the other explanatory variables, thereby supporting its inclusion in the dynamic model without distorting coefficient estimates. FDII also displays a centered VIF of around 1.05, implying a very low level of collinearity with the other predictors, which reinforces the reliability of its estimated effect on RGDP. GIS shows a slightly higher centered VIF of 1.06, which still indicates minimal collinearity, suggesting that government investment spending varies independently enough from the other variables to provide meaningful individual contributions to the model. PSCGDPR has a centered VIF of 1.12, the highest among the variables, yet still comfortably within acceptable limits, indicating that private sector credit does not substantially overlap with the other investment metrics in a way that would undermine interpretability. IGDPR records a centered VIF of 1.11, suggesting low but present shared variance with other independent variables, again not enough to cause estimation problems. The constant term (C) shows a high uncentered VIF of 25.34, which is expected and not problematic, as VIFs for the constant are typically not interpreted in the same way as those for explanatory variables. Overall, the VIF results affirm the independence of the regressors and validate the integrity of subsequent ARDL analyses.

Breusch-Godfrey Serial Correlation LM Test

This test checks for autocorrelation in the residuals of the regression model. Since the study involves time series data, ensuring that residuals are not serially correlated is vital for reliable statistical inference about the effect of investment indicators on RGDP. This was presented in Table 4.4 below:

Table 4.4: Breusch-Godfrey Serial Correlation LM Test:

F-statistic	1.848144	Prob. F(2,26)	0.1776
Obs*R-squared	4.231970	Prob. Chi-Square(2)	0.1205

Source: Econometric Views Version 9.0 (2025)

The Breusch-Godfrey Serial Correlation LM test results in Table 4.4 provide evidence regarding the presence of autocorrelation in the residuals of the estimated regression model. The F-statistic of approximately 1.85 with a corresponding probability value of 0.18 suggests that the null hypothesis of no serial correlation up to the second order cannot be rejected at conventional significance levels. Similarly, the Obs*R-squared statistic of 4.23, with a probability of 0.12, reinforces this conclusion. These results imply that the residuals are not significantly autocorrelated, which supports the reliability of the estimated coefficients. This absence of serial correlation is particularly important in time series analysis, as it indicates that the model does not suffer from omitted dynamics or feedback effects that could bias standard errors or weaken inference. Therefore, the model is statistically sound in terms of residual independence and is appropriately specified to analyze the relationship between RGDP and the selected investment variables over the study period.

Heteroskedasticity Test: Breusch-Pagan-Godfrey

The presence of non-constant variance in the error terms is examined to confirm the assumption of homoskedasticity. If heteroskedasticity exists, it could distort the efficiency of the estimators, undermining conclusions about the impact of investment metrics on economic growth. This was presented in Table 4.5 below:

Table 4.5: Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	1.065494	Prob. F(5,28)	0.4003

Obs*R-squared	5.434976	Prob. Chi-Square(5)	0.3651
Scaled explained SS	2.356454	Prob. Chi-Square(5)	0.7979

Source: Econometric Views Version 9.0 (2025)

The results of the Breusch-Pagan-Godfrey heteroskedasticity test in Table 4.5 indicate that the model does not suffer from heteroskedasticity. The F-statistic of 1.07 with a corresponding probability of 0.40 suggests that the null hypothesis of homoskedasticity (constant variance of the error terms) cannot be rejected. Similarly, the Obs*R-squared value of 5.43 with a p-value of 0.37, and the scaled explained sum of squares of 2.36 with a much higher p-value of 0.80, further support this conclusion. These results imply that the variance of the residuals is stable across observations, enhancing the credibility of the regression estimates. In the context of analyzing the impact of FDII, GIS, PSCGDPR, and IGDPR on RGDP, the absence of heteroskedasticity ensures that standard errors are reliable, t-statistics are valid, and inference drawn from the model is statistically robust. This supports the use of ARDL estimators in the analysis without concern for efficiency loss due to unequal error variance.

Ramsey RESET Test

The Ramsey RESET test assesses model specification errors. It checks whether non-linear combinations of the fitted values help explain the dependent variable, thus validating whether the functional form used appropriately captures the relationship between investment variables and RGDP. This was presented in Table 4.6 below:

Table 4.6: Ramsey RESET Test

Equation: UNTITLED
Specification: RGDP RGDP(-1) FDII GIS PSCGDPR IGDPR C
Omitted Variables: Squares of fitted values

	Value	df	Probability
t-statistic	0.117044	27	0.9077
F-statistic	0.013699	(1, 27)	0.9077

Source: Econometric Views Version 9.0 (2025)

The Ramsey RESET test results in Table 4.6 indicate that the functional form of the model is correctly specified. The t-statistic of approximately 0.12 and the corresponding F-statistic of 0.01 both have a high probability value of 0.91, meaning the null hypothesis that no omitted nonlinear variables are present cannot be rejected. This strongly suggests that the linear specification of the model, which includes RGDP(-1), FDII, GIS, PSCGDPR, IGDPR, and a constant, adequately captures the underlying relationship between the variables. There is no statistical evidence of omitted variable bias or incorrect functional form, which supports the credibility of the estimated effects of investment indicators on RGDP. The outcome affirms that the model is well-specified and reliable for policy interpretation and forecasting purposes.

Augmented Dickey-Fuller (ADF) Unit Root Test

Given the time series nature of the data, the ADF test is used to determine the stationarity of the variables. This ensures that spurious regression results are avoided and helps guide the appropriate econometric techniques for estimating long-run relationships. This was presented in Table 4.7 below:

Table 4.7: Summary of ADF Test

ADF test at Levels				
Parameter	**ADF test statistic**	**Test critical value @ 5%**	**Prob.***	**Decision**
RGDP	-5.243944	-2.951125	0.0001	Stationary
FDII	-2.792437	-2.954021	0.0703	Non-stationary
GIS	-4.603772	-2.951125	0.0008	Stationary
PSCGDPR	-4.939418	-2.951125	0.0003	Stationary
IGDPR	-7.628846	-2.951125	0.0000	Stationary
ADF test at 1st Difference				
RGDP	-5.894836	-2.957110	0.0000	Stationary
FDII	-13.12096	-2.954021	0.0000	Stationary
GIS	-7.716868	-2.954021	0.0000	Stationary
PSCGDPR	-6.599784	-2.957110	0.0000	Stationary
IGDPR	-8.365409	-2.960411	0.0000	Stationary

Source: Econometric Views Version 9.0 (2025)

The results of the Augmented Dickey-Fuller (ADF) unit root test presented in Table 4.7 provide critical information about the stationarity properties of the variables used in the analysis. At level, RGDP, GIS, PSCGDPR, and IGDPR all have ADF test statistics

that are more negative than their respective 5% critical values, with associated p-values well below 0.05. This indicates that these four variables are stationary in their level form, meaning they do not exhibit unit roots and their statistical properties remain constant over time. In contrast, FDII is non-stationary at level, with an ADF statistic of -2.79 that is higher than the 5% critical value of -2.95 and a p-value of 0.07, suggesting the presence of a unit root and time-dependent behavior. However, after first differencing, all variables including FDII become stationary, as evidenced by highly negative ADF test statistics and p-values of 0.0000 across the board. This mixture of integration orders (some variables stationary at level and others at first difference) justifies the use of the ARDL approach for further analysis. The ARDL model is suitable in such contexts and enables robust estimation of both short-run dynamics and long-run equilibrium relationships between RGDP and the investment indicators FDII, GIS, PSCGDPR, and IGDPR.

ARDL Bound Test

The ARDL bound testing approach is used to examine whether a long-run equilibrium relationship exists between RGDP and the investment variables, regardless of whether the variables are I(0) or I(1). This makes it particularly suitable for this mixed-order dataset. This was presented in Table 4.8 below:

Table 4.8: ARDL Bounds Test

Date: 05/07/25 Time: 17:06
Sample: 1991 2024
Included observations: 34
Null Hypothesis: No long-run relationships exist

Test Statistic	Value	K
F-statistic	6.995427	4

Critical Value Bounds

Significance	I0 Bound	I1 Bound
10%	2.45	3.52
5%	2.86	4.01
2.5%	3.25	4.49
1%	3.74	5.06

Source: Econometric Views Version 9.0 (2025)

The ARDL bounds test results in Table 4.8 provide strong evidence for the existence of a long-run relationship between RGDP and the selected investment indicators (FDII, GIS, PSCGDPR, and IGDPR). The computed F-statistic of 6.995 is clearly above the upper bound critical value at all conventional significance levels, including the 1% level where the I1 bound is 5.06. Since the F-statistic exceeds even the most stringent critical threshold, the null hypothesis of no long-run relationship is decisively rejected. This confirms that there is a statistically significant cointegrating relationship among the variables, implying that despite any short-run fluctuations, FDII, GIS, PSCGDPR, and IGDPR are collectively linked to the long-term behavior of RGDP in Nigeria over the study period. This result validates the application of the ARDL long-run form and error correction model (ECM) to further analyze the dynamic interplay between investment components and economic output. It ensures that the model captures not only short-term adjustments but also meaningful long-term equilibrium effects.

ARDL Cointegrating and Long Run Form Analysis

Finally, once cointegration is established, the ARDL long-run form is estimated to quantify the long-term impact of FDII, GIS, PSCGDPR, and IGDPR on RGDP. This provides a nuanced understanding of how different investment dimensions shape economic performance over time in Nigeria. This was presented in Table 4.9 below:

Table 4.9: ARDL Cointegrating And Long Run Form

Dependent Variable: RGDP
Selected Model: ARDL(1, 0, 0, 0, 0)
Date: 05/07/25 Time: 16:58
Sample: 1990 2024
Included observations: 34

Cointegrating Form				
Variable	Coefficient	Std. Error	t-Statistic	Prob.

D(FDII)	0.503951	3.688499	0.136628	0.8923
D(GIS)	-1.186071	1.007126	-1.177679	0.2488
D(PSCGDPR)	4.124832	3.592669	0.000000	0.0000
D(IGDPR)	-4.157887	4.090663	0.000000	0.0000
CointEq(-1)	-0.998185	0.192020	-5.198343	0.0000

Cointeq = RGDP - (0.5049*FDII -1.1882*GIS + 4.5627 PSCGDPR - 3.2877
* *IGDPR + 1.8030)

Long Run Coefficients

Variable	Coefficient	Std. Error	t-Statistic	Prob.
FDII	0.504867	3.684303	0.137032	0.8920
GIS	-1.188228	1.036543	-1.146338	0.2614
PSCGDPR	4.562670	6.689675	0.088048	0.9305
IGDPR	-3.287675	1.712550	-1.143646	0.2625
C	5.803768	5.816788	5.346928	0.0000

Source: Econometric Views Version 9.0 (2025)

In the short run, FDII has a coefficient of 0.504951 with a very high p-value of 0.8923, indicating that changes in foreign investment inflows do not have a statistically significant impact on RGDP. GIS also shows a negative short-run effect (-1.186071), but the p-value (0.2488) suggests this effect is not statistically significant. PSCGDPR and IGDPR, though shown with zero p-values in the output, are likely affected by formatting errors. The error correction term (CointEq(-1)) is negative and statistically significant at the 1% level (-0.998185, p = 0.0000). This implies a high speed of adjustment toward the long-run equilibrium after short-term shocks, with approximately 99.8% of any disequilibrium corrected within one period—confirming the presence of a stable long-run relationship between RGDP and the explanatory variables. The findings from the analysis of the effects of FDII, GIS, PSCGDPR, and IGDPR on RGDP in Nigeria revealed a complex dynamic that challenges theoretical expectations and aligns only partially with empirical literature.

Starting with FDII, the results show that foreign direct investment inflows have no statistically significant effect on Nigeria's RGDP in either the short run or the long run, as indicated by p-values of 0.8923 and 0.8920, respectively. This outcome contradicts the predictions of the Endogenous Growth Theory, which posits that FDI should foster economic growth by transferring technology, improving human capital, and increasing productivity. The result, however, is consistent with the findings of Ozili (2024), who similarly reported that FDI had no significant effect on economic growth in Nigeria between 2010 and 2019. Ozili attributed this to Nigeria's weak macroeconomic environment and limited absorptive capacity. Giwa et al. (2023) also emphasized that FDI alone is insufficient to drive growth unless complemented by strong institutions and a skilled labor force. These findings suggest that Nigeria may not be leveraging FDI effectively due to structural inefficiencies, policy inconsistencies, or the limited capacity of its economy to absorb and utilize foreign capital productively.

In the case of GIS, the results also indicate no statistically significant effect on RGDP in either the short or long term, with p-values of 0.2488 and 0.2614, respectively. This finding challenges the expectations of Keynesian theory, which asserts that government spending can stimulate aggregate demand and promote economic growth, particularly in periods of underemployment or economic slack. The insignificance of GIS in this study resonates with the results of Wobo and Odoemelam (2024), who found that government spending on education did not significantly affect GDP, attributing this to inefficiencies or misallocation in public expenditure. Similarly, Abada and Manasseh (2023) found that while certain categories of government spending, like general administration, had a positive impact, others such as defense and internal security were not significant. These parallels suggest that it is not the volume of government spending per se that drives growth, but the efficiency and sectoral targeting of such expenditures. In Nigeria's case, persistent issues such as corruption, bureaucratic delays, and weak fiscal discipline may undermine the potential growth-enhancing effects of public investment.

Regarding PSCGDPR, the analysis shows a long-run p-value of 0.9305, indicating no significant long-term impact on RGDP, while the short-run result appears unreliable due to a probable data error. This finding contrasts with the predictions of the Endogenous Growth Theory, which emphasizes the critical role of financial development in facilitating capital accumulation and productivity

growth. It also diverges from the empirical findings of Olannye et al. (2024), who found that credit to the private sector significantly and positively influenced RGDP in Nigeria. The disparity could be due to differences in model specification, time periods covered, or the effectiveness of credit channeling during the years included in this study. It may also reflect structural issues within Nigeria's financial system, where credit does not sufficiently reach productive sectors or MSMEs due to high interest rates, collateral constraints, or risk aversion among lenders.

Similarly, IGDPR shows no statistically significant long-run effect on RGDP, with a p-value of 0.2625, and the short-run result is again compromised by a formatting irregularity. This outcome appears counterintuitive, given that a higher investment-to-GDP ratio is often associated with increased capital formation and economic expansion. Within the context of the Endogenous Growth Theory, sustained investment should enhance physical capital and boost output. However, the lack of significance may reflect the quality rather than the quantity of investment. Giwa et al. (2023) highlighted that capital formation had only a marginal effect on RGDP, suggesting that without improvements in the absorptive capacity of the economy—such as infrastructure, institutional quality, and human capital—investment alone may not yield substantial growth dividends. This is further supported by Abada and Manasseh (2023), who emphasized the importance of strategic allocation in public investment to maximize its growth impact.

Overall, the findings suggest that Nigeria's investment-growth nexus is constrained by structural inefficiencies, institutional weaknesses, and poor resource allocation. While the theoretical frameworks anticipate positive contributions from investment indicators to economic growth, the empirical results from this study point to a disconnect between investment inputs and economic outcomes. These results underscore the need for policies that go beyond simply increasing investment flows. Instead, focus should be placed on improving the effectiveness of public spending, strengthening the financial sector to support productive private investment, enhancing institutional quality, and building human capital to fully realize the potential benefits of both domestic and foreign investment.

Summary of Findings

1. The findings of this study reveal that Foreign Direct Investment Inflows (FDII) do not exert any statistically significant effect on Nigeria's Real Gross Domestic Product (RGDP) in either the short run or the long run. The high p-values associated with FDII (0.8923 in the short run and 0.8920 in the long run) indicate that foreign investment inflows, though often emphasized in economic policy, have not translated into measurable economic growth over the 34-year study period. This suggests that issues such as weak institutional capacity, poor infrastructure, and policy instability may be limiting Nigeria's ability to harness FDI for economic advancement.

2. Similarly, Government Investment Spending (GIS) was found to have no significant impact on RGDP in both the short run and the long run, with p-values of 0.2488 and 0.2614 respectively. This indicates that despite various fiscal initiatives and budgetary allocations, public investments have not effectively stimulated aggregate demand or enhanced output growth. The result may reflect inefficiencies in government spending, misallocation of resources, or corruption, which often dilute the developmental impact of public expenditures.

3. The Private Sector Credit to GDP Ratio (PSCGDPR), which theoretically reflects the depth and efficiency of financial intermediation, showed no statistically significant effect on RGDP in the long run, with a p-value of 0.9305. Although credit to the private sector is essential for productive investment and entrepreneurship, its ineffectiveness in this context may be due to constraints in accessing finance, high lending rates, or poor targeting of credit facilities. The short-run result for PSCGDPR was compromised by an estimation anomaly (recorded as 0.000000), suggesting a possible formatting or computational error, making it difficult to interpret its immediate impact with confidence.

4. Investment-to-GDP Ratio (IGDPR) also failed to demonstrate a statistically significant long-run effect on RGDP, as evidenced by a p-value of 0.2625. This outcome contradicts the theoretical expectation that higher investment intensity should correlate positively with economic growth. The absence of a significant relationship may point to concerns about the quality of investment rather than its quantity. As with PSCGDPR, the short-run estimate for IGDPR was similarly affected by a data reporting issue, which limits interpretation. Nonetheless, the pattern indicates that capital accumulation alone is insufficient without the presence of enabling macroeconomic and institutional conditions.

Conclusion

This study concludes that despite the theoretical relevance of investment indicators in promoting economic growth, FDII, GIS, PSCGDPR, and IGDPR did not have a statistically significant influence on Nigeria's RGDP between 1990 and 2024. While the ARDL Bounds Test confirmed the existence of a long-run relationship among the variables, individual coefficients were not statistically robust, highlighting a disconnect between investment inflows or credit expansion and actual economic performance. This outcome underscores deeper structural challenges in Nigeria's economic environment, including inefficient public expenditure systems, weak financial intermediation, and limited absorptive capacity to convert investments into tangible growth. The findings

call into question the prevailing assumption that increasing investment alone will drive growth, emphasizing instead the importance of institutional quality, strategic allocation, and implementation capacity.

Recommendations

Based on the findings, it is recommended that policymakers shift focus from merely increasing investment volumes to improving the quality and effectiveness of those investments. For FDII to contribute meaningfully to growth, efforts should be made to enhance the investment climate by strengthening governance, ensuring macroeconomic stability, and improving infrastructure. In the area of government spending, there is a critical need to realign fiscal priorities toward high-impact sectors such as agriculture, transportation, and energy, where returns to investment are higher and more immediate. Regarding credit to the private sector, financial institutions should be encouraged to adopt inclusive lending practices that support productive enterprises, particularly small and medium-sized businesses. Furthermore, targeted interventions such as credit guarantees and interest rate subsidies may help improve access to finance for key growth sectors. Investment-to-GDP improvements should be coupled with monitoring frameworks to ensure resources are not only mobilized but effectively deployed in sectors that drive economic diversification and job creation.

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