# Government Security Spending, Foreign Direct Investment and Economic Growth in Nigeria: 1986-2017

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### Abstract

his paper is an assessment of government security spending, foreign direct investment and economic growth in Nigeria covering from 1986 to 2017. The study used time series data and econometrics tools were used for testing for the stationarity, causality and co-integration. To show the long run and short run impact and the relationships among the variables, Ordinary Least Squares and Error Correction Model were adopted. The findings show that there is short run and long run impact of government security spending and foreign direct investment on economic growth in Nigeria. Some of government security spending and foreign direct investment indicators were negatively related to Real Gross Domestic Product while some were positively related to Real Gross Domestic Product in Nigeria. Government internal security spending shows strong and positive impact on economic growth in Nigeria. The study shows that foreign direct investment has weak impact on Real Gross Domestic Product in Nigeria and this weak impact may be due to the fact that the sub-sector has been facing the problems of corruption and other socio-economic issues that have increased the cost of doing business and as such foreign investors would prefer to invest in countries with lower rates of corruption which is believed to derive maximum profits from their investments. Therefore, the study recommends that fiscal discipline should be adhered to strictly; the fight against corruption should be total and transparent; government should straighten and deepen all incentives, institutional and regulatory frameworks in the country, issues of insecurity should be addressed without any sentiment in order to foster foreign direct investment for sustainable economic growth in Nigeria.

Keywords: Security, Foreign Direct Investment, Economic Growth, Corruption, Government

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# **Background to the Study**

Government spending is a vital instrument for government to control its activities. It plays a vital role in the functioning of an economy both developed and underdeveloped. Government spending was born out of revenue allocation which means redistribution of fiscal capacity between the different levels of government or the disposition of responsibilities between arms of the government. Generally, Government spending affects aggregate resources used, together with monetary and exchange rate. Specifically, public expenditure refers to the value of goods and services provided through the public sector. While Foreign Direct Investment (FDI)is an investment made by an organization or individual of a country in business interests in another country, in the form of either establishing business operations or acquiring business assets in the other country, such as ownership or controlling interest in a foreign company. Foreign direct investments are distinguished from portfolio investments in which an investor merely purchases equities of foreign-based companies. The key feature of foreign direct investment is that it is an investment made that establishes either effective control of, or at least substantial influence over, on the decision making of the foreign business.

Also, (FDI) is seen to play a key role in the growth and development process of developing nations, like Nigeria, who's human and material resources are underemployed or not fully employed. According to Shiro (2008), foreign investments consist of foreign resources such as technology, managerial and marketing expertise and capital which have considerable impact on the host nation's production capacity. Foreign Direct Investment (FDI) occurs when a firm invests directly in the production or other facilities in a foreign country in which it has effective control (Shenkar, 2007).

In the Nigerian economy, Government spending can generally be categorized into capital and recurrent spending. The recurrent spending are government expenses on administration such as wages, salaries, interest on loans, maintenance etc., while expenses on capital projects like roads, airports, health, education., telecommunication, electricity generation etc., are considered as capital spending(Al-Yousif, 2000).

Government performs two major roles in any economy; provision of security (protection of lives and properties) and provisions of certain public goods and service (Al-Yousif, 2000). The level of government security speeding affect the level of protection of lives and properties in a society. Security in any economy plays a vital role in economic growth and development. The size of government spending on security also has effect on economic growth, and vice versa, and this has been an issue of sustained interest for over decades now. The relationship between government spending on security and economic growth has continued to generate series of debate among scholars. On the other hand there have debates whether or not government spending on security and foreign direct investment have effect on economic growth.

Gaiya, (2011) strongly agreed that government security spending and foreign direct investment have great impact on economic growth in Nigeria. Anna (2010) also agreed that government security spending determines the level of foreign direct investment. On the other hand, that government security spending and foreign direct investment determine economic

growth because government security spending affects the level of protection of lives and properties while foreign direct investment affects the level of inflow of foreign investment which can trigger so many macroeconomic variables in the country.

In Nigeria, over the years, the issues of security has been an important aspect of the government especially in this last decade due to increase in internal resistance and threat and this has been an issue of concern to many Nigerians and other stakeholders in the country. Presently, internal resistance and threat especially that of the increasingly violent Islamist sect, known as Boko Haram is forcing increasing financial cost on government's spending towards defense sector. According to World Development Indicators, the government security spending (% of GDP) in Nigeria in 2008 was 0.78, in 2009, it was 0.89 and in 2010, it stood at 1.00. Nigeria's security bills have risen to 20 percent of spending in the budget from 16 percent in 2010. This has led to diversion of the money needed for infrastructure projects and work on reforms of social and industrial sectors. This was done in order to increase the protection of lives and properties and to foster improvement in foreign direct investment in Nigeria.

Also, due to insecurity in the country, government security spending has been increasing steadily over the years in absolute terms. In 2013, Federal Government in its budget allocated the sum of №348.91 billion naira to defense. Despite the huge government security spending, the issue of "BOKO HARAM" attacks in the Northern part of Nigeria persisted, resulting to Federal Government declaration of state of emergency on three states in the North, namely Borno, Yobe and Adamawa States respectively. And this has affected both local and international investors thereby reducing the level of investment in Nigeria. The question is, is there any relationship among Government Security Spending, Foreign Direct Investment and Economic Growth in Nigeria? If there is, what is the impact of Government Security Spending and Foreign Direct Investment on Economic Growth in Nigeria? Therefore, the main objective of this study is to examine the relationship among Government Security Spending, Foreign Direct Investment and Economic Growth in Nigeria, while the specific objectives are to:

- i. Investigate the impact of Government Security Spending on Economic Growth in Nigeria.
- ii. Examine the impact of Foreign Direct Investment on Economic Growth in Nigeria.

# Literature Review

## Empirical Review on FDI, Government Security Spending and Economic Growth

Cernat and Vranceanu (2002) opined that as economic growth rises, FDI inflows into host countries tend to be encouraged. In corroboration, Chakrabarti (2001), and Asiedu (2002) also showed that economic growth was a vital determinant of FDI as higher economic growth resulted in greater FDI inflows. In the investigation of the linkage between FDI and economic growth in Lan (2006) found that FDI and economic growth were vital determinants of each other. Also, the examination of the impact of FDI on economic growth in Indonesia over the period from 1997 to 2006 revealed the same results.

Khaliq and Ilan (2007) revealed that, at the aggregate level, FDI had positive effect on economic growth. In a review of the FDI-economic growth nexus in the context of developing countries, and particularly Sub-Saharan Africa, Adams (2009) suggested that FDI was a necessary but not sufficient condition for economic growth. On the analysis of the effect of FDI on economic growth in Togo over 33 years from 1975 to 2008, Aboudou (2010) found that FDI had positive impact on economic growth. By implication, the empirical analysis showed that FDI alone played an ambiguous role in contributing to economic growth in the country.

While analyzing the impact of FDI inflow and economic growth in a pre and post deregulated Nigerian economy between 1970 and 2010, Olusanya (2013) reported a unidirectional causal relationship from FDI to growth in the pre-deregulation era (1970-1986) and a no-causal relationship between the variables in the post-deregulation era (1986-2010). In the overall period, however, a bidirectional relationship was found between the variables.

Also, Oyinlola (1993) examined the relationship between the Nigeria's defense sector and economic development, and the result indicates a positive impact of defense expenditure on economic growth. Similarly, Donald and Shuanglin (1993) investigated the differential effects of various categories of expenditures on economic growth for a sample of 58 countries; their findings suggest that government expenditures on education and defense have positive effect on economic growth. This study therefore focuses on covering the research gap with the aim at investigating the relationship between defense spending and economic growth in Nigeria as there is deficiency on several studies on the above.

Odusola (1996) adopted a simultaneous equations model to capture the interrelationship between military expenditure and economic growth in Nigeria and the result suggested that aggregate military expenditure is negatively related to growth. Olabode (2012) investigated the relationship between the components of security spending and poverty reduction in Nigeria for the period 1990-2010. Four models were estimated using Dynamic Ordinary Least Squares (DOLS) method. The results suggest that military spending per soldier, military output per capital square were positively related to poverty indicator. In the study, he observed that total military spending was statistically significant in model one and three, while output per capita in model three was statistically significant, while others were statistically insignificant.

Anyanwu and Aiyedogbon (2011) investigated the relationship between defense expenditure and economic growth proxy by Gross Domestic Products (GDP). The co-integration and vector error correction mechanism were used to analyze all the variables. The results suggest that all the variables have a long run relationships and that there was positive relationship between military spending and economic growth in the long run and short run. However, the variance decomposition results indicate very little contribution of the military sector to the variables used. They thus recommended that the present level of funding of the military should be maintained.

Oriavwope and Eshenake (2013) studied the impact of security spending on the level of economic growth in Nigeria, using data for the period 1980 – 2010, from their results, the ECM result shows that spending on defense has a negative impact on economic growth while

expenditure on internal security played an important role in generating the desired level of economic growth in Nigeria. They observed that the significance was below expectation. The result of the variance decomposition indicates that the shocks of expenditure on defense did not significantly explain changes on economic growth in Nigeria while the result of the Johansen Co-integration test shows that there exists long run relationships among the variables.

#### Theoretical Review

- a. Wagner's Law of Increasing State Activity: Wagner's Law states that as per-capita income increases, the relative size of the public sector will grow. According to Wagner, as the economy becomes industrialized through FDI and other wise, population tends to concentrate in the urban areas. This in turn leads to externalities like insecurity and congestion which require government intervention and regulations. Legal authorities and the police emerge to address problems of law and order, peace and security (Aigbedion and Anyanwu, 2015). The increase of public expenditures on education, recreation, health, security and welfare services is explained in terms of the high population in the urban centers. Wagner argued that as real income increases, public expenditures on security etc. would increase more than the increase in real income. This explains the increase in economic activities lead to government in security and other economic public goods.
- **b.** Peacock and Wiseman Theory of Public Expenditure: Allan Peacock and Jack Wiseman theory, otherwise known as PWT, was based on the political theory of government spending determination which says that government desires to spend more money, that citizens do not like to pay more taxes, and that government needs to pay some attention to the aspiration and wishes of their people. In Nigeria one of the major wishes of citizens is security and economic development. PWT attempted to explain the circular trend or time pattern of change in government spending in response to development in the political economy and security needs in the society while the taxable capacity of the electorates acts as a constraint. Their theory is known as Displacement Hypothesis and is based on the experience of Great Britain. The Displacement hypothesis states that government spending grows in step wise pattern relating to the need of the people.

During periods of catastrophe or wars, government spending grew rapidly in Great Britain due to the need for security and the need to build up the economy to attract foreign investment and remained constant during the war, famine, or disaster otherwise catastrophe period. They argued that government's spending are largely determined by government revenue or taxation, PWT maintains that as the economy and income grew, tax revenue would rise thereby enabling government spending to rise in line with GNP. This implies that government spending in security is determined by the level of income available to them at a particular period and on the other hand government desire for economic growth and favourable foreign investment stimulate government increase in security spending.

# Methodology

# The Ordinary Least Squares (OLS) Model Specification

The model for this study was adopted from the work of Anyanwu and Aiyedogbon (2011). This is an attempt to determine the impact of government security spending and foreign direct investment on economic growth in Nigeria. The model to be used can be explicitly specified as follows:

Where: RGDP represents the Real Gross Domestic Product

GSS is the Government Security Spending FDI is the Foreign Direct Investment in Nigeria

EXCHR is the Exchange Rate INTR is the Interest Rate EXTR is the External Reserves

GISS is the Government Internal Security Spending.

The Real GDP is GDP at factor prices deflated by the consumer price index (at constant factor cost). The equation 3.1 can be specifically expressed in explicit econometric (linear equation) form as:

$$RGDP = \alpha + \beta_1GDS + \beta_2FDI + \beta_3EXCHR + \beta_4INTR + \beta_5EXTR + \beta_6GISS + U \dots 2$$

Taking the natural log of the variables we have:

Where; U – stochastic or random error term (with usual properties of zero mean and non-serial correlation).

The a priori expectations of the multiple regression model for the coefficients are as follows:  $\beta_1 > 0$ ;  $\beta_2 > 0$ ;  $\beta_3 < 0$ ;  $\beta_4 < 0$ ;  $\beta_5 > 0$ ;  $\beta_6 > 0$ .

Positive signs are expected for the coefficients of the explanatory variables that is positive relationships between RGDP and GDS, RGDP and FDI, RGDP and EXTR, RGDP and GISS, while negative signs are expected for the coefficients of the Exchange Rate and Interest Rate that is negative relationships between RGDP and EXCHR, RGDP and INTR.

## The Error Correction Model (ECM)

The building of Error Correction Model (ECM) starts with the basic structure of Error Correction Model (ECM) which is stated as:

#### Where:

 $\Delta Y$  is the output that is Real Gross Domestic Product which is used as a proxy for economic growth in Nigeria.

The  $\beta X$  presents the five exogenous variables i.e (GSS, FDI, EXCHR, INTR, EXTR, GISS) which are Government Defense Spending (GDS), Foreign Direct Investment in Nigeria (FDI), Exchange Rate (EXCHR), Interest Rate (INTR), External Reserve(EXTR) and Government Internal Security Spending (GISS) and  $\beta \Delta X_{t-1}$ , this present the lag (period one) of the variables.

To formulate Error Correction Model (ECM), it will begin with the Ordinary Least Squares (OLS), the Ordinary Least Squares for multiple regression model is formulated as follows:

RGDP = 
$$\alpha + \beta_1$$
GDS +  $\beta_2$ FDI +  $\beta_3$ EXCHR +  $\beta_4$ INTR +  $\beta_5$ EXTR+  $\beta_5$ GISS+U .......5

To formulate Error Correction Model (ECM) it will begin with the Ordinary Least Squares (OLS) stated in equation 5. From the equation above, the Error Correction Model (ECM) is formulated as follows:

$$\begin{split} \Delta RGDP_t = & \ \alpha_0 \ + \sum_{f=1}^m \alpha_{1i} \ \Delta RGDP_{t-i} + \sum_{g=0}^n \alpha_{2i} \ \Delta GDS_{t-j} + \sum_{h=0}^o \alpha_{2i} \ \Delta FDI_{t-j} \\ & + \sum_{i=0}^p \alpha_{2i} \ \Delta EXCHR_{t-j} + \sum_{j=0}^q \alpha_{2i} \ \Delta INTR_{t-j} + \sum_{k=0}^r \alpha_{3i} \ \Delta EXTR_{t-k} \\ & + \sum_{l=0}^s \alpha_{3i} \ \Delta GISS_{t-l} + ECM_{t-1} + \varepsilon_t (3.6) \end{split}$$

The negative sign of coefficient of the error correction term ECM (-1) shows the statistical significance of the equation in terms of its associated t-value and probability value.

#### Sources and Methods of Data Analysis

The study adopted time series data and these data were sourced from Central Bank of Nigeria online databank. The Ordinary Least Squares (OLS) was used to estimate the multiple regression model and this was used to establish the long run impact among the economic variables. The Error Correction Model (ECM) was used to estimate the over-parameterize model to determine the short run impact of the variables. Also, econometrics tools were used for stationarity test, causality test and co-integration test and E-views version 7.0 was used to process the data.

# Presentation and Discussion of Results Descriptive Analysis of Variables

Table 1: Summary Statistics

Mean	481217.4	100.1805	2693477.	105.9181	18.15143	2460680.	126.8424
Median	527576.0	69.13000	1803937.	125.8100	17.95000	1181652.	81.95000
Maximum	716949.7	296.8000	8771263.	156.8100	24.85000	7025860.	362.5000
Minimum	275450.6	4.210000	365870.6	21.88000	13.84000	30455.90	4.400000
Std. Dev.	153493.9	100.4598	2687906.	51.23307	2.375957	2336997.	118.2399
Skewness	-0.077715	1.087660	1.068108	-0.849195	0.884652	0.611488	0.635912
Kurtosis	1.456136	2.621070	2.943830	2.155838	4.366227	1.976162	2.012956
Jarque-Bera	2.106715	4.266153	3.995751	3.147494	4.372388	2.225924	2.267818
Probability	0.348765	0.118472	0.135623	0.207267	0.112344	0.328584	0.321773
Observations	32	32	32	32	32	32	32

**Source:** Author's Computation, 2017

The summary of descriptive statistics of relevant variables of study is as reported in Table 1. As may be observed from the table, the mean, median, standard deviation as well as the skewness and kurtosis measures of our variables of interest are given. The mean values of Real Gross Domestic Product, Government Defense Spending (GDS), Foreign Direct Investment in Nigeria (FDI), Exchange Rate (EXCHR), Interest Rate (INTR), External Reserves (EXTR) and Government Internal Security Spending (GISS) are481217.4, 100.1805, 2693477, 105.9181 18.15143, 2460680 and 126.8424respectively. Their respective standard deviations are153493.9, 100.4598, 2687906, 51.23307, 2.375957, 2336997 and 118.2399. The Jarque-Bera test of normality shows that the error term in our specified equation is normally distributed. This is evidenced by the respective insignificant Jarque-Bera statistics of the relevant variables.

## **Unit Root Tests**

Table 2: Result of Augmented Dickey-Fuller (ADF) Test for Stationarity

Variables	Adf Statistic	5% Critical Value	Order of interpretation
RGDP	-4.361928	-3.0521	1(2)
GDS	-3.991888	-3.0521	1(2)
FDI	-4.488016	-3.0521	1(2)
EXCHR	-4.479087	-3.0521	1(2)
INTR	-7.043606	-3.0400	1(1)
EXTR	-4.277501	-3.0521	1(2)
GISS	-4.564916	-3.0521	1(2)

**Source:** Author's Computation, 2017

The unit root test was conducted to ascertain the stationarity of the data before estimation using the Augmented Dickey Fuller (ADF). In Table 2, the Interest Rate in Nigeria is stationary at first difference with ADF statistic value of -7.043606at 5 percent. While Real Gross Domestic Product, Government Defense Spending, Foreign Direct Investment, Exchange Rate, External Reserve and Government Internal Security Spending were

stationary at second difference with ADF statistic value of -4.361928, -3.991888, -4.488016, -4.479087, -4.277501 and -4.564916 respectively at 5 percent level of significance.

# **Causality Test**

**Table 3:** Showing Causality Test

Null Hypothesis:	Obs	F-Statistic	Probability
RGDP does not Granger Cause GDS		5.05019	0.02232
RGDP does not Granger Cause FDI		4.38586	0.03320
EXCHR does not Granger Cause RGDP	30	6.13024	0.01224
FDI does not Granger Cause GDS	30	6.90228	0.00821
EXTR does not Granger Cause GDS	30	5.52659	0.01702
GISS does not Granger Cause GDS	30	3.56183	0.05617
EXTR does not Granger Cause FDI	30	9.48271	0.00249

**Source:** Author's Computation, 2017

Table 3 above shows the stationary test results of the variables used in this study. Using the probability of the results at 5 percent level of significance, the results show that Real Gross Domestic Product granger cause Government Defense Spending in Nigeria, Real Gross Domestic Product granger cause Foreign Direct Investment, Exchange Rate in Nigeria granger cause Real Gross Domestic Product, Foreign Direct Investment granger cause Government Defense Spending in Nigeria, External Reserve granger cause Government Defense Spending in Nigeria and External Reserve granger cause Foreign Direct Investment. While other peer of variables in Table 3 show non-causal relationship between themselves. This implies that most determinants of Government Security Spending and Foreign Direct Investment have less causal relationship and this means that the activities in some variables may not have effect on another variable.

# **Co-integration Test**

**Table 4:** The Johansen Co-integration Test Results

Eigenvalue	Likelihood Ratio	5% Critical Value	1% Critical Value	Hypothesized No. of CE (s)
0.903176	162.3515	94.15	103.18	None **
0.670805	87.63612	68.52	76.07	At most 1 **
0.485568	52.08072	47.21	54.46	At most 2 *
0.422369	30.81058	29.68	35.65	At most 3 *
0.225818	13.24833	15.41	20.04	At most 4
0.146203	5.057992	3.76	6.65	At most 5 *
0.390343	1.043675	0.03	1.98	At most 6*

<sup>\*(\*\*)</sup> denotes rejection of the hypothesis a 5 %( 1%) significance levelL.R. test indicates 2 co-integrating equation(s) at 5% significance level

**Source:** Author's Computation, 2017

The Johansen co-integration test results in Table 4 show the existence of two co-integrating equations at 5% significance level in the model. The hypothesis which states that there is no long-run relationship among Government Security Spending and Foreign Direct Investment and economic growth in Nigeria is rejected at 5% significance level. This implies that there exists a long-run relationship among Government Security Spending and Foreign Direct Investment and economic growth in Nigeria.

# **Ordinary Least Squares Results**

**Table 5:** Aggregate Regression Results

Variables	Coefficient	Std. Error	T- statistic	Prob.
C	12.87071	0.906317	14.20110	0.0000
LOG(GDS)	-0.254236	0.058386	-4.354401	0.0007
LOG(FDI)	-0.042939	0.052869	-0.812178	0.4303
LOG(EXCHR)	-0.018909	0.068754	-0.275027	0.7873
LOG(INTR)	0.124138	0.192964	0.643325	0.5304
LOG(EXTR)	-0.051660	0.041713	-1.238470	0.2359
LOG(GISS)	0.538536	0.114855	4.688848	0.0003
R-Squared	0.955			
Adjusted R <sup>2</sup>	0.936			
F-statistic	50.11231			
DW	2.1			

**Source:** Author's Computation, 2017

Having conducted the unit root and co-integration tests, we proceeded to obtain the long-run results of the relationship among Government Security Spending, Foreign Direct Investment and economic and economic growth using the ordinary least squares method. The result presented in Table 5 reveals that Interest Rate and Government Internal Security Spending satisfy the a priori expectations with respect to their signs. This means that Interest Rate and Government Internal Security Spending are positively related to Real Gross Domestic Product. The result further shows that Government Internal Security Spending has significant impact on economic growth at 5 percent significant level in the long-run. This means that a unit increases in Government Internal Security Spending will increase Real Gross Domestic Product by 0.54 percent. While Interest Rate impact at 5 percent level and was statistically signification explaining variation in Real Gross Domestic Product in the long-run in Nigeria.

On the other hand, Government Defense Spending, Foreign Direct Investment, Exchange Rate and External Reserve were all negatively related to Real Gross Domestic Product in Nigeria. Also, Foreign Direct Investment, Exchange Rate and External Reserve were statistically insignificant at 5 percent level of significance in explaining any variation in Real Gross Domestic Product in the long-run. While Government Defense Spending has negative impact on Real Gross Domestic Product and the impact was significant in explaining any variation in Real Gross Domestic Product at 5 percent level of significance. This means that a percent increase in Government Defense Spending will cause 0.25 percent decrease in Real Gross Domestic Product in Nigeria.

The R<sup>2</sup>of 0.955 percent indicates that 96percent of the total variation in the dependent variable is explained by variations in the independent variables and the Durbin Watson statistic of 2.1 suggests that the model is free from serial auto correlation. From the results, there are strong relationships among Government Security Spending, Foreign Direct Investment and economic and economic growth.

**Error Correction Model Results** 

Table 6: Error Correction Model Results

Variables	Coefficient	Std. Error	T- statistic	Prob.
С	12.89090	0.752757	17.12492	0.0000
LOG(GDS)	-0.326339	0.058270	-5.600478	0.0003
LOG(FDI)	-0.060962	0.047471	-1.284211	0.2311
LOG(EXCHR)	-0.097622	0.063003	-1.549485	0.1557
LOG(INTR)	0.471571	0.198143	2.379950	0.0412
LOG(EXTR)	-0.126254	0.046372	-2.722640	0.0235
LOG(GISS)	0.741551	0.115106	6.442333	0.0001
D(LOG(INTR(-1)))	-0.263950	0.116565	-2.264406	0.0498
D(LOG(EXTR(-1)))	-0.031686	0.022943	-1.381046	0.2006
ECM(-1)	-0.296157	0.542606	-2.388763	0.0406
R-Squared	0.97			
Adjusted R <sup>2</sup>	0.94			
F-statistic	38.682			
DW	2.1			

**Source:** Author's Computation, 2017

The error correction model in Table 4.6 shows that the coefficient determination (R²) is 0.97, which indicates that about 97 percent of the systematic variation in the Real Gross Domestic Product (RGDP) growth rate is accounted for by the variables taken together. The F-value of 38.68 is significant at 1 per cent level of significance, which further suggests a linear relationship between the regressors and regressand. That is, there is a strong relationship between Real Gross Domestic Product (RGDP) growth rate and Government Defense Spending, Foreign Direct Investment, Exchange Rate, Interest Rate, External Reserve and Government Internal Security Spending. While the D.W. statistics of 2.1 rules out autocorrelation.

From the results, Interest Rate and Government Internal Security Spending were found to be positively related to Real Gross Domestic Product (RGDP) and they were statistically significant in explaining any variation in the Real Gross Domestic Product (RGDP) at the short-run in Nigeria. This implies that any change in Interest Rate and Government Internal Security Spending will cause 0.47 and 0.74 percent change in the Real Gross Domestic Product (RGDP) in Nigeria respectively.

On the other hand, Government Defense Spending, Foreign Direct Investment, Exchange Rate, External Reserve, Interest Rate at lag one and External Reserve at lag one were found to be negatively related to Real Gross Domestic Product (RGDP). Government Defense

Spending, Foreign Direct Investment, Exchange Rate, External Reserve, and Interest Rate at lag one were statistically significant in explaining any variations in the Real Gross Domestic Product (RGDP) at the short-run in Nigeria. This implies that any change in Government Defense Spending, Foreign Direct Investment, Exchange Rate, External Reserve, and Interest Rate at lag one will cause 0.33, 0.061, 0.098,0.126 and 0.264 percent decrease in the Real Gross Domestic Product (RGDP) in Nigeria respectively.

While Foreign Direct Investment, Exchange Rate and External Reserve at lag one were statistically insignificant in explaining any variation in the Real Gross Domestic Product (RGDP) at the short-run in Nigeria. This implies that any change in Foreign Direct Investment, Exchange Rate and External Reserve at lag one will cause insignificant impact on Real Gross Domestic Product (RGDP) in Nigeria. Also, from the results, the coefficient of the error correction term is -0.296 which implies that the speed of adjustment is approximately 0.3 per cent per quarter. The negative sign and significant coefficient is an indication that co-integrating relationship exists among the variables that are Real Gross Domestic Product (RGDP), Government Security Spending and Foreign Direct Investment in Nigeria. The size of the coefficient on the error correction term (ECT) denotes that 0.3 per cent of the disequilibrium caused previous year's shock converges back to the long run equilibrium in the current year. This implies that in the short-run, the Government Security Spending and Foreign Direct Investment have less impact on economic growth in Nigeria.

#### **Conclusion and Recommendations**

In conclusion, the study has examined the relationship among Real Gross Domestic Product, Government Security Spending and Foreign Direct Investment. The results have shown that Government Defense Spending and Foreign Direct Investment have negative and insignificant impact on Real Gross Domestic Product but Government Internal Security Spending has positive and significant impact on Real Gross Domestic Product in Nigeria. This implies that the Government Internal Security Spending has great potential for economic growth in Nigeria that if government wants to increase FDI and domestic economic activities there is the need for proper channeling of funds to improve the security situation in Nigeria.

This result agreed with the work of Oriawote and Eshenake (2013) which shows that spending on defense has a negative impact on economic growth while expenditure on internal security played an important role in generating the desired level of economic growth in Nigeria. The poor performance of Foreign Direct Investment may due to the level of insurgency and trade policies inconsistency in Nigeria which have been major challenges in Nigeria. Also, the low negative and poor impact of Government Defense Spending can result from diversion and mismanagement of Government Defense funds in Nigeria.

Therefore, the study recommends that fiscal discipline should be adhered to strictly; the fight against corruption should be total and transparent; government should straighten and deepen all incentives, institutional and regulatory frameworks in the country, issues of insecurity should be addressed without any sentiment in order to foster foreign direct investment for sustainable economic growth in Nigeria.

#### References

- Adams, S. (2009). Can foreign direct investment (FDI) help to promote growth in Africa? *African Journal of Business Management*, 3(5),178-183.
- Al-Yousif Y, (2000). Does government expenditure inhibit or promote economic growth: Some empirical evidence from Saudi Arabia. *Indian Economic Journal*, 48 (2).
- Anna, C. M. (2010). *Do trade not aid, determinants of military expenditure in developing countries*. Eco.uab.es/ue/TFC%2031%2020%20Campos.pdf
- Anyauwu, S. & Aiyedegbon J. O (2011). Defense EXPENDITURE AND ECONOMIC in Nigeria: A vector error correction model (VECM) approach. *Asian Journal of Empirical Research* 1(2) 31-40.
- Aigbedion. I. M & Anyanwu, O. S. (2015). Government Education Expenditure for Inclusive Growth in Nigeria: An Error Correction Model. Proceeding of the Nigerian Economic Society 56<sup>th</sup> Annual Conference October 12-15, 2015 Sheraton, Abuja-Nigeria.
- Asiedu, E. (2002). 'On the determinants of foreign direct investment to developing countries: is Africa different?' *World Development*, *30*, 107-119.
- Chakrabarti, A. (2001). 'The determinants of foreign direct investment: sensitivity analyses of cross-country regressions'. *Kyklos*, *54*, 89-113.
- Donald, N. B. & Shuanglin, L (1993). Differential effects on economic growth of government expenditures on education, welfare and defense, *Journal of Economic Development 18* (1).
- Gaiya, B. A. (2011). An analysis of defence expenditure and growth in Nigeria 1970-2008. A P.hD. dissertation, Department of Economics, Ahmadu Bello University Zaria.
- Khaliq, A. & Ilan Noy, I. (2007). Foreign direct investment and economic growth: Empirical Evidence from Sectoral Data in Indonesia. *Self-Publication*.
- Lan, N.P. (2006). Foreign direct investment and its Linkage to Economic Growth in Vietnam: A Provincial Level Analysis. *Centre for Regulation and Market Analysis*, University of South Australia.
- Odusela, F. & Adeyodele, B. (1996). Military Expenditure and Economic Growth, *Nigerian Journal of Economic and Social Studies 38 (1, 2&3) 199-211.*
- Olabode, P. O. (2012): Defense spending and poverty reduction in Nigeria. *American Journal of Economics* 2(6) 122-127.

- Olusanya, S.O. (2013). Impact of foreign direct investment inflow on economic growth in a Pre and Post Deregulated Nigeria Economy. A granger causality test (1970- 2010), *European Scientific Journal*, 9(25), 335-356.
- Oriavwope, V.E. & Eshenake S.J. (2013): A vector error correction modeling of security spending and economic growth in Nigeria. *Journal of Accounting and Finance Research*, 2 (2).
- Oyinlola, O. (1993) Nigeria's National Defence and economic development: An impact analysis. *Scandinavian Journal of Development Alternative 12 (3)*.
- Shenkar, O. (2007). Foreign direct investment: theory and application. Retrieved from www.sagepub.com.upm-data/18594 chapters 3pdf on November 13, 2013.
- Shiro, A. A. (2008). *The impact of FDI on the Nigerian economy.* Paper delivered at the 2nd National Conference organized by the Department of Finance, university of Lagos, Lagos State. Retrieved fromwww.unilag.edu.ng/research view