

FOREIGN CAPITAL INFLOWS, INSTITUTIONAL QUALITY, AND ECONOMIC GROWTH IN NIGERIA

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Abstract

For any developing country with an investment gap to achieve a desired rate of economic growth, foreign investment has to be given due consideration. Thus, foreign capital inflows are believed to be able to drive the Nigerian economy towards achieving her desired level of macroeconomic goals. The paper examined the impact of foreign capital inflows and institutional quality on economic growth in Nigeria from 1990 to 2023. The paper used explanatory variables Foreign Direct Investment (FDI) Foreign Portfolio Investment (FPI) External Debt (EXD), institutional quality (IQ) and Gross Domestic Product (GDP) as the dependent variable. ARDL technique was used and the result revealed that foreign direct investment has a negative impact, foreign portfolio investment, external debt and institutional quality have positive impact on GDP. This result confirms the existence of a long-run relationship among foreign capital inflows, institutional quality, and economic growth in Nigeria. FDI, contrary to expectation, appears to undermine economic growth, while external debt contributes positively. These findings have critical implications for policy, particularly the need to redirect capital inflows toward productive sectors, ensure fiscal responsibility, and strengthen institutions for sustainable development.

Keywords: Foreign Direct Investment, Foreign Portfolio investment, External Debt, Gross Domestic Product and Institutional Quality.

INTRODUCTION

Foreign Investment has been seen as a major driver of economic growth especially in third world countries experiencing a shortage of requisite investment to drive the strategic sectors of the economy. Foreign direct investment and foreign portfolio investment play a key role in accelerating economic growth, especially in developing countries. These capital inflows fill critical gaps in financing, bring new technologies, and create opportunities for knowledge transfer. They also help diversify economies, supporting the shift from traditional agrarian structures to industrial and service-based economies. However, the extent to which foreign capital inflows enhance economic development significantly depends on the strength of institutional frameworks (Acemoglu & Robinson, 2020).

Nigeria has always recognized the role of foreign investment as a crucial driver of growth. Yet, the country's institutional environment has historically served both as an enabler and as a bottleneck in unlocking the full potential of these inflows. Institutional quality measured by factors such as governance, regulatory effectiveness, political stability, and the rule of law plays a fundamental role in determining the macroeconomic outcomes of foreign direct investment (World Bank, 2022). Strong institutions are essential for effectively allocating and managing foreign investments, minimizing risks such as misallocation or corruption, and fostering sustainable development (Rodrik, 2021).

Since gaining independence in 1960, Nigeria has implemented several policies aimed at attracting foreign investment. These include the creation of export processing zones, financial sector liberalization, and offering tax incentives to multinational corporations. Despite these efforts, the country has struggled to achieve consistent economic growth and development. Nigeria's economic vulnerabilities are further exacerbated by its reliance on a mono-cultural economy dominated by oil exports. Oil accounts for over 90% of Nigeria's export earnings and a substantial share of government revenue, yet it remains highly susceptible to global price fluctuations. This dependence has led to a cycle of economic uncertainty, with periods of growth often followed by sharp contractions during times of declining oil prices (UNCTAD, 2022).

Institutional quality is also critical in determining how foreign investments are utilized. Robust institutions direct foreign capital into productive sectors and ensure the equitable distribution of benefits across the economy. For example, FDI in the manufacturing sector can drive industrialization, create jobs, and foster technological advancement when supported by effective institutional frameworks (Alfaro et al., 2004). In contrast, weak institutions often result in capital being diverted to unproductive or rent-seeking activities, which exacerbate economic inequality and threaten the long-term sustainability of foreign investments (Ndulu et al., 2021).

The COVID-19 pandemic further exposed the vulnerabilities of Nigeria's investment environment. During the pandemic, global economic uncertainties caused a sharp decline in foreign capital inflows to Nigeria. According to the Central Bank of Nigeria (2023), capital inflows fell by nearly 50% between 2019 and 2020, reflecting the fragility of Nigeria's economic structure and its reliance on short-term investments. This decline significantly impacted macroeconomic stability, exacerbating existing challenges such as unemployment and inflation.

Empirical studies highlight the role of institutional quality in mitigating the adverse effects of economic shocks. Countries with strong institutions are better equipped to attract and retain foreign investments during periods of global uncertainty, as these institutions provide a stable and predictable environment for investors (Dollar & Kraay, 2021). In contrast, Nigeria's lack of institutional resilience has often led to capital flight during crises, further destabilizing the economy. Strong institutions foster a stable economy and a united society, thereby encouraging investment and driving economic growth (Utile et al., 2021). According to Abubakar (2020) nations with robust institutions support robust legal frameworks for effective funding mobilization and allocation, which lowers the risk of doing business in those nations.

The economic importance of foreign investment in Nigeria does not depend on the size of the investment or on the speed of flow only but also on their responsiveness to all requirements of the balanced growth of the sectors and various economic activities within the State, and also on their willingness to develop skilled manpower and administrators who will be able to deal with modern technology associated with this investment efficiently thus contributing to raising the economy's ability to create production base in the future.

Foreign direct investments consist of external resources, including technology, managerial and marketing expertise and capital. All these generate a considerable impact on host nation's production capabilities. At the current level of Gross Domestic Product, the success of government's policies of stimulating the productive base of the economy depends largely on her ability to control adequate number of foreign investments comprising of managerial, capital and technological resources to boost the existing production capabilities. Nigeria had in the past endeavoured to provide foreign investors with a healthy climate as well as generous tax incentives, but the result had not been sufficiently encouraging. Nigeria still requires foreign assistance in the form of managerial, entrepreneurial and technical skills that often accompany foreign investments.

Nigeria has benefited from growing foreign capital inflows in the recent decade, being one of the top recipients of capital inflows from the rest of the world. However, capital inflow especially FDI is not seen to have improved the economic growth in Nigeria and Nigeria is yet to experience real inclusive economic growth despite these huge domestic and foreign resources (Akinlo, 2004; Okodua, 2009; Umoh *et al.*, 2012; Aga, 2014; Adofu *et al.*, 2015; Mohammed & Mahfuzul, 2016). Also, Nigeria's position as one of Africa's leading recipients of foreign capital inflows has not translated into commensurate economic growth or improved macroeconomic stability. While foreign direct investment (FDI) and portfolio investments have grown over the years, their impact on key macroeconomic indicators such as unemployment, inflation, and GDP growth has been limited (UNCTAD, 2022).

One of the key challenges is Nigeria's weak institutional framework, which undermines the efficient utilization of foreign capital inflows. Institutional quality, encompassing governance effectiveness, regulatory capacity, and corruption control, plays a pivotal role in determining the extent to which foreign investments contribute to sustainable growth (Rodrik, 2021). In light of this, this paper focused on the impact of foreign capital inflows and institutional quality on economic growth in Nigeria from 1990 to 2023 and the main objective of this paper is to examine the impact of foreign capital inflows and institutional quality on economic growth in Nigeria while the specific objectives are to:

- i. Determine how foreign direct investment have impacted GDP in Nigeria
- ii. Investigate the effect of foreign portfolio investment on GDP in Nigeria
- iii. To examine the impact of external debt on GDP in Nigeria.
- iv. Determine the impact of institutional quality on GDP in Nigeria.

LITERATURE REVIEW Conceptual Review Foreign Capital Inflow

Foreign Capital Inflow (FCI) is defined as the investment made by foreign entities in a host country's economy, typically involving the acquisition of a substantial ownership stake in domestic enterprises (UNCTAD, 1998; OECD, 2002). Foreign capital inflow (FCI) is widely acknowledged for its capacity to stimulate economic growth by introducing capital, advanced technologies, and managerial expertise into the host economy (Borensztein *et al.*, 1998; Lundan, 2008; Golitsis *et al.*, 2018). Additionally, foreign capital inflows play a pivotal role in creating employment opportunities, thereby contributing to the overall socio-economic development of the host country (Kabashi, 2016).

Foreign Direct Investment

The World Bank (2022) stated that FDI occurs when capital flows into a company in an economy other than the investors in order to obtain a long-term managerial stake (10% or more of voting shares). Developing countries can leverage FDI as a source of external financing (Aust *et al.*, 2020). According to the balance of payments, it is the total of equity capital, profits reinvestment, other long-term capital, and short-term capital (Bird & Choi, 2020).

Foreign Portfolio Investment

FPI, according to Onuorah and Akujuobi (2013), is a category of foreign capital inflows that covers any transfer of financial resources and assets, including cash, tradable securities issued or backed by the government, bonds, equity shares, promissory notes, debentures, and money market instruments issued in a domestic stock market by residents of other countries with the intention of splitting profits. Foreign portfolio investment (FPI) is a type of foreign private capital, characterized by the international transfer of financial assets such as cash, stocks, and bonds to generate profit. This form of investment constitutes an important element of global capital flows (Kurt *et al.*, 2013).

External Debt

Obadan (2004) defined external debt as an amalgam of claims against the government of a country held by public or private sector of a foreign economy, which may be interest or noninterest bearing. Public debt is made up in part of external or foreign debt and in part of domestic debt, which is not included in this analysis since it does not fall under the purview of international finance (Idowu, 2015).

Institutional Quality

Yildirim & Gokalp (2016), refer to Institutional Quality as the entire governance framework of societies that encompasses the rules, regulations, and organizations that structure human interactions and, consequently, dictate the results of all activities within a society. Differences in macroeconomic performance among countries cannot be separated from the formation, functioning and development of institutions which varies across societies (Yildirim & Gokalp, 2016). Institutional quality is one of the most important factors in enhancing the economic development of a country. All over the world, the most crucial goal of any government to enhance economic growth is to endorse people's living standards (Ngo & Nguyen, 2020). The differences in institutions worldwide produce significant variances in productivity growth, capital accumulation, education attainment, and so account for wealth disparities.

Gross Domestic Product Growth

The most comprehensive measure of the total output or performance of an economy is the Gross Domestic Product. Although, GDP is the most widely used measure of national output of an economy, two other concepts are frequently cited, Net Domestic Product and Gross National Product (GNP). The relationship among these three concepts (GDP, GNP and Net Domestic Product) is that they measure an economy's output. Nnamocha (2014) pointed out that Gross Domestic Product is the total money value of all goods and services produced in the domestic economy by everybody in that economy no matter where he/she

comes from, provided he/she resides within the economy. GDP includes both the nationals and nonnationals of an economy and GDP must be equal to the value of only the final products Nnamocha (2014).

Samuelson (2005), explained Gross Domestic Product as the name given to the total market value of the final goods and services produced within a nation during a given year. From his description, of Gross Domestic Product, GDP is used for many purposes but the most important one is to measure the overall performance of an economy and this overall performance could be measured as a flow of final products or as a flow of cost. Both approaches will yield the same total GDP since profit, is a residual. Kimberly (2008), said that Gross Domestic Product is everything produced by all the people and all the companies within an economy. The difference between Gross Domestic Product and Gross National Product is the fact that GDP is concerned with the region in which income is generated and focuses on where the output is produced rather than who produces it. Ruffin (1998), emphasized that Gross Domestic Product is the broadcast measure of the total output of the economy. Only final goods and services are included to avoid double counting of products. GDP can be calculated by measuring the total value of income. Nominal GDP is the value of final goods and services in current market prices. Nominal GDP can rise because of either increasing output or rise in the price of products.

Real GDP, on the other hand, is an inflation-adjusted macroeconomic assessment which reveals the monetary worth of total goods and services produced by an economy at a particular period expressed in base-year prices, usually regarded as "co," "inflation corrected" GDP or "constant naira GDP." Unlike nominal GDP, real GDP or growth rate assesses changes in price level and shows a verifiable growth rate. The growth rate is governed by four parts of GDP. The first is personal consumption, which involves sales to consumers. The next part is investment, such as construction and inventory levels. Government spending forms the third propeller of growth. This manifests more in defense spending (particularly in Nigeria where the government spends more on insurgence and related criminality and social infrastructures. Governments also increase spending to jump-start the economy during a recession. The fourth propeller of growth is trade.

Empirical Review

Atakpa *et al.* (2024) examined the impact of foreign capital inflows on economic growth in Nigeria from 1990 – 2023. The variables of interest are real gross domestic product (RGDP), foreign direct investment (FDI), remittance (REM) foreign portfolio investment (FPI) official development assistance (ODA) external debt (ED) government expenditure on health (GEH) and government expenditure on education (GEE). The study employed a Nonlinear Autoregressive Distributed lag (NARDL) model and the Granger causality test. The finding from the NARDL model showed that Foreign Direct Investment, Remittances, Official Development Aid, External Debt, government expenditure on health, and government expenditure on education all exhibit substantial impacts, with positive changes in these variables associated with increased economic growth, and negative changes leading to decreased economic growth in both short and long-run period. The finding further revealed significant asymmetric impacts between Foreign Direct Investment,

Remittances, Official Development Aid, government expenditure on health, and government expenditure on education with the exception of External debt in the short run.

Adegboyo and Abu (2024) examined the relationship between capital inflows, exports, and economic growth in Nigeria from 1980 to 2022. The study uses the Autoregressive Distributed Lag (ARDL) estimation technique to analyze the short-term and long-term impacts of these factors on Gross Domestic Product (GDP). The findings reveal that capital inflows and exports have a positive impact on Nigeria's economic growth. However, the study also reveals a negative relationship between FDI and economic growth in the long run. In the short run, exports have a negative effect on GDP, while capital inflows demonstrate a positive influence on economic growth.

Kingsley and Nwagu, (2023). Investigated the impact of macroeconomic variables on foreign direct investment in Nigeria. This research used an ex post facto research design to study how such macroeconomic factors as exchange rate, inflation rate, monetary policy rate (MPR), and gross domestic product growth (GDP) rate affected the amount of foreign direct investment (FDI) flowing into Nigeria between 1986 and 2020. The study used ARDL bounds test to examine if the model's variables have a long-term relationship and found that while GDP growth rate and monetary policy rate were the primary macroeconomic variables that increased FDI inflow in Nigeria, inflation and exchange rate were the major macroeconomic variables that decreased FDI inflow.

Urama *et al.* (2022) delves into the multifaceted relationship between foreign capital inflows and economic growth in Nigeria, utilizing time-series data spanning from 1981 to 2020. Employing the autoregressive distributed lag (ARDL) model, the study examines the impact of foreign capital inflows on economic growth in Nigeria. They aim to empirically ascertain the extent and nature of these impacts, contributing to the ongoing discourse on the role of external capital in fostering economic development in developing economies. The study's findings reveal a significant positive correlation between foreign capital inflows, particularly FDI and Gross Fixed Capital Formation, and Real Gross Domestic Product (RGDP). This suggests that these forms of foreign capital are instrumental in stimulating economic growth. Conversely, personal remittances were found to have a negative yet significant relationship with RGDP, indicating that while they may provide financial support at the individual level, their macroeconomic impact may be limited or even detrimental.

From 1986 to 2017, Ezeanyej and Maureen (2019) evaluated the effect of portfolio investment on economic development in Nigeria. The study used error correction mechanism (ECM) to investigate how quickly the variables were adjusted over the long term. The results showed that foreign portfolio investments had a considerable influence on Nigeria's economic growth. The long-term model was not stated, and the study's scope was constrained.

Emenuga (2019) Look at the Impact of macroeconomic variables on foreign direct investment flow in Nigeria between 1986 and 2017. The factors under consideration are GDP, government size, exchange rate, inflation rate, and interest rate. The ARDL cointegration bound test and error correction model estimation

was used. The findings of the ARDL test revealed that all of the factors under consideration had a substantial impact on Nigeria's foreign direct investment. The study also found out that there is a long-run relationship between macroeconomic variables and foreign direct investment in Nigeria.

This study examines the relationship between Foreign Portfolio Investment (FPI) and economic performance in Nigeria, as explored by Oghuma (2017), utilizing data spanning from 1986 to 2015. The research employs a range of econometric techniques, including the Error Correction Model (ECM), Ordinary Least Squares (OLS), and correlation analysis, to evaluate the data. The findings indicate that FPI exerts a significant negative impact on Nigeria's economic performance in the short run, while stock market development and capital formation demonstrate positive effects. In the long run, FPI continues to exhibit a negative, albeit statistically insignificant, influence, whereas stock market development and capital formation maintain their positive contributions to economic performance. The study concludes that FPI poses a risk to the Nigerian economy due to its inherent volatility and susceptibility to sudden withdrawals, highlighting the need for policies to mitigate these risks and enhance economic stability.

Bada, (2016) also looked at how foreign portfolio investments affected Nigeria's economic expansion from 1991 to 2014. The data analysis approach used was ordinary least square estimation. The results showed, among other things, that there had been a rise in foreign portfolio investment for a certain period, followed by a fall as a result of a significant outflow of money and investor divestment brought on by the world recession. The factors used in the study are distinct from the ones used in the present research, which will be updated for 2023. Study by Okafor *et al.* (2016) found out that there is bi-directional causality between the variable's foreign direct investment and GDP. Furthermore, they found that there was unidirectional causality between foreign private investment and GDP with causation running from foreign private investment to GDP. Furthermore, they demonstrated a one-way causal relationship between GDP and foreign aid, with the causative relationship moving from foreign aid to GDP. Finally, they found that the combined causation of all the factors affecting foreign capital inflows suggests that an increase in foreign capital inflow favorably affects GDP.

For the years 1981 to 2012, Akanyo and Ajie (2015) examined the effect of capital flows on economic development in Nigeria. This data was examined using the Johansen co-integration test. According to the findings, Nigeria's economic development will improve by 33% if capital flows, particularly foreign direct investment, are increased by 1%. However, their economic growth rates grew to 40% as the amount of foreign money increased. The study suggested that in order to increase investors' preference for local financial assets over international assets, policymakers should maintain a stable exchange rate system. The scope of the study is limited and the variables of the study are different from the variables that the current research will use.

Olaleye (2015) looked at how foreign capital movement affected Nigeria's economic growth from 1990 to 2012. Foreign capital flows, such as inflows of debt and remittances, outflows of foreign direct investment, inflows of foreign medical and educational services, and inflows of remittances, are the independent

variables. Nigeria's economic growth is the dependent variable. We gathered information from the IMF, the World Bank Data Bank, and the CBN's Statistical Bulletin. To investigate how these variables affected Nigeria's economic growth, we employed Ordinary Least Square regression techniques. They found that both debt inflows and remittance inflows have a significant negative effect on GDP per capita growth rate. Foreign investment outflows though showed a positive effect on GDP per capita growth--though it wasn't statistically significant.

The impact of four different types of foreign capital inflows foreign direct investment (FDI), official development assistance (ODA), foreign private investment (FPI), and remittances (REM) on the growth of the West African Monetary Zone (WAMZ) economies' output between 1981 and 2010 is examined by Orij *et al.* (2014). The data analysis method employed was the Ordinary Least Squares (OLS) approach. The findings indicated that Nigeria's production growth was favourably impacted by a variety of capital inflows. While FDI continued to have a significant influence on Nigeria and the Gambia, ODA was shown to have a beneficial impact on production growth in Sierra Leone and Ghana. With no significant impact on Guinea's economic growth, remittances had the greatest influence on Liberia's growth. The study therefore recommended that West African Monetary Zone countries should support an environment that is welcoming for these forms of capital and make sure they have sound economic policies in place. The scope of the study is limited and this current work will focus on Nigeria instead of Nigeria and Ghana.

The dynamic links between economic development and the foreign capital determinants of foreign direct investment (FDI), external debt, and short-term capital inflows were experimentally investigated by Adegboye *et al* (2014). The classification of foreign capital inflows into direct and foreign portfolio investments has major importance in terms of their impact on economic growth in Nigeria, according to the results of the empirical investigation. It is also shown that, in comparison to foreign capital components, Nigeria's external debt has the greatest influence on economic development. The scope of the study is limited and the variables of the study are different from the variables that the current research will use. Finally, Baghebo, (2014), examined the impact of foreign portfolio investment on Nigeria's economic growth and long-run determinant factors. Analysis techniques included the Johansen Cointegration test, the Augmented Dickey Fuller Unit Root Test, and Parsimonious Error Correction. In Nigeria, there was a favourable correlation between foreign portfolio investment, market capitalization, and trade openness to GDP. Authorities should make sure that business-friendly policies are in place and that the economy is being kept under control of inflation, it was advised.

Theoretical Framework

This study adopted dual-gaps theory by Chenery and Strout (1966) which explains the usefulness of external debt in augmenting a country's domestic savings. External debt is significant, according to the dual-gap hypothesis, since it bridges funding gaps caused by poor savings and investments, as well as low foreign exchange profits due to trade imbalances, hence contributing to economic growth in borrowing jurisdictions and lowering unemployment. For decades, the aforementioned claim has been the

overarching economic goal of external debt (Arhenful, 2013). This theory acknowledges investment as a growth stimulant, which is not readily apparent in developing economies due to their poor saving culture; hence, the initial necessity for imported capital resources.

The study will also utilize Institutional Theory; The evolutionary approach to economic growth which draws attention to three aspects that were neglected in Classical, neo-classical, and endogenous growth theories. They don't consider the institutional framework that presumably contributes strongly to an explanation of cross-country differences in economic growth. North (1990) cited by Chomen (2022) described that the quality of institutions, such as property rights, rule of law, and government effectiveness, play a critical role in driving economic growth. Economies with strong institutions tend to have more efficient markets, higher levels of investment, and greater technological progress, all of which contribute to economic growth.

According to Acemoglu et al. (2005) institutions matter for economic growth because they shape the incentives of key economic actors in society, in particular they influence investments in physical and human capital and technology, and the organization of production. Although cultural and geographical factors may also matter for economic performance, differences in economic institutions are the major source of cross-country differences in economic growth and prosperity. For the authors institutions not only determine the aggregate economic growth potential of the economy, but also an array of economic outcomes, including the distribution of resources in the future (the distribution of wealth, of physical capital or human capital). In other words, the institutions influence not only the size of the aggregate pie, but how this pie is divided among different groups and individuals in society.

METHODOLOGY

The study used ex-post facto research design, which implies a cause-and-effect study. According to Kerlinger and Rint (1986), an ex post facto investigation in the context and area of social and management sciences research seeks to reveal possible relationships by observing an existing situation or condition of issues and searching back in time for possible contributing and determining factors. The study's goal is to use this research design to establish a causeand-effect relationship between the variables, which is accomplished by obtaining secondary data from the Central Bank of Nigeria and World Bank Indicator (WDI) from 1990-2023.

Model Specification

The study examined the impact of foreign capital inflow on economic growth in Nigeria. The initial model is adapted from the work of Okafor, Ugwuegbe and Ezeaku (2016) with the following specification;

$$GDP = f(FDI, FPI, FA) \quad (1)$$

Where;

FDI= Foreign Direct Investment, FPI= Foreign Portfolio Investment and FA= Foreign Aid

However, the model is modified as follows;

$$GDP = F(FDI, FPI, EXD, IQ) \quad (2)$$

Explicitly, the equation can be written as:

$$GDP_t = a_0 + a_1 FDI_t + a_2 FPI_t + a_3 EXD_t + a_4 IQ_t + a\mu_{3t}$$

RGDP is Real Gross Domestic Product per Capita, FDI is Foreign Direct Investment; FPI is Foreign Portfolio Investment; EXTD is External Debt; IQ is Institutional Quality and a_0 is

Intercept term and a_1 - a_4 , are parameters known as partial regression coefficient

PRESENTATION OF RESULTS AND DISCUSSION Descriptive Analysis

To provide preliminary insights into the behaviour and distributional characteristics of the variables employed in the study, descriptive statistics for real gross domestic product (RGDP), foreign direct investment (FDI), foreign portfolio investment (FPI), external debt (EXTD), and institutional quality (IQ) are presented in Table 1.

Table 1. Descriptive Statistics of Study Variables (1990–2023)

	N	Mean	SD	Min	Max	Skewness	Kurtosis
RGDP	34	45685.468	20730.218	21680.199	77936.102	.172	1.403
FDI	34	-404.054	385.053	-1270	53.76	-.532	2.055
FPI	34	-485.756	1070.746	-4010	1400	-1.696	5.776
EXD	34	6546.909	10251.531	84.09	53258.012	3.029	13.802
IQI	34	0.00000	1.812	-1.712	4.083	1.521	3.659

Source: Author's computation, 2025

Real GDP (RGDP) shows a high mean and dispersion, reflecting Nigeria's growing but volatile economy. Negative in both foreign direct investment (FDI) and foreign portfolio investment (FPI)) highlight the dominance of capital flight and portfolio outflows during economic or political instability. External debt (EXT) displays substantial variation and skewness, consistent with Nigeria's debt restructuring and borrowing cycles. The institutional quality index (IQI) shows an average of 0 due to standardization, but high variability suggests diverse governance outcomes over the years.

Correlation Matrix

Correlation analysis helps identify the strength and direction of linear relationships between variables. However, correlation alone does not imply causality.

Table 2. Matrix of correlations

Correlation					
Probability	RGDP	FDI	FPI	EXD	IQI
RGDP	1.000000				

FDI	-0.595654	1.000000			
	0.0002	-----			

FPI	-0.541693 0.0009	0.399900 0.0191	1.000000 -----		
EXD	0.728811 0.0000	-0.369539 0.0315	-0.711174 0.0000	1.000000 -----	
IQI	-0.403975 0.0178	0.395310 0.0207	0.156091 0.3780	-0.148587 0.4017	1.000000 -----

Source: Author's computation, 2025

GDP is negatively correlated with both FDI and FPI, suggesting that increased capital inflows do not automatically translate into higher output in the short run. Conversely, external debt (EXD) is positively correlated with GDP, potentially indicating that debt has been used for growth-promoting activities. Institutional quality shows a weak negative correlation with GDP, which may be due to a lagged governance-growth effect.

Unit Root Tests Table 3: Unit Root Test

<u>Variable</u>	<u>Intercept</u>	<u>Intercept and Trend</u>
I_RGDP	-0.709	-1.585
D(I_RGDP)	-1.976**	-1.940
FDI	-1.582	-1.746
D(FDI)	-5.717***	-5.653***
FPI	-1.333	-2.565
D(FPI)	-3.659***	-3.740***
I_EXD	0.267	-3.407*
D(I_EXD)	-2.322**	-1.766
IQI	-2.468***	-1.785

*** p < 0.01; ** p < 0.05; * p < 0.10

Source: Authors' Computation, 2025

All variables except IQI are non-stationary at the level but become stationary at first difference, confirming integration of order one (I(1)). The IQI variable is stationary at level (I(0)). The mixed order of integration justifies the use of the ARDL bounds testing framework.

ARDL Bounds Test Result

The ARDL bounds testing procedure was implemented to determine whether a long-run equilibrium relationship exists among the variables: economic growth (RGDP), foreign direct investment (FDI), foreign

portfolio investment (FPI), external debt (EXD), and institutional quality index (IQI). As shown in the appendix, the calculated F-statistic (4.937) exceeds the upper bound critical value at the 5% level (4.01), indicating strong statistical evidence against the null hypothesis of no cointegration. This confirms the existence of a long-run relationship between economic growth and the explanatory variables. The result validates the appropriateness of estimating both the long-run and short-run dynamics using the ARDL framework.

ARDL Long-Run and Short-Run Estimates

Having established cointegration, the ARDL (4, 4, 3, 3, 4) model was estimated. The results are presented below in separate tables for short-run and long-run coefficients.

Table 4 ARDL Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(L_RGDP(-1))	-0.129048	0.243983	-0.528924	0.6132
D(L_RGDP(-2))	0.178031	0.212715	0.836947	0.4303
D(L_RGDP(-3))	-0.307451	0.233662	-1.315791	0.2297
D(FDI)	0.000024	0.000038	0.640197	0.5424
D(FDI(-1))	0.000069	0.000033	2.112773	0.0725
D(FDI(-2))	0.000113	0.000055	2.053957	0.0791
D(FDI(-3))	0.000048	0.000059	0.808211	0.4456
D(FPI)	0.000003	0.000009	0.376880	0.7174
D(FPI(-1))	-0.000029	0.000017	-1.680163	0.1368
D(FPI(-2))	-0.000038	0.000029	-1.310695	0.2313
D(L_EXD)	0.006142	0.055307	0.111056	0.9147
D(L_EXD(-1))	-0.076148	0.072259	-1.053811	0.3270
D(L_EXD(-2))	-0.169448	0.057386	-2.952788	0.0213
D(IQI)	0.013032	0.007982	1.632819	0.1465
D(IQI(-1))	-0.000563	0.006049	-0.093142	0.9284
D(IQI(-2))	0.008399	0.007924	1.059955	0.3244
D(IQI(-3))	0.019745	0.007751	2.547364	0.0383
ECT	-0.369492	0.138973	-2.658722	0.0325
Long	Runs			
Coefficient	Coefficient			
Variable		Std. Error	t-Statistic	Prob.
FDI	-0.000559	0.000185	-3.016307	0.0195
FPI	0.000211	0.000190	1.110965	0.3033
L_EXD	0.212462	0.047674	4.456587	0.0029

IQI	0.014622	0.018361	0.796348	0.4520
C	9.191781	0.513911	17.885930	0.0000

Source: Author's computation, 2025

The error correction term (ECT) is negative and statistically significant, confirming model stability and gradual adjustment toward long-run equilibrium. Approximately 36.95% of any deviation from the long-run equilibrium is corrected in the current period. Notably, $D(FDI(-1))$ and $D(FDI(-2))$ are marginally significant, suggesting that foreign direct investment influences GDP with a lag. Additionally, $D(IQI(-3))$ is significant, indicating that institutional quality influences economic growth with delayed effects. A significant negative coefficient on $D(L_EXD(-2))$ implies that debt may hinder short-term economic activity, possibly due to fiscal burdens or repayment obligations.

In the long run, FDI has a statistically significant negative effect on economic growth. This counterintuitive result may reflect Nigeria's reliance on extractive FDI, repatriation of profits, or institutional weaknesses in capital absorption. External debt (EXD) shows a strong positive impact, suggesting that when appropriately used, debt may finance productive investments that stimulate long-run growth. Neither FPI nor IQI are significant in the long run, although their coefficients are positively significant.

Post-Estimation Results

To validate the robustness and reliability of the ARDL model estimates, several diagnostic tests were conducted. These include tests for serial correlation, heteroscedasticity, model specification, and (implicitly) residual normality. The results confirm that the model satisfies key econometric assumptions.

Table 5: Post-Estimation Results

Test type	F-Statistic		Prob
Heteroskedasticity Test	0.004356		0.9479
Breusch-Godfrey Serial Correlation LM	0.536601		0.4915
Ramsey (RESET) Linearity	0.783118	0.3936	

Source: Researcher's Computation Using EViews-12 (2025)

An ARCH (Autoregressive Conditional Heteroscedasticity) test was conducted to detect heteroscedasticity. Heteroscedasticity violates the assumption of constant variance and can lead to inefficient estimators and the p-values for both the F-statistic and chi-square statistic are much higher than 0.05, indicating no evidence of heteroscedasticity in the model residuals. Thus, standard errors can be considered reliable. On the other hand, The Breusch-Godfrey LM test was used to detect autocorrelation in the residuals. Absence of serial correlation is essential for unbiased inference and reliable standard errors. Both the F-statistic and the chi-square (Obs*R-squared) test indicate no serial correlation in the residuals at conventional significance levels. This supports the assumption that the residuals are independently distributed. The Ramsey Regression Equation Specification Error Test (RESET) evaluates whether the model suffers from incorrect functional form or omitted variables. The test statistics, as shown in the appendix, indicate no evidence of model misspecification. The null hypothesis of correct functional form cannot be rejected, implying the model is well specified.

Residual Normality

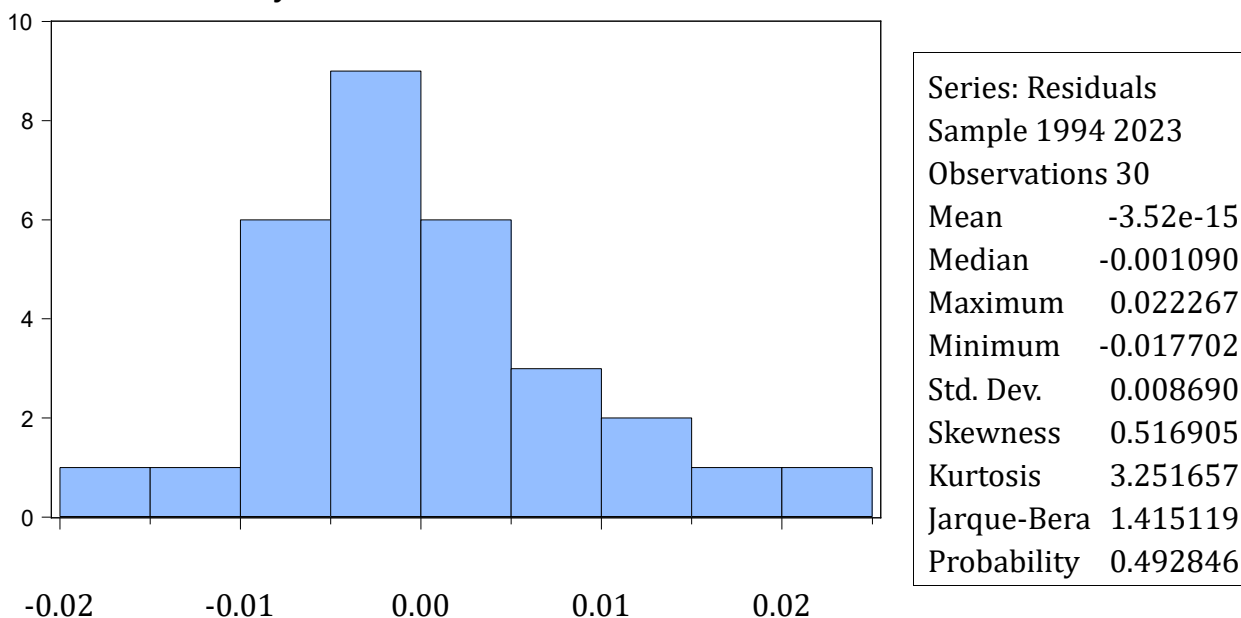


Fig. 1 Normality Test

The histogram indicates a fairly symmetric bell-shaped distribution. The skewness value is close to zero, and kurtosis approximates the normal benchmark of 3. The Jarque-Bera test has a p-value of 0.493, which is well above the conventional 5% level. Thus, we fail to reject the null hypothesis of normality. This result supports the assumption that the residuals are normally distributed, validating the reliability of hypothesis testing within the ARDL framework.

Discussion of Findings

In contrast to the theoretical expectation that FDI spurs economic growth, the long-run coefficient is negative and significant. This finding suggests that FDI inflows into Nigeria may not be directed toward productive or growth-enhancing sectors. The dominance of FDI in extractive industries, weak technology spillovers, and frequent repatriation of profits may explain this trend. Short-run coefficients further indicate delayed but mild positive impacts, consistent with the adjustment lag associated with investment implementation. This finding is in line with the work of Adegboyo and Abu (2024), who studied the relationship between capital inflows, exports, and economic growth in Nigeria from 1980 to 2022 and found that there is a negative relationship between FDI and economic growth in the long run.

The estimated coefficients for FPI were positive but statistically insignificant in both the short- and long-run. Portfolio investments are known for their high volatility and speculative nature, which limits their contribution to long-term capital formation. The finding aligns with empirical studies highlighting the procyclicality and flightiness of FPI in developing economies. Also, external debt exhibits a positive and significant long-run effect on economic growth, suggesting that debt financing has been effectively channelled into investment projects or public sector expenditure with multiplier effects. However, in the short run, the impact is negative and significant at lag two, hinting at the burden of debt service and repayment obligations. This dichotomy underscores the importance of debt quality and management, rather than debt volume. This finding is in line with the study by Adegboye *et al* (2014), who studied the dynamic links between economic development and the foreign capital determinants of foreign direct investment (FDI), external debt, and short-term capital inflows, and Nkoro and Uko (2013), who also looked at the nature of the causal relationship between Nigeria's economic development and several aspects of foreign capital inflows (aid, remittances, foreign direct investment, and external debt) and both studies found that Nigeria's external debt has the greatest influence on economic development.

IQI shows a positive relationship with economic growth, although statistically insignificant. This may be due to the slow-moving nature of institutional reforms or measurement limitations of the index. Notably, the three-period lag of IQI has a significant short-run effect, reflecting the delayed influence of governance reforms on macroeconomic outcomes. Over time, improvements in regulatory quality, corruption control, and governance effectiveness are expected to support investment and growth. Meanwhile, the significant error correction term confirms a stable long-run equilibrium among the variables. The speed of adjustment (36.95%) indicates that shocks are not quickly self-correcting, requiring coordinated macroeconomic and institutional responses. In conclusion, the ARDL results confirm the existence of a long-run relationship among foreign capital inflows, institutional quality, and economic growth in Nigeria. FDI, contrary to expectation, appears to undermine economic growth, while external debt contributes positively. These findings have critical implications for policy, particularly the need to redirect capital inflows toward productive sectors, ensure fiscal responsibility, and strengthen institutions for sustainable development.

Conclusion and Recommendations

This study set out to examine the impact of foreign capital inflows and institutional quality on economic growth in Nigeria over the period 1990–2023, using an ARDL approach that accommodates variables integrated of different orders. The existence of a long-run relationship after the ARDL bounds test confirmed the existence of a statistically significant long-run equilibrium relationship among economic growth (RGDP), foreign direct investment (FDI), foreign portfolio investment (FPI), external debt (EXD), and institutional quality index (IQI). The significant error correction term indicates that deviations from long-run equilibrium are corrected at a moderate speed (approximately 37% annually).

Contrary to theoretical expectations, FDI exerts a statistically significant negative effect on economic growth in the long run. This suggests that FDI in Nigeria may be concentrated in sectors with limited linkages to the domestic economy (e.g., extractive industries), or that profit repatriation and weak

institutional frameworks limit its developmental impact. In the short run, however, lagged FDI exhibits marginally positive effects. FPI had a positive but statistically insignificant effect on GDP in both the long and short run. This aligns with the view that portfolio flows are often speculative and volatile, offering limited contributions to capital formation or productivity.

The external debt shows a strong and positive long-run impact on economic growth, indicating that when well-managed, external borrowing can finance infrastructure, health, education, and other public investments that support long-term development. However, short-run results show a negative lagged effect, suggesting short-term costs associated with debt servicing or disbursement delays. Also, IQI demonstrates a positive but statistically insignificant impact on economic growth in the long-run equation, possibly reflecting the delayed nature of institutional reforms or the limitations of perception-based governance indices. Interestingly, the third lag of IQI in the short-run dynamics was significant, implying that institutional effects materialize with a delay, reinforcing the importance of policy continuity. Finally, diagnostic tests, including the Breusch-Godfrey serial correlation test, ARCH heteroscedasticity test, Ramsey RESET test, and the Jarque-Bera normality test, confirm that the model is wellspecified, free of autocorrelation, homoscedastic, and has normally distributed residuals, supporting the reliability of the estimated coefficients.

Conclusion and Recommendations

This study contributes to the growing body of literature on the macroeconomic implications of capital inflows and institutional governance in developing economies. By applying the ARDL bounds testing approach to Nigerian data from 1990–2023, the study offers several critical insights: While foreign capital inflows offer potential to spur growth, not all types of capital are equally beneficial. In Nigeria's context, FDI has not delivered the expected growth dividends, raising questions about sectoral allocation, regulatory oversight, and value chain integration. External debt, when strategically utilized, can support long-run growth, affirming the importance of efficient debt management practices and transparency. Meanwhile, institutional quality matters, but its effects may take time to manifest. This calls for sustained investments in governance reform and anti-corruption efforts.

The findings reinforce the idea that capital inflows cannot substitute for good governance, sound macroeconomic management, and inclusive development planning. In conclusion, the interplay between external capital and domestic institutions must be carefully managed. Foreign capital is not a panacea; its impact depends on the strength of domestic absorptive capacity, policy coherence, and institutional maturity.

Policy Recommendations

- i. The Nigerian government should redirect FDI into productive sectors such as manufacturing and technology, with stronger backwards and forward linkages to the domestic economy. Incentivise

reinvestment of profits by foreign firms, strengthen regulatory mechanisms to limit excessive capital repatriation and improve the ease of doing business and eliminate bureaucratic bottlenecks that deter long-term investors.

ii. Introduce macroprudential policies to manage the volatility of portfolio flows, develop deeper and more liquid capital markets that can absorb and utilize FPI for productive investment rather than speculative short-term gains and strengthen the Central Bank's capacity to manage external shocks through reserves and monetary buffers.

iii. While external debt can support growth, it must be contracted transparently, invested productively, and supported by robust fiscal frameworks. Institutions such as the Debt Management Office (DMO) should ensure debt sustainability and improve public access to debt utilization reports; and public-private partnerships should be explored to leverage concessional borrowing for infrastructure development.

iv. Invest in long-term governance reform, focusing on the rule of law, control of corruption, regulatory quality, and government effectiveness. Support civil society and independent institutions that hold public officials accountable, and institutional improvements should be aligned with digital governance strategies and anti-corruption technologies.

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