African Journal of Accounting and Financial Research
ISSN: 2682-6690
Volume 8, Issue 1, 2025 (pp. 33-50)
www.abjournals.org

FOREIGN DIRECT INVESTMENTS AND ECONOMIC GROWTH OF AN EMERGING ECONOMY: IMPLICATIONS FOR NIGERIA (2009 – 2023)

Ogwuma Mike Madubuike[1*], Nwachukwu Chima Peter[2],

Avoaja Paul Chinagorom[3], and Nwabeke Elizabeth Chidinma[4]

[1]Department of Banking and Finance, Nnamdi Azikiwe University, Awka, Anambra State.

[2]Department Of Marketing, Entreprenuership and Procurement, Federal University, Otuoke, Bayelsa State, Nigeria.

[3,4]Department of Banking and Finance, Abia State Polytechnic, Aba, Abia State, Nigeria.

[*]Corresponding Author's Email: ogwumamikemadu@gmail.com

Cite this article:

Ogwuma, M. M., Nwachukwu, C. P., Avoaja, P. C., Nwabeke, E. C. (2025), Foreign Direct Investments and Economic Growth of an Emerging Economy: Implications for Nigeria (2009 – 2023). African Journal of Accounting and Financial Research 8(1), 33-50. DOI: 10.52589/AJAFR-QFD43ZRV

Manuscript History

Received: 19 Nov 2024

Accepted: 5 Jan 2025

Published: 27 Jan 2025

ABSTRACT: *The study used an ex-post facto research design to examine the relationship between economic growth (EGR) and foreign direct investment (FDI) in Nigeria from 2009 Q1 to 2023 Q4. Secondary data from the World Bank and the Central Bank of Nigeria were employed, with a regression model to explain the link between EGR and FDI. The model included variables such as net foreign direct investment (NFDI), exchange rate (EXCH), trade openness (TROPN), external reserves (EXRSV), and government debt (DEBT). The study utilized the Johansen Cointegration test, specifically the trace test, to determine the long-run relationships between the variables. Further, an error correction model (ECM) was used to assess short-run dynamics, including the speed of adjustment toward long-run equilibrium. Lastly, the study applied Fully Modified Ordinary Least Squares (FMOLS) to estimate the long-run relationships once cointegration was confirmed. The study found that net foreign direct investment (NFDI) has a statistically significant negative effect on economic growth (EGR) in Nigeria. The analysis revealed that a unit increase in NFDI results in a decrease of approximately 365.96 units in EGR. The p-value of 0.0033, which is below the 5% significance level, confirmed this negative relationship. The study therefore recommends that the Nigerian government strengthen institutional frameworks, promote sectoral diversification by attracting FDI into underdeveloped sectors, and invest in infrastructure and human capital development to foster a conducive business environment, enhance local linkages, and improve productivity for sustainable economic growth.*

KEYWORDS: FDI, Exchange rate, Trade openness, External reserves, National Debt.

Article DOI: 10.52589/AJAFR-QFD43ZRV
DOI URL: https://doi.org/10.52589/AJAFR-QFD43ZRV

African Journal of Accounting and Financial Research
ISSN: 2682-6690
Volume 8, Issue 1, 2025 (pp. 33-50)

www.abjournals.org

INTRODUCTION

The dynamic nature of the global economy often puts some countries of the world in economic shocks. These shocks occur occasionally and often affect those highly classified advanced economies to some observable extent. These occasional economic fluctuations have triggered competitions among nations of the world in cushioning the economic imbalances from such shocks when it occurs.

One of the main economic hedges against negative economic swings taken by Nigeria has been the encouragement of Foreign Direct Investments (FDI). Nigeria has actively been employing varying policies to ensure Foreign Direct Investments through the introduction of incentive packages (Ekpo, 1997).

Given the attributes accorded Nigeria as an emerging market, which is hinged on an economy of a developing nation that is becoming more engaged with global markets as it grows. Nigeria is faced with a myriad of economic and developmental challenges such as low productivity, low export, higher level of import, low savings and investment (Iyasi, 2021). In order to tackle some of the challenges, Foreign Direct Investment policies have to be taken. Foreign Direct Investment (FDI) inflows help to bridge the savings and investment gap due to its multiplicity effects on the economy, such as its impact on employment, technological progress, productivity, as well as contributing in forestalling negative economic swings which are prone to adverse economic growth and development of Nigeria.

Globally, Foreign Direct Investment flows fell by 2% to US$1.3 trillion in 2023, as trade and geographical tensions weigh on a glowing global economy. The FDI flows to developing countries dropped by 7% to US$867 billion (World Investment Report, 2023). Nigeria as an emerging market has also been striving to gain much market share in the international FDI market. Nigeria in the 4th Quarter of 2023, had a 16.90% in FDI valued at US$183.97 million, and in the 1st Quarter of 2024 recorded US$119.18 million indicating a 35.3% decrease in FDI (National Bureau of Statistics, 2023).

Nonetheless, the cardinal contribution of Foreign Direct Investment on the economic growth of Nigeria has a direct and strong correlation for the boost on the drive for foreign investors, which invariably will encourage exports and increase Nigeria's external reserves. A rise in external reserves boost economic confidence of the foreign investors, while a shrink is attributed to a slow down on portfolio inflows and foreign direct investment (Akinwunmi & Adekoya, 2016).

Nigeria's foreign exchange reserves dropped to US$33.23 billion at the end of the third quarter of 2023. Foreign reserves dropped by US$38.25 billion recorded in September 2022. Foreign reserves depleted by US$881.84 million and closed at US$34.11 million in the second quarter of 2023. Prior to May 29, 2023, Nigeria's total external reserves was US$35.14 billion and dropped to US$1.91 million between May 29 2023 and June 30, 2023. The US$33.23 billion external reported in third quarter 2023 stood as the lowest in two years since hitting US$33.22 billion on July 22, 2021 (Central Bank of Nigeria, 2023).

Article DOI: 10.52589/AJAFR-QFD43ZRV
DOI URL: https://doi.org/10.52589/AJAFR-QFD43ZRV

African Journal of Accounting and Financial Research
ISSN: 2682-6690
Volume 8, Issue 1, 2025 (pp. 33-50)

www.abjournals.org

REVIEW OF THE RELATED LITERATURE

CONCEPTUAL FRAMEWORK

Nigeria as a member of the global economic community has been rated by too many countries of the world as being endowed with abundant human and material resources. Nigeria has also been coming up with strategic economic policies that can help to maximize her potential in order to enhance her economic growth and development (Ogwuma, 2023).

CONCEPT OF ECONOMIC GROWTH

Economic growth is the continuous improvement in the capacity to satisfy the demand for goods and services, resulting from increased production scale, and improved productivity (innovation in product and processes) (Department for International Development, 2011).

Economic growth also entails changes in material production and during a relative short period of time, usually one year. In economic theory, the concept of economic growth involves an annual increase of material production expressed in value. Economic growth also means the increase in the overall productivity that is measured by the gross domestic product (GDP). Productivity means the tendency of a state to produce goods and services from its own resources. Any rise in productivity is seen as an increase in economic growth.

TYPES OF ECONOMIC GROWTH

Economic growth is measured in two broad ways:

a) Real Economic Growth: Real Economic Growth occurs when the rate of change of overall productivity is rising. This mainly occurs when a country is capable of producing goods and services with each year passing owing to increase in natural and human resources or any other factor.

b) Nominal Economic Growth: Contrary to the real economic growth, nominal economic growth manifests when the GDP of a country's economy is increasing merely because there is an increase in the prices of commodities. This includes changes in both the volume of production and the prices of goods and services produced (Solow, 1956).

Factors Militating against Economic Growth

Economic growth potentials have positive multiplier effects but the following factors affect effective economic growth. Among them are:

1. Unemployment: The higher the unemployment in a given economic system, the lower the productivity. This will in turn affect per capita income, disposable income and tax deductibles that have the capacity to increase government revenues and the government expenditure.

2. Inflation: Inflation reduces the purchasing power of a country's currency. The real value of currencies under higher inflation rate is adjusted, thereby negatively affecting the economic growth of such a country's economy. Citizens will develop the tendency of lower purchases.

Article DOI: 10.52589/AJAFR-QFD43ZRV
DOI URL: https://doi.org/10.52589/AJAFR-QFD43ZRV

3. Inadequate Natural Resources Endowment: Most countries rely on other country's resources endowment for the growth and development of their economies. Inadequate resource endowment could arise in the form of low technical know-how, lack of highly experienced personnel and other professionals who could extract, convert and create more resources from their available resources. Most countries rely on the skills from expatriates before they could exploit their endowed wealth.

4. Near Dearth of Foreign Direct Investments: Foreign Direct Investment contributes to the economic growth of a country. Countries with higher FDI create more jobs, generate more export oriented products and services, help to stimulate the domestic economy and as well reposition for export, which encourages economic growth.

5. Poor Education Environment: Given the competitive nature of economies of the world, education enrollment should be a priority plan of any economy that would be able to compete effectively and achieve its mapped out plans for economic growth and development.

Nigeria's Economic Growth Projection

Given Nigeria's Strategic economic position in Africa and as one of the emerging economies of the world, Nigeria's economic trends look promising. In 2018, Nigeria's GDP grew by 2.38% in real terms, representing an increase of 0.27% points compared to the fourth quarter of 2017, which had 2.11%. This indicated a rise of 0.55% points. The fourth quarter growth performance implies real GDP growth rate of 1.93% in 2018, compared to 0.82% in 2017 indicating an increase of 1.09%.

Aggregate nominal GDP was N35,230,607.63 million higher than N31,275,354.08 million recorded in 2017, with a growth rate of 12.65% and N127.762.545 million in 2018 representing 12.36% compared to N113,711,634.61 million of 2017. In 2022, Nigeria's GDP grew 3.52% in real terms in the fourth quarter of 2022 with a growth of 2.25% in 2022 and 3.98% in 2021.

In 2023, Nigeria's GDP grew by 3.46%. The growth is lower than 3.52% recorded in 2022 and higher than the third quarter growth rate of 2.54% in 2023. Nigeria was projected to record a Gross Domestic Product (GDP) growth rate of 3.2% in 2022 and 3.0 percent in 2023, both representing 0.26 points lower than the 3.4% and 3.2%, respectively (International Monetary Fund, 2021).

The economy of Nigeria advanced by 2.25%, from a year ago in the third quarter of 2022, decelerating from the first quarter's 3.54% expansion and missing market estimates of a 2.95% rise. This makes the eight consecutive quarters of growth but at the slowest rate since the first quarter of 2021 (National Bureau of Statistics, 2023).

Foreign Direct Investments and Emerging Economy

Given constant economic fluctuations and imminent development urge among the developing nations of the world, many countries are in lack of incentives that may trigger investments for local and regional growth and development (Halil & Faruk, 2016). Domestic capitals in the emerging economies are in short supply to assist in their economic simulations that involve huge investments. Therefore, emerging economies such as Nigeria have come up with incentives to attract Foreign Direct Investments.

Article DOI: 10.52589/AJAFR-QFD43ZRV
DOI URL: https://doi.org/10.52589/AJAFR-QFD43ZRV

Foreign Direct Investment is any investment where an Investor from a country invests in a foreign country in the creation of the assets (property) of the enterprise, with the right to control its business (Halil & Faruk, 2016). Foreign Direct Investment reflects the aim of obtaining a lasting interest by a resident entity of one economy (Direct Investor) in an enterprise that is resident in another economy.

FDI is structured to improve the recipient economies thereby enhancing growth and development. It is on the strength of this that developing countries attract investors with the hope of strengthening their economy by making good policies that will help to accelerate foreign investment portfolios (Ebunoluwa, Osman & Avas, 2021).

Nigeria has witnessed several trade policies which aimed at diversifying the economy away from oil revenue. These policies are focused on improving the industrial sector and of course tailored to assist in enhancing the economic growth of Nigeria (Ebunoluwa, Osman & Avas, 2021).

Types of Foreign Direct Investments

As could be noted in different economic systems, most countries of the world operate a liberal and open market system, wherein they allow foreign direct investment inflows; others run a guided or controlled system of FDI inflows. But given the competitive global economic climate, most economics seem to have relapsed structural rigidities that hinder inflows of Foreign Direct Investment in their respective economics.

Therefore, Foreign Direct Investment can be categorized as follows:

1. **Joint Venture FDIs**: Joint Venture takes the form of joint investment of foreign and local partners, in creation of common business objectives and attainment of their articulated aims. This comes in the form of Joint control, common risk bearing, and joint profit sharing (Dasa, 2012).

2. **Individual FDIs:** This entails the ability and capacity of an individual to entirely and solely own a company abroad; such an individual can do that via creation of a new company and or acquiring an already existing business firm(s) abroad.

Nigeria's Foreign Direct Investments Inflows

Given the economic trajectory of Nigeria, the country has been striving to reposition her industrial sector so as to harness its abundant and untapped resources for a common economic growth.

As noted by Soludo (2024), he opined that low inflow of FDI into Nigeria is a source of worry and that Nigeria is punching below her weight both in Africa and globally. As could be observed, the former CBN Governor, and the current Anambra State Governor stressed that the flows of FDIs across the word mostly towards Asia, and Africa received 3% to 4% of FDI in 2023 and in terms of portfolio and FDI, Nigeria is grossly punching below its weight, whether relative to her population or relative to the size of her economy in Africa and globally.

Nigeria's quest for an improved economic system places a daunting task on her; by doing so, Nigeria has been recording both upward and downward slopes in her foreign direct investment

Article DOI: 10.52589/AJAFR-QFD43ZRV
DOI URL: https://doi.org/10.52589/AJAFR-QFD43ZRV

inflows. Nigeria had a total monetary value of FDI of US$1.194.6 million, indicating 7.11% of total inflows into Nigeria in 2018.

In 2019, FDI recorded an inflow of US$222.89 million which accounted for 3.83% of total capital importation in Nigeria. This shows a drop by US$971.71 within the comparable years indicating 82% drop on FDI inflows in Nigeria. In 2022, FDI recorded a total inflow of US$84.23 million indicating 7.94% of the total capital importation in Nigeria; while in 2023, the total FDI was US$183.97 million, showing 16.90% of the total capital imported. Between 2022 and 2023, there was a surplus inflow of FDI to US$99.74 indicating a positive percentage variance of 1.5%.

Theoretical Framework

Developing economies such as Nigeria, and as often observed in other economic systems, generate their real assets investment both from domestic economy and from Foreign Direct Investment (FDI).

This study lay theoretical strength from Harrod-Domar Growth Theory. It states that for any country to have meaningful growth, its portion of her Gross Domestic Product in monetary terms must be saved and the other proportion be invested. He posits that the amount of savings available to a country's economic system determines her economic growth level. Higher savings rate increases growth and is inversely or negatively related to the capital ratio whereby a capital increase reduces the GDP Growth rate.

The New Growth Model: This model posits that emerging economies ensure an increase in investments, which is the accumulation of capital and increasing the saving rate, and it will largely achieve a higher level of output.

Solow (1956) opined that permanent growth rate of output per unit of input of labour is independent of savings rate, which is investments and depends largely on the technological progress rate. More so, the investment growth theory focuses majorly on the establishment of technological know-how and its positive transmission for the attainment of economic growth of a nation.

Positive SpillOver Theory of FDI

This model, as stated by Hymen (1976), posits that external differences across firms at both scientific and technological levels, as a source of technological spillovers and transfers. On the other hand, the study characterized Foreign Direct Investment as an International extension of industrial organization theory.

Empirical Framework

Epor, Yua and Iorember (2024) examined the role of international trade and external debt in the relationship between foreign direct investment and economic growth for Brazil, Nigeria, and Vietnam using the Autoregressive Distributed Lag model on annual data from 1990 to 2021. The findings revealed that foreign direct investment and trade had positive but insignificant effects on economic growth across all three countries. Furthermore, external debt was shown to hinder long-term economic growth. The study suggested country-specific recommendations tailored to economic and financial conditions, global market dynamics, and long-term development goals of these developing countries.

Article DOI: 10.52589/AJAFR-QFD43ZRV
DOI URL: https://doi.org/10.52589/AJAFR-QFD43ZRV

Mustafa and Azizun (2020) investigated the impact of foreign direct investments on unemployment in six countries in the Middle East and North African. The study employed panel data for a period of 1990 to 2018. Using Fixed-Effect Model (FEM), Random-Effect Model (REM) and Granger Causality Test, the result showed that FDI reduces unemployment rate, and also, that there is no causal relationship in the short term between FDI and unemployment in its various firms.

Ezeanyeji and Ifeako (2019) explored the impact of foreign portfolio investment on economic growth in Nigeria from 1986 to 2017. The study employed Augmented Dickey – Fuller (ADF) test. The Johansen Cointegration Technique and the Error Correction Model (ECM) in the analysis. Variables employed include Net-Foreign portfolios Investment, Real Gross Domestic Product (RGDP), inflation rate, market capitalization and trade openness. The result revealed that foreign portfolio investments have a positive significant impact on economic growth in Nigeria. It therefore recommended that the government should initiate policies that will promote the long-run growth of the capital market and the economy at large.

Dritsakis, Nikolas and Stamatiou (2018) examined the causality relationship between FDI, Exports, Unemployment and Economic Growth in the fifteen old EU members, using panel data covering the period 1970-2015. The Fixed-Effect Model was applied in order to estimate the panel VAR equations for Granger Causality tests. The result revealed three bidirectional causalities running from FDI to economic growth, FDI to unemployment, and from economic growth to unemployment.

Akanegbu and Chizea (2017) examined Foreign Direct Investment and economic growth in Nigeria, as an empirical analysis using annual time series data between 1991 – 2024, and the neoclassical production function, where capital and labour are used as production input, and ordinary least square (OLS) estimated techniques to determine the impact of FDI on economic growth in Nigeria. The result shows a positive but insignificant impact of FDI on Output productivity in Nigeria.

Melynk, Kubatko and Pysarenko (2014) examined the impact of FDI and economic growth, using communist transition economies. The study made use of panel data spanning from 1998-2010, which was analyzed using the Fixed-Effects estimation technique. The finding was that there exists a positive impact of FDI on economic growth in the communist transition countries. FDI stimulates growth in the long-run, although it exhibits a negative impact on economic growth in the short-run in some selected developing countries under review.

Dao (2014) examined the impact of the drivers of economic growth in developing countries. The study modified the conventional neoclassical growth model to account for the impact of the increase in the number of people working relative to the total population and that of the number of people working relative to the total population and that of the increase in the value added per worker over time. Results revealed that the increase in the number of people working, relative to the total population does not help explain cross-country differences in per capita GDP growth in developing economies.

Hitken and Harrison (1999) looked at whether domestic firms benefit from Foreign Direct Investments, with evidence from Venezuela. Their study found that FDI may have negative effects on productivity of local firms in the case that the local firms are not protected and the micro-economic environment of the host country is weak. The study prefers a "market – Stealing" hypothesis in its result. The hypothesis explains that in its findings, the FDI promotes

Article DOI: 10.52589/AJAFR-QFD43ZRV
DOI URL: https://doi.org/10.52589/AJAFR-QFD43ZRV

technological transfer, and external investors may dominate the market share and produce at cheaper average costs, while local firms produce smaller output at higher costs. This experience exposes the local firms to unhealthy rivalry with their foreign investors' counterparts.

DATA AND METHODOLOGY

Data and sources

The study employed an *ex-post facto* research approach to analyze economic growth (EGR) in Nigeria with the influence of foreign direct investment (FDI) from 2009Q1 to 2023Q4. This study strategy was chosen because it will allow the researcher to capture the trend of economic growth (EGR) in Nigeria. The ex-post facto research approach was used since the study is highly reliant on quantitative secondary data.

The study employed secondary data gathered from various issues of the World Bank Development Indicators for Nigeria as well as the Central Bank of Nigeria (CBN) statistical bulletin during the study period. To this goal, regression models that seek to explain these associations will be developed using basic theories and empirical investigations spanning the years 2009Q1 to 2023Q4.

Model Specification

Based on the theoretical framework, this study's model goes thus:

$$EGR = f(NGDI, EXCH, TROPN, EXRSV, DEBT)$$

To assess the link between economic growth (EGR) and foreign direct investment (FDI) in Nigeria, this study drew on previous research of Epor, Yua and Iorember (2024) and Ezeanyeji and Ifeako (2019) that developed empirical models for estimating economic growth (EGR) from FDI impact. This means that modeling FDI without including exchange rate, trade openness, external reserves and government debt will be misspecification. The mathematical models can be expressed as:

$$EGR_t = \alpha_0 + \alpha_1 NFDI_{t-i} + \alpha_2 EXCH_{t-i} + \alpha_3 TROPN_{t-i} + \alpha_4 EXRSV_{t-i} + \alpha_5 DEBT_{t-i} + \in_t \quad 2$$

Where EGR is economic growth, NFDI is net inflow of foreign direct investment, EXCH is exchange rate, TROPN is trade openness, EXRSV is external reserve and DEBT is government debt level

Data Analysis Techniques: Cointegration Test: Trace Test

The trace test is one of the methods used to test for cointegration in a set of variables, particularly when applying the Johansen cointegration test. The trace statistic tests the null hypothesis that there are at most "r" cointegrating relationships against the alternative hypothesis that there are more than "r" cointegrating relationships. The trace test statistic is calculated as:

Article DOI: 10.52589/AJAFR-QFD43ZRV
DOI URL: https://doi.org/10.52589/AJAFR-QFD43ZRV

$$Trace\ Statistic = -T \sum_{i=r+1}^{k} ln(1 - \hat{\lambda}_i) \quad 3$$

Where:

- T is the number of observations in the sample.
- k is the number of variables in the system.
- λ_i are the estimated eigenvalues from the estimated matrix of the system.

The trace test is performed sequentially for increasing values of "r" (from 0 to k−1):

- For r=0, the null hypothesis is that there are no cointegrating vectors.
- For r=1, the null hypothesis is that there is at most one cointegrating vector.
- This continues until r=k−1.

The test statistic is compared with critical values from the asymptotic distribution of the trace statistic. If the trace statistic exceeds the critical value, the null hypothesis of "at most r cointegrating relationships" is rejected in favor of more cointegrating relationships.

Error Correction Model and Short-Run Estimations

In the next step, we obtain the short-run dynamic parameters by estimating an error correction model associated with the long-run estimates. This is specified as follows:

$$EGR_t = \alpha_0 + \sum_{i=1}^{a} \beta_i \Delta EGR_{t-i} + \sum_{i=0}^{b_1} \partial_j \Delta X_{t-j} + \Omega ECT_{t-1} + \psi_t \quad 4$$

Where,

X = vector of explanatory variables

ECT = error correction term derived from equation 4, and

Ω = the speed of adjustment.

ψ_t = error term of the short-run model

The error correction model shows the speed of adjustment needed to restore the long run equilibrium following a short run shock. The Ω is the coefficient of the error correction term in the model and must be negative and significant for the return back to long-run equilibrium to hold (Epor, 2024).

Article DOI: 10.52589/AJAFR-QFD43ZRV
DOI URL: https://doi.org/10.52589/AJAFR-QFD43ZRV

African Journal of Accounting and Financial Research
ISSN: 2682-6690
Volume 8, Issue 1, 2025 (pp. 33-50)

www.abjournals.org

The Fully Modified Ordinary Least Squares (FMOLS) Long-run Estimation

Once cointegration is established between public debt and investment, the conditional FMOLS long-run model can be estimated as specified:

$$EGR_t = \omega_0 + \alpha_1 EGR_{t-i} + \alpha_2 NFDI_{t-i} + \alpha_3 EXCH_{t-i} + \alpha_4 TROPN_{t-i} + \alpha_5 EXRSV_{t-i} + \alpha_6 DEBT_{t-i} + \in_t \quad 5$$

Where,

ω_0 = intercept

α_1–α_6 = coefficients of long-run estimates

$\in_t$ = error term of long-run estimates

DATA ANALYSIS AND RESULTS

The descriptive statistics provide insights into Nigeria's economic growth, net inflow of foreign direct investment, exchange rate, trade openness, external reserves, and government debt levels over 60 observations. Economic growth (EGR) averaged 2351.11 with a standard deviation of 384.54, indicating moderate variability. The skewness (0.85) suggests a rightward lean, meaning higher values occurred more frequently. NFDI (net foreign direct investment inflow) averaged 0.93 but ranged from -0.25 to 3.75, reflecting instances of outflows. Its positive skewness (1.12) and relatively high kurtosis (4.43) point to occasional extreme positive inflows.

Table 1: Descriptive Analysis

	EGR	NFDI	EXCH	TROPN	EXRSV	DEBT
Mean	2351.11	0.93	291.73	27.70	106.67	15.42
Median	2193.85	0.75	253.77	27.00	86.91	14.20
Maximum	3242.83	3.75	1174.27	41.67	247.74	50.13
Minimum	1697.80	-0.25	148.77	17.60	3.52	8.56
Std. Dev.	384.54	0.82	196.99	6.33	67.00	7.72
Skewness	0.85	1.12	2.54	0.47	0.35	2.51
Kurtosis	2.75	4.43	10.50	2.51	1.99	10.49
Jarque-Bera	7.36	17.59	205.08	2.84	3.76	203.54
Prob.	0.03	0.00	0.00	0.24	0.15	0.00
Obs.	60	60	60	60	60	60

The exchange rate (EXCH) demonstrated significant variability, with a mean of 291.73 and a high standard deviation of 196.99. The maximum value (1174.27) compared to the minimum (148.77) shows large fluctuations, reflecting exchange rate instability. Its skewness (2.54) and kurtosis (10.50) suggest a heavy right-tail distribution with extreme values. Trade openness (TROPN) had a mean of 27.70 and a relatively low standard deviation of 6.33, indicating modest variability. Its skewness (0.47) and kurtosis (2.51) reflect a fairly normal distribution.External reserves (EXRSV) averaged 106.67, with a standard deviation of 67.00,

Article DOI: 10.52589/AJAFR-QFD43ZRV
DOI URL: https://doi.org/10.52589/AJAFR-QFD43ZRV

showing significant variability. The skewness (0.35) and kurtosis (1.99) suggest a near-normal distribution. Government debt (DEBT) had a mean of 15.42 but varied widely, ranging from 8.56 to 50.13, with a standard deviation of 7.72. Its high skewness (2.51) and kurtosis (10.49) indicate extreme values on the higher end, reflecting occasional spikes in debt levels. The Jarque-Bera probabilities confirm that most variables, especially EXCH and DEBT, deviate significantly from normality.

Correlation Analysis

The correlation analysis examines the relationships among economic growth (EGR), net foreign direct investment (NFDI), exchange rate (EXCH), trade openness (TROPN), external reserves (EXRSV), and government debt (DEBT) in Nigeria. EGR exhibits a negative and significant correlation with EXCH (-0.390, **p=0.002**) and DEBT (-0.366, **p=0.004**), indicating that rising exchange rates and debt levels negatively affect economic growth. However, EGR has a positive and significant relationship with EXRSV (0.327, *p=0.010*), suggesting that higher external reserves contribute to economic growth. The relationship with NFDI (0.017) and TROPN (0.222) is positive but statistically insignificant.NFDI shows strong and significant relationships with several variables. It has a positive and significant correlation with TROPN (0.574, ***p=0.000***) and EXRSV (0.474, ***p=0.000***), indicating that increased trade openness and external reserves attract foreign direct investment. Conversely, NFDI has a negative and significant correlation with EXCH (-0.622, ***p=0.000***) and DEBT (-0.639, ***p=0.000***), suggesting that higher exchange rates and government debt reduce foreign direct investment inflows.

Table 2: Correlation Analysis

	EGR	NFDI	EXCH	TROPN	EXRSV	DEBT
EGR	1					
NFDI	0.017 0.895	1				
EXCH	-0.390 0.002***	-0.622 0.000***	1			
TROPN	0.222 0.089	0.574 0.000***	-0.198 0.130	1		
EXRSV	0.327 0.010*	0.474 0.000***	-0.350 0.000***	0.601 0.000***	1	
DEBT	-0.366 0.004***	-0.639 0.000***	0.509 0.000***	-0.212 0.105	-0.740 0.000***	1

Note: *, **, *** represents significance at 10%, 5%, 1%

EXCH exhibits a negative and significant correlation with EXRSV (-0.350, ***p=0.000***) and a positive and significant relationship with DEBT (0.509, ***p=0.000***), implying that exchange rate increases reduce external reserves but coincide with higher debt levels. TROPN positively correlates with EXRSV (0.601, ***p=0.000***) and NFDI but has no significant relationship with EGR or DEBT. Lastly, DEBT negatively correlates with EXRSV (-0.740, ***p=0.000***) and EGR,

Article DOI: 10.52589/AJAFR-QFD43ZRV
DOI URL: https://doi.org/10.52589/AJAFR-QFD43ZRV

highlighting that rising government debt is associated with lower external reserves and economic growth. Overall, significant correlations indicate key linkages among macroeconomic variables in Nigeria.

Table 3: ADF Unit Root Tests

Variables	ADF Tests: Levels		ADF Tests First Difference		Order of Integration
	ADF Test Statistic	p-values	ADF Test Statistic	p-values	
EGR	-2.1487	0.2270	-2.8427	0.0052***	*I(1)*
NFDI	-1.2619	0.6408	-5.3664	0.0000***	*I(1)*
EXCH	1.2067	0.9978	-7.6541	0.0000***	*I(1)*
TROPN	-2.2288	0.1988	-5.7400	0.0000***	*I(1)*
EXRSV	-1.1076	0.7072	-3.6477	0.0076***	*I(1)*
DEBT	-1.3832	0.9987	-3.6284	0.0005***	*I(1)*

Note: *, **, *** represents significance at 10%, 5%, 1%

The unit root test results using the Augmented Dickey-Fuller (ADF) method indicate that all variables—economic growth (EGR), net foreign direct investment (NFDI), exchange rate (EXCH), trade openness (TROPN), external reserves (EXRSV), and government debt (DEBT)—are non-stationary at their levels. This is evidenced by the fact that the ADF test statistics for all variables at levels are greater than their critical values, with p-values exceeding 0.10, meaning the null hypothesis of a unit root cannot be rejected. However, when the ADF test is applied to the first difference of the variables, all variables become stationary. Specifically, the ADF test statistics at the first difference for EGR (-2.8427), NFDI (-5.3664), EXCH (-7.6541), TROPN (-5.7400), EXRSV (-3.6477), and DEBT (-3.6284) are all significant at the 1% or 5% levels, as indicated by their p-values being less than 0.05. This suggests that the null hypothesis of a unit root is rejected at the first difference.

Based on these results, all variables are integrated of order one I(1). This means they achieve stationarity after first differencing, which is a necessary condition for further econometric analysis such as cointegration tests and autoregressive distributed lag (ARDL) modelling.

Cointegration Test

The cointegration test results using the Johansen *Unrestricted Cointegration Rank Test (Trace)* indicate the presence of cointegration among the variables (EGR, NFDI, EXCH, TROPN, EXRSV, DEBT), confirming a long-run relationship. The null hypothesis of no cointegration (*None*) is rejected at the 5% significance level as the trace statistic (107.5035) exceeds the critical value (95.75366) with a probability of 0.0061. This suggests the existence of at least one cointegrating equation. The null hypothesis of at most one cointegration equation is also rejected since the trace statistic (73.80284) is greater than the critical value (69.81889) with a probability of 0.0232, confirming a second cointegrating vector.

Article DOI: 10.52589/AJAFR-QFD43ZRV
DOI URL: https://doi.org/10.52589/AJAFR-QFD43ZRV

Table 4: Johansen Cointegration Test: The Trace Test

Date: 11/30/24 Time: 21:58
Sample (adjusted): 2009Q3 2023Q4
Series: EGR NFDI EXCH TROPN EXRSV DEBT
Lags interval (in first differences): 1 to 1

Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.440687	107.5035	95.75366	0.0061
At most 1 *	0.372747	73.80284	69.81889	0.0232
At most 2	0.324287	46.75137	47.85613	0.0632
At most 3	0.184335	24.01615	29.79707	0.1997
At most 4	0.137426	12.19856	15.49471	0.1477
At most 5	0.060574	3.624195	3.841466	0.0569

However, for the null hypothesis of at most two cointegrating equations, the trace statistic (46.75137) is slightly below the critical value (47.85613) with a probability of 0.0632, meaning the null cannot be rejected at the 5% level. Beyond this point (at most three or more cointegrating equations), the null hypotheses are not rejected as the trace statistics fall below the critical values. The test results reveal the presence of two cointegrating relationships among the variables, as evidenced by the rejection of the null hypotheses at *None* and *At most 1*. This confirms a stable long-run relationship among the variables, which validates the appropriateness of employing an error correction model (ECM) in the analysis.

Error Correction Model

The short-run and error correction model (ECM) results indicate the dynamic adjustment and short-run relationships among the variables. The coefficient of the error correction term (ECT1) is negative and statistically significant at the 1% level (-0.1469), confirming the presence of a long-run equilibrium relationship among the variables. This implies that approximately 14.7% of the disequilibrium caused by a shock in the previous quarter is corrected in the current quarter, ensuring a gradual adjustment back to long-run equilibrium.

In the short run, economic growth (EGR) shows strong persistence, with its lagged value positively and significantly impacting current growth (0.8860). Net foreign direct investment (NFDI) also has a positive and significant effect on economic growth (230.2658), suggesting that increases in foreign capital inflows contribute to growth. The exchange rate (EXCH) exhibits a positive short-run effect (10.3129), indicating that exchange rate changes can influence economic activity positively in the short term. Trade openness (TROPN), however, has a negative and significant effect on economic growth (-32.5393), suggesting that excessive openness may have adverse short-run implications, possibly due to import dominance or trade imbalances.

Article DOI: 10.52589/AJAFR-QFD43ZRV
DOI URL: https://doi.org/10.52589/AJAFR-QFD43ZRV

Table 5: Error Correction Model and Short-run Estimations

Vector Error Correction Estimates
Sample (adjusted): 2009Q3 2023Q4

Variable	Coefficient	Std. Error	t-Statistic	Sig.
ECT1	-0.1469	0.0504	-2.9143	***
D(EGR(-1))	0.8860	0.1236	7.1673	***
D(NFDI(-1))	230.2658	110.4920	2.0840	***
D(EXCH(-1))	10.3129	5.3828	1.9159	***
D(TROPN(-1))	-32.5393	15.2226	-2.1376	***
D(EXRSV(-1))	-1.7641	1.4511	-1.2156	
D(DEBT(-1))	-248.5548	130.4550	-1.9053	***
C	2.1298	8.0547	0.2644	
R-squared	0.71			
Adj. R-squared	0.67			

Note: *** represents significance

The coefficients of external reserves (EXRSV) and government debt (DEBT) reveal mixed impacts. While the effect of external reserves is negative and insignificant (-1.7641), government debt has a significant negative short-run effect on economic growth (-248.5548), indicating that increasing debt levels may hinder short-term growth prospects. The R-squared value of 0.71 and adjusted R-squared of 0.67 indicate that the model explains a substantial proportion of the variations in economic growth. Overall, the model highlights significant short-run effects, with the error correction mechanism ensuring that deviations from equilibrium are progressively corrected over time.

Long-run Relationship

The hypothesis test investigates whether net foreign direct investment (NFDI) significantly affects economic growth (EGR) using the Fully Modified Least Squares (FMOLS) method. The null hypothesis (H0H_0) states that NFDI has no significant effect on EGR, while the alternative hypothesis (H1H_1) posits that NFDI does have a significant effect. The results reveal that the coefficient of NFDI is -365.9553, with a standard error of 119.0255. The t-statistic is -3.0746, and the corresponding p-value is 0.0033.

Article DOI: 10.52589/AJAFR-QFD43ZRV
DOI URL: https://doi.org/10.52589/AJAFR-QFD43ZRV

African Journal of Accounting and Financial Research
ISSN: 2682-6690
Volume 8, Issue 1, 2025 (pp. 33-50)

Table 6: Long-run FMOLS Estimation

Dependent Variable: EGR
Method: Fully Modified Least Squares (FMOLS)
Sample (adjusted): 2009Q2 2023Q4

Variable	Coefficient	Std. Error	t-Statistic	Prob.
NFDI	-365.9553	119.0255	-3.074596	0.0033
EXCH	-10.34759	4.471436	-2.314153	0.0246
TROPN	20.20599	9.652310	2.093384	0.0411
EXRSV	4.670811	1.609513	2.902002	0.0054
DEBT	251.7880	114.7704	2.193841	0.0327
C	718.6343	558.8288	1.285965	0.2040

R-squared	0.523453	Mean dependent var	2362.180
Adjusted R-squared	0.478495	S.D. dependent var	378.0702
S.E. of regression	273.0245	Sum squared resid	3950745.
Long-run variance	98875.91		

Given that the p-value (0.0033) is less than the 5% significance level (α=0.05\alpha = 0.05), the null hypothesis is rejected in favour of the alternative. This implies that NFDI exerts a statistically significant negative effect on economic growth in the long run. Specifically, a unit increase in NFDI is associated with a reduction of approximately 365.96 units in EGR, holding other factors constant. The significance level of 1% further strengthens the reliability of this finding, indicating a robust negative relationship between NFDI and EGR.

DISCUSSION OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

Discussion of Findings

The findings of this study, which highlight a significant negative effect of Foreign Direct Investment (FDI) on economic growth in Nigeria, reflect the challenges within the Nigerian economy. These results align with the conclusions of Hitken and Harrison (1999), whose "market-stealing" hypothesis explains that FDI can stifle local firms, particularly in weak economic environments. In Nigeria, the dominance of foreign firms, with their advanced technologies and access to cheaper capital, often places domestic firms at a disadvantage. Local industries, constrained by high production costs, poor infrastructure, and weak institutional frameworks, struggle to compete, leading to reduced output and slower economic growth. The absence of adequate policies to protect domestic firms and encourage technological spillovers further exacerbates this challenge.

The results also partly align with Melynk et al. (2014), who found that FDI exhibits short-run negative effects in some developing economies due to structural weaknesses. In Nigeria, structural bottlenecks such as poor electricity supply, insecurity, corruption, and regulatory inefficiencies reduce the capacity of FDI to stimulate growth. These issues prevent FDI from integrating effectively with domestic industries, limiting its long-term benefits and reinforcing its negative short-run impact. For instance, foreign investments in Nigeria's oil and gas sector often operate in isolation, generating little backward linkage to other sectors like manufacturing or agriculture, which are crucial for broad-based economic development.

Article DOI: 10.52589/AJAFR-QFD43ZRV
DOI URL: https://doi.org/10.52589/AJAFR-QFD43ZRV

However, the findings contradict Akanegbu and Chizea (2017), who reported a positive but insignificant impact of FDI on Nigeria's economic growth. Their results suggest that FDI in Nigeria has limited effectiveness but does not harm growth. This discrepancy could stem from differences in methodology or sample periods, but it also reflects the uneven distribution of FDI across sectors in Nigeria. While oil and gas attract significant foreign investments, other sectors such as manufacturing and agriculture receive less attention, reducing FDI's ability to contribute meaningfully to overall economic growth.

The contrasting positive findings in studies like Mustafa and Azizun (2020) and Dritsakis et al. (2018) highlight the role of institutional quality and macroeconomic stability. In the Nigerian context, the weak institutional framework, coupled with persistent issues such as policy inconsistency and infrastructure deficits, limits FDI's potential to stimulate growth. These studies imply that in economies with stronger governance, FDI fosters growth through job creation, technology transfer, and productivity enhancements. Unfortunately, in Nigeria, FDI often exacerbates existing inequalities and sectoral imbalances, as foreign investors dominate key markets without significantly contributing to skills development or local capacity building.

Additionally, the findings of Dao (2014) and Ezeanyeji and Ifeako (2019) provide further insights into the Nigerian experience. Dao's emphasis on productivity and demographics highlights Nigeria's need to address structural issues, such as low labour productivity and insufficient human capital development, to harness FDI's benefits. Ezeanyeji and Ifeako's conclusion that foreign portfolio investment (FPI) positively impacts economic growth in Nigeria suggests that the country may benefit more from short-term capital inflows in its capital markets than from long-term FDI, which often fails to integrate with domestic economic structures.

In conclusion, the significant negative effect of FDI on economic growth in Nigeria can be attributed to structural inefficiencies, weak institutions, and a lack of integration between foreign investments and domestic industries. The Nigerian economy, characterised by its overdependence on oil, insufficient infrastructure, and high operational costs, limits FDI's growth-enhancing potential. Addressing these issues through improved governance, infrastructure development, and targeted policies to strengthen domestic industries is crucial for reversing the negative impact of FDI and fostering inclusive economic growth.

SUMMARY AND CONCLUSION

The study used an ex-post facto research design to examine the relationship between economic growth (EGR) and foreign direct investment (FDI) in Nigeria from 2009Q1 to 2023Q4. Secondary data from the World Bank and the Central Bank of Nigeria were employed, with a regression model to explain the link between EGR and FDI. The model included variables such as net foreign direct investment (NFDI), exchange rate (EXCH), trade openness (TROPN), external reserves (EXRSV), and government debt (DEBT). The study utilized the Johansen cointegration test, specifically the trace test, to determine the long-run relationships between the variables. Further, an error correction model (ECM) was used to assess short-run dynamics, including the speed of adjustment toward long-run equilibrium. Lastly, the study applied Fully Modified Ordinary Least Squares (FMOLS) to estimate the long-run relationships once cointegration was confirmed.

Article DOI: 10.52589/AJAFR-QFD43ZRV
DOI URL: https://doi.org/10.52589/AJAFR-QFD43ZRV

The results show that NFDI has a statistically significant negative effect on EGR in the long run. The coefficient of NFDI was -365.9553, with a t-statistic of -3.0746 and a p-value of 0.0033, which is below the 5% significance level. This suggests that an increase in NFDI is associated with a decrease of approximately 365.96 units in EGR, holding other factors constant. The significance level of 1% further supports the robustness of this negative relationship. Thus, the null hypothesis was rejected, confirming that NFDI negatively influences economic growth in Nigeria.

RECOMMENDATIONS

In the first instance, the Nigerian government should enhance regulatory frameworks and improve governance to ensure a conducive business environment. This includes addressing corruption, ensuring policy consistency, and creating transparent processes to encourage foreign investors to collaborate with local firms and integrate into the domestic economy. Secondly, efforts should be made to attract FDI into underdeveloped sectors like manufacturing and agriculture, rather than concentrating on oil and gas. Policies that encourage foreign investors to establish backward linkages with local suppliers and transfer technology to domestic firms will enhance productivity and foster inclusive economic growth. Finally, the government should prioritise infrastructure development, particularly in energy, transport, and ICT, to reduce production costs for local firms. Additionally, investing in education and skill development will equip the labour force with the expertise needed to maximise the benefits of FDI through improved productivity and innovation.

REFERENCES

Aitken, B. and Harrison, A. (1990) Do Domestic Firms Benefit from Foreign Direct Investments? Evidence from Venezuela. The American Economic Review, 89(3), 605-10.

Akanegbu, B.N &Chizea, J.J (2017) Foreign Direct Investment and Economic Growth in Nigeria: An Empirical Analysis: European Journal of Research in Social Sciences, 5(1) 1-10.

Akinwunmi, A. A and Adekoya, R.B (2016), External Reserve Management and its Effect on Economic Growth of Nigeria. International Journal of Business and Finance Management Research, www.bluefenjournals.org/ijbfmr .

Akpan, H.E (1997) Foreign Direct Investment in Nigeria: Evidence from Time Series Data. CBN Economic & Financial Review, Vol. 35. No: 59-78

CBN Statistical Bulletin (2023).

CBN Statistical Bulletin, 1st Quarter (2023)

Dao M. Q. (2014), Drivers of Economic Growth in Developing Countries. Journal for studies in Economics and Econometrics.

Department for International Development, DFRD,(2011)

Dritsakis, Nikolas, and Stamatiou, (2018) "Causal Nexus Between FDI, Exports, Unemployment and Economic Growth for the Old European Union members. Evidence from Panel Data. International Journal of Economic Science. VII. No. 2 (2018).

Article DOI: 10.52589/AJAFR-QFD43ZRV
DOI URL: https://doi.org/10.52589/AJAFR-QFD43ZRV

Ebunoluwa O.O, and Osman, N.A (2021) Impact of Foreign Direct Investment on Economic Growth in Nigeria. Journal of Management, Economics, and Industrial Organization, Vol. 5. No. 1, 2021 PP.31-33

Ezeanyeji, C.I. and Ifeako, M. (2019) Foreign Portfolio Investment on Economic Growth of Nigeria. An Impact Analysis. International Journal of Academic Management Science Research (IJAMSR). ISSN: 2000 – 00LX. VOL.3. Issue, 3. March, 24-36.

Epor, S. O. (2024). Finance and Economic Development in Brazil: An Exposition of Policies and Economic Performance. In *Finance and Economic Development: Post-Cold War Perceptions, Paradigms and Outcomes: A 20 Country Comparisons.* Published by IGI-Global. DOI: 10.4018/979-8-3693-1610-8.ch006

Epor, S. O., Yua, H. and Iorember, P. T. (2024). Foreign direct investment and economic growth in developing countries: The role of international trade and foreign debt. *Modern Finance*, 2(1), 1-17

Halil.K and Faruk, B.A (2016) The Importance of Foreign Direct Investments on Economic Development in Transitional Countries: A Case Study of Kosoro. European Scientific Journal. March 2016, Edition, Vol. 12, No. 7, ISSN 1857-7881 (Print)

Hymer, S. (1976), The International Operation of National Firms: A Study of Foreign Direct Investment. Cambridge: MLT Press (Google Scholar)

IMF World Investment Review (2021)

IMF, Global, Trade Trend (2001)

Iyaji D. (2021) Insurgency, Political Risk, and Foreign Direct Investment Inflows in Nigeria: A Sectoral Analysis, CBN Journal of Applied Statistics Vol. 12, No: 27-57

Melynk, L. Kubatko, O. and Pysarenko, S. (2014). The Impact of Foreign Direct Investment on Economic Growth: Cases of Communism Transition Economic. Problem and Perspectives in Management, Vol. 12(1), 1-9

Mladan, M.I, (2015) Economic Growth and Development: Journal of Process Management-New Technologies International. Vol.3, No;1, 2015

Mustafa A. and Azizun N. (2020) Impact of Foreign Direct Investment on Unemployment. A Panel Data Approach. Emerging Science Journal. Vol. 4, No. 4.

National Bureau of Statistics (2023)

National Bureau of Statistics (2023)

Nigeria Labour Force Statistics Report (2023)

Ogwuma .M.M (2023) External Sector Reforms and Economic Growth of Nigeria: Unpublished PhD Dissertation

Solow, R. M (1956), A Contribution to the Theory of Economic Growth. The Quarterly Journal of Economic, Oxford University Press. 70(1), 65-94.

Soludo, C.C (2024) Foreign Direct Investment into Nigeria. Abuja Investments Company Limited Summit.

World Investment Report (2023).

Article DOI: 10.52589/AJAFR-QFD43ZRV
DOI URL: https://doi.org/10.52589/AJAFR-QFD43ZRV