Impact of Foreign Direct Investment on Economic Growth in Nigeria (1986-2017): Evidence of Oil Sector

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Abstract: *This study explores the impact of the inflow of foreign direct investment into oil sector on economic growth in Nigeria during the period 1986-2017. This study employed Autoregressive Distributed Lag (ARDL) Bounds testing approach to test for long run relationship. The long run dynamics are also captured from ARDL cointegration model. The results of the ARDL Bounds test suggest that there is a long run relationship between oil sector FDI and economic growth in Nigeria. This result is consistent with a number of earlier studies reviewed in the literature that found oil sector FDI and economic growth to be cointegrated in the long run. The ARDL regression result showed that government spending on infrastructure has a positive and insignificant effect on economic growth in Nigeria compare to its expected impact. The study recommended that the government of federal republic of Nigeria should increase spending on provision of infrastructure such as more roads, electricity supply as foreign direct investment (FDI) responds to it brilliantly well*
Key Words: *Foreign direct investment, economic growth, oil sector, Auto Regressive Distributed Lag Model*

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I. Background to the Study

The importance of the oil sector to the National economy of Nigeria cannot be over emphasized (Ibi-Ajayi, 2014). It suffices to state that oil constitutes about 90% of Nigerian exports, her earnings and foreign reserve (UNCTAD 2007). At independence in 1960 Nigerian economy was agrarian, however after a decade of independence there was a shift towards the oil sector. Indeed, by the 1970s Nigeria's economic performance has increased given the revenue from oil resources. This was one of the reasons for the implementation of the popular Jerome Udoji's award which was headed by Jerome Udoji in 1975 over minimum wage increment. On the other hand, the crash of oil prices in the international oil market in the early 1980s arising from oil glut, resulted in precarious economic situation that over stressed the balance of payment and compounded deficit problem. This condition made it difficult for the government to fund her recurrent expenditure (leading to salary arrears) as well as making it difficult to execute capital expenditure. Privatization has been a very important source of FDI in many developing countries. Nigeria has implemented two rounds of privatization since 1980s (United Nation, 2009).

The Structural Adjustment Programmed (SAP) was in 1986-1993 in Nigeria aimed to attract Foreign Direct Investment to Nigeria through the adoption and implementation of deregulation and privatization policies. Africa countries, particularly Nigeria, joined the rest of the world in search of FDI as evidenced by the formation of the New Partnership for Africa's Development (NEPAD) which has the desirability of increasing foreign investment to Africa as a major component (Ibi-Ajayi, 2014). Consequently, in 2007, UNCTAD World Investment Report showed that FDI inflow to West Africa was dominated by inflow to Nigeria which received 70 percent of the sub-regional total inflow and 11percent of Africa's total inflow. Out of this, Nigeria's oil sector alone receives 90 percent. The UNCTAD report noted that investment inflow into Nigeria and the rest of Africa increased substantially in 2008 but declined significantly in 2009. Foreign Direct Investment (FDI) inflows to Nigeria dropped considerably between 2009 and 2010 by $3.7bn from $6bn in 2009 to $2.3bn in 2010 (UNCTAD, 2011). This immense fall of 60.4 percent shows the need for Nigerian government to begin to rigorously and courageously address the challenges to foreign investment and other business interests in the country. In spite of the economic reforms by the government, no appreciable improvement was made. Insecurity in the land is a primary factor responsible for the sharp decline. This is a true reflection of Nigeria's economic, social, legal and cultural environment which raises anxiety from prospective foreign investors (UNCTAD, 2011).

In 2016, $20.83 million foreign capital inflow was recorded in the oil and gas sector in the first quarter; $200.39 million was recorded in the second quarter; while $171.63 million and $227.3 million were recorded in the third and fourth quarters respectively. The NBS reported the largest amount of capital import in the second quarter of 2017, closely followed by oil and gas and telecommunications sectors, while fishing, transport,

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tanning and weaving sector recorded no capital importation in the second quarter of 2017 (NBS 2017). Foreign investment inflow into the Nigerian oil and gas industry rose to $291.47 million in the first six months of the year, between January and June 2017, according to data released by the National Bureau of Statistics (NBS). The NBS in its Second Quarter 2017 Foreign Capital Importation Report, disclosed that foreign investment inflow into the oil and gas sector appreciated by 31.76 per cent compared to an inflow of 21.21 percent recorded in the first six months of 2016. (NBS 2017).

The NNPC identified the Joint Venture alternative financing upstream investments to include: The $1.2 billion multi-year drilling for 36 offshore/onshore oil wells under the NNPC/Chevron Nigeria Limited JV, codenamed project Cheetah and the NNPC/First E&P JV and Schlumberger tripartite $800 million alternative funding agreement for the development of the Anyalu and Madu fields in the Niger Delta. Others, the NNPC had stated are the recent agreements executed in London for the $1 billon NNPC/SPDC JV Project Santolina and the NNPC/Chevron $780 million Project Falcon, hitherto financed through JV Cash Call. It declared that the four major investments were capable of providing incremental revenue to the national treasury and also the economic growth of Nigeria by over $30 billion within the next 10 years.

The NNPC further stated that the investments would serve as vehicle to fast-track the prevailing post cash-call exit era. It noted that the arrangement would allow the NNPC to operate from the production revenue less the first line charge to government which is the royalties and petroleum profit tax. The NNPC also disclosed that a consortium of Chinese banks had invested $250 million in the Nigerian petroleum industry. The NNPC investments were secured from the Chinese banks, which were staking their funds in the Nigerian petroleum industry for the first time, at the recent financing agreements signed in London. It added that the Chinese banks had made commitments to bringing in as much money as might be needed to finance oil and gas investments in Nigeria. (NBS,2017). Despite the policies formulated and implemented by government to encourage FDI inflow over years, the effect of FDI in the oil sector in Nigeria still remain scanty. This study however examines the contributions of FDI in oil sector to growth by examining the policy gap which makes the impact of FDI in oil sector on economic growth in Nigeria scanty or less effective. Consequently, the study attempts to answer the following question: firstly, does foreign direct investment in the oil sector has impact on in economic growth in Nigeria over the study period? And secondly, does the level of infrastructure in Nigeria determines the inflow of foreign direct investment into the oil sector?

II. Literature Review
Conceptual Issues:
Concept of Foreign Direct Investment in Nigeria

According to Thomas and Peter (2016) FDI is any flow of lending to, or purchase of ownership in a foreign enterprise that is largely owned by the residents of the investing country. According to Ayanwale (2007), many countries especially developing countries now see FDI as an important element of economic development. FDI is seen as a combination of capital, technology, marketing and management. Many African countries are improving their business climate in order to attract FDI. Nigeria as a country, given its vast natural resource and large market size is ae a major recipient of FDI in Africa and indeed is one of the top three leading African countries that consistently receives FDI.

Majority of the investors in the Nigerian business environment had been from those countries where the oil barons had originated from. For example, The Royal Dutch Company Shell from the Netherlands, Total Oil from France and ENI from Italy as well as Exxon Mobil, Texaco and Chevron form the United States of America (UNCTAD, 2017). Most FDI inflows into Nigeria are reinvested earnings from the oil multinationals (Kolawole and Henry, 2013). Although much of the investment was by large multinational companies that were already operating in the country, there have been some new European entrants since the beginning of this decade, and South African companies have also strongly increased their presence in recent years, particularly in the mobile phone sector. Nigeria the second largest FDI recipient has more of it concentrated in the extractive industry but a veritable non-oil sector, manufacturing sector that recorded 47 percent of FDI stock in 1992 has been a great source of FDI to the country. The recent banking consolidation exercise also boosted FDI (and portfolio inflows) into Nigeria as existing foreign banks increased the capitalization of their subsidiaries to meet the new minimum capital requirements.

Concept of Economic Growth:

Economic growth is commonly measured as the annual rate of increase in a country's gross domestic product (GDP). In other words, economic growth is defined as long term expansion of the productive potential of the economy. According to the neoclassical point of view, economic growth is entirely driven by the accumulation of input factors and technical progress while Endogenous growth approaches stress the role of entrepreneurship and innovations.

Todaro (1992) argue that foreign firms bring not only financial capital but also managerial, entrepreneurial, and technological skills that lack in LDCS and these skills can be transferred to domestic firms through different channels. Also, government's budget deficit can be filled by tax on profit that may be collected from transnational companies. The total amount of foreign exchange that can be obtained from export and foreign aid falls short of foreign exchange that is required by LDCS. Todaro (1992) FDI can help to fill the gap by reducing part or the entire deficit in the balance of payments. Moreover, multinational companies' products that can be exported can generate net positive export earnings.

Theoretical Literature
Economic Growth Models and Their Relevance to Nigeria economy:
Harod-Domar Growth Model

According to Chenery and Strout (1966) foreign resources are considered necessary for growth in developing countries. Some growth theories assume that some gaps can only be filled by transfer of resources from abroad. Growth models such as that of Harod – Domar which emphasized capital shortage argues that the infusion of foreign capital would lead to growth. Specifically, foreign resources are capable of replenishing the inadequate domestic savings in developing countries. While a particular size of saving or investment is required to attain a target rate of growth, there is always a difference between planned investment (Ip) and planned savings (Sp). The saving gap (Sg) is taken as an indication of the size of foreign resources to achieve a planned growth rate. This can be expressed as

FR = Sg = Sp – Ip

Where Sp< Ip, which implies insufficient domestic resources are available to support required level of investment. The above situation implies that given the required foreign resources such as foreign capital, a developing country like Nigeria may tend to achieve its planned rate of growth on assumption that all foreign resources are invested.

The Solow's Neo-classical Growth Model

Robert Solow (1956). "A Contribution to the Theory of Economic Growth*, according to Solow, the economy will be more toward a stable steady – state equilibrium, in the steady – state equilibrium, there can be permanent economic growth only if there is technological progress. When the economy transitions from one steady state to another, medium – term growth in per capita output can occur, an economy will transition toward a higher steady state if there is an increase in its rate of saving or a decrease in its rate of population growth. An economy will experience higher permanent economic growth if there is an increase in its rate of labor – enhancing technological progress.

The Solow model predicts only conditional convergence. Only if countries have the same saving rates, the same production functions, the same rates of technological progress, the same depreciation rates, and the same population growth rates can we be sure that their economies will converge to the same steady – state level of per capita output.

Assumptions of Solow's Neoclassical Growth Model
- There is only one commodity, output as a whole.
- Four variables include: output (**Y**), capital (**K**), labour (**L**) and "knowledge" or the "effectiveness of labour" (**A**).
- Production function: **Y(t) = F (K(t) , A(t) L(t)) (1)** where t denotes time.

Capital Accumulation
- Size of the labor force is fixed (no population growth)
- GDP per capital will increase only due to increase in capital stock
- Households' savings are used as investment into capital accumulationK
    I = Sy
- Investment is proportional to output: higher Y => higher sY=> higher I
- Capital depreciates at an exogenous rate **δ**
- Every year a fraction of capital δ breaks down and becomes useless $K_{t+1} = I_t + (1-δ)K_t$

Empirical Literature

Pulstova (2016) studied the effects of foreign direct investment and firm export on economic growth in Uzbekistan. The study covered the period 1990 – 2014 and descriptive method was adopted. He found that an increase in FDI may cause firms to increase their export of products. Muntah, Khan, Haider and Ahmad (2015) studied the impact of foreign direct investment on economic growth of Pakistan covering the period 1995 to 2011. The data were sourced from World Bank, Economy of Pakistan Books, Index Monde and Economic

Survey of Pakistan. Regression analysis was used in the study. They found that FDI impacts positively on economic growth of Pakistan.

Agrawal (2015) assessed the relationship between foreign direct investment and economic growth in the five BRICS economies, namely, Brazil, Russia, India, China and South Africa over the period 1989 – 2012. Cointegration and Causality analysis were applied. The results indicate that foreign direct investment and economic growth are cointegrated at the panel level, indicating the presence of long run equilibrium relationship between them. Results from causality tests indicate that there is long run causality running from foreign direct investment to economic growth in these economies.

Khaliq and Noy (2007) studied the impact of foreign direct investment on economic growth using detailed sectoral data for FDI inflow to Indonesia over the period 1997 – 2006. The sectors examined are: farm food crops, livestock product, forestry, fishery, mining and quarrying, non-oil and gas industry, electricity, gas and water, construction, retail and wholesale trade, hotels and restaurants, transport and communications, and other private and services sectors. According to their findings, in the aggregate level, FDI is observed to have a positive effect on economic growth. However, when accounting for the different average growth performance across sectors, the beneficial impact of FDI is no longer apparent. When examining different impacts across sectors, estimation results show that the composition of FDI matters for its effect on economic growth with very few sectors shows positive impact of FDI and one sector even showing a robust negative impact of FDI inflows (mining and quarrying).

Uwubanmwen and Ogiemudia (2016) examined the effect of foreign direct investment on economic growth in Nigeria using annual time series data covering the period 1979 to 2013. The data were analyzed using Error Correction Model. The results reveal that FDI has both immediate and time lag effect on Nigeria economy in the short run but has a non-significant negative effect on the Nigeria economy in the long run.

Ayanwale (2007) examined FDI and economic growth in Nigeria using secondary data sourced from the Central Bank of Nigeria, International Monetary Fund and Federal Office of Statistics. The period of analysis was 1970- 2002. An augmented growth model was estimated via the ordinary least squares and the 2SLS method to ascertain the relationship between the FDI, its components and economic growth. Results suggest that the determinants of FDI in Nigeria are market size, infrastructure development and stable macroeconomic policy. Openness to trade and available human capital, however, are not FDI inducing. He observed that FDI in Nigeria contributes positively to economic growth. He stressed that although the overall effect of FDI on economic growth may not be significant, the components of FDI do have a positive impact. He added that FDI in the communication sector has the highest potential to grow the economy and is in multiples of that of the oil sector. The manufacturing sector FDI negatively affects the economy, reflecting the poor business environment in the country. According to him, the level of available human capital is low and there is need for more emphasis on training to enhance its potential to contribute to economic growth.

Dominic (2014) examined the impacts of Foreign Direct Investment (FDI) and Oil export on Economic growth in Nigeria from 1970 through 2011. The Augmented Dickey Fuller (ADF) unit root test was adopted to determine the stationary properties of the data, while the order of integration of the data was tested using the Johansen Co-integration test. The co-integration result produce two co-integrating equations, which confirms the existence of long-term relationship among the variables- Gross Domestic Product (GDP) and Foreign Direct Investment (FDI,) Oil Export, Exchange rate Inflation as well as Trade Openness. Also, the ordinary Least Square (OLS) or short run regression analysis result shows that 87 percent of total changes in economic growth are explained by the explanatory variables.

Odularu (2014) examined the relationship between the crude oil sector and the Nigerian economic performance. Using the Ordinary Least Square regression method, the study revealed that crude oil consumption and export contributed to the improvement of the Nigerian economy. On the other hand, Ibeh (2013) investigated the impact of the oil industry on the economic growth performance of Nigeria. Using ordinary least square (OLS) regression technique, the researcher regressed Gross Domestic Product (GDP), against oil Revenue (OREV) and time appeared as repressors. A two tailed test of 5 percent significant levels were conducted indicating that the two explanatory variables did not have any significant impact on growth performance of the Nigerian economy within the same period. The researcher therefore recommends that government should formulate appropriate policy mix that would motivate the firm in the oil sector to enhance improved performance and contribution of the sector. Her findings contradict the findings of Odularu (2008), who find a positive relationship between oil sector and Nigeria economic performance.

Nexus Between Oil Sector FDI and Nigerian Economic Growth:

Renewed research interest in FDI stems from the change of perspectives among policy makers from "hostility" to "conscious encouragement", especially among developing countries. FDI had been seen as "parasitic" and retarding the development of domestic industries for export promotion until the 1990s in Nigeria. However, Bende-Nabende and Ford (2014) submit that the wide externalities in respect of technology

transfer, the development of human capital and the opening up of the economy to international forces, among other factors, have served to change the former image.

Findlay (1978) postulates that FDI increases the rate of technical progress in the host country through a "contagion" effect from the more advanced technology, management practices, etc. used by foreign multinational firms. On the basis of these assertions, government of various countries has often provided special incentives to foreign firms to set up companies in their countries.Caves (2016) observed that the rationale for increased efforts to attract more FDI where premised from the belief that FDI has several positive effects. Among these are productivity gains, technology transfers, introduction of new processes, managerial skills and know-how in the domestic market, employee training, international production networks, and access to market. Borensztein (2008) see FDI as an important vehicle for the transfer of technology, contributing to growth in larger measure than domestic investment

III. Model Specification

The model used in this study was adopted from the earlier work of Odularu (2014), the model was analyzed using an econometric model of multiple regression analysis to test the relationship between dependent variable and independent variables. In order to capture the impact of oil sector FDI on economic growth in Nigeria, this study modified the empirical work of Odularu (2014).

However, in an attempt to capture the essence of this study and based on previous studies. The Real Gross Domestic Product (RGDP), Oil sector FDI (OSFDI), Exchange Rate (EXR), level of infrastructure (IFR), Degree of Openness (DOP) and Inflation (INF) are used to formulate this model. Thus, the model is represented in functional form of the variables specified is shown below:

RGDP = f (OSFDI, EXR, INF, IFN, DOP) ……………………………………………3.1

The stochastic form of the model is given in equation (2):

$RGDP_t = \beta_0 + \beta_1 OSFDI_t + \beta_2 EXR_t + \beta_3 INF_t + \beta_4 IFN_t + \beta_5 DOP_t + U_t$…………… 3.2

Based on the assumption of linearity of the variables, we take Log of both sides. Since logarithmic transformations of variables are very popular in econometrics because many economic time series data exhibits a strong trend and taking the natural logarithm of a series effectively linearizes the exponential trend.

$InRGDP_t = In\beta_0 + \beta_1 InOSFDI_t + \beta_2 InEXR_t + \beta_3 InINF_t + \beta_4 InIFN_t + \beta_5 InDOP_t + U_t$……….3.3

Since this study is dealing with time series data, we preferred to take log of variables to avoid cumbersomeness in the modelling. Therefore, the model is given below:

$LogGDP = \beta_0 + \beta_1 logOSFDI + \beta_2 logEXR + \beta_3 logINF + \beta_4 IFN + \beta_5 DOP + U$ ………3.4

RGDP=   REAL Gross domestic product in percentage

OSFDI= Oil sector FDI in percentage

$EXR_=$ Exchange rate in percentage

INF= Inflation in percentage

IFN= Level of infrastructure proxy government capital expenditure in naira

DOP= Degree of Openness proxy international trade in naira

β_0 = constant term/parameter intercept

β_1-β_5= coefficients of each of the independent variables.

U_t= Error Term.

Before proceeding to cointegration test, the stationarity of employed variables has to be examined. In order to test the order of integration of the variables, the ADF unit root test will be applied. Following the stationarity test, the Autoregressive Distributed Lag (ARDL) bounds testing approach to cointegration proposed by Pesaran et al. (2001) will be used to analyze long-run relationships between the variables. This procedure is adopted because it has better small sample properties than alternative methods. Moreover, it can be used irrespective of the order of integration of the regressors. The bounds testing procedure consists of estimating an unrestricted error correction model with the following generic form in which each variable comes in turn as a dependent variable, according to Haug (2002), ARDL bounds testing approach is more suitable and provides better results for small sample size and the short and long-run parameters are estimated simultaneously. The unrestricted error correction model is used for equation- 3.5.

The ARDL representation of the trade openness and economic growth relationship can be constructed as:

$\Delta RGDP_t = \lambda_0 + \lambda_1 OSFDI_{t-1} + \lambda_2 INF_{t-1} + \lambda_3 IFR_{t-1} + \lambda_4 EXR_{t-1} + \lambda_5 DOP_{t-1} + \lambda_6 \Delta OSFDI_{ti} + \lambda_7 \Delta INF_{t-i} + \lambda_8 \Delta IFR_{t-i} + \lambda_9 \Delta EXR_{t-i} + \lambda_{10} \Delta DOP_{t-I} + \eta ECM_{t-1} + \varepsilon_t$ …………………….3.5

In the above model, Δ is the first-difference operator, and λs indicate long run coefficients and short run coefficients are represented as. The hypothesis of no cointegration deals with H0: $\lambda_1 = \lambda_2 = \lambda_3 = \lambda_4 = \lambda_5 = \lambda_6 = \lambda_7 = \lambda_8, = \lambda_9, = \lambda_{10} = 0$ and H1: $\lambda_1 \neq \lambda_2 \neq \lambda_3 \neq \lambda_4 \neq \lambda_5 \neq \lambda_6 \neq \lambda_7 \neq \lambda_8 \neq_9 \neq_{10} \neq 0$ is an alternative hypothesis of cointegration.

The short-run causality is thus determined from the following ARDL model;

$\Delta RGDPt = \psi 0 + \psi 1 \Delta OSFDIt\text{-}i + \psi 2 \Delta INFt\text{-}i + \psi 3 \Delta IFRt\text{-}i + \psi 4 \Delta EXRt\text{-}i + \psi 4 \Delta DOPt\text{-}i + \eta ECMt\text{-}1 + \epsilon t$…………………………………3.6

where, Δ is the difference operator, ECM representing the error - correction term derived from the long-run cointegrating relation from the above specified ARDL models. In equation, η should exhibit a negative and significant sign for causality to exist in the long run. The aprioriexpectations are that $\beta 1$, $\beta 2$, ……….$\beta 5$, be positive.

IV. Data Analysis and Presentation of Results
Table 1: Unit Root Test

Variables	ADF Statistic	Critical Value (5%)	Order of Integration	Prob	Remark
InRGDP	-7.997533	-2.986225	1(1)	0.0323	Stationary
InDOP	-5.800687	-2.967767	1(1)	0.0000	Stationary
InEXR	-5.649414	-2.967767	1(1)	0.0000	Stationary
InINF	-4.829030	-2.967767	1(1)	0.0000	Stationary
InIFR	-6.420641	-2.976263	1(1)	0.0000	Stationary
InOSFDI	-8.651451	-2.967767	1(1)	0.0000	Stationary

Source: Researcher's Computation using Eviews 9.5

Table 1 presents the summary of the Augmented Dickey Fuller (ADF) test result for all the time series data. The result obtained reveals that the null hypothesis (H_0) of a unit root can be rejected at first difference I (1) for all the variables, since the ADF statistic is less than the critical value at 5% level of significance. Moreover, further evidence of stationarity was also revealed from the result of p-value which is less than 5% for all the variables. The results as detailed below shows the unit root test result carried out on Real Gross Domestic Product (RGDP), Oil sector FDI (OSFDI), Exchange Rate (EXR), level of infrastructure (IFR), Degree of Openness (DOP) and Inflation (INF). The result shows the existence of unit root for all the variables at their levels. ARDL bound test and ARDL co-integration tests was used for detecting long run relationship between oil sector FDI and economic growth of Nigeria.

Table 2:Summary of ARDL Regression Result

Variables	Coefficient	Std Error	t-Statistic	Prob*
InRGDP	0.361585	0.135836	2.661921	0.0186
InOSFDI	1.420005	0.349896	-4.058357	0.0012
InEXR	-2.648260	0.480798	-5.508121	0.0001
InINF	-0.485446	0.247038	-1.905069	0.0000
InDOP	0.793816	0.316440	-2.508581	0.0250
InIFR	6.043507	4.033407	1.500121	0.1558
C	12.92602	4.846133	6.010054	0.0118
	R-Square= 0.856656 Prob(F-Statistic) = 0.00000	Adj R-square= 0.744029 Durbin Watson= 2.570671	F-statistic= 7.606132	

Source: Researcher's Computation using Eviews 9.5

The summary of the Auto Regressive Distributed Lag Model (ARDL) as presented in table 2 reveals that the explanatory power of the model i.e. R-squared is 0.856656, This showed that about 85% of the variation in Real Gross Domestic Product (RGDP) was explained by the following independent variables, Oil sector FDI (OSFDI), Exchange Rate (EXR), level of infrastructure (IFR), Degree of Openness (DOP) and Inflation (INF) respectively. The remaining 15% can be attributed to other variables which were not captured in the model, but also influence Real Gross Domestic Product (RGDP) in Nigeria, but are accounted for by the random variable (Ɛ). Also, the value of the Durbin Watson (DW) stands at approximately 2.5, which is greater than 2, it can therefore be concluded that the model is free from autocorrelation. The absence of auto correlation simply means the independent variables are truly independent and therefore reliable in making forecasting, policy recommendations in the growth of Nigerian economy.

The Coefficient of Oil Sector FDI (OSFDI) is positive and statistically significant at 5% level of significance. Meaning that, holding other independent variables constant, a percentage increase in Oil Sector FDI (OSFDI) will lead to approximately 1.42% increase in Real Gross Domestic Product (RGDP). Furthermore, since the p-value is 0.0012 is less than 0.05, the null hypothesis can be rejected, Thus, the study therefore concludes that, Oil Sector FDI (OSFDI) has a significant impact on Real Gross Domestic Product over the sampled period of the study. i.e. 1986-2016.This result conform with earlier studies carried out by Usman (2016), while it goes in contrast with earlier study carried out by Uwubanmwen and Ogiemudia (2016) who found a negative relationship oil sector and economic growth in long run. The study therefore rejects the null hypothesis which states that oil sector FDI does not have a significant impact on Gross Domestic Product.

Moreover, the coefficient of Exchange Rate (EXR) is -2.648260. Though significant, it implies that a percentage increase in exchange rate will lead to -2.648260 decrease in Gross Domestic Product. The significance is based on the p-value of 0.0001 which is less than 0.05 (at 5% significance level.). Exchange rate (EXR) is negative and significant which implies the phenomenon of capital flight and excessive imports that characterized the period of 1981-1987. The coefficient of Inflation (INF) is -0.485446, implying that inflation rate has a negative impact on Gross Domestic Product as investors get. This means that a percentage increase in Inflation will lead to approximately -0.48 decrease in Gross Domestic Product (RGDP). The pvale stands at 0.0000, which is absolutely significant, this conform with a-priori expectation, since decreased inflation rate is expected to improve the performance of the Gross Domestic Product. Rate of inflation is a crucial factor in influencing the inflow of foreign investment. A high rate of inflation signifies economic instability associated with inappropriate government policies, especially the monetary fiscal policy mix (Macpherson, 2013). Khan & Mitra (2014) opine that high rates of inflation distort the economic activities, leading to lesser inflow of capital. The implication is that a low and stable inflation rate acts as a sign of internal economic stability. This is because it reduces uncertainty and boosts the confidence of foreign investors and businesses for making investment decisions. On the other hand, high inflation rate signifies the inability of the Central Bank to set appropriate monetary policies. A high inflation rate also impacts capital preservation of foreign investment. It affects profitability as higher prices can lead to increased costs and lower profits. So, stable inflation rate is desirable to attract foreign capital inflow (Aijaz, Siddiqui, &Aumeboonsuke, 2014).

Furthermore, the result also indicated that the coefficient of Degree of Openness (DOP) as a positive impact of 0.793816 on Real Gross Domestic Product. This implies that a percentage increase in degree of openness will increase Real Gross Domestic Product with approximately 0.79%. The result of the p-value (0.0250) is less than 0.05 (at 5% level of significance), which means the impact is statistically significant. Therefore, the study rejects the null hypothesis which states that degree of openness has no significant impact on Real Gross Domestic Product. The degree of openness (DOP) variable is significant implying that there is less degree of trade restriction which hampers FDI inflow this explains the inflow of FDI from China and other countries into the oil sector of Nigeria.

However, the coefficient of level of infrastructure (IFR) is 6.043507. Though insignificant, it implies that a percentage increase in level of infrastructure will lead to 6.043507 increase in Gross Domestic Product. The non-significance is based on the p-value of 0.1558 which is greater than 0.05 (at 5% significance level.). This agrees with the result of level of infrastructure that is positive and insignificant. This was the case of long run and short run related. Besides, the estimation shows that a percentage increase in government expenditure on infrastructure in the previous 1year causes economic growth to increase by approximately 6.04 percentage. this is not surprising because funds meant for the development of infrastructures have not been properly utilized and most cases embezzled, thus precipitating the reduction of the inflow of oil sector FDI into Nigeria which makes the impact insignificant. The F-statistics is used to test for simultaneous significance of all the estimated parameters. However, the lower the probability value of obtaining the f-statistic, the better the overall significance of the regression. The result obtained from the regression result reveals that the Prob(F-statistic) =0.0000000 at 5% level of significance. This implies that the explanatory variables; Oil sector FDI (OSFDI), Exchange Rate (EXR), level of infrastructure (IFR), Degree of Openness (DOP) and Inflation (INF) are simultaneously significant in explaining the variation in Real Gross Domestic Product (RGDP).

Table 3: *Bounds Test for Cointegration*

		F-statistic= 5.322966 **K= 5**
Critical Values	**Lower Bound 1(0)**	**Upper Bound 1(1)**
10%	2.26	3.26
5%	2.62	3.79
1%	2.62	3.41

Source: Researcher's Computation using Eviews 9.2.

The unique order of integration of the variables supports us to investigate the long run relationship between the variables by applying ARDL bounds testing approach to cointegration. The appropriate lag length is prerequisite to continue the ARDL bounds testing to examine cointegration between the series. The results of the bounds test for cointegration, together with critical values of Pesaran and Pesaran (1997) are reported in Table 4. The decision rule as explained by Pesaran and Shin (1999) requires that the F statistics values of any of the variables be greater than the critical bound values at any significance level (10%, 5%, or 1%) for long run relationship to exist. The calculated F-statistic together with the critical bounds values as reported in Table 3 shows that the calculated value of the F-statistic (i.e. 5.322966) for the bounds test for cointegration exceeds the upper bound critical value of 2.62 at 5% level. Hence, reject null hypothesis of no cointegration relationship.

Based on the result in Table, concluded that there is strong support for a long-run relationship between oil sector FDI and economic growth in the model for Nigeria. That is, a long run relationship exists among the variables under investigation.

Post Estimation

Table 4: *Heteroskedasticity Test: Breusch-Pagan-Godfrey*

F-statitics	5.505349	Prob. F(5,25)	0.0015
Obs R-squared	16.24561	Prob. Chi-Square (5)	0.4500
Scaled explained SS	12.90115	Prob. Chi-Square (5)	0.4849

Source: Researcher's Computation Using Eview 9.5

As reported in table 3, Breusch-Pagan-Godfrey test was conducted to test for heteroskedasticity. The result shows probability of 0.4828 which is in excess of 0.05. This leads to the rejection of the presence of heteroscedasticity in the residuals. Summarily, the diagnostic tests reveal that the residuals are serially uncorrelated and homoskedasticity based on this result. It can therefore be deduced that the model is valid and can be used for policy making without re-specification.

Normality Test

The Jarque-Bera Test result of normality is contained in Figure 1. The result revealed that the residuals of the data are normally distributed. The null hypothesis of normality of the residuals of the data is accepted at 88.87 per cent confidence level as indicated by the probability value of 0.377831 and Jarque-Bera value of 1.946619 which is greater than zero.
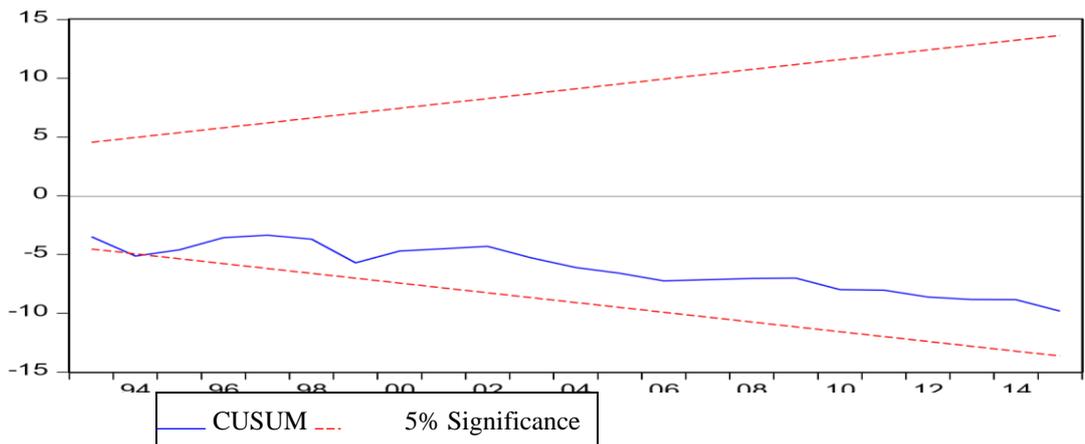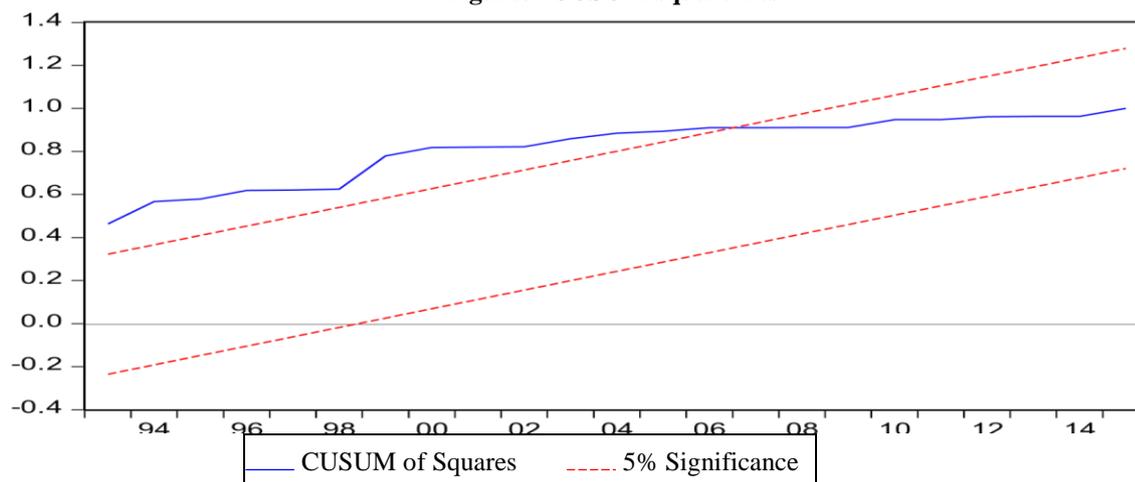
CUSUM TEST

Figure1: Recursive Residual Test:
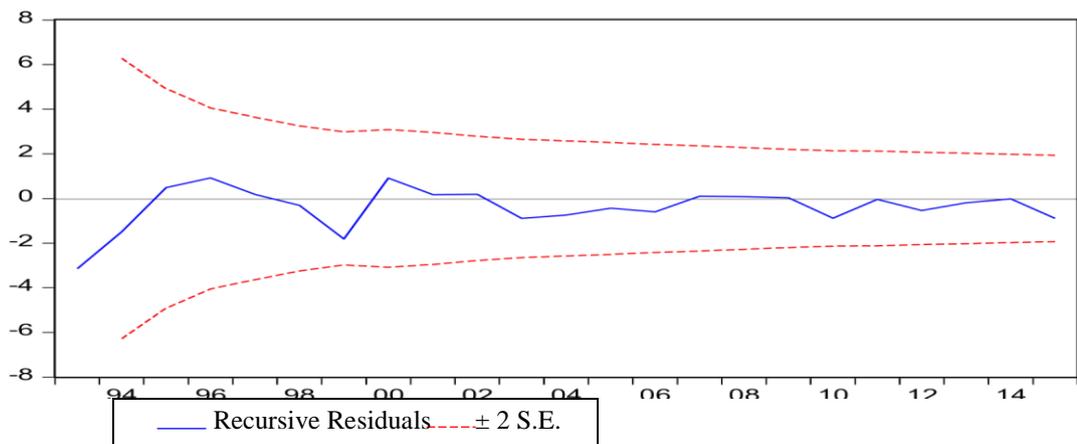
Source: Researcher's Computation using Eviews 9.5

Figure2: CUSUM Test:

Source: Researcher's Computation using Eviews 9.5

Figure3: CUSUM square Test

Source: Researcher's Computation using Eviews 9.5

As shown in the recursive residual test, CUSUM test and CUSUM of Squares graphs in figure 2, 3, 4, the recursive residual lines do not go beyond the 5% critical lines. This also affirms the stability of the long run and short run coefficients of the independent variables on economic growth of Nigeria during the period of this study.

V. Conclusions and Recommendations
In conclusion it is clear that Nigerian economy needs major private sector investment in almost all aspect of the economy that can industrialize the whole economy. There-fore, Nigeria's foreign investment policy should gear to-wards attracting and encouraging inflows of foreign capital investment through stable economic programmes. Also, government should embark on development of indigenous technology and entrepreneurial capabilities because foreign investment cannot contribute much to the economic development of Nigeria if it is directed primarily to capital supply than to investment projects FDI can only be effective if it is directed toward improving and expanding managerial and labour skills. Finally, the most effective strategy for attracting foreign investment is to make the Nigerian economy very attractive to home investors at the beginning.The study therefore recommends that, to encourage FDI inflows much of government expenditure should be used in financing capital projects such social infrastructures that can ease the cost of doing business in Nigeria and increase profitability. More so, the privatization exercise of the government should be handled in a transparent manner as any alteration will send a bad signal that is capable of discouraging FDI.

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