

## **FOREIGN RESOURCES INFLOW AND ECONOMIC GROWTH IN NIGERIA**

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### **Abstract**

The study assessed the impact of foreign resources on economic growth in Nigeria from 1986 to 2015. Secondary data were obtained from various issues of CBN statistical bulletin. Economic Growth (the dependent variable) was considered in terms of real gross domestic product (RGDP); while foreign resources (independent variable) was considered in the form of foreign direct investment (FDI), foreign portfolio investment (FPI), and official direct assistance (ODA). These served as the major regressor with exchange rate (EXCR) as check variable. The techniques of analysis used were ADF test of stationarity, co-integration test for long-run relationship, and Error Correct Mechanism (ECM) analyse of relationship between the variables. The results show that the explanatory variables explained 93.7% of the variations in economic growth in Nigeria. F-statistic of 66.628 (F-table = 2.84) showed statistical significance the model. The values of the coefficient of past (lag 1 and 2) of FDI and current value of FPI had significantly positively signed, while the first lag (lag 1) of ODA and current value of EXCR were significantly negatively related with economic growth. From these findings, foreign resource inflows is said to, on the whole, have significant impact on RGDP. In conclusion, the study submits that the flow of foreign resources is very important to economic growth (in terms of the growth in real gross domestic product) in Nigeria within the period of study. This means that, more efforts should be done to attract and ensure effective use of the resources.

**Keywords:** Foreign Capital, Real Gross Domestic Product, Foreign Direct Investment, Official Direct Assistance, Exchange Rate

## **1.0 INTRODUCTION**

The cardinal economic objective of developing countries, including Nigeria, is to achieve high economic growth which will enhance rapid economic development and poverty reduction. This is so because, economic development depends to a very large extent on the level of investment and growth, which is also dependent on capital accumulation. The accumulation of capital is in turn, therefore, the key to economic growth. Thus, capital is an essential component which breaks the vicious circle of poverty if adequately mobilized and invested (Onyeso, 2010). As such, the non-availability of the capital resources that would drive the process of economic growth, which has been at the front burner of economic policy of developing countries, often hinders the achievement of this required economic growth. This then makes the sourcing for and accumulation of capital very important, especially that which comes in from without the country. The need for foreign capital flow arise when the desired investment exceeds the actual savings and also due to investments with long gestation periods that generate non-monetary returns, growing government expenditure that are not tax-financed; and when actual saving is lower than potential saving due to repressed financial markets and even capital flight (Essien & Onwioduokit, 1999).

In order then to increase the stock of capital necessary for economic growth, a few options are open; it can either be borrowed from outside, attract foreign investments or borrowed from the domestic money and capital markets. Each of these alternatives is constrained in terms of its feasibility and effectiveness in the Nigerian context. The often (Oyejide, 2005) narrowness of the Nigerian financial market poses constraint on its reliance for huge investment capital for the productive sectors of the economy. Therefore, this has increased the extent to which the country relies on externally sourced funds through foreign capital inflow, external borrowing. There are, however, certain conditions that must be met. Some of such are the International Monetary Fund (IMF) set of conditionalities, which are often difficult to meet. However, foreign capital inflows appear to be a leeway to pry-loose these challenges given the high benefits it confers to the host economy even though it has its own constraints.

However, in an effort to mobilize resources for growth and sustained economic development, a country must rely on transfer of foreign resources until it achieves the capital self-sustained growth (Aborh, 2015). According to Gbosi (2003), foreign capital flows into a country in the form of foreign aid, private foreign investment and private bank lending. These are the principal ways by which resources come from rich nations to poor ones. There is no doubt that capital inflow from these sources further the transmission of technology, ideas, knowledge and others into less developed economy.

Capital inflows can also benefit recipient countries through a variety of channels, such as heightened domestic investment, financial sector development, improved liquidity, and international integration (Kim & Yang, 2008). And where there is low rate of savings, as witnessed in Nigeria, it is difficult to finance investment entirely through domestic savings. By augmenting available local capital, foreign capital inflow can assist in creating direct and indirect employment in an economy.

The disadvantages also abound: large capital flows could spur economic growth or have destabilizing effect in the economy, if not well managed. The destabilizing effect of foreign capital inflows had aroused concern over their potential effects on macroeconomic stability, the competitiveness of the export sector and external viability. The most risk is that they fuel inflation and drive the real exchange rate to unstable high level (Obiechinna & Ukeje, 2013).

Nevertheless, the benefits usually hold sway. Therefore, arising from the benefits above, the Nigerian government, like its counterparts, has realized the need to focus on providing an enabling environment that would make the private sector to strive in contributing meaningfully to the country's quest for development. The government has committed itself to improving the country's economic performance through expansion of the private sector. The commitment became more pronounced or visible when Nigeria transitioned to democratic dispensation in 1999. Past and present leaders of Nigeria, since 1999, have visited foreign countries to solicit and attract foreign investors to Nigeria. In addition, major policy steps are being taken to reduce regulatory constraints so as to attract foreign investors (Wafure & Nurudeem, 2010).

However, despite all the concerted effort made by our past and present government concerning foreign resources, Nigerian's experience with capital inflow is still in doubts.

Table 1: The rate of growth of the Real GDP vs that of Foreign Resources inflow

<b>Year</b>	<b>RGDP</b>	<b>FDI</b>	<b>FPI</b>	<b>ODA</b>
	<b>(N,m)</b>	<b>(N,m)</b>	<b>(N,m)</b>	<b>(N,m)</b>
1987	0.170232	233.3515	2771.438	870.4065
1991	-0.55202	47.5907	36.69577	-1.17672
1995	1.872355	241.6254	2742.752	-3.31706
1999	0.521832	14.91474	-259.325	-26.9244
2000	5.518497	24.95859	4928.955	17.1449
2005	7.008456	163.5489	392.906	962.9105
2009	8.353335	31.11254	-145.139	31.41853
2010	9.539775	-28.8963	684.6023	23.38126
2011	5.307929	50.18899	-242.361	-13.8359
2013	5.487796	-21.4105	-179.27	-17.7063
2015	2.786392	-18.4408	-40.1565	1.237368

Source: Computed from CBN statistics, (various years)

It is still questionable to tell what impact foreign capital inflows have on economic growth in Nigeria. For instance, as can be seen from Table 1, the growth rate low as compared to the growth rate of the foreign resources inflow over the years. Also, while economic growth has been relatively positive over time, the rate of growth of the foreign resources inflow has been negative for some years. As such, in specific terms, it is, therefore, arguable if foreign resource inflow [in the form of foreign direct investment (FDI), foreign portfolio investment (FPI), and official direct assistance (ODA)] has any impact on economic growth in Nigeria. It is in view of the foregoing that this study aimed at investigating the impact of foreign resources inflow on economic growth in Nigeria between 1986 and 2015.

This paper is divided into five sections; section one is the introductory aspect, section two deals with theoretical and empirical literature while section three dwells on methodology. Section four is results and discussion. Section five is the conclusion and recommendation.

## **20 LITERATURE REVIEW**

### **21 Theoretical Framework**

The flow of capital between the developed and the developing countries has its origin in the colonial period. Although the issue of development was not important either to colonies or to the relationship between richer and poorer countries, aid has been provided to accelerate developing economics, hence the role of outside capital is not directly to raise the standards of living but to make a transition in the economy and bring about sustainable growth. This has changed over time and there are a lot of theories and other scholarly works now that seek to not only explain, but encourage the flow of foreign capital from the advanced nations to the developing ones.

The early neoclassical theories explains international capital flows with differentiated rates of returns across countries that lead to capital arbitrage, with capital seeking the highest return. Cockcroft & Riddell (1991) argue that the future investment flows are directly related to the package of incentives, which influence expected rate of returns; the security of the investment; the scope and speed with which companies are able to disinvest. The tax regime; investment code guidelines; overall macroeconomic policies are all elements of attracting foreign capital. Despite these changes, there is still need for action for improvement of factors that inhibited investment. These factors include lack of formal legislation, lack of legal infrastructure such as patents, price control, labour legislation, taxation policy and foreign exchange control. It suggests that addressing these problems would certainly help improve the foreign capital inflow.

### **22 Review of Empirical Literature**

There are many scholarly discusses about foreign resource inflows and economic growth in Nigeria. Such studies include those of Kumar & Pradhan (2002) who analyzed the relationship between FDI, growth and domestic investment for a sample of 107 developing countries for the 1980-1999 period. Their model uses flow of output as the dependent variable and domestic and foreign owned capital stock, labor, human skills capital stock and total factor productivity as their independent variables. Their results of a panel analysis show that suggest a positive effect of FDI on growth and held that, although FDI appears to crowd-out domestic investments in

net terms, in general, some countries have had favourable effect of FDI on domestic investments in net terms suggesting a role for host country policies.

Mohey-ud-din (2006) studied the impact of foreign capital flows on economic growth in Pakistan from 1975 to 2004 using GDP as the dependent variable and net inflow of FDI and ODA (Official Development Assistance and Official Aid) as the independent variable. The study showed a high positive impact of foreign capital inflows on the GDP growth in Pakistan during the period of 1975-2004.

In the same light, Kyaw & Macdonald (2010) also examined the impact of foreign direct investment and portfolio investment flow on economic growth in a sample of 126 developing countries, over the period 1985-2002. It was found that effects of foreign direct investment and portfolio investment are conditional to host country's absorptive capacity.

Amadasun & Okodua (2011) examined the inflow of foreign Direct Investment and other related investments into sub-saharan Africa (SSA); other factors that support or hinder the inflow of FDI and the instruments and strategies to adopt to make it fundamental for achieving SSA drive to become a development capable region.

Reisen & Soto (2011) examined the growth effect of foreign direct investment, portfolio equity flows and banks' lending, which include short-term and long-term lending for 44 emerging economies, covering from 1986 to 1997. They found that foreign direct investment and portfolio investment or equity flows exert a significant positive effect on growth while bank lending has a significant negative impact on growth.

Other empirical studies done by Obwona & Egesa (2007), Osabuohien (2007), Adofu (2010), Shen, Lee & Lee (2011), Ekwe & Inyama (2014), Sethi (2013), Umoh & Jacob (2013) also found positive impact of foreign direct investment has a significant on growth.

### 3.0 METHOD OF STUDY

The study was designed to be quasi-experimental. The cointegration and error correction technique, was employed as the main analytical tools. The unit root test was also applied to ascertain the stationarity properties of the series so as to correct every instability that may exist in time series data. The long run relationship that exists among the variables was tested with the Johansen co-integration, vector error correction model and pair-wise granger causality test.

The functional relationship between our variables is as follows:

$$RGDP_t = f(FDI, FPI, ODA, EXR, ) \quad (1)$$

The model, in its explicit (linear) form, is specified as:

$$RGDP_t = \alpha_0 + \alpha_1 FDI + \alpha_2 FPI + \alpha_3 ODA + \alpha_4 EX + U \quad (2)$$

From our model, we expect that;  $\alpha_1 > 0$ ,  $\alpha_2 > 0$ ,  $\alpha_3 > 0$ ,  $\alpha_4 < 0$ ,

### 3.1 Testing Techniques and Procedures

#### *Augmented Dickey Fuller (ADF) Test for Unit Root [I(0) and I(1)]*

The series of the study were tested for a unit root using the standard augmented Dickey-Fuller (ADF) test which holds that: for a time series the ADF test requires the following regression carried out under three conditions:

i. A random walk process which is defined as;  $(X_t \text{ or } Y_t)$ ,

ii. A random walk process with drift which is defined as;

$$\Delta X_t = \delta X_{t-1} + \sum_{i=1}^m \alpha \Delta X_{t-i} + \varepsilon_t \quad (3)$$

where,

$$\Delta X_t = \beta_1 + \delta X_{t-1} + \sum_{i=1}^m \alpha \Delta X_{t-i} + \varepsilon_t \quad (4)$$

iii. Arandom walk process with drift around a stochastic trend which is defined as;

$$\Delta X_t = \beta_1 + \beta_2^* \delta X_{t-1} + \sum_{i=1}^m \alpha \Delta X_{t-i} + \varepsilon_t \quad (5)$$

where,

$\delta$  = the difference operator;  $\varepsilon_t$  = the random error term.

The ADF test considers a null hypothesis of an I(1) process against the alternative of an I(0) process.

### ***Time Series Cointegration***

The multivariate cointegration test was used to assess the long run equilibrium linkages among the variables in the system. Cointegrated variables, if disturbed, will not drift apart from each other and hence, possess a long run equilibrium relationship. Testing for the existence of cointegration among economic variables with the Johansen (1991, 1988) maximum likelihood test requires the following procedure:

Consider a Vector Auto Regressive (VAR) model of order k:

$$\Delta Y_t = \mu + \varphi_1 Y_{t-1} + \varphi_2 Y_{t-2} + \dots + \varphi_{k-1} Y_{t-k+1} + \Pi Y_{t-k} + \xi_t \quad (6)$$

Where  $Y_t$  is an 5 X 1 vector of the first order integrated [i.e., I(1)] variables;  $\varphi_i$  are 5 X 5 coefficient matrices; and  $\xi_t$  is a vector of normally and independently distributed error terms. The existence of cointegrating vectors ( $r$ ) is rank-deficient. If  $\Pi$  is of rank  $r$  ( $0 < r < 5$ ), then it can be decomposed as:  $\Pi = \alpha \beta'$  where  $\alpha$  is  $(5 \times r)$  and  $\beta$  is  $(5 \times r)$ ; and equation (6) can be rewritten as:

$$\Delta Y_t = \mu + \varphi_1 Y_{t-1} + \varphi_2 Y_{t-2} + \dots + \varphi_{k-1} Y_{t-k+1} + \alpha \beta' Y_{t-k} + \xi_t \quad (7)$$

The rows of  $\beta$  are considered as the distinct cointegrating vectors whereby  $\beta' Y_{t-1}$  from linear stationary processes, while those of  $\alpha$  as error correction coefficients (loading factors) that indicates the speed of adjustment towards the long run equilibrium. We can also represent the VAR as in the following form:



$$\Delta Y_t = \mu + \Pi Y_{t-1} + \sum_{i=1}^{k-1} A_i \Delta Y_{t-i} + \xi_t \quad (8)$$

The *Trace* and the *Maximal Eigenvalue* likelihood ratio test statistics are then constructed from the residual vectors as:

$$\lambda_{Tra} = -T \sum_{i=r+1}^n \text{Log}(1 - \hat{\lambda}_i) \quad (9)$$

Where  $\hat{\lambda}_{r+1}, \dots, \hat{\lambda}_n$  are (n-r) smallest estimated eigen values with the null hypothesis that there are at most r unique cointegration vectors.

and

$$\lambda_{Max} = -T \text{Log}(1 - \hat{\lambda}_{r+1}) \quad (10)$$

The null hypothesis for this test is that there are r cointegrating vectors in  $Y_t$ . For both tests, the alternative hypothesis is that there are  $g > r$  cointegration vectors in  $Y_t$ .

### **Vector Error Correction Model (VECM)**

A basic single equation error correction model (ECM) between a dependent variable Y and an independent variable X is of the form:

$$\Delta Y_t = \alpha + \beta_0 \Delta X_t - \beta_1 (Y_{t-1} - \beta_2 X_{t-1}) + \varepsilon_t \quad (11)$$

$$\Delta Y_t = \alpha + \beta_1 \Delta X_t - \beta_2 EC_{t-1} + \varepsilon_t \quad (12)$$

However, the Granger representation theorem (Granger, 1988) holds that if two variables (say  $Y_1t$  and  $Y_2t$ ) are cointegrated and each is individually  $I(1)$ , then either  $Y_1t$  Granger causes  $Y_2t$  or  $Y_2t$  Granger causes  $Y_1t$ . Causality of cointegrated variables, for this study (with more than two variables), is thus captured by Vector Error Correction Model (VECM) where  $Y_1$  is the dependent variable (RGDP) and  $Y_2, Y_3, Y_4,$  and  $Y_5$  are the independent variables respectively. The model is therefore expressed as follows:

$$\begin{aligned} \Delta Y_{1t} = \varphi_1 + \sum_{k=1}^{n-1} \alpha_{11,k} \Delta Y_{1,t-1} + \sum_{k=1}^{n-1} \alpha_{12,k} \Delta Y_{2,t-1} + \sum_{k=1}^{n-1} \alpha_{13,k} \Delta Y_{3,t-1} + \sum_{k=1}^{n-1} \alpha_{14,k} \Delta Y_{4,t-1} \\ + \sum_{k=1}^{n-1} \alpha_{15,k} \Delta Y_{5,t-1} + \sum_{h=1}^r \alpha_{11,h} EC_{h,t-1} + \varepsilon_t \end{aligned} \quad (13)$$

$$\begin{aligned} \Delta Y_{2t} = \varphi_2 + \sum_{k=1}^{n-1} \alpha_{21,k} \Delta Y_{1,t-1} + \sum_{k=1}^{n-1} \alpha_{22,k} \Delta Y_{2,t-1} + \sum_{k=1}^{n-1} \alpha_{23,k} \Delta Y_{3,t-1} + \sum_{k=1}^{n-1} \alpha_{24,k} \Delta Y_{4,t-1} \\ + \sum_{k=1}^{n-1} \alpha_{25,k} \Delta Y_{5,t-1} + \sum_{h=1}^r \alpha_{21,h} EC_{h,t-1} + \varepsilon_t \end{aligned} \quad (14)$$

$$\begin{aligned} \Delta Y_{3t} = \varphi_3 + \sum_{k=1}^{n-1} \alpha_{31,k} \Delta Y_{1,t-1} + \sum_{k=1}^{n-1} \alpha_{32,k} \Delta Y_{2,t-1} + \sum_{k=1}^{n-1} \alpha_{33,k} \Delta Y_{3,t-1} + \sum_{k=1}^{n-1} \alpha_{34,k} \Delta Y_{4,t-1} \\ + \sum_{k=1}^{n-1} \alpha_{35,k} \Delta Y_{5,t-1} + \sum_{h=1}^r \alpha_{31,h} EC_{h,t-1} + \varepsilon_t \end{aligned} \quad (15)$$

$$\begin{aligned} \Delta Y_{4t} = \varphi_4 + \sum_{k=1}^{n-1} \alpha_{41,k} \Delta Y_{1,t-1} + \sum_{k=1}^{n-1} \alpha_{42,k} \Delta Y_{2,t-1} + \sum_{k=1}^{n-1} \alpha_{43,k} \Delta Y_{3,t-1} + \sum_{k=1}^{n-1} \alpha_{44,k} \Delta Y_{4,t-1} \\ + \sum_{k=1}^{n-1} \alpha_{45,k} \Delta Y_{5,t-1} + \sum_{h=1}^r \alpha_{41,h} EC_{h,t-1} + \varepsilon_t \end{aligned} \quad (16)$$

$$\begin{aligned} \Delta Y_{5t} = \varphi_5 + \sum_{k=1}^{n-1} \alpha_{51,k} \Delta Y_{1,t-1} + \sum_{k=1}^{n-1} \alpha_{52,k} \Delta Y_{2,t-1} + \sum_{k=1}^{n-1} \alpha_{53,k} \Delta Y_{3,t-1} + \sum_{k=1}^{n-1} \alpha_{54,k} \Delta Y_{4,t-1} \\ + \sum_{k=1}^{n-1} \alpha_{55,k} \Delta Y_{5,t-1} + \sum_{h=1}^r \alpha_{51,h} EC_{h,t-1} + \varepsilon_t \end{aligned} \quad (17)$$

Where,  $EC_{h,t-1}$  is the hth error correction term, the residuals from the hth cointegration equation, lagged one period,  $\hat{a}_{ij,k}$  describes the effect of the kth lagged value of variable j on the current value of variable of i:  $i,j = Y_1, Y_2, Y_3, Y_4, Y_5$ . This formed the base of our estimation.

#### 4.0 RESULTS AND DISCUSSIONS

A descriptive analysis of the variables was performed (see Table 2). It show that, the mean, median, standard deviation, skweness, Jarque-Bera, etc of Nigeria's Real Gross Domestic Product (a proxy for Growth Rate) (RGDP), Foreign Direct Investment (FDI), Foreign Portfolio Investment (FPI), Official Direct Assistance (ODA), and Exchange Rate (EXCR) from 1986 to 2015. From the result of the summary statistics we observe that the mean for RGDP, FDI, FPI, ODA, and EXCR, variables is 407396.8, 138530.4, -66551.98, 1.34E+09, and 73.25503, respectively. This indicates that the variables, during the study period, have positive values, except FPI which has a negative mean value implying the outflow of PDI.

**Table 2: Descriptive Statistics Results**

	RGDP	FDI	FPI	ODA	EXCR
Mean	407396.8	138530.4	-66551.98	1.34E+09	73.25503
Median	312183.5	152411.0	-594.9000	3.83E+08	92.34280
Maximum	672202.6	326537.9	92518.90	1.24E+10	152.3297
Minimum	204806.5	9313.600	-560498.5	12300000	2.020600
Std. Dev.	174040.0	102882.4	144627.2	2.60E+09	59.58708
Skewness	0.514454	0.051528	-1.821442	3.359866	0.022490
Kurtosis	1.619963	1.695838	6.190638	13.92811	1.174991
Jarque-Bera Probability	3.333548 0.188855	1.925391 0.381862	26.38213 0.000002	185.1506 0.000000	3.749268 0.153411
Sum	10999713	3740320.	-1796903.	3.61E+10	1977.886
Sum Sq. Dev.	7.88E+11	2.75E+11	5.44E+11	1.76E+20	92316.12
Observations	30	30	30	30	30

**Source:** *Authors' Computation (2016)*

These suggest that, other than FPI, other variables have on the average grown during this period or at least not declined. The high values of standard deviation suggested a wide variation of individual values from the means. The Jarque-Bera test of normality indicates that FPI and ODA are not normally distributed. This violates one of the basic assumptions of ordinary least squares (OLS), by which the application of OLS as techniques of analysis was not necessary. However, since the analysis was based on higher technique other than OLS, this mis-normal was overcome.

Further analyses were based on the hypothesis that, there is no significant relationship between public expenditure and economic growth in Nigeria. The result of the descriptive statistics of the variables employed in the estimations in this study is presented in Table 2.

We also tested for co-integration among the variables and conducted the ECM. In conducting stationarity tests of the variables in equations 3 and 4, we used the Augmented Dickey-Fuller (ADF) unit root test which is derived from Dickey and Fuller (1979, 1981). The results are presented in Tables 3.

**Table 3: ADF Test Results at Level**

Variables	ADFTest Statistic	ADF Critical Value	Level of Significance	Order of Integration	Remark
RGDP	-6.285554	-2.991878	5%	I(0)	Stationary
FDI	-8.103128	-2.986225	5%	I(1)	Stationary
FPI	-7.255616	-2.986225	5%	I(0)	Stationary
ODA	-5.233673	-2.991878	5%	I(1)	Stationary
EXCR	-4.732754	-2.986225	5%	I(1)	Stationary

**Source:** *Authors' Computation (2016)*

The results of the ADF unit root test results in Table 3 reveal that economic growth (RGDP) and foreign portfolio investment (FPI) were stationary at levels; while foreign direct investment (FDI), official direct assistance (ODA), and exchange rate (EXCR), were stationary at first difference, meaning that the short-run information of these variable is lost. Due to this, the series could best be analyzed by performing a long-run test of co-integration.

In order to test for the long-run relationship, unit root for the variables were further tested at their first difference. The result of the unit root test revealed that the remaining variables – RGDP and FPI – were also stationary in their first differences. Therefore, the variables of the model were all integrated of order one i.e. I(1).

Having stabilized and stationarized the data, the conducted the co-integration test. The co-integration tests are based on the Johansen and Juselius co-integration test. Table 4 present the co-integration test result.

**Table 4: Co-integration Tests**

Unrestricted Cointegration Rank Test (Trace)				
Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.942627	155.8196	29.79707	0.0001
At most 1 *	0.405477	35.77631	15.49471	0.0000
At most 2 *	0.282384	13.93649	3.841466	0.0002
Trace test indicates 3 cointegratingeqn(s) at the 0.05 level * denotes rejection of the hypothesis at the 0.05 level **MacKinnon-Haug-Michelis (1999) p-values				
Unrestricted Cointegration Rank Test (Maximum Eigenvalue)				
Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.942627	120.0433	21.13162	0.0001
At most 1 *	0.405477	21.83983	14.26460	0.0027
At most 2 *	0.282384	13.93649	3.841466	0.0002
Max-eigenvalue test indicates 3 cointegratingeqn(s) at the 0.05 level * denotes rejection of the hypothesis at the 0.05 level **MacKinnon-Haug-Michelis (1999) p-values				

**Source:** *Authors' Computation (2016)*

The co-integration results in Table 4 for the variables (i.e. RGDP, FDI, FPI, ODA, EXCR) reveal that, both the trace statistic and the max-eigen value indicate 3 cointegrating equations at 5 percent level of significance. This suggests that there is a long-run relationship between economic growth and public expenditure. We

therefore reject the null hypothesis of no co-integration amongst the variables but do not reject the alternative hypothesis.

The confirmation of the existence of a co-integrating vector among the series in the models gave us the confidence in carrying out short run dynamic adjustment. Thus, adopting the general-to-specific framework, we proceed to estimate an over-parameterized error correction model from where a parsimonious error correction mechanism is obtained as shown in Tables 5.

**Table 5: Parsimonious ECM**

Dependent Variable: D(RGDP)				
Method: Least Squares				
Sample (adjusted): 1986 2015				
Included observations: 30 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-136832.6	253448.1	-0.539884	0.5931
D(RGDP(-1))	0.548055	0.115300	4.753285	0.0000
D(RGDP(-2))	0.416106	0.080500	5.168992	0.0000
D(FDI(-1))	14.34272	3.496813	4.101654	0.0003
D(FDI(-2))	8.379418	2.961078	2.829854	0.0081
D(FPI)	21.17291	1.912853	11.06876	0.0000
D(ODA(-1))	-6.416861	2.821032	-2.274650	0.0300
D(EXCR)	-3.215029	0.887472	-3.622682	0.0010
ECM(-1)	-0.470435	0.083556	-5.630143	0.0000
R-squared	0.950845	Mean dependent var	1956462.	
Adjusted R-squared	0.936574	S.D. dependent var	4995292.	
S.E. of regression	1258042.	Akaike info criterion	31.13623	
Sum squared resid	4.91E+13	Schwarz criterion	31.55418	
Log likelihood	-628.2927	Hannan-Quinn criter.	31.28842	
F-statistic	66.62827	Durbin-Watson stat	2.101918	
Prob(F-statistic)	0.000000			

**Source:** Authors' Computation (2016)

Table 5 presents the parsimonious ECM for model. It shows that the explanatory variables included in the model explained 93.7 percent of the variations in economic growth in Nigeria. The F-statistic of 66.628 (F-table = 2.84) shows that the model is statistically significant and that the independent variables are significant explanatory

factors of the dependent variable. The above implies that the model has a goodness of fit. This implies that, foreign resources in the form of FPI, FDI, and ODA are relevant determinants of economic growth in Nigeria. This, therefore, shows the how significant the external sector is to the Nigerian economy. To support the suitability of the model, the Durbin Watson Statistic of 2.102 reveals that there is minimal or absence of serial autocorrelation among the variables used in the model. Also, the error correction coefficient (ECM) is significant and appropriately signed. This reveals that economic growth in Nigeria, proxied by real gross domestic product (RGDP), can adjust to changes in these external sector's explanatory variables and be able to attain a long-run growth.

Furthermore, the values of the coefficient of past (lag 1 and 2) of FDI and current value of FPI have significant positive sign. This indicates that these variables have positive influence on the economy that spans for up to 2 years. However, the first lag (lag 1) of ODA and current value of EXCR are significantly negatively related with economic growth. This means that though ODA may have positive impact on economic growth in Nigeria, that does not go beyond the current year of its flow into the country. As such, having rather a negative consequence on the economy. This could be as a result of the dumping effect of some of the ODA and leakage created by others. Equally, the weakening of the value of Naira in relation to other foreign currencies makes EXCR to have negative effect on economic growth. This is because, a weak price of Naira, does not only discourages FDI and FPI but make foreign productive goods expensive and results to unfavourable balance of payments. These, cumulatively, hinder the economy from growing but rather retards.

However, on the whole, the analysis has revealed a long-run relationship between the economic growth and the flow of foreign resource into the Nigerian economy. This is evident from the ECM results as have shown above. This means that, an increase in FDI and FPI will increase economic growth in Nigeria in the long-run. This led to rejection of the null hypothesis which held that there is no significant relationship between the flow of foreign resources and economic growth in Nigeria, and its alternative retained. The findings of this study partly agree with the work of Moheyud-din (2006) who found a high positive impact of foreign capital inflows on the GDP growth in Pakistan. It also agrees with Obwona & Egesa (2007), Osabuohien

(2007), Adofu (2010), Shen, Lee & Lee (2011), Ekwe & Inyiama (2014), Sethi (2013) who found a positive relationship between economic growth and foreign direct investment.

On the contrary, ODA and EXCR have shown to reduce economic growth within the period under review. The negative signs of ODA and EXCR do not conform to the *apriori* expectation of a positive relationship between these variables and economic growth. The negative effect of ODA on economic growth in Nigeria within the period under review could be blamed on lack of prudent fiscal management and institutional weaknesses that tend to deride benefit of ODA to the country.

## **5.0 CONCLUSION AND RECOMMENDATIONS**

The study assessed the impact of the inflow of foreign resources on economic growth in Nigeria from 1986 to 2015 using secondary data. The result has led to the conclusion that foreign resource inflow has impact significantly on economic growth in Nigeria. While foreign direct investment and foreign portfolio investment have positive impact, official direct assistance has negative impact. This tells the contribution of the external sector to the growth of the Nigerian economy. However, the funds that come into the country in the form of direct assistance have not been put to effective use as to trigger economic growth. Also, exchange performance has negative impact on economic growth.

Based on the findings, the following recommendations were made. On the whole, it is recommended that external policies should be designed to favour the inflow of foreign resources as data have shown that they support the growth of the economy. However, though our empirical evidence suggests that FDI and FPI play important role in contributing to economic growth in Nigeria, for such impact to be sustained, Nigeria, like most countries, including both developed and emerging nations, should establish investment agencies, and have policies that include both fiscal and financial incentives to attract foreign resources and improve the local regulatory environment and the cost of doing business.

Another suggestion, based on the finding that official direct assistance (ODA) reduced economic growth, is that, for the economy to benefit from ODA received, it should be targeted toward sectors that will boost the growth of the economic. Such



sectors like manufacturing and agriculture should be on the priority list. These tend to spark a much wider coverage ripple effect on the economy. Also, it the government should be choosy on the kind of ODA inflows. This is because, some tend to save rather as a leakage than the flow then portends to be.

Also, monetary policy and actions concerning exchange rate (EXCR) that will protect domestic economic agents and attract external investors into the country should be put in place.

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## APPENDIX 1

**Table A. Real Gross Domestic Product, Foreign Direct Investment, Foreign Portfolio Investment, Official Direct Assistance and Exchange Rate (1986-2015)**

Year	RGDP (N,m)	FDI (N,m)	FPI (N,m)	ODA (N,m)	EXCR (N/\$)
1986	15,237.99	735.8	151.6	12300000	2.0206
1987	15,263.93	2,452.80	4,353.10	119360000	4.0179
1988	16,215.37	1,718.20	2,611.80	184910000	4.5367
1989	17,294.68	13,877.40	-1618.8	546250000	7.3916
1990	19,305.63	4,686.00	-435.2	383270000	8.0378
1991	19,199.06	6,916.10	-594.9	378760000	9.9095
1992	19,620.19	14,463.10	36,851.80	358120000	17.2984
1993	19,927.99	29,660.30	-377	427680000	22.0511
1994	19,979.12	22,229.20	-203.5	270420000	21.8861
1995	20,353.20	75,940.60	-5785	261450000	21.8861
1996	21,177.92	111,290.90	-12055.2	246750000	21.8861
1997	21,789.10	110,452.70	-4785.8	277230000	21.8861
1998	22,332.87	80,749.00	-637.5	287100000	21.8861
1999	22,449.41	92,792.50	1,015.70	209800000	92.6934
2000	23,688.28	115,952.20	51,079.10	245770000	102.1052
2001	25,267.54	132,433.70	92,518.90	263430000	111.9433
2002	28,957.71	225,224.80	24,789.20	419250000	120.9702
2003	31,709.45	258,388.60	-23,555.50	384570000	129.3565
2004	35,020.55	248,224.60	23,541.00	654310000	133.5004
2005	37,474.95	654,193.20	116,035.00	6954730000	132.147
2006	39,995.50	624,520.70	360,291.50	12383000000	128.6516
2007	42,922.41	759,380.40	-332,547.80	1951130000	125.8331
2008	46,012.52	971,543.80	-157,157.20	1271670000	118.5669
2009	49,856.10	1,273,815.80	70,938.50	1671210000	148.8802
2010	54,612.26	905,730.80	556,585.10	2061960000	150.298
2011	57,511.04	1,360,307.90	-792,360.20	1776670000	153.8616
2012	59,929.89	1,113,510.60	-2,687,232.50	2061960000	157.4994
2013	63,218.72	875,102.50	2,130,179.90	1696863333	157.3112
2014	67,152.79	738,197.20	832,392.00	1845164444	158.5526
2015	69,023.93	602,067.80	498,132.20	1867995926	193.2792

**Source:** CBN Statistical Bulletin, various issues, World bank data base.