



# The Impact of Capital Inflow and Economic Growth in Nigeria

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## ABSTRACT

*This study examined the impact of international capital inflow on economic growth in Nigeria using time series quarterly data from 1981Q1 to 2023Q4. The specific objectives of the study were to evaluate the impact of international capital inflow on economic growth, determine the direction of causality between international capital inflow and economic growth; and to determine the nature of the relationship between international capital inflow and economic growth in Nigeria. The data were sourced from the Central Bank of Nigeria and the National Bureau of Statistics, 2023. The theoretical framework of this study was the Augmented Solow-Swan version of the Neo-Classical Model because of its dynamism. The dependent variable used in the work was economic growth (GDPGR) and the independent variables were foreign direct investment (FDI), remittances (REM), exchange rate (EXR), trade openness (TOP), and gross fixed capital formation (GFCF). The techniques used by this study were the Classical Multiple Regression Model and the Autoregressive Distributed Lag (ARDL) model. The findings of the long run ARDL showed that all the variables had positive impact on economic growth except gross fixed capital formation. This indicates that an increase in FDI, REM, and EXR had individually insignificant positive impact on economic growth. It was also indicated from the findings that trade openness had significant impact on economic growth in Nigeria. The result of the short run dynamic of the ARDL showed that remittances and gross fixed capital formation had negative and insignificant impact on economic growth in Nigeria. The result further indicated that Foreign Direct Investment (FDI), Exchange Rate (EXR) and Trade Openness (TOP) had positive relationship with economic growth in Nigeria. The impact of trade openness on economic growth was statistically significant within the short run and the long run. The result of the co-integration test showed a long-run relationship between international capital inflow and economic growth in Nigeria. This study also showed no evidence of direction of causality between capital inflow and economic growth. The study therefore recommended the need to consciously improve the business environment, such as insurgency, kidnapping and other related security threat to enable capital inflow contribute more to economic growth in Nigeria. The study also recommended that the government should develop Nigeria's local financial markets for easy inflow of capital.*

## Introduction

International capital inflow shows the movement of money from foreign investors into a nation's economy. Capital inflows are witnessed in the form of foreign direct investment (FDI) and portfolio investment (PI) and they are attracted by high real interest rates within a country and lower rates may bring outflows. Encouraging capital inflows is a useful tool in financing local business growth and infrastructure but excess of this will result to economic overheating, currency appreciation, and financial instability.

Nigeria has experienced a drastic shift from agriculturally based economy of 1960s to an oil-dependent economy in 1970s and 1980s. The country has an economy with significant growth in services, telecommunications, and manufacturing, but its economic growth is being constrained by high poverty, infrastructure deficits, and low diversification. Nigeria's economic growth has been characterized by periods of rapid expansion as struggled with persistent issues such as fluctuating oil prices, inadequate infrastructure, high unemployment rates, and political instability (Adaramola & Obisesan, 2015).). These challenges have impeded sustainable growth and economic diversification, making the

country highly vulnerable to external shocks (Muhammad and Afroz, 2023). In this context, foreign capital inflows can play a pivotal role in revitalizing Nigeria's economic growth. The infusion of foreign capital through mechanisms such as foreign direct investment (FDI), portfolio investments, and remittances provides essential financial resources that can stimulate economic growth, enhance productivity, and foster technological advancements (Ibenyenwa, et al 2023).

Nigeria faces challenges in effectively harnessing capital inflows for productive investments. Despite efforts to attract foreign capital as well as significant challenges, FDI continued to be poor. Nigeria has investment through policy reforms and incentives, structural impediments such as inadequate infrastructure, weak institutional frameworks, and bureaucratic inefficiencies persist. The influence of FDI on Nigeria's economic growth is centered on oil and gas industry. Investment in oil and gas inevitably enlarges market size, which in turn attracts further FDI thereby influencing economic growth. This calls for investigation on the precise role of the size of the market in inducing economic growth. Therefore, this study departs from other works by including market size as one of its explanatory variables

The relationship between Foreign Direct Investment and the growth of GDP was shown in figure 2.1

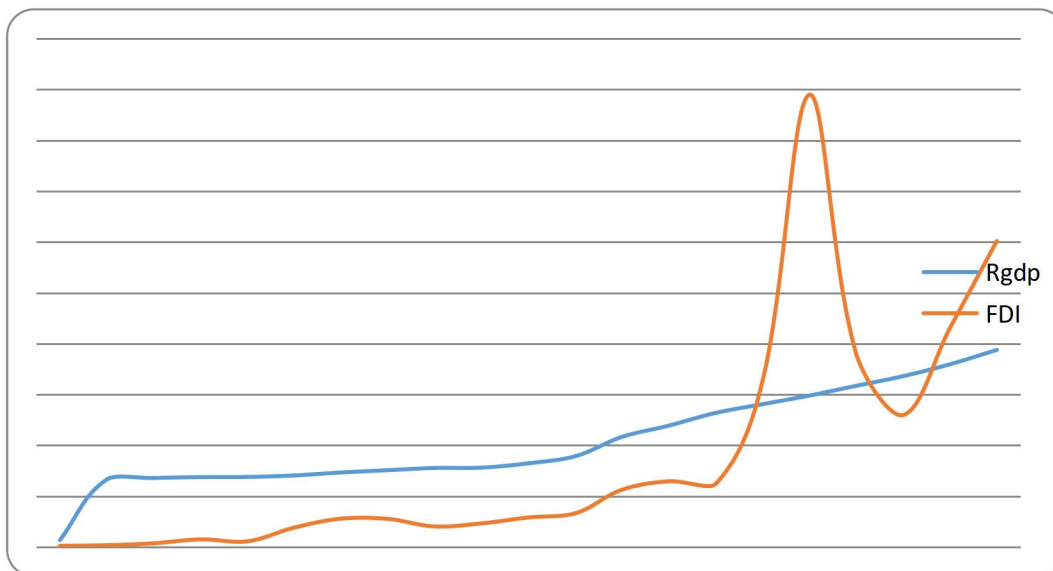


Figure 2.1: The relationship between RGDP and FDI in Nigeria

The trend of FDI was lower than that of the growth of RGDP from 1990 to 2004 and later rose to the apex in 2005. The trend of FDI decreased from 2006 till 2008 when the two trends were equal.

Foreign Portfolio Investment (FPI) in Nigeria between 2018 and 2023 encountered some problem such as foreign exchange market illiquidity, exchange rate volatility, policy uncertainty, political risk, and pervasive security challenges which deterred investor confidence.

Official Development Assistance (ODA) inflow in Nigeria between 2018-2023 was constrained by a high rate of corruption and mismanagement, which led to aid not reaching intended beneficiaries or being used inefficiently. Over-reliance on foreign aid can foster dependency, discouraging domestic resource development and failing to drive significant economic growth or reduce socioeconomic problems like unemployment. (Ekine, Ewubare & Ajie, 2019)) Based on the above discussion, this study was motivated to investigate the need to increase economic growth in Nigeria beyond available factor inputs. It is based on this that the following questions were addressed

- (i) What is the impact of capital inflow on economic growth in Nigeria?
- (ii) What is the directional causality between capital inflow and economic growth in Nigeria?
- (iii) What is the nature of the relationship between capital inflow and economic growth in Nigeria?

The overall objective of this study is to examine the impact of international capital inflow on economic growth in Nigeria. The specific objectives are to evaluate the impact of capital inflow on economic growth, determine the direction of causality between capital inflow and economic growth and to determine the nature of the relationship between capital inflow and economic growth.

## Literature Review

The neoclassical growth theory was introduced by Robert Solow and Trevor Swan in 1956. The theory states that economic growth is a function of labor, capital, and technology. While an economy has limited resources in terms of capital and labor, the contribution from technology to growth becomes boundless. The theory outlines how a steady economic growth rate is achieved as a result combining labor, capital, and technology. Therefore,

the production function of neoclassical growth theory is used to measure the growth and equilibrium of an economy. There is need to note that the relationship between labour and technology is specified based on the economy's production function as

$$Y = F(K, AL).$$

If the three factors of neoclassical growth theory are not all equal, the returns of both unskilled labor and capital on an economy diminish will. These diminished returns show that increases in these two inputs have exponentially decreasing returns while technology is boundless in its contribution to growth.

The study if economic growth is linked to endogenous growth theory which could be traced back to 1980s as a reaction to neoclassical growth theory. The theory was developed in response to the idea that exogenous factors, like unexplained technical progress, determined long-term economic growth instead of the role of internal factors, like technological change, innovation, and human capital, in driving economic growth. Paul Romer argued that technological change is not just an exogenous byproduct of independent scientific developments but a necessary tool for deriving growth.

Some of the growth theories have helped in explaining growth of individual countries but could not completely explain why countries have differing growth trajectory. The neoclassical theory opined that the long-run rate of growth in output was exogenously determined by an assumed rate of labour force growth. The endogenous growth theory on the other hand, indigenizes the rate of technological progress. It traces the rate of growth of output per capita to savings and efficiency. The theory maintains that policy measures can have an impact on the long-run growth rate of an economy, even if they do not change disaggregate saving rate.

There are many empirical works on the relationship between foreign direct investment and economic growth with varying outcomes. Alabi (2019) investigated the impact of foreign direct investment on economic growth in Nigeria from 1986 to 2017. The paper found that foreign direct investment was positive and significant to economic growth of Nigeria while the domestic investment was also positive but not significant at 5% alpha level. Other papers in line with these findings are El-Rasheed and Abdullahi (2022) and Oluitan and Dada (2020).

Agunbiade and Mohammed (2018) examined the impact of Foreign Aid (FA) on the economic growth in Nigeria using vector error correction model (VECM) and Johansen cointegration test. The study found out that foreign aid inflow does not show any significant impact on the level of real GDP in Nigeria.

Yiew and Lau (2018) examined the impact of official development assistance (ODA) on economic growth in a panel study of 95 different developing countries. The findings indicated that an oscillatory relationship between ODA and economic growth.

Modibbo, et al, (2019) examined the effect of foreign aid on economic growth of 11 OPECmember countries between the period 2010 and 2017. The study employed both difference and system generalized method of moment (GMM) estimators. Immediate lagged value of economic growth was found to be a significant positive determinant of its contemporaneous value. However, foreign aid exhibited negative significant effect on economic growth.

Isiaka and Makinde (2020) explored how economic growth was influenced by foreign aid in Nigeria from 1990 to 2017. The study adopted the Error Correction Model (ECM) and its result indicated that 6% of the short-run disturbance in the model was adjusted in each period, indicating slow adjustment process to long-run equilibrium path.

Duru, et al., (2020) investigated the effect of foreign aid on economic growth in Nigeria from 1984 to 2017. Autoregressive distributed-lag (ARDL) method was employed for the study. Although the results of the bounds test revealed existence of long-run relationship, however, foreign aid did not show any impact on economic growth in Nigeria both in the short-run and the long-run. The results further revealed that the impact of foreign aid on economic growth in Nigeria was contingent on the quality of the macroeconomic policy environment. Ubi and Ebi (2021) also investigated the relationship between foreign aid and the development process between the period 1980 and 2018 using Pearson correlation method. The results showed that the correlation between aid and development indicators was both time- and sector-specific. Periods of very high foreign aid inflows seemed to support improvement in most of the development indicators. Also, health and education appeared to be more positively responsive to changes in foreign aid inflow than other

development indicators like economic growth, and roads infrastructures. This was later confirmed by Albert et al, (2021)

Asaleye, et al (2023) used Nigeria's quarterly data, ranging from 2002 to 2021, to investigate the asymmetric effects of aggregated aid inflows on growth and employment in the country. The study employed Non-linear ARDL and VECM techniques for the analysis. The results obtained showed both positive and negative shock effects of aggregate aid on growth in the long run and short run, respectively. On the other hand, positive shocks were found to reduce employment in the long run. For sector effects, the finding showed that positive shock in education and health aid increases employment in the long run, while positive shock in health and industry aid undermines growth in the short run.

Rojik et al (2024) employed the use of ARDL and Granger Causality models to assess the impact of foreign aid (measured in ODA and foreign loan) on the growth of Nigerian economy from 1980 to 2019. The findings of the paper indicated that ODA and credit extensions did not contribute to the progress of the Nigerian economy; they instead retarded it, both the short and long run. However, labour force, which used as controlled variable, contributed positively to economic progress in Nigeria. In contrast, gross capital formation did not show any impact on economic growth during the period. The Granger causality test revealed absence of causal relationship between ODA and economic growth in Nigeria. However, this study suffers some limitations in terms of the period covered by the study, the use of only two variables to capture foreign aid, as well as methodological defects as Granger Causality test employed does not match the data generating process of the variables.

Kutu and Ohonba (2024) examined the impact of foreign capital inflows on economic growth in Nigeria between 1984 to 2020 using Autoregressive Distributed Lag (ARDL) model. The 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 of the paper showed that foreign capital inflows have a long-run impact on economic growth in Nigeria except for official development aids.

Nwokoye, Igbonagu, and Dinwobi (2020) investigated the impact of remittance inflow to Nigeria on labour force participation data from Nigeria's 2015–16 General Household Survey. The paper applied nonlinear ARDL model in order to capture the direct and indirect relationship that exists between international capital movement, migration, and labour productivity. The result showed that receiving remittances raised labour force participation in urban areas for non-farm economic activities. The findings further indicated that a higher percentage of younger workers were more economically active as a result of remittance inflows. The current used

The existing literature could not make an attempt to use high frequency data to capture quarterly effect of international capital inflow on economic growth in Nigeria. Many of the existing literature did not use pre-estimation tests to fish out the necessary properties of the variables used in the model.

**The model**

The Augmented Solow-Swan version of the neo-classical model was applied in this study because of its dynamism. The Augmented Solow model focuses on four variables: real output (Y), capital (K), labour (L), and knowledge (A) (Romer, 2009). The neoclassical growth theory is of the view that an increment in labour or capital leads to diminishing returns.

The model used in this study is the autoregressive distributed lag (ARDL) model because of its flexibility and ability to handle varying order of integrated variables. The model in its functional form was specified as:

$$RGDPGR = f(FDI, REM, EXR, TOP, GFCF) \tag{1}$$

Where; GDPGR = Economic Growth

FDI = Foreign Direct Investment

REM = Remittances

EXR = Exchange Rate

TOP = Trade Openness

GFCF = Gross Fixed Capital Formation.

$$RGDPGR_t = \beta_0 + \beta_1 FDI_t + \beta_2 REM_t + \beta_3 EXR_t + \beta_4 TOP_t + \beta_5 GFCF_t + U_t \dots\dots \tag{2}$$

Where:

$U_t$  = The error term

$t$  = the time series property of the respective variables.

$\beta_0$  = Intercept term or constant parameter.

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5,$  and  $\beta_6$  = The Regression parameters and slopes of the respective explanatory variables.

all the variables remain as defined

The autoregressive distributed lag (ARDL) model was employed and specified as:

$$\begin{aligned} \Delta RGDPGR_t = & \alpha_0 + \sum_{i=1}^n \beta_1 \Delta RGDPGR_{t-i} - i + \\ & \sum_{i=1}^n \beta_2 \Delta FDI_{t-i} + \sum_{i=1}^n \beta_3 \Delta REM_{t-i} + + \\ & \sum_{i=1}^n \beta_4 \Delta EXR_{t-i} + \sum_{i=1}^n \beta_5 \Delta TOP_{t-i} + \\ & \sum_{i=1}^n \beta_6 \Delta GFCF_{t-i} + \gamma_1 + \gamma_2 FDI_{t-1} + \gamma_3 REM_{t-1} + \\ & \gamma_4 EXR_{t-1} + \gamma_5 TOP_{t-1} + \gamma_8 GFCF_{t-1} + \\ & \varepsilon_t \dots\dots\dots \tag{3} \end{aligned}$$

all the variables remain as defined

Where,  $\Delta$  is the first difference operator, and  $\alpha_0$  is the drift component. The expressions with summation sign ( $\beta_1$ - $\beta_7$ ) represents the short-run dynamics of the model, while the coefficients ( $\gamma_1$ - $\gamma_8$ ) represents long-run relationship and  $\varepsilon_t$  is the serially uncorrelated disturbance with zero mean and constant variance.

The existence of a relationship between variables does not prove causality or the direction of influence. The Granger causality test was carried out as specified in equations 4 and 5

$$Y_t = \sum_{i=1}^k \delta_{11i} Y_{t-1} + \sum_{i=1}^k \delta_{12i} Y_{t-1} + U_{1t} \dots\dots\dots \tag{4}$$

$$X_t = \sum_{i=1}^k \delta_{21i} Y_{t-1} + \sum_{i=1}^k \delta_{22i} Y_{t-1} + U_{2t} \dots\dots\dots \tag{5}$$

: where:  $t$  = the current period of the variables and  $t-i$  = the lagged period of the variables,  $\delta_{11}$  to  $\delta_{22}$  = the coefficients of the lagged variables and  $U_1$  and  $U_2$  = mutually uncorrelated white noise. The Granger causality analysis decision rule follows F-distribution. Therefore, rejected null hypothesis if the  $p(F\text{-statistic}) < 0.05$ ; otherwise accept.

Post estimation tests such as serial correlation, heteroscedasticity, normality, multicollinearity were carried out to ensure the robustness of the results. The data used in this paper were sourced from the world development indicator, 2024 and econometric software for the data estimation was E-view 12.

**Results**

The results of the descriptive statistics were presented in Table 1 in order to show the distribution of the data used in the model. It showed the measures of central tendency, dispersion, and non-parametric measures.

**Table 1: The Result of Descriptive Statistics**

	GDPGR	FDI	EXR	REM	TOP	GFCF
Mean	4.548298	326192.3	169.4373	3.418525	37.59788	2762745.
Median	4.631193	80750.40	132.8600	3.998536	38.23000	1935040.
Maximum	15.32916	1889205.	543.0000	8.333829	53.28000	8151272.
Minimum	-2.035120	264.3000	9.865000	0.108433	20.72000	35423.90
Std. Dev.	4.171477	534061.2	139.4157	2.377209	8.649472	2741138.
Skewness	0.519141	1.828734	1.077184	0.031909	-0.079816	0.567567
Kurtosis	3.321853	5.124465	3.449493	1.807743	2.378373	1.849443
Jarque-Bera	6.498904	98.39733	26.63841	7.840517	2.265463	14.36770
Probability	0.038795	0.000000	0.000002	0.019836	0.322152	0.000759
Sum	600.3754	43057380	22365.73	451.2452	4962.920	3.65E+08
Sum Sq. Dev.	2279.560	3.74E+13	2546214.	740.2969	9800.550	9.84E+14
Observations	132	132	132	132	132	132

Source: Authrs' computation using Eview 12

The result of the descriptive statistics showed that the mean value for the growth of gross domestic product was 4.548 while foreign direct investment (FDI), exchange rate (EXR), remittances (REM), trade openness (TOP) and gross fixed capital formation (GFCF) were 326192.3, 169.4373, 3.418525, 37.59788, and 2762745 respectively. GFCF has the highest mean value and followed by FDI. The median value for the variables used in the model varied from one variable to another. GFCF has the highest median value (80750.40) and followed by exchange rate (FDI). The result also showed significant variation among the variables used in the study.

The minimum values for GDPgr, FDI, EXR, REM, TOP and GFCF were -2.035120, 264.3000, 9.865000, 0.108433, 20.72000 and 35423.90 respectively. The minimum values for the variables showed large variation among them. The range of the minimum values was from -2.035120 to 35423.90.

Table 1 further showed the Jarque-bera statistic of each variable with their respective probability. The outcome of the Jarque-Bera indicated that all the variables used were not normally distributed except trade openness whose probability value exceeded 0.05. It was also observed from the results that all the variables skewed to the right except trade openness which had a negative sign. The result showed a total of 132 observations after subjecting the annual data to high frequency quarterly series.

Augmented Dickey-Fuller (ADF) unit root test was conducted in order to fish out the order of integration of the series used in the model. The result of the ADF Unit root test was presented with the aid of table 2.

**Table 2: Result of the ADF Unit Root Test**

Variables	Level form	ADF 5% Critical value	First Diff	Second Diff	Order of Integration
GDPGR	-2.080626	-2.883579	-11.35418	***	I(1)
FDI	-0.352485	-2.883579	-11.41809	***	I(1)
EXR	1.635467	-2.883579	-3.944714	***	I(1)
REM	-1.877619	-2.883579	-11.35347	***	I(1)
TOP	-2.686828	-2.883579	-11.32107	***	I(1)
GFCF	0.756504	-2.883579	-55.03636	***	I(1)

Source: Authors' computation using Eview 12

The result of the unit root test showed that all the variables were integrated of order one,. The ADF values for GDPGR, FDI, EXR, REM, and TOP were individually less than the ADF 5% critical values and this led to differencing then in order to smooth the trend. They were differenced once and the trends became stationary as their individual ADF became greater at that point. Gross Fixed Capital Formation was differenced thrice before becoming stationary. A co-integration test was carried out using Augmented Dickey-Fuller co-integration test in order to find out the existence of a long run relationship among the variables used. The results of the ADF co-integration test were presented in table 4.3.

**Table 3: ADF CO-INTEGRATION TEST**

Null Hypothesis: ECM has a unit root

Exogenous: Constant

Lag Length: 4 (Automatic - based on SIC, maxlag=12)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-2.930714	0.0446
Test critical values: 1% level	-3.482453	
5% level	-2.884291	
10% level	-2.578981	

\*MacKinnon (1996) one-sided p-values.

**Source:** Authors' computation using Eview 12

Table 4.3 showed that the variables were co-integrated. This was evidenced based on the fact that the Augmented Dickey-Fuller test statistic of the residual was higher than the 5% level test critical value. This showed evidence of a long run relationship among the variables.

Autoregressive Distributed Lag model was estimated with the intention of capturing both the short run and the long run effect of capital inflow on economic growth in Nigeria. The result was presented in table 4

**Table 4. Results of short run ARDL**

Variables	Coefficient	Std Error	t-statistic	Prob
D(FDI)	0.000000	0.000001	0.602686	0.5478
D(REM)	-0.327751	0.233866	-1.401449	0.1636
D(EXR)	0.006350	0.004166	1.524316	0.1300
D(TOP)	0.044669	0.021658	2.062486	0.0413
D(GFCF)	-0.000000	0.000000	-1.735701	0.0851
CointEq(-1)	-0.158004	0.048413	-3.263658	0.0014

Source: Authors' computation using Eview 12

The result of the short run dynamic of the ARDL showed that remittances and gross fixed capital formation had negative and insignificant impact on economic growth in Nigeria. An increase in remittances in a short period decreased economic growth by 0.327751 with t-statistic and P-value of -1.401499 and 0.1636 respectively. In the same vain, an increase in GFCF (investment) decreased investment by 0.000with P-value of 0.0851. The result is closer to the a priori expectation as the period may be too short to create an impact more than zero.

The result further indicated that Foreign Direct Investment (FDI), Exchange Rate (EXR) and Trade Openness (TOP) had positive relationship with economic growth in Nigeria. The coefficients of FDI, EXR, and TOP were 0.000, 0.0064 and 0.045 respectively. An increase in FDI in a short period gave zero effect on economic growth with t-statistic of 0.603 and P-value of 0.5478. It was shown in the result that an increase in exchange rate had 0.00635 effect on economic growth while an increase in trade openness increased economic growth by 0.044669 in Nigeria within the period under investigation. The impact of trade openness was statistically significant with t-statistic of 2.0623 and P-value of 0.0413. The significance of trade openness in a short run may be attributed to the fact that Nigeria is import dependent country. The speed of adjustment of the residual back to equilibrium was correctly signed and showed 15.8% possibility of going back to equilibrium as shown in Table 4.5.

The long run impact of capital inflow was estimated in order to investigate its impact when sufficient time for adjustment is given. The result of the long run ARDL was present in Table 4.6.

**Table 5: Result of the Long run ARDL**

Variables	Coefficient	Std Error	t-statistic	Prob
FDI	0.000003	0.000005	0.568593	0.5707
REM	0.241432	0.531705	0.454072	0.6506
EXR	0.040191	0.024778	1.622034	0.1074
TOP	0.282710	0.124844	2.264518	0.0253
GFCF	-0.000002	0.000001	-1.713640	0.0891
C	-8.548154	5.017628	-1.703624	0.0910

Source: Authors' computation using Eview 12

The result of the long run ARDL showed that all the variables had positive impact on economic growth except gross fixed capital formation in a long period of time. The sign of the gross fixed capital formation was contrary to the a priori expectation. An increase in FDI, REM, and EXR had individually insignificant impact on economic growth with coefficient of 0.000003, 0.241432, and 0.040191 respectively. The result further indicated that trade openness had significant impact on economic growth in Nigeria with t-statistic of 2.2645 and P-value of 0.0253. An increase in trade openness increased economic growth significantly by 0.2827 in a long within the period of investigation.

The result of the granger causality test which was carried out to detect the direction of causality among the variables was presented with the aid of Table 4.7

**Table 6: Results of the Granger Causality**

Null Hypothesis:	Obs	F-Statistic	Prob.
FDI does not Granger Cause GDPGR	130	1.15111	0.3196
GDPGR does not Granger Cause FDI		0.21081	0.8102
EXR does not Granger Cause GDPGR	130	1.70174	0.1866
GDPGR does not Granger Cause EXR		0.64802	0.5248
REM does not Granger Cause GDPGR	130	0.12700	0.8808
GDPGR does not Granger Cause REM		0.86627	0.4230
TOP does not Granger Cause GDPGR	130	1.72555	0.1823
GDPGR does not Granger Cause TOP		0.90836	0.4058
GFCF does not Granger Cause GDPGR	130	0.31384	0.7312
GDPGR does not Granger Cause GFCF		0.13800	0.8712

EXR does not Granger Cause FDI	130	8.11817	0.0005
FDI does not Granger Cause EXR		0.38200	0.6833
<hr/>			
GFCF does not Granger Cause FDI	130	5.09232	0.0075
FDI does not Granger Cause GFCF		1.24606	0.2912
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GFCF does not Granger Cause REM	130	0.23488	0.7910
REM does not Granger Cause GFCF		6.25335	0.0026
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Source: Authors' computation using Eview 12

The result of the Granger causality test showed no evidence of direction of causality relationship between capital inflow and economic growth in Nigeria. The P-values of each of the components of capital inflow and economic growth were individually greater than 0.05. The result further indicated a unidirectional causality flowing from exchange rate to foreign direct investment; gross fixed capital formation to foreign direct investment, and remittances to gross fixed capital formation.

### Summary of Research Findings

This paper examined the impact of Capital inflow on economic growth in Nigeria using time series quarterly data from 1981Q1 to 2023Q4. The main objective of the study was to examine the impact of capital inflow on economic growth in Nigeria. The specific objectives of the study were to evaluate the impact of capital inflow on economic growth; determine the direction of causality between capital inflow and economic growth and to determine the nature of the relationship between capital inflow and economic growth in Nigeria.

The study adopted the Autoregressive Distributed model because of its simplicity and ability to handle heterogeneous order of integration. The variables used in the study were the growth of the Real Gross Domestic Product (RGDPgr), Foreign Direct Investment (FDI), Exchange Rate (EXR), Remittances, Trade Openness (TOP) Trade openness (TOPENS), and the Gross Fixed Capital Formation (GFCF). The data used were obtained from the Central Bank of Nigeria Statistical Bulletin (2023)

The model adopted came out with the following findings.

The findings of the long run ARDL showed that all the variables had positive impact on economic growth except gross fixed capital formation. This indicates that an increase in FDI, REM, and EXR had individually insignificant positive impact on economic growth. The result further indicated that trade openness had significant impact on economic growth in Nigeria.

1. The findings of the long run ARDL showed that all the variables had positive impact on economic growth except gross fixed capital formation. This indicates that an increase in FDI, REM, and EXR had individually insignificant positive impact on economic growth. The result further indicated that trade openness had significant impact on economic growth in Nigeria. The result of the short run dynamic of the ARDL showed that remittances and gross fixed capital formation had negative and insignificant impact on economic growth in Nigeria. The result further indicated that Foreign Direct Investment (FDI), Exchange Rate (EXR) and Trade Openness (TOP) had positive relationship with economic growth in Nigeria. The impact of trade openness on economic growth was statistically significant within the short run and the long run.
2. The result of the co-integration test indicated a long run relationship between capital inflow and economic growth in Nigeria. This was justified by the result of the Augmented Dickey-Fuller co-integration test.
3. The result of the Granger causality test pointed out no evidence of direction of causality relationship between capital inflow and economic growth in Nigeria as indicated

by their respective p-value of the null hypotheses. it was shown in the result that a direction of causality flew from exchange rate to foreign direct investment; Gross Fixed Capital Formation to Foreign Direct Investment, and remittances to gross fixed capital formation.

Based on the results, this study concludes

- (i) Capital inflows were had insignificant impact on economic growth as shown by the results of the short run and long run ARDL.
- (ii) There was a a long run relationship between capital inflows and economic growth in Nigeria as indicated by the results of the co-integration test.
- (iii) There was no evidence of direction of causality relationship between capital inflow and economic growth in Nigeria as indicated by the result of the Granger causality test. It was also concluded that a direction of causality flew from exchange rate to foreign direct investment; Gross Fixed Capital Formation to Foreign Direct Investment, and remittances to gross fixed capital formation exist.

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