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Impact of Foreign Capital Inflow on Economic Growth in Nigeria

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Abstract

The study examines the impact of foreign capital inflows on economic growth in Nigeria between 1984 to 2020. Four core channels of foreign capital inflows were adopted which consist of foreign direct investment (FDI), official development assistance (ODA), and remittances (REM) as the explanatory variables and GDP as the dependent variable. The overall finding revealed that foreign capital inflows have a long-run impact on economic growth in Nigeria except for official development aids. Specifically, the ARDL long-run result revealed that FDI and REM exert strong positive effects on GDP. This implies that FDI and REM are key factors that promote economic growth in Nigeria. Granger causality shows a uni-directional relationship running only from remittance to GDP, implying that remittance is a predictor of economic growth in Nigeria. Interestingly, a bi-directional causal effect exists between FDI and GDP (both are influencers of each other). This generally implies that international capital inflow is one major promoter of economic growth in Nigeria. Therefore, the study recommends that Nigeria should pursue workable foreign investment policies that are geared towards attracting inflows of foreign capital which is expected to help generate meaningful economic growth by improving the pace of industrialization and creation of more job opportunities for the teeming youths.

Keywords: *Foreign Capital Inflow, Economic Growth, ARDL Model.*

Introduction

It is a common assertion in the neoclassical economic theory that capital is an integral part of the growth equation in any economy in the world. In essence, capital serves as a key factor that promotes or induces economic growth. Capital formation must not be neglected if the macroeconomic policy is driving towards boosting economic activities with the target of achieving economic growth, as well as economic development in the long run. Specifically, Nigeria which is one of the emerging economies, suffers from the problem of inadequate capital formation or a savings-investment gap as witnessed by most of the developing economies. Standard neoclassical growth theory emphasized capital accumulation (through increased savings) as a prerequisite for the achievement of economic growth (Dornbusch et al., 2002). However, the low level of savings, which in turn results in low investment among developing countries is one major militating factor which has made developing countries' actual output level lag behind their potential output level (Javid and Qayyum, 2011; Lewis, 1954; Rostow, 1960). Nigeria's aim of penetrating the global economy to sustain its domestic economy has continuously made its economy porous, privatized and deregulated since the middle of 1980. With the view to generate more foreign capital to augment domestic inadequate capital formation, several liberalization and regulation policies were also initiated by these developing countries. According to Obadan (2004), capital flows is a broad term which includes different kinds of financial transactions such as; lending by governments, and international organizations; bank lending, short and long-term; investment in public or private bonds; investment in equities; and direct investment in productive capacity.

Conversely, capital inflow plays the role of determining the exchange rate of the domestic economy in addition to bridging the gap between Savings and Investment. Accordingly, economists and policy analysts have stressed that the effectiveness of foreign capital inflows on economic growth is conditioned on the presence of sound macroeconomic policies in the recipient economy (Karakaplan et al., 2005; Javid and Qayyum, 2011). The national economy of Nigeria in particular has experienced an inflow of more foreign aid capital into the domestic economy through its various liberalization policies. These policies include Foreign Exchange (Monitoring and Miscellaneous Provisions) Degree No.17 of 1995; Nigeria Investment Promotion Council Decree No. 16 of 1995; and Nigerian Investment Promotion Commission (NIPC)

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Decree No. 16 of 1995 (Ukeje and Obiechina, 2013) which promotes the involvement of foreign agents in the economy. Most emerging economies periodically resort to attracting foreign capital as a way of obtaining resources to augment local funds that will help improve investment in an attempt to achieve economic growth.

Being one of the largest economies in Africa, Nigeria has been a significant destination of foreign capital over many decades. For instance, Nigeria capital inflow data was reported at $52million in Mar 2021. This records an increase from the previous month of $ 39 million for Feb 2021 (CBN, 2021). It is commonly believed that longer-term inflows such as foreign direct investment, official development assistance (popularly known as foreign aid) or sovereign debts have some positive impacts on the receiving economy (See: Lipsey, 2004 and Leevchenko and Mauro, 2007; César Calderón and Ha Nguyen, 2015). The United Nations Conference on Trade and Development, UNCTAD (2007) reports that FDI flow to Africa has increased from $9.68 billion in 2000 to $1.3 trillion in 2006. According to UNCTAD (2006), the largest portion of the FDI entry to the West Africa sub-region flows to the Nigerian economy, accounting for 70% of the sub-regional total and 11% of Africa's total FDI inflow. The oil sector which is the mainstay of the economy takes the lion's share of the inflow. In essence, out of this, Nigeria's oil sector alone receives 90% of the FDI inflow. This leading position of Nigeria continues to improve. However, Nigeria's foreign investment inflows fell by 26.7 per cent to US$3.9 billion in 2023 from US$5.3 billion in 2022.

Similarly, remittance is another source of foreign capital which is becoming a very important source of finance for developing countries, both in size and growth rate, exceeding the inflows of most forms of financial flows. Englama (2007) emphasized that the phenomenal growth of remittances in recent times has caught the attention of governments, particularly in developing countries, international organizations, Non-Governmental Organizations (NGOs), and the private sector. Workers' remittance has surpassed the foreign capital inflow such as foreign direct investment and foreign portfolio investment and also serves as a major source of foreign exchange for others. According to Akpan, Okon, and Udoka (2014), in Sub-Saharan Africa (SSA), again, Nigeria topped the list of remittance recipients' nations in 2010 with US$10.0 billion, followed by Sudan (US$3.2 billion), Kenya (US$1.8 billion), Senegal (US$1.2 billion), and South Africa (US$1.0 billion).

However, despite the fluctuations, Nigeria has been favourably receiving the highest inflow of foreign capital in the West Africa economic block, yet, her economic progress remained questionable. This is noticed in the level of poverty and, high level of unemployment ravaging the economy.

Meanwhile, well-managed foreign capital inflows are capable of inducing economic growth and development in the recipient countries or regions. Nigeria is experiencing a low turnout of per capital income occasioned by low output which is in turn associated with inadequate capital needed to meet the investment demand in the face of a significant inflow of capital.

The contention here remains if Nigeria's receipt of foreign capital inflow is not potent enough to contribute to the set pace targeted at achieving economic advancement. Thus, this study will majorly centre on examining the relationship between foreign capital inflow and economic growth in Nigeria during the period under review to ascertain the potency of foreign resources in the domestic economy.

Besides, empirical studies failed to profile the final conclusion as there have been conflicting outcomes from the extant literature as regards the impact of this foreign capital inflow on the domestic economy. Thus, this study is spurred to evaluate the relationship that exists between foreign capital inflow and economic growth in Nigeria between 1985 and 2020.

The result of this study is expected to serve as a blueprint for the national economy and the sister countries in the West African sub-region who will find the piece useful to their economies.

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Theoretical Model

Frankel's AK Model

This study is rooted in Frankel's (1962) AK Model of an endogenous growth theory. The theoretical model focuses on the accumulation of physical capital to stimulate economic growth. Frankel (1962) thinks that the investment rate (savings rate) has a permanent positive contribution to the long-run growth of an economy. He believes that the aggregate production function would exhibit an increasing return to scale if capital employed is used for innovative purposes that would result in technological progress (Chirwa and Odhiambo, 2018). Frankel (1962) believes that when firms accumulate more capital, some of the increased capital will be the innovative capital that creates technological progress, and this technological progress will offset the tendency for the marginal product of capital to diminish. The aggregate production function is presumed to take the following form:

$$Y=aK$$

The above aggregate production function is a special case of the Cobb-Douglas production function. In this case, the constant 'a' is referred to as the output-capital ratio, which is assumed to be positive and, since 'a' is constant, aggregate output Y is proportionate to aggregate stock of capital K. This implies that an increase in investment (savings) rate would lead to a permanent increase in the long-run growth rate (Chirwa and Odhiambo, 2018). Foreign capital inflows such as FDI (Foreign Direct Investment), ODA (Official development aid) and remittances are a source of investments. An increase in these variables would therefore increase aggregate stock of capital and, according to the AK model, it would result in a permanent positive increase in the long-run growth rate.

Empirical Literature Review

Traditionally, foreign capital inflow into Nigeria takes different forms such as foreign capital inflow (FDI), Remittance, Official Development Aid (ODA), Portfolio Investment, Loans and Foreign Aid amongst others. There are many studies on the relationship between foreign capital inflows and economic growth, but there is no consensus as regards its real impact on economic growth. In essence, several studies subscribe to the positive impact of foreign capital inflow on economic growth while others did not contend with this conclusion.

Olaleye (2022) assessed the relationship between foreign capital inflow (proxy by foreign direct investment (FDI), Foreign Portfolio Investment (FPI) and External debt from 1990 to 2021 on selected macroeconomic variables. The study employed the Autoregressive Distributed Lag (ARDL) and found that FPI exerts a negative significant influence on economic growth, while FDI and External debts exhibit a strong positive impact on economic growth.

In another study, Onyekwelu (2022) investigated the relationship between foreign capital inflow and Human Capital Development in Nigeria from 1988 to 2020. The study employed FDI, ODA, Portfolio Investment and External Debt as proxy to International foreign capital inflow. The Ordinary Least Square (OLS) method was adopted for the estimation of the model of the study. The study discovered that all variables employed as a proxy to International Capital Flow demonstrate a strong positive effect on human capital development, hence the study concludes that foreign capital inflow is important for human capital development in Nigeria for the period under review. This by implication indicates foreign capital induces economic growth indirectly through its influence over human capital development.

Ndiweni and Bonga-Bonga (2021) examined the threshold effect of International foreign capital inflow on economic expansion in 13 developing countries in Sub-Saharan Africa from 1995 to 2019. The finding of the study shows that a threshold exists in the foreign capital inflow and growth nexus. Also, once a defined threshold of institutional quality has been exceeded, foreign capital inflow would exert a positive influence on economic growth.

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Joshua, Adewale and Uzomba (2021) assessed the effect of domestic capital and foreign capital inflow on economic growth from 1981 to 2018 using the autoregressive Distributed Lag (ARDL) estimation techniques and the Granger Causality test. The result from the Granger causality test showed a bidirectional relationship between FDI inflow, External debts and economic growth, while there exists a unidirectional causal relationship running from domestic capital to economic growth. Meanwhile, there exists no causal relationship between foreign aid and economic growth. The result of the ARDL estimation indicates that Domestic capital and foreign aid exert a positive influence on GDP both in the long run and short run, FDI exerts a positive influence on GDP only in the short run and external debt has a negative influence on growth. The study therefore concludes that foreign capital inflow assists domestic inflow in ensuring growth but, external debt is a threat to growth.

Nwosa (2020) used Autoregressive Distributed Lag (ARDL) to study the relationship between volatility in foreign capital inflows and economic growth in Nigeria between 1986 and 2018. The study reveals that volatility in foreign capital inflow influences economic growth positively in the long run and negatively in the short run.

Adebayo (2020) examined the influence of foreign capital entry and economic growth in Nigeria between 1981 and 2018. The relationship between the variables was tested using ARDL and the direction of causality was tested using the Granger Causality test. The result of the ARDL shows that Gross Capital Formation (GCF) has a positive significant impact on economic growth while FDI and ODA have an insignificant impact on economic growth. The result of the causality test reveals that there exists a bi-directional relationship between GCF and economic growth. Meanwhile, there exists a one-way relationship running from FDI and ODA to economic growth.

Using Panel Autoregressive Distributed Lag (PARDL) and Mean Group (MG) estimation techniques, Saibu, Ikechukwu and Nwosa (2022) examined the individual, interactive and threshold effects of FDI, Foreign Aids and Trade Openness on Economic growth in 14 West African countries for the period of 1980 to 2018. Findings from the results proved that in the long run, FDI, Foreign Aids and Trade Openness would positively influence economic growth. Also, the interactive effect of aid, trade openness and FDI was negative, but the result strengthens the individual effects on economic growth in the long run aligning with the empirical work of Joshua and Alola (2020), Joshua, Güngör & Bekun (2023) and Joshua, Salami & Alola (2020).

Khan, Arif and Raza (2021) using a panel analysis investigated the effects of capital flow and capital control on economic growth in 54 developed and developing countries between 1995 to 2017. The study used four variables as a proxy for foreign capital inflow which are: FDI, Remittance, External Debts and Exports. The empirical estimation of PMG revealed that all the variables augment the economic growth in both developed and developing countries. However, restrictions on these flows would result in the reduction of the impact of FDI, external debt and exports but would increase the influence of remittances on economic growth.

Olayiwola and Joseph (2020) investigated the impact of foreign capital inflow on both manufacturing exports and economic growth in Nigeria. The study used time series data ranging from 1981 through 2017 and used ARDL estimation techniques for the analysis. The result revealed that foreign capital inflow has a positive significant relationship with economic growth and a positive insignificant impact on manufacturing exports.

Giwa, George, Okodua and Adediran (2020) using GMM techniques examined the effect of Foreign Direct Investment Inflow on Nigerian Real Economic growth (proxy by RGDP) covering the period of 1981 to 2017. The result of the findings showed a negative insignificant result between FDI and Capital Intensity and RGDP, meanwhile, labour has a positive significant relationship with RGDP.

Anidiobu, Okolie, Onyia and Onwumere (2020) examined the effect of foreign capital inflow (proxy by foreign debt) on economic development (proxy by per capita income) in 18 West African countries for the period 1986 to 2017. The study used the Panel Least Square technique for the analysis. The results reveal

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that foreign capital inflow exerts a negative and statistically significant effect on economic growth. The study therefore recommends that external borrowing should be tailored towards development-oriented projects that aid large-scale production as supported by the empirical work of Rotimi, Doorasamy, Joshua, Rotimi, Rotimi, Samuel and Kimea (2023).

Younsi Bechtini and Khemili (2021) investigated the relationship between foreign aid, Foreign Direct Investment (FDI) and Domestic Investment in 41 African countries for the period 1990 to 2016. The study used fixed Effect and System GMM for the estimation. The findings of the study showed that FDI and foreign aid complement direct investment, and increase its effectiveness in fostering growth aligning with the work of Joshua, Adedoyin and Sarkodie (2020) and Joshua, Rotimi and Sarkodie (2020).

Okoro, Nzotta and Alajekwu (2019) used the ordinary Least Square (OLS) regression techniques to investigate the impact of international foreign capital inflow (proxy by FDI, ODA, Remittances and External debts) on economic growth in Nigeria from (1986 to 2016). The findings from the study revealed that FDI and remittances have a significant positive impact on economic growth while that of ODA and external debts is statistically insignificant. Therefore, the study concludes that international foreign capital inflow is a vital tool for ensuring growth in Nigeria as supported by the work of Joshua, Babatunde and Sarkodie (2021).

Samuel and Stephen (2018) examined the impact of international remittances inflows on the domestic economy in Nigeria from 1980 to 2015 using Co-integration, Granger causality test and the Vector Error correction model (VECM). The variables employed in this study are Real Gross Domestic Product (RGDP), Remittances, ODA, Balance of Trade (BOT) and inflation (INFL). The result of the Granger causality test revealed that there exists a significant causal relationship between Remittances and RGDP. Also, the Vector Error correction model (VECM) revealed that there is a negative significant relationship between remittances and RGDP, and there exists a positive significant relationship between ODA and BOT and RGDP, lastly, INFL and RGDP have a positive but insignificant relationship.

Adekunle and Sulaimon (2018) re-examine the relationship between foreign capital inflows and economic growth in Nigeria from 1986 to 2015. Results showed that the unconditional short-run determinants of growth (based on the baseline models) are net FDI inflows, oil price, trade openness and domestic investment, whereas the conditional short-run determinants of growth (based on the alternative models) are net portfolio flows, financial depth, net external debt and net foreign remittances, meanwhile, only foreign aids have an insignificant effect on growth. The study therefore concludes that foreign capital inflow and economic growth in Nigeria have both a linear and a nonlinear relationship.

Adekunle and Sulaimon (2018) also re-examine the relationship between foreign capital flows and economic growth in Nigeria by collecting annual data from 1986 to 2015 from various sources. The study employed a combination of stationary and nonstationary series. Similarly, irrespective of specifications, the study reported the absence of a long-run relationship between economic growth and its determinants in Nigeria. Furthermore, owing to absorptive capacity constraints (such as infrastructural deficit, underdeveloped local financial market and negative and/or very weak positive spill-over effect on domestic investment), net FDI inflows exerted positive short-run influence on growth, while net portfolio flows and net foreign remittance had significant negative short-run effects on growth.

Error correction model, Granger causality test, and co-integration test were employed by Gabriel and Austin (2016) in their study to check the contribution of foreign capital inflow on Nigeria's economic development between the periods 1981 and 2014. Based on the findings, the study concluded that the contribution of foreign capital inflow to Nigeria's economic growth is weak and the expected level of sustainable development is not being felt to a large extent.

Anthony-Orji, Orji and Ogbuabor (2018) examined the impact of foreign capital inflows on economic growth in Nigeria from 1986Q1 to 2014Q4. GDI, Foreign Portfolio investment and remittances were used as proxies for capital inflow. The study employed the use of Autoregressive Distributed Lag and Unrestricted Error Correction Model (ARDL-UECM) for its analysis. The result of the study revealed that

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apart from remittances another component of foreign capital inflow also has a significant influence on growth hence, the study concludes that foreign capital inflows can support economic growth in Nigeria if properly tailored and adequately utilized.

Oluwaseyi, Abdullah, Mahmood, Ismail and Yusuf. (2017) also investigated the impact of foreign capital inflow on Economic Growth in selected African countries using the Two Gap Theory, the study employed panel data ranging from 1980 to 2013. The result of the study revealed that there exists a positive significant relationship between FDI and economic growth but, between ODA and net remittances, the relationship is positive but insignificant. The study therefore recommended that more policies should be put in place to encourage foreign capital inflow.

Nwosa and Akinbobola (2016) used the Autoregressive Distributed Lag (ARDL) Bound co-integration technique to investigate the role of macroeconomic policies (monetary, fiscal and trade policies) in the relationship between foreign capital inflows (proxy by foreign direct investment, foreign aid and remittances) and economic growth in Nigeria between 1970 and 2013. The study discovered that macroeconomic policies played a significant role in influencing the relationship between FDI and economic growth in Nigeria.

Kolawole (2013) in his study examined the impact of official development assistance (ODA) and foreign direct investment (FDI) on real economic growth in Nigeria from 1980 to 2011. The study adopted a two-gap model and other econometric techniques which include the Granger causality test, Johansen co-integration test and error correction method. The result shows that there exists a negative relationship between FDI and real economic growth while ODA exerts no impact on Nigeria's economic growth.

Nkoro and Furo (2012) assessed the impact and the nature of causality of four components of foreign capital inflow (FDI, Foreign Aids, Remittance and External debts) on economic growth in Nigeria from 1981 to 2010. The study employed the Vector Autoregressive (VAR) technique and also conducted a multivariate Granger causality test (block homogeneity test) using the VAR technique. The results from the analysis revealed that a causal relationship exists between foreign capital inflows and economic growth in Nigeria, which supports the foreign capital inflows-led economic growth hypothesis. However, the result of the error correction model shows that there is a significant positive relationship between foreign aid, FDI and Economic growth but there exists a negative significant relationship between effect remittance, external debts and economic growth.

Ehigiamusoe and Lean (2019) examine the impact of foreign capital inflows on economic growth in Nigeria for the 1980 to 2015 period. It employs the ARDL-bounds test and finds a cointegration relationship between foreign capital inflows and growth. Specifically, foreign portfolio investment has a positive impact on growth, while the impact of foreign loans is negative. Nevertheless, foreign direct investment and foreign aid have an insignificant impact on growth, suggesting that Nigeria cannot rely on foreign direct investment and foreign aid as vehicles to stimulate growth.

Haruna Danja (2012) using Ordinary least square (OLS) techniques investigated the applicability of FDI and its impact on the Nigerian economy. The result of this study showed a positive relationship between FDI and GDP, Index of Industrial Product (IIP) and Gross Fixed Capital Formation (GCFC). Meanwhile, based on the study, FDI does not contribute substantially to economic growth in Nigeria, this was said to be due to the repatriation of profits and interest paid on FDI loans.

Research Methodology

This section aimed at explaining the research method adopted for the estimation of the model of this study. More so, it specifies the theoretical framework, model specification, source of data, and description of variables used in the study. It also specify the data analyzing techniques used in estimating the impact of foreign capital inflow on the economic growth of Nigeria.

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Data and Data Sources

Gross Domestic Product (GDP), Foreign Direct Investments (FDI), Official Development Aid (ODA) and Remittances (RMT). These variables are rooted from theories and empirical studies of Anidiobu et al. (2020), Adebayo (2020) and Giwa (2020). The data are sourced from Nigeria Bureau of Statistics, Central Bank of Nigeria, IMF's International Financial Statistics (IFS) and the Federal Reserve Bank of St. Louis.

Model Specification

The model of this study is structured after the work of Frankel's (1962) AK in addition to the empirical support from the work or submission of Okoro, Nzotta and Alajekwu (2019) with a slight modification. Thus, for the purpose of this study, the relationship between the dependent and independent variables is specified as follows:

$$GDP = f(FDI, \quad ODA, \quad RMT) \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (1)$$

Where;

GDP – Gross Domestic Product

FDI – Foreign Direct Investments

ODA – Official Development Aid

RMT – Remittances

The exact form of the above linear function (equation 1) expressed in econometric form can be rewritten as:

$$GDP = \alpha_0 + \beta_1 FDI_t + \beta_2 ODA_t + \beta_3 RMT_t + \mu_t \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots (2)$$

To ensure unison in measurement of the variables in this model and to analyze the variables based on its growth rate, the variables employed in this study are converted into natural log. Hence, the logged model specification is given as:

$$lnGDP = \alpha_0 + \beta_1 lnFDI_t + \beta_2 lnODA_t + \beta_3 lnRMT_t + \mu_t \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots (3)$$

Where, ln is natural logarithm, α_0 is constant, $\beta_1 - \beta_3$ are coefficients and μ_t is error term.

Techniques for Data Analysis

In an attempt to achieve the objectives of this study, Autoregressive Distributed Lag and Granger Causality test were employed. Other Statistics test would also be performed before and after the functions stated above, in order to test for stationarity, stability and to diagnose serial correlation and heteroscedasticity.

Unit Root Tests

Unit root test is a very important preliminary test first conducted on time series data to determine the order of integration which help significantly in deciding the method of approach. A variable is stationary when shock fades away gradually overtime but, a variable is non-stationary when shock are permanents.

Augmented Dickey Fully (ADF) is one of the most popular unit root test. It tests the null hypothesis that a variable has a unit root (non-stationary) against the alternative hypothesis that a variable does not have a unit root (stationary). The ADF test relies on estimating the test regression:

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$$\Delta Y_t = \alpha_0 + p_1 Y_{t-1} + \sum_{i=1}^{k} \alpha_i \Delta Y_{t-1} + \mu_t \; \ldots\ldots\ldots\ldots\ldots\ldots (4)$$

Where:

ΔY_t is change in Y_t, ΔY_{t-1} captures serial correlation, μ_t is error term, t is lag trend, k is lagged value of ΔY. The unit root test is then carried out under the null hypothesis $p = 0$ against the alternative hypothesis of $p < 0$.

Decision rule:

If ADF statistics > critical value - Variable is Stationary

If ADF statistics < critical value - Variable is non-stationary

At Significant level 5% level.

ARDL Co-integration Test

For this study the ARDL Long-run and bound test would be apply to investigate the long-run relationship between foreign capital inflow and economic growth in Nigeria. It tests the null hypothesis that there is no co-integration among the variables. To detect this relationship, the popular F-Statistics will be used. The F statistics is compared with two asymptotically set of critical value: the lower bound I(0) and the upper bound I(1).

If the F-statistics is greater than the upper bound critical value, there exists a long run relationship among the variables, but if the F-statistics falls below the lower bound critical value there exists no long run relationship between the variables and, if the value of the F-statistics falls between the lower bound and upper bound critical value then the state of the long run relationship is inconclusive Yakubu, Salisu and Umar (2015).

To perform the bound test for co-integration, the model employed for this study is specified as:

$$\Delta lnGDP_t = \alpha_{01} + \beta_{11} lnGDP_{t-i} + \beta_{21} lnFDI_{t-i} + \beta_{31} lnODA_{t-1} + \beta_{41} RMT_{t-1} + \sum_{i=1}^{p} \alpha_{1i} \Delta lnGDP_{t-1} + \sum_{i=1}^{q} \alpha_{2i} \Delta lnFDI_{t-1} + \sum_{i=1}^{q} \alpha_{3i} \Delta lnODA_{t-1} + \sum_{i=1}^{q} \alpha_{4i} \Delta RMT_{t-1} + \mu_{1t} \; \ldots\ldots\ldots\ldots\ldots\ldots (5)$$

Hypotheses:

$\boldsymbol{H_0(longrun\ relationhip\ does\ not\ exists)}$: $\boldsymbol{\beta_{1i} = \beta_{2i} = \beta_{3i} = \beta_{4i}}$
$\boldsymbol{H_1(longrun\ relationhip\ does\ exists)}$: $\boldsymbol{\beta_{1i} \neq \beta_{2i} \neq \beta_{3i} \neq \beta_{4i}}$ (i = 1, 2)

Hence, lack of co-integration shows that a variable has no long run relationship.

Error Correction Mechanism (ECM)

In time series data analysis generally, the Error Correction Mechanism is applied to find evidence of the speed of adjustment from the short-run equilibrium to the long-run equilibrium state. This is done after conducting the co-integration test, and it is mainly adopted to ensure the evidence convergence of the variables long-run. To ensure convergence, the coefficient of the lagged $\boldsymbol{ECT_{t-1}}$ must be negative and greater than 10 percent.

The error correction model for the estimation of the short-run relationship is given as:

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$$\Delta lnGDP_t = \alpha_{02} + \sum_{i=1}^{p} \alpha_{1i} \Delta lnGDP_{t-1} + \sum_{i=1}^{q} \alpha_{2i} \Delta lnFDI_{t-1} + \sum_{i=1}^{q} \alpha_{3i} \Delta lnODA_{t-1} + \sum_{i=1}^{q} \alpha_{4i} \Delta RMT_{t-1} + \lambda ECT_{t-1} + \mu_{2t} \ldots \ldots \ldots \ldots \ldots (6)$$

Where; $\boldsymbol{\alpha_{1i}, \alpha_{2i}, \alpha_{3i}, \alpha_{4i}}$ are the short run dynamic coefficients. $\boldsymbol{\lambda = (1 - \sum_{i=1}^{p} \delta_i)}$ which is the speed of adjustment parameter with a negative sign. $\boldsymbol{ECT = (lngdp_{t-i} - \theta X_t)}$ where $\boldsymbol{\theta}$ is the long run parameter. Unit root test in this study revealed a mixed order of integration, the dynamic ARDL is considered to be the best approach for the estimation of the model.

Results Presentation and Discussion

Generally, the descriptive statistic is tested to explore the nature and the trend of the series under investigation which includes: gross domestic product (GDP), foreign direct investment (FDI), official development aid (ODA) and remittance (RMT). This is to ascertain the nature of these variables within the time frame of this study. The outcome is presented in Table 1 which proves that GDP is at the minimum of 2.78 and maximum at about 5.47, and averaged at 2.01. This gap between the minimum and maximum indicate that over the time frame of the study, GDP increase significantly from the minimum value to maximum figure. Other series like FDI, ODA and RMT achieved the maximum value of 8.8, 1.2 and 2.4 respectively, which obviously means the FDI generate the highest form foreign capital inflow over the study period. On the contrary, FDI, ODA and RMT achieved the lowest value of 1.8, 85 and 24 respectively. This implies the RMT generate the lowest form foreign capital entry within the study period. The probability of Jacque-Bera statistic which is used to determine normality of series indicates that GDP and RMT trend normally (*prob.* > 0.05), whereas the trend of FDI, and official ODA failed to fulfil the condition of normal distribution as their probability values are more than 5% level of significant.

Table 1. Summary Statistics

	GDP	FDI	ODA	RMT
Mean	2.01E+11	2.68E+09	1.62E+09	8.89E+09
Median	9.54E+10	1.87E+09	4.28E+08	1.30E+09
Maximum	5.47E+11	8.84E+09	1.22E+10	2.43E+10
Minimum	2.78E+10	1.89E+08	85239998	2424527.
Std. Dev.	1.75E+11	2.60E+09	2.32E+09	9.84E+09
Skewness	0.593576	1.067489	2.928994	0.344653
Kurtosis	1.712289	2.921315	13.09194	1.227618
Jarque-Bera	4.729111	7.036658	209.9185	5.575406
Probability	0.093991	0.029649	0.000000	0.061562
Sum	7.45E+12	9.91E+10	5.99E+10	3.29E+11
Sum Sq. Dev.	1.11E+24	2.43E+20	1.93E+20	3.48E+21
Observations	37	37	37	37

Source: Authors Computation

It is critical to understand the trend movement of the series under investigation according to econometric procedures and for the purpose of preventing spurious results. To do this, this study employed the standard Augmented Dickey-Fuller unit root test as the most appropriate approach. The result of the ADF unit root test as presented in Table 2 indicate an overall outcome of a mixed order of integration like I(0) and I(1). Specifically, the finding prove that Gross Domestic Product (GDP), Foreign Direct Investment (FDI), Remittance (RMT) are significant after first difference I(1) at 5%, while Official Development Aid (ODA) became integrated at level I(0) at 5%. Thus we deduced and concluded from the general rule of thumb that

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the t-statistics values are more than t-critical values at 5% significance level, see the Table 4.2 accordingly. The order of integration fulfils the condition for using ARDL model.

Table 2. ADF Stationarity Test Result

	ADF	**ADF**	Order of integration
Variables	**Level**	**First Difference.**	**O(I)**
LnGDP	0.0438 (*0.9565*)	-4.6132*** (0.0007)	I(1)
LnFDI	-2.4357 (0.1395)	-9.7742*** (0.0000)	I(1)
LnRMT	1.1980 (0.6647)	-6.2008*** (0.0000)	I(1)
LnODA	-3.3590* (0.0509)	-5.9184*** (0.0000)	I(0)

Source: Author's Computation, O (I): Order of integration.

The ARDL bounds test is adopted to determine whether or not a long run relationship exist among the variables incorporated in the model which is presented in Table 3. As developed by Pesaran and Shin (1999) and upheld by Pesaran, Shin, and Smith (2001), the ARDL approach to cointegration remains one of the most useful tools to cointegration in econometric procedures. Hence, to determine whether the variables are co-integrated, Bounds' test is performed on the time series and the result is presented in Table 3. The result shows that the value of the *F*-statistic (6.41) is greater than the values of the lower bounds, *I* (0), and the upper bounds, *I* (1) at 0.05 level of significance, thus we conclude that there is a long-run relationship among the series. The finding conforms to Pesaran, Shin, and Smith (2001) and align with the view of Nkoro and Uko (2016) that the ARDL approach to cointegration is more efficient and realistic due to its strength in the identification of the cointegrating vectors in a model.

Table 3. F-Bound Test Result

Test Statistic	Value	Significance	I(0)	I(1)
F-statistic K	9.432767 3	10% 5% 1%	3.29 3.936 5.654	4.176 4.718 6.926

Source: Researcher's computation

The estimation and analysis of the finding of the short-run between the targeted variable and the regressors is presented in Table 4. In essence, the study examines the short-run dynamics that exist between the target variable of this study (GDP) and the explanatory variables (foreign direct investment, official development aid, and remittance). As shown in Table 4, foreign direct investment is positive but insignificantly linked with GDP in current year. In the current year, a 1% increase in FDI will generate a 6.16% increase in economic growth. This show that in the current year, the contribution of FDI to economic growth is not tangible. This corroborates the work of Haruna Danja (2012), Adebayo (2020), Anthony-Orji, Ogbuabor and Nwosu (2018) in the case of Nigeria. On the contrary, the impact of FDI on GDP in the last previous

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year is negative and weak such that a 1% increase in FDI will lead to a decline in GDP by 0.19%. However, in the last two years, the impact of FDI inflow is positive and insignificant such that a 1% increase in FDI entry will generate economic growth by 0.5% only. This also show that FDI entry does not really explain the variation in economic expansion in the period. In line with Idris (2021), this might not be unconnected to the issue of persistent capital flight in the country due to bad economic system and policy inconsistency by the government. The effect of official development aid is negatively and insignificantly related to GDP in the current year. A 1% increase in official development aid will reverse GDP growth rate by 1.9% in the current year. However, the opposite holds for both last one year and the last two years respectively. In the last year and last two years, a 1% increase in official development aid inflow will generate a 26.3% and 32.7% increase in GDP respectively. This means that the impact of official development aid on economic growth in those years is not felt (though positive) due to its insignificant contribution.

In contrast, the negative coefficient of RMT imply an inverse relationship with GDP in the previous one and two years, meaning that GDP increases with decreases in remittance. However, this turned out to be positive in the current year. Specifically, every 1% increase in remittance translates to 1.5% increase in GDP in the current year and 12.2 and 19.2% decrease in GDP in the last one year and last two year respectively. More importantly, it is critical to note that despite having a negative relationship with GDP, remittance in the last two year is shown to be statistically significant exponent of GDP at the 5% significance level (0.0153 < 0.05). Meanwhile, the error correction model (ECM) which represents the speed of adjustment is both negative (-0.86392) and significant (0.0001). This means that the deviating movements in the dependent variable in the short run are pulled back to equilibrium in the long run at a speed of 86%.

Table 4. The Short Run ARDL Result

Variables	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
D(LNFDI)	6.164408	4.116720	1.497408	0.1780
D(LNFDI(-1))	-0.194118	4.845101	-0.040065	0.9692
D(LFDI(-2))	0.535820	4.747559	0.112862	0.9133
D(LNODA)	-1.954647	4.677323	-0.417899	0.6885
D(LNODA(-1))	26.34429	23.76286	1.108633	0.3042
D(LNODA(-2)	32.72295	20.51068	1.595411	0.1547
D(LNRMT)	1.528076	2.207482	0.692226	0.5111
D(LNRMT(-1))	-12.14329	6.375891	-1.904564	0.0985
D(LNRMT(-2))	-19.23000	6.033534	-3.187187	0.0153
ECM_1	-0.863923	0.100351	-8.608984	0.0001

S/N	Measurement	Coefficient
1	R-squared	0.9879
2	Adjusted R-squared	0.9670
3	Dubin-Watson Stat	2.7236
4	F-statistics	47.3190
5	Prob. (F-Statistics)	0.0000

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Source: Author Computation

The Adjusted R-squared (R^2) had a coefficient of 0.9670, which suggest that over 97% of the systemic variations in economic growth is adequately accounted for by the model at 5% level of significance. The F-statistic of 47.3 attested to the goodness-of-fit of the parameter estimate. That is, all the explanatory variables jointly influence the GDP. The Durbin-Watson (DW) auto-correlation test estimate of 2.7 within the neighborhood of 2 provided reasonable proof of the absence of any auto-correlation disturbances, thus we conclude that the standard errors were minimized.

More importantly, the result of the estimated long term relationship between the variables incorporated in the model is presented in Table 5. Finding shows that except for ODA, all the variables are positively related to the GDP and are statistically significant at 5% level of significant. Accordingly, except for official development aid, foreign direct investment and remittance exert a strong and positive impact on the economic growth in Nigeria. The long-run associations of foreign direct investment and remittance with GDP are individually positive, meaning that an increase in FDI entry and RMT inflow will induce tangible increase in economic growth in the long term. Specifically, for every 1% increase in FDI entry and RMT inflow will generate a strong impact on economic growth by 18.3% and 17.5% respectively, confirming the MacDougall-Kemp Hypothesis (1958). According to the model, the host country achieve a benefit and an increase in national income as a result of an increase in the quantum of investment occasioned by the inflows. This is further supported by the work of Joshua, Akadiri, Sarkodie & Meadows (2024), Joshua, Beke & Uzomba (2021) and Joshua, Wubon, Arastus, & Owolabi (2021) in the case of Nigeria. However, the ODA does not exert significance influence on the GDP. Every 1% increase in the ODA confer a weak inverse impact on economic growth, as such, ODA is ant-growth to the national economy. The overall result implies that only foreign direct investment and remittance contribute immensely to economic growth in Nigeria as supported by the work of Okoro, Nzotta and Alajekwu (2019), while ODA is not an exponential of economic growth in Nigeria in the period under review.

Table 5. Long-Run Coefficients for Gdp

Cointegrating Eq:	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob**
LNFDI	18.39646	6.859287	2.681979	**0.0314**
LNODA	-28.13130	25.37602	-1.108578	0.3042
LNRMT	17.55980	4.152848	4.228376	**0.0039**
C	2.24E+09	1.09E+09	2.043621	0.0803

Source: Researcher's Computation

Meanwhile, Table 6 presents the four diagnostic tests that were performed to verify the accuracy, reliability and stability of the estimated models. First is the residual normality test which measures the normality of the residuals of the variables and indicates whether or not other useful insights can be obtain from the dependent variable. According to the finding, the probability that the residuals are normal (0.993269) is greater than 0.05, indicating that the null hypothesis cannot be rejected. Thus, the residuals are normal. Similarly, residual serial correlation LM tests shows that there is an absence of serial correlation in the model, while the heteroscedasticity white test shows that the model is free from homoscedasticity. The Ramsey regression specification error test (RESET) determined that the model is well specified and does not require additional independent variable to explain GDP aligning with the work of Joshua, Umar, & Owolabi (2023), Gabriel, Abdulrahman, Abah & Joshua (2022) and Joshua, Busari, Meseko & Olajide (2024) in the situation of the Nigerian economy.

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Table 6. Residuals Of Diagnostics Tests

Tests	Value	Prob.	Decision
Normality	0.02013	0.9899	Residuals are normal
Serial correlation	1.85985	0.2490	No serial correlation
Heteroscedasticity	0.75291	0.7180	No heteroscedasticity
Ramsey RESET	0.60610	0.5666	Model is well specified

Source: Researcher's Computation

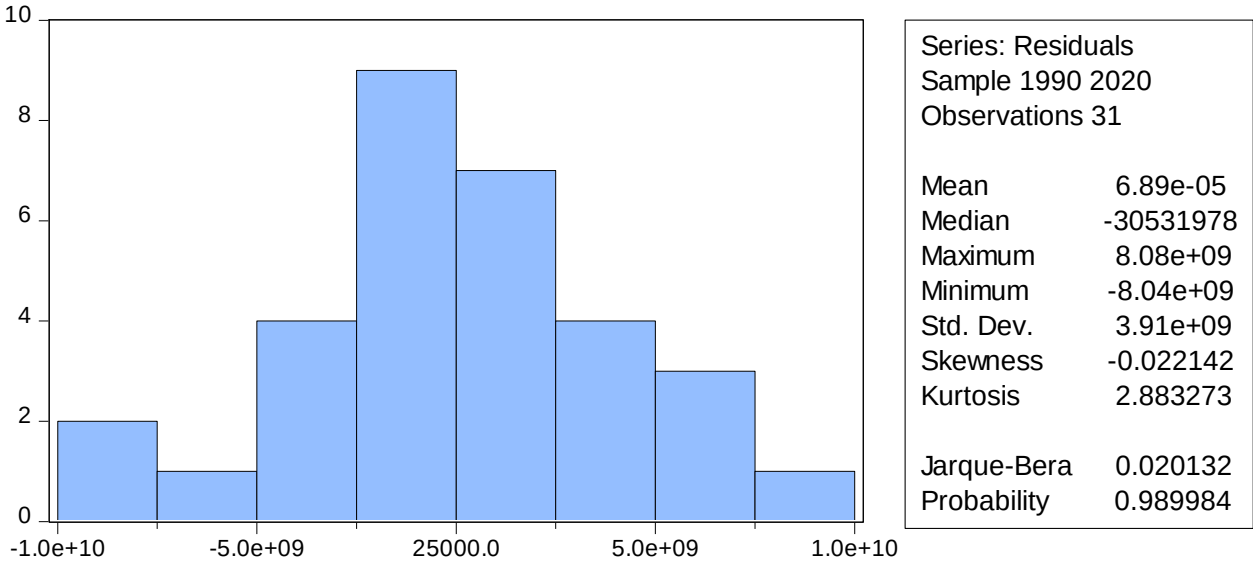

Figure 1 Normality Test

Further results of the cumulative sum of squares (CUSUM) tests in Figure 2 shows that the parameters of the estimated models (represented by the blue lines) fall within the 5% critical level (represented by the red lines). This implies that the estimated models are stable, and reliable for policy implication for the economy investigated.

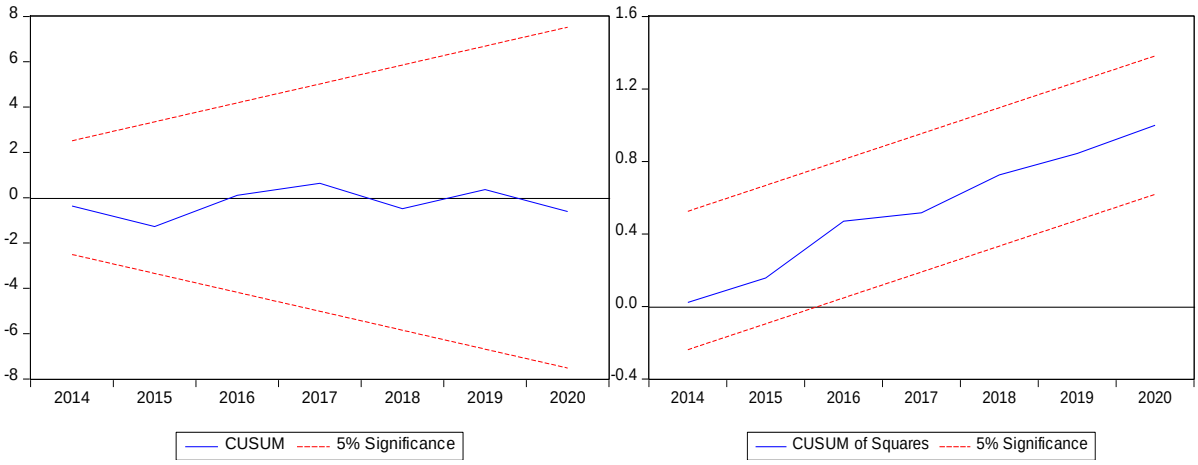

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Figure 2 CUSUM and CUSUM Square

This study subjected the model into causality test and the results of the Pairwise Granger Causality test presented in Table 7 shows the various causal relationships among the variables. The most relevant of these relationships are those that are related to GDP. In the above situation, the null hypothesis of no granger causality amongst the variables cannot be rejected for ODA because it does not fall within the 5% significance level. On the contrary, the null hypothesis is rejected for FDI and RMT at the 5% significance level such that there is an evidence of bidirectional causal relationship between FDI inflow and GDP. This implies that foreign direct investment is a predictor of economic growth in Nigeria similar to the work of Joshua, Akadiri, Sarkodie and Meadows (2024). Similarly, there is an evidence of a uni-directional causal relationship running only from remittance to GDP. This means that remittance is an influence of economic growth in Nigeria.

Table 7. Granger Causality Result

Null Hypothesis:		Obs	F-Statistic	Prob.
LNFDI does not Granger Cause LNGDP	↔	35	3.44815	0.0449
LNGDP does not Granger Cause LNFDI			3.88984	0.0315
LNODA does not Granger Cause LNGDP	≠		1.31476	0.2836
LNGDP does not Granger Cause LNODA		35	1.55749	0.2272
LNRMT does not Granger Cause LNGDP	←		5.02832	0.0131
LNGDP does not Granger Cause LNRMT		35	0.61684	0.5463

Source: Researcher's Computation

- *Conclusion and Policy Implication*

This study set out to investigate the relationship between foreign capital importation and economic growth in Nigeria. On the general note, foreign capital importation represent those external resources that flow into the domestic economy from other countries for the purposes of investment, trade and business production (Awe, 2017). It could be seen as a diffusion of resources from one country to another. In other word, it can be seen as the movement of financial resources from one country to another which include foreign direct investment, official development aid and remittances among others.

The model of this study was subjected to empirical test through the ADRL method, and the finding proves an evidence of a strong positive impact of foreign direct investment on economic growth as well as a strong significant impact of remittance on economic growth in Nigeria in the period under review. This validate our apriori expectation as well as theoretical assertions such as the AK Model (Endogenous Theory) and further supported by empirical study such as the Okoro, Nzotta and Alajekwu (2019). Unfortunately, official development aids proves to be anti-growth in nature, suggesting that this component of foreign resources is not fit to propel growth in Nigeria. On the overall, the finding submits that international capital inflow is a key driver of economic growth in the national economy of Nigeria. Thus, we conclude through this outcome that increased capital flow from the foreign sources will help promote the course of industrialization in the country which in turn generate employment opportunities for the teeming youth of the country, thereby influencing growth through the multiplier effect. Invariably, the increase in employment generation will help reduce the high rate of unemployment and poverty ravaging the economy.

Thus, if the drive of the central government is to achieve economic prosperity, then there is the need to pursuit some macroeconomic policies that is worthy to attract foreign capital inflow.

More specifically, the central government is advised to do the following:

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First, the Nigerian government should ensure that the operation of the foreign companies and investors is transparent enough in an attempt to woo more foreign investors. Good policy such as consistent stabilization of the exchange rate in a bit to stabilize the macroeconomic environment for the purpose of making the investment world attractive for the foreign investors and prevent capital flight is key. Once the purchasing power of the domestic currency is reasonably strong and stable, foreign investors will naturally flow into the domestic economy of Nigeria for investment purposes. This will in turn generate high level of employment opportunities for the teeming youth, and thus, naturally add to economic growth significantly.

Also, investment-friendly environment with good economy system is also a vital factor needed to attract foreign capital. This includes peace, strong institutional and legal systems. Currently in Nigeria, the situation of insecurity has driven many companies away from the national economy (Joshua, 2020). No investor in his/her right sense would want to commit his/her hard earned resources to investment in a country that is ravaging with insecurity and high level of robbery as it is the case with the national economy of Nigeria right now. Thus, the government should ensure that peace is restore in the country for the purpose of maintaining a peaceful and enabling investment environment thereby wooing foreign investment.

Government should as a matter of necessity give priority to screening process involved in selecting the forms of foreign capital inflow into the national economy. This is so because the finding prove that not all forms of foreign capital is viable to promote growth in the national economy. For instance the result shows that official development aids is anti-growth in nature. Thus, such form of capital should be discouraged from flowing into the country except if it is critical. However, foreign direct investment and remittance should be given priority. In essence, policy actions that will encourage the inflow of remittance and FDI should be strengthen immediately by the government concern.

Finally, good and stable infrastructural facilities such as electricity, roads, water etc are highly recommended by this study to meet up the threshold need to convert the inflow of capital into economic growth.

References

Adebayo, T. S. (2020). The Impact of Capital Inflows on Economic Growth in Nigeria: Empirical Evidence from Wavelet Coherence Technique. Asian Journal of Economics and Empirical Research, 7(2), 136-146.

Adekunle, W., & Sulaimon, M. (2018). A Re-examination of the relationship between Foreign capital flows and Economic growth in Nigeria.

Adeola, O. O. (2017). Foreign capital flows and economic growth in selected Sub-Saharan African economies (Doctoral dissertation, Stellenbosch: Stellenbosch University).

Agbahoungba, L. S. W., & Biao, B. (2019). Trade Liberalization and Economic Performance in the ECOWAS Zone: A Granger Causality Analysis. International Journal of Innovation and Applied Studies, 27(4), 979-988.

Akpan, S. B., Okon, U. E., & Udoka, S. J. (2014). Assessment of empirical relationships among remittances and agricultural productivity indicators in Nigeria (1970-2012). American Journal of Economics, 4(1), 52-61.

Anidiobu, G. A., Okolie, P. I., Onyia, C. C., & Onwumere, J. U. (2020). Impact of foreign capital inflow on economic growth in Ecowas Sub-Region. International Journal of Academic Research in Accounting, Finance and Management Sciences, 10 (1), 172-188.

Anthony-Orji, O. I., Orji, A., Ogbuabor, J. E., & Nwosu, E. O. (2018). Disaggregated foreign capital inflows and economic growth in a developing economy: Empirical evidence from nigeria. Journal of Empirical Studies, 5(1), 1-11.

Awe, M.A. (2017). The role of real interest rates and savings in Nigeria. First Bank of Nigeria Quarterly Review,1(2), 21-38

Balcerowicz, L. (Ed.). (2014). Puzzles of economic growth. World Bank Publications.

Chappelow, J. (2019). Gross Domestic Product—GDP. Tomado de: https://www. investopedia. com/terms/g/gdp. asp.

Chenery, H. and Strout, A. (1956). Foreign Assistance and Economic Development. American Economic Review, vol. 56.

Chirwa, T. G., & Odhiambo, N. M. (2018). Exogenous and endogenous growth models: A critical review. Comparative Economic Research. Central and Eastern Europe, 21(4), 63-84.

Dornbusch, R., S. Fischer and R. Startz (2002), Macroeconomics (8th edn), Tata McGrawHill, West Patel Nagar, New Delhi.

Dunning, J. (1993). Multinational Enterprises and the Global Economy. Wokingham: Addison-Wesley.

Englama. (2009). The economics of Remittances, theories and issues-Paper presented at a high level Regional Seminar on International remittances for economic development. West African Institute of Financial and Economic Management Gambia.

Gabriel, A., Abdulrahman, M., Abah, B., & Joshua, U. (2022). Econometric Relationship between the Agriculture Sector Performance and Economic Growth in Nigeria. Regional Economic Development Research, 231-240.

Gabriel, B. T., John, O., & Baryl, I. O. (2019). Capital Flows and Economic Growth in Nigeria: An Econometric Approach. International Journal of Research, 7(9), 183-199.
Gabriel, M. T., & Austin, A.(2016). Capital Inflow and Its Dynamic Effect on Economic Development in Nigeria.
Giwa, B. A., George, E. O., Okodua, H., & Adediran, O. S. (2020). Empirical analysis of the effects of foreign direct investment inflows on Nigerian real economic growth: Implications for sustainable development goal-17. Cogent Social Sciences, 6(1), 1727621.
Haruna Danja, K. (2012). Foreign direct investment and the Nigerian economy. American Journal of Economics, 2(3), 33-40.
Idris, M. (2021). Impact of Capital Flight in Developing Countries: A Threat to National Solvency and Economic Growth in Nigeria. IOSR JEF (IOSR-JEF), 12(2), 22-33.
International Monetary Fund. (2015). Macroeconomic Development and Prospect in Low Income Developing Countries. Capital Flows to Nigeria: Recent Developments and Prospects page 30 IMF. Working Paper, WP/15/275. https://doi.org/10.5089/9781498343978.007.
Javid, M., and A. Qayyum (2011), 'Foreign Aid and Growth Nexus in Pakistan: The Role of Macroeconomic Policies', Pakistan Institute of Development Economics Islamabad (PIDE), Working Papers, No. 72.
Joshua, U., & Alola, A. A. (2020). Accounting for environmental sustainability from coal-led growth in South Africa: the role of employment and FDI. Environmental Science and Pollution Research, 27(15), 17706-17716.
Joshua, U., Adedoyin, F. F., & Sarkodie, S. A. (2020). Examining the external-factors-led growth hypothesis for the South African economy. Heliyon, 6(5).
Joshua, U., Adewale, B. E. K. E., & Uzomba, P. C. (2021). Domestic Capital Flow VS Foreign Capital InFlow in Nigeria: Which One Matter Most?. Kırklareli Üniversitesi Sosyal Bilimler Dergisi, 5(1), 29-50.
Joshua, U., Akadiri, S. S., Sarkodie, S. A., & Meadows, O. (2024). Accounting for sustainable economic growth in Nigeria: the role of external factors. Journal of Social and Economic Development, 1-18.
Joshua, U., Akadiri, S. S., Sarkodie, S. A., & Meadows, O. (2024). Accounting for sustainable economic growth in Nigeria: the role of external factors. Journal of Social and Economic Development, 1-18.
Joshua, U., Babatunde, D., & Sarkodie, S. A. (2021). Sustaining economic growth in Sub-Saharan Africa: Do FDI inflows and external debt count?. Journal of Risk and Financial Management, 14(4), 146.
Joshua, U., Beke, A., & Uzomba, P. C. (2021). Domestic capital flow vs foreign capital InFlow in Nigeria: which one matter most?. Kırklareli Üniversitesi Sosyal Bilimler Dergisi, 5(1), 29-50.
Joshua, U., Busari, T. O., Meseko, A. A., & Olajide, A. L. (2024). A Comparative Assessment of the Contribution of Foreign Direct Investment to Economic Development of Nigeria and Ghana. Regional Economic Development Research, 32-43.
Joshua, U., Güngör, H., & Bekun, F. V. (2023). Assessment of foreign direct investment-led growth argument in South Africa amidst urbanization and industrialization: evidence from innovation accounting tests. Journal of the Knowledge Economy, 14(3), 3374-3394.
Joshua, U., Rotimi, M. E., & Sarkodie, S. A. (2020). Global FDI inflow and its implication across economic income groups. Journal of Risk and Financial Management, 13(11), 291.
Joshua, U., Salami, O. M., & Alola, A. A. (2020). Toward the path of economic expansion in Nigeria: The role of trade globalization. Journal of Labor and Society, 23(2), 205-220.
Joshua, U., Umar, A. P., & Owolabi, A. T. (2023). Government expenditure and economic growth nexus: How valid is Wagner's law in the Nigeria situation?. Sustainable Economies, 1(1).
Joshua, U., Wubon, J. J., Arastus, S. N., & OWOLABİ, A. T. (2021). Inward FDI and Manufacturing Sector Productivity: An Empirical Evidence from the Dynamic ARDL Approach. Aksaray Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, 13(4), 97-104.
Karakaplan, M. U., B. Neyapti and S. Sayek (2005), 'Aid and Foreign Investment: International Evidence', Departmental Working Paper, Bilkent University.
Khan, L., Arif, I., & Raza, S. A. (2021). Capital Flow, Capital Control, and Economic Growth: Evidence from Developed & Developing Economies. Journal of Accounting and Finance in Emerging Economies, 7(2), 467-482.
Kolawole, B. O. (2013). Foreign assistance and economic growth in Nigeria: The two-gap model framework. American international journal of contemporary research, 3(10), 153-160.
Kurtishi-Kastrati, S. (2013). Impact of FDI on economic growth: An overview of the main theories of FDI and empirical research. European Scientific Journal, 9(7).
Levchenko and P. Mauro, "Do some forms of financial flows help protect against "sudden stops?" The World Bank Economic Review, vol. 21, no. 3, pp. 389-411, 2007.
Ndiweni, Z. L., & Bonga-Bonga, L. (2021). Capital inflows and economic growth nexus in Sub-Saharan Africa: evidence on the role of institutions.
Nkoro, E., & Furo, A. O. (2012). Foreign capital inflows and economic growth in Nigeria: An empirical approach. Academic Journal of Interdisciplinary Studies, 1(2), 55-55.
Nkoro, E., & Uko, A. K. (2016). Autoregressive Distributed Lag (ARDL) cointegration technique: application and interpretation. Journal of Statistical and Econometric methods, 5(4), 63-91.
Nwosa, P. I. (2020). Volatility in foreign capital inflows and economic growth in Nigeria. 62064382X.
Nwosa, P. I., & Akinbobola, T. O. (2016). Capital Inflows and economic growth in Nigeria: the role of macroeconomic policies. African Development Review, 28(3), 277-290.
OECD (2009), National Accounts of OECD Countries 2009, Volume I, Main Aggregates, OECD Publishing, http://dx.doi.org/10.1787/na_vol_1-2009-en-fr
Okodua, H., Ewetan, O. O. & Urhie, E. (2015). Remittance expenditure patterns and human development outcomes in Nigeria. Developing Country Studies, 5(2), 70-80

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Okoro, C. O., Nzotta, S. N., & Alajekwu, U. B. (2019). Effect of international capital inflows on economic growth of Nigeria.

Olaleye, O. (2022). Impact of Foreign Capital Inflow on a Selected Macroeconomic Variable in Nigeria 1990-2021. Indiana Journal of Humanities and Social Sciences, 3(7), 25-33.

Olayiwola, A. S., & Joseph, K. E. (2020). Impact of capital inflows on manufacturing exports and economic growth: An empirical evidence from Nigeria. Research in Applied Economics, 12(1), 1-11.

Olotu, M. E., & Jegbefume, K. (2011). The place of foreign capital flows in the Nigerian economic growth equation: evidence from foreign portfolio investment. International Journal of Economic Development Research and Investment. (139).

Oluwaseyi, M. H., Abdullah, H., Mahmood, S., Ismail, S., & Yusuf, H. A. (2017). The impact of foreign capital inflows on economic growth in selected West African countries. American Journal of Innovative Research and Applied Sciences, 4(3), 96-104.

Onyekwelu, O. V. (2022). International Capital Inflows and Human Capital Development in Nigeria (1988-2020).

Orji, A., Ogbuabor, J. E., Anthony-Orji, O. I., & Mbonu, C. O. (2018). Analysis of capital formation and foreign aid nexus in Nigeria. International Journal of Emerging Markets.

R. E. Lipsey and F. Sjöholm, "Foreign direct investment, education and wages in Indonesian manufacturing," Journal of Development Economics, 2004.

Ramirez, M. D. (2013). Do financial and institutional variables enhance the impact of remittances on economic growth in Latin America and the Caribbean? A panel cointegration analysis. International Advances in Economic Research, 19(3), 273-288.

Rotimi, M., Doorasamy, M., Joshua, U., Rotimi, G., Rotimi, C., Samuel, G., ... & Kimea, A. (2023). ARDL analysis of remittance and per capita growth nexus in oil dependent economy: The Nigeria's experience. International Journal of Business and Economic Sciences Applied Research (IJBESAR), 15(3), 38-51.

Saibu, O. (2014). Capital inflow and economic growth nexus in Nigeria: The role of trade openness. Acta Universitatis Danubius, 10(6).

Saibu, O. M., Ikechukwu, O. M., & Nwosa, P. I. (2022). Dynamic Effects of Foreign Aid, Trade Openness and FDI on Economic Growth for West African Countries. The Journal of Developing Areas, 56(2), 49-63.

Samuel, O. O., & Stephen, O. I. (2018). International Remmitance Inflow a nd Economic Growth In Nigeria. IOSR Journal of Humanities and Social Science (IOSR-JHSS), 23(1), 52-64.

Ukeje, E. U. and M. E. Obiechina (2013), 'Workers' Remittances Economic Growth Nexus: Evidence from Nigeria, Using an Error Correction Methodology', International Journal of Humanities and Social Sciences, Vol. 3, No. 7, pp. 212–17.

UNCTAD (2006): World investment report, United Nations, New York

UNCTAD (2007): Handbook of Statistics available on-line at (http://www.unctad.org)

UNCTAD. 2018. FDI/MNE Database. Available online: https://bu_.ly/2J1E33F (accessed on 20 March 2020).

World Bank 2013. World Bank Global Financial Development Database (GFDD). Washington D.C. World Bank

Younsi, M., Bechtini, M., & Khemili, H. (2021). The effects of foreign aid, foreign direct investment and domestic investment on economic growth in African countries: Nonlinearities and complementarities. African Development Review, 33(1), 55-66.