

The Impact of Oil Sector's Performance on Economic Growth in Nigeria: 1980-2013

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Abstract

This paper examines the impact of oil sector's performance on economic growth in Nigeria from 1980 to 2013. Time series data and Econometrics tools were used to ascertain stationary, causality and co-integration of the variables. Multiple regression model of the Ordinary Least Squares (OLS) and Error Correction Models were used for the estimation and analysis of long run and short run impacts of the economic variables. From the result the long run model was found to have poor fit in explaining the variation in Real Gross Domestic Product (RGDP) in Nigeria. The result shows that oil sector indicators in Nigeria have positive impact on Real Gross Domestic Product (RGDP) but the impacts were statistically insignificant. Also in the short run although the Error Correction Models suggested short run impact of oil sector's performance on economic growth in Nigeria, the impact was not inclusive due to that fact that the impact was majorly from the domestic consumption of oil products in Nigeria. From the study the weak contribution of oil sector's performance to economic growth in Nigeria may be attributed to the lack of required refineries to process the crude resources to finished products that are useful to consumers and producers of economic goods and services in Nigeria and inadequate job creation for meaningful Nigerians in this sector. What we have in Nigeria is the large involvement of so called foreign expatriates in the extractive processes of our crude oil and thereafter exportation to foreign refineries thereby creating jobs for those countries and unemployment for us. Therefore, the paper recommends that government should adopt indigenous policies for the production and refining of our crude oil products rather than exporting the crude materials to other countries for processing and refining. This will ensure indigenous participation and that will in turn create job opportunities for citizens and enhance sustainable economic growth in Nigeria.

Keywords:

Oil Sector,
Performance,
Economic Growth,
Crude Oil,
Government

Background to the Study

The early post-independence period up until mid-1970s experienced rapid growth of industrial capacity and output, as the contribution of the manufacturing sector to GDP rose from 4.8% to 8.2%. This experience changed when oil suddenly became of great importance to the world economy through its supply-price nexus, Crude oil was first discovered in commercial quantities in Nigeria in 1956, while actual production started in 1958. It became the dominant resource in the mid-1970s. On-shore oil exploration accounts for about 65% of total production and it is found mainly in the swampy areas of the Niger Delta, while the remaining 35% represents offshore production and involves drilling for oil in the deep waters of the continental shelf. Nigeria has proven reserves of about 32 billion barrels of predominantly low sulphur light crude, which at current rate of exploitation could last other years.

The intention is to expand the reserves to 40 billion barrels and production capacity to 4 million barrels per day (MBD). The massive increase in oil revenue as an aftermath of the Middle-East war of 1973 created unprecedented, unexpected and unplanned wealth for Nigeria, and then began the dramatic shift of policies from a holistic approach to benchmarking them against the state of the oil sector. The importance of crude oil to the economic development of Nigeria cannot be over emphasized, as shown in the evidence presented in Binda and Van Wijnbergen (2008) which states that Nigeria gained an extra \$390 billion in oil-related fiscal revenue between 1971 and 2005, or 4.5 times 2005 gross domestic product (GDP).

Nigeria's economy is struggling to leverage the country's vast wealth in fossil fuels in order to displace the crushing poverty that affects about 57 percent of its population. Economists refer to the coexistence of vast natural resources wealth and extreme personal poverty in developing countries like Nigeria as the "resource curse". Unfortunately, the economy has been bedeviled by sustained underdevelopment evidenced by poor human developmental and economic indices including poor income distribution, militancy and oil violence in the Niger Delta, endemic corruption, unemployment, relative poverty (Nwezeaku, 2010). Irrespective of Nigeria's huge oil wealth, the country has remained one of the poorest in the world. In particular, the Niger Delta which produces the oil wealth that accounts for the bulk of Nigeria's earnings has also emerged as one of the most environmentally degraded regions in the world evidenced from the World Wildlife Fund report released in 2006 (Ekaette,2009).The problems with Nigerian economy have been traced to failure of successive governments to use oil revenue and excess crude oil income effectively in the development of other sectors of the economy (Yakub, 2008). Over all, there has been poor performance of national institutions such as power, energy, road, transportation, politics, financial systems, and investment environment have been deteriorating and inefficient (Nafziger, 2008).

According to Odularu (2008), outside of the energy sector, Nigeria's economy is highly inefficient. Moreover, human capital is underdeveloped. Nigeria ranked 151 out of 177 countries in the United Nations Development Index in 2004 and non-energy-related

infrastructure is inadequate. Nigeria's economy is struggling to leverage the country's vast wealth in fossil fuels in order to displace the devastating lack that affects about 57 percent of its population. In 2009, persistent inflation and environmental degradation led to deprivation of means of livelihood and other socio-economic factors to the people of Niger Delta which is the major oil producing state in Nigeria. Despite the fact that crude oil has been the source of Nigerian economy, the economy is faced with high rate of unemployment, wide spread oil spillage, increasing poor standard of living as a result of decreasing gross domestic product, per capita income and high rate of inflation which has led to the effect of the economic development (Nwezeaku, 2010). Therefore, the main objective of this paper is to examine the impact of oil sector's performance on economic growth in Nigeria from 1980 to 2013. While the specific objective are to:

- i. Investigate the impact of Domestic Consumption of Crude Oil (OILDC) on Economic Growth in Nigeria.
- ii. Examine the impact of Crude Oil Export (OILEXP) on Economic Growth in Nigeria.
- iii. Assess the impact of Oil Price Per Barrel (OILPPB) on Economic Growth in Nigeria.

Literature Review

Conceptual, Theoretical and Empirical Issues

Oil sector is no doubt a major source of Nigeria's revenue and foreign exchange. The petroleum industry in Nigeria is subdivided into two main segments. The upstream and the downstream sectors. The upstream include activities such as exploration, production and delivery to an export terminal of crude oil or gas. The downstream on the other hand include activities like loading of crude oil at the terminal and its user especially transportation, supply trading, refining distribution and marketing of petroleum (Dominic, 1999).

The impact of world economic growth on oil price can be seen in the light of the oil market power. In fact, as World economic growth increases the demand for oil increases which pushes up oil prices. Oil prices then, tend to be volatile, at least partly due to variations in the business cycle. In the last quarter of 1998, economic growth decreased and pushed down the demand for oil and therefore reduced oil price to 20\$ per barrel. While the world economy continued its recovery in 2003 and through the year 2004 and 2005 with gross domestic product (GDP) growth rates increasing in many regions, the world oil market was characterized by strong oil demand growth and the oil price increased from 27 to 35\$ the barrel. In the first quarter of 2005, the oil price increased to \$50 per barrel approximately \$15 per barrel higher than in the first quarter of 2004, and remain above this level for the rest of 2005 and 2006.

Leading up to 2008, a strong world economic growth driving growth in oil use, thus crude oil prices increased dramatically during 2007, with oil prices climbing from an average of nearly \$55 per barrel in the first quarter of 2007 to over \$95 per barrel in the last quarter of 2007. The decline in the value of the dollar against other currencies supports continued oil consumption growth in foreign countries because oil is traded globally in dollars, and a

declining dollar has made the increase in oil prices less severe in foreign currencies. Oil prices fell to less than \$62 a barrel in last quarter of 2008 amid continuing concerns about a global economic recession while the hope in an economic recovery increases oil prices in the second quarter of 2009 to continue in 2013 (Central Bank of Nigeria, 2014).

It is vital to examine whether oil sector can enhance industrial growth to help curtail economic growth and to definitely establish whether the theories reviewed has any linkage to the stated problem under study. Using the Dutch disease theory which states that, the discovery of a natural resource (primary) has negative consequences which results from any large increase in foreign currency, including foreign direct investment, foreign aid or a substantial increase in natural resource prices. The impediments of oil revenue to economic growth and development of oil-dependent states at the neglect of other sectors is what is cumulatively called Dutch Disease in the literature of development economics (Ottawa, 2001).

The enormous influx of cash resulting from oil tends to foster, overzealous and imprudent expenditure. High oil revenue raises exchange rates, promotes adverse balance of payment as the cost of imports rises. In fact, it kills incentive to risk investment in non-oil sectors, the competitiveness of all non-oil sectors such as agriculture and manufacturing industries would be crowded out. If the employment of both labour and other resources has been exchanged for unemployment as the government and private expenditure multipliers have been exported abroad. Together, these forces constitute what Michael (2001) calls the rentier effect, oil states being "rentier states". The study also reviewed the unified growth theory that is consistent with the preceded Industrial Revolution through the gradual shift in the workplace to larger and more centralized production units leading the industrial growth.

Akanni (2007), examines if oil exporting countries grows as their earnings on oil rents increases, using ordinary least squares regression. The result shows that there is a positive and significant relationship between investment and economic growth and also on oil rents. In conclusion, oil rents in most rich oil developing countries in Africa do not promote economic growth. Idowu (2005), a causality approach examines that there is a relationship between oil exports and economic growth in Nigeria. Using Johannsen's multivariate co-integration technique. The result shows that there is stationary relationship between exports and gross domestic product (GDP). There is feedback causality between exports and economic growth.

Hadi, et.al (2009), investigate the impact of income generated from oil exports on economic growth in Iran. Using Cobb-Douglas production function, the economy of Iran adjusts fast to shocks and there is progress in technology in Iran. Oil exports contribute to real income through real capital accumulation. Odularu (2008), used Harrod-Domar theory and Solow's theory of economic growth used Ordinary Least Square regression and Cobb-Douglas production function were employed to test the impact of crude oil on Nigeria economic performance. The result shows that crude oil production contributed to economic growth but have no significant improvement on economy growth of Nigeria.

Samad (2011), tested the hypothesis that there exist relationship between oil exports and economic growth in Algeria, using VEC Granger causality and block exogeneity Wald test. Augmented Dickey-Fuller test was used to run the regression. The result shows that the variables are non-stationary. It was concluded that there is causal relationship between economic growth, exports and imports.

Methodology

The Ordinary Least Square (OLS) Model specification

The model for this study was adopted from the work of Milbourne, Otto and Voss (2003), which is based on studies by Mankiw, Romer, Weil (2002) and this is an attempt to determine the long run impact of oil sector performance on economic growth in Nigeria. The model to be used can be explicitly specified as follows:

$$RGDP = f(OILDC, OILEXP, EXRV, EXCHR, OILPPB). \quad (1)$$

Where RGDP represents the Real Gross Domestic Product, OILDC represents Domestic Consumption of Crude Oil, OILEXP represents Crude Oil Export, EXRV External Reserves in Nigeria, EXCHR represents Exchange Rate in Nigeria and OILPPB is the Oil Price Per Barrel in Nigeria. The Real GDP is GDP at factor prices deflated by the consumer price index (at constant factor cost). The equation (1) can be specifically expressed in explicit econometric (linear equation) form as:

$$RGDP = \alpha + \beta_1 OILDC + \beta_2 OILEXP + \beta_3 EXRV + \beta_4 EXCHR + \beta_5 OILPPB + U. \quad (2)$$

Taking the natural log of the variables we have:

$$\text{Log}(RGDP) = \alpha + \beta_1 \text{log}OILDC + \beta_2 \text{log}OILEXP + \beta_3 \text{log}EXRV + \beta_4 \text{log}EXCHR + \beta_5 \text{log}OILPPB + U. \quad (3)$$

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

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:

$$\Delta \Delta = \Delta + \Delta \Delta + \Delta \Delta \Delta_{\Delta-1} - \Delta \Delta_{\Delta-1} + \Delta_{\Delta} \quad (4)$$

Where:

$\Delta \Delta$ is the output that is Real Gross Domestic Product which is used as a proxy for economic growth in Nigeria. The $\Delta \Delta$ present the five endogenous variables i.e (OILDC, OILEXP, EXRV, EXCHR, OILPPB) Which are Domestic Consumption of Crude Oil (OILDC), Crude Oil Export (OILEXP), External Reserves in Nigeria (EXRV), Exchange Rate in Nigeria (EXCHR) and Oil Price per Barrel in Nigeria (OILPPB) and $\Delta \Delta \Delta_{\Delta-1}$ this present the lag (period one) of the variables.

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

$$RGDP = \alpha + \beta_1 OILDC + \beta_2 OILEXP + \beta_3 EXRV + \beta_4 EXCHR + \beta_5 OILPPB + U. \quad (5)$$

From the equation above the over parameterized model is formulated as follows:

From the equation above the over parameterized model is formulated as follows:

$$GDP = \alpha + \beta_1 OILDC + \beta_2 OILEXP + \beta_3 EXRV + \beta_4 EXCHR + \beta_5 OILPPB + \beta OILDC_{t-1} + \beta OILEXP_{t-1} + \beta EXRV_{t-1} + \beta EXCHR_{t-1} + \beta OILPPB_{t-1} + \beta OILDC_{t-2} + \beta OILEXP_{t-2} + \beta EXRV_{t-2} + \beta EXCHR_{t-2} + \beta OILPPB_{t-2} + \beta X_{t-3} + \dots + \beta X_{t-n} - ECM_{t-1} + \varepsilon_t \quad (6)$$

The over parameterized model will be used to adjust the estimation until the ECM turned negative. 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.

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 Square (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 stationary test, causality test and co-integration test.

Results and Discussion

Descriptive Analysis of Variables

Table 4.1: Summary Statistics

Mean	436367.9	4806209.	406385.8	1525491.	67.73353	40.63382
Median	311536.8	1190988.	171378.4	244450.5	22.03500	27.30500
Maximum	2010363.	71405722	1432300.	7025860.	156.8100	109.7800
Minimum	183563.0	7201.200	51.80000	781.7000	0.620000	12.28000
Std. Dev.	327138.0	12251242	506535.5	2183068.	63.51992	32.04825
Skewness	3.374159	4.916862	1.010712	1.274579	0.216301	1.235179
Kurtosis	16.85926	27.27911	2.460817	3.229882	1.239871	3.067464
Jarque-Bera	336.6267	972.0844	6.200574	9.280652	4.654030	8.651897
Probability	0.000000	0.000000	0.045036	0.009655	0.097587	0.013221
Observations	34	34	34	34	34	34

Generated by the Authors (2016)

The summary of descriptive statistics of relevant variables of study is as reported in table 4.1 above, 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 RGDP, OILDC, OILEXP, EXRV, EXCHR and OILPP Bare 436367.9, 4806209.0, 406385.8, 1525491.0,

67.73353 and 40.63382 respectively. Their respective standard deviations are 327138.0, 1225124.2, 506535.5, 2183068, 63.51992 and 32.04825. 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 4.2: Result of Augmented Dickey-Fuller (ADF) Test for Stationarity

Variables	Adf Statistic	5% Critical Value	Order of interpretation
RGDP	-3.658077	-2.9527	1(0)
OILDC	-6.447681	-2.9591	1(2)
OILEXP	-5.803622	-2.9558	1(2)
EXRV	-4.047172	-2.9558	1(2)
EXCHR	-5.305746	-2.9558	1(2)
OILPPB	-5.160147	-2.9558	1(2)

Source: Generated by the Authors, 2016

The unit root test was conducted to ascertain the stationarity of the data before estimation using the Augmented Dickey Fuller (ADF). In Table 4.2, the Real Gross Domestic Product in Nigeria is stationary at level with ADF statistic value of -3.658077 at 5 percent. While Domestic Consumption of Crude Oil, Crude Oil Export, the External Reserves in Nigeria, the Exchange Rate in Nigeria and the Oil Price Per Barrel in Nigeria were stationary at second difference with ADF statistic value of -6.447681, -5.803622, -4.047172, -5.305746 and -5.160147 respectively at 5 percent level of significance.

Causality Test

Table 4.3: Showing Causality Test

Null Hypothesis:	Obs	F-Statistic	Probability
OILDC does not Granger Cause RGDP	32	0.77942	0.46872
RGDP does not Granger Cause OILDC		0.28588	0.75360
OILEXP does not Granger Cause RGDP	33	2.03170	0.15000
RGDP does not Granger Cause OILEXP		0.11947	0.88784
EXR does not Granger Cause RGDP	33	2.04246	0.14859
RGDP does not Granger Cause EXR		0.11128	0.89508
EXCHR does not Granger Cause RGDP	33	1.76838	0.18914
RGDP does not Granger Cause EXCHR		0.03858	0.96220
OILPPB does not Granger Cause RGDP	33	2.51308	0.09913
RGDP does not Granger Cause OILPPB		0.68699	0.51137
OILEXP does not Granger Cause OILDC	32	0.98396	0.38684
OILDC does not Granger Cause OILEXP		0.20542	0.81556
EXR does not Granger Cause OILDC	32	2.12025	0.13955
OILDC does not Granger Cause EXR		24.0065	1.0E-06
EXCHR does not Granger Cause OILDC	32	3.05072	0.06390
OILDC does not Granger Cause EXCHR		0.21663	0.80661
OILPPB does not Granger Cause OILDC	32	0.53630	0.59101
OILDC does not Granger Cause OILPPB		1.10455	0.34587
EXR does not Granger Cause OILEXP	33	2.73742	0.08206
OILEXP does not Granger Cause EXR		13.5625	7.6E-05
EXCHR does not Granger Cause OILEXP	33	2.89283	0.07210
OILEXP does not Granger Cause EXCHR		0.60781	0.55157
OILPPB does not Granger Cause OILEXP	33	1.33568	0.27922
OILEXP does not Granger Cause OILPPB		6.83436	0.00383
EXCHR does not Granger Cause EXR	33	2.26929	0.12208
EXR does not Granger Cause EXCHR		0.10567	0.90008
OILPPB does not Granger Cause EXR	33	4.35843	0.02250
EXR does not Granger Cause OILPPB		1.88884	0.17002
OILPPB does not Granger Cause EXCHR	33	0.10782	0.89816
EXCHR does not Granger Cause OILPPB		5.01758	0.01373

Source: Generated by the authors, 2016

Table 4.3 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 Crude Oil Export granger cause Oil Price Per Barrel in Nigeria, Oil Price Per Barrel in Nigeria granger cause External Reserves in Nigeria and Exchange Rate in Nigeria granger cause Oil Price Per Barrel in Nigeria. While other peer of variables in table 4.3 show non-causal relationship between themselves. This implies that most determinants of oil sector's performance have less causal relationship and this means that the activity in a variable may not have effect on another variable. This may be the reason for low impact of oil sector performance on economic growth in Nigeria.

Co-integration Test

Table 4.4: The Johansen Co-integration Test Results

Eigen value	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 *

() denotes rejection of the hypothesis at a 5% (1%) significance level. L.R. test indicates 2 co-integrating equation(s) at 5% significance level**

The Johansen co-integration test results in Table 4.4 show the existence of two co-integrating equations at 5% significance level in the model. The hypothesis which states there is no long-run relationship between oil sector performance and economic growth in Nigeria is rejected at 5% significance level. This implies that there exists a long-run relationship oil sector performance and economic growth in Nigeria.

Ordinary Least Squares Results

Table 4.5: Aggregate Regression Results

Variables	Coefficient	Std. Error	T- statistic	Prob.
C	10.89246	0.816754	13.33628	0.0000
LOG(OILDC)	0.244868	0.103317	2.370056	0.0249
LOG(OILEXP)	-0.366707	0.105328	-3.481562	0.0017
LOG(EXRV)	0.132630	0.089945	1.474574	0.1515
LOG(EXCHR)	0.190629	0.177459	1.074215	0.2919
LOG(OILPPB)	0.138414	0.140870	0.982561	0.3342
R-Squared	0.64			
Adjusted R ²	0.57			
F-statistic	9.89			
DW	1.8			

Source: Generated by the Authors (2016)

Having conducted the unit root and co-integration tests, we proceeded to obtain the long-run results of the relationship between oil sector's performance and economic growth using the ordinary least squares method. The result presented in Table 4.5 reveals that all the variables in the model (except the Crude Oil Export) satisfy the a priori expectations with respect to their signs, this because Crude Oil Export is negatively related to Real Gross Domestic Product. The result further shows that Crude Oil Export has significant impact on economic growth at 5 percent significant level in the long-run. This means that a unit increase in Crude Oil Export will decrease Real Gross Domestic Product by -0.37 percent. While Domestic Consumption of Crude Oil has a positive and significant impact on growth at 5 percent level significant in the long-run.

The External Reserves in Nigeria (EXRV), Exchange Rate in Nigeria (EXCHR) and Oil Price Per Barrel in Nigeria (OILPPB) were positively related to Real Gross Domestic Product. Though positive they are not statistically significant at 5 percent level significance in the long-run. The R^2 of 0.57 percent indicates that 57 percent of the total variation in the dependent variable is explained by variations in the independent variables and the Durbin Watson statistic of 1.82 suggests that the model is free from serial auto correlation.

Error Correction Model Results

Table 4.6: Error Correction Model Results

Variables	Coefficient	Std. Error	T- statistic	Prob.
C	11.27373	0.754927	14.93355	0.0000
LOG(OILDC)	0.286697	0.108884	2.633049	0.0136
LOG(OILEXP)	-0.393781	0.111869	-3.520029	0.0015
LOG(EXCHR)	0.348172	0.154576	2.252439	0.0323
LOG(OILPPB)	0.267011	0.120302	2.219509	0.0347
ECM(-1)	-0.289395	0.205609	-1.407498	0.0103
R-Squared	0.64			
Adjusted R ²	0.57			
F-statistic	9.79			
DW	2.0			

Source: Generated by the Authors (2016)

The error correction model in Table 4.6 show that the coefficient determination (R^2) is 0.64, which indicates that about 64 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 9.79 is significant at 1 per cent level of significance, which further suggests a linear relationship between the dependent and independent variables. That is there is a fair relationship between Real Gross Domestic Product (RGDP) growth rate and Domestic Consumption of Crude Oil (OILDC), Crude Oil Export (OILEXP), External Reserves in Nigeria (EXRV) and Oil Price per Barrel in Nigeria (OILPPB). While the D.W. statistics of 2.0 rules out auto-correlation.

From the result, the Domestic Consumption of Crude Oil (OILDC), Crude Oil Export (OILEXP), and Oil Price Per Barrel in Nigeria (OILPPB) were found to be positively related to Real Gross Domestic Product (RGDP) and all the variables 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 Domestic Consumption of Crude Oil (OILDC), Crude Oil Export (OILEXP), and Oil Price Per Barrel in Nigeria (OILPPB) will cause 0.041, 0.078, 6.96 and 0.22 percent change in the Real Gross Domestic Product (RGDP) in Nigeria respectively.

Also, from the result the coefficient of the error correction term is -0.29 which implies that the speed of adjustment is approximately 0.47 per cent per quarter. The negative sign and significant coefficient is an indication that co-integrating relationship exists among the

variables that is Real Gross Domestic Product (RGDP) and Oil Sectors in Nigeria. The size of the coefficient on the error correction term (ECT) denotes that 29 percent 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 Oil Sector Performance has fairly impact on economic growth in Nigeria.

Conclusion and Recommendations

In conclusion, the two estimated results that is the long-run and short run show that there is a relationship between Oil Sector Performance and economic growth in Nigeria. The results show that though some Oil Sector Performance variables used were positive, there were statistically significant at 5 percent level of significance. This means that any variation in these Oil Sector Performance indicator will not have impact on the economic growth in Nigeria. Also the Crude Oil Export (OILEXP) was seen to be negatively related to Real Gross Domestic Product (RGDP) both in the long run and short run.

This means the activities of Crude Oil Export (OILEXP) in has a negative impact on economic growth corresponded with my argument that government loose so much in the exportation of Crude Oil in Nigeria this is because Crude Oil has so many components that are needed by our industries as derived demand which can lead to industrial development and job creation but these components are exported to other countries thereby increasing their industrial access to these raw materials for their industrial development. Similarly, Crude Oil Exportation create job for those countries through the activities of refineries while Nigeria our refineries are incapacitated thereby leading to unemployment for many Nigeria. Therefore, the paper recommends the following:

- i. Government should adopt indigenous policies for the production and refining of our crude oil products rather than exporting the crude materials to other countries for processing and refining. This will ensure indigenous participation and that will in turn create job opportunities for citizens and enhance sustainable economic growth in Nigeria.
- ii. The government should encourage more private company participation. So that better equipped refineries can be built and the cost of refining crude oil will reduce.
- iii. Security should be boosted on the high sea where crude oil products are being smuggled. This will help reduce the loss from illegal export of crude oil products; government should give immediate attention to the indigenes of the region where crude oil is being extracted from. This will reduce the unrest in the region where crude oil extractive activities are taking place.

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APPENDIX 1

Table 4.1: Data for Regression

YEAR	RGDP	OILDC	OILEXP	EXR	EXCHR	OILPPB
	31546.8					
1980		13632.3	227.4	5445.6	0.55	35.52
1981	205222.1	10680.5	119.8	2424.8	0.62	34.00
1982	199685.3	8003.2	225.5	1026.5	0.67	32.38
1983	185598.1	7201.2	171.6	781.7	0.72	29.04
1984	183563.0	8840.6	282.4	1143.8	0.77	28.20
1985	2010363.3	11223.7	51.8	1641.1	0.89	27.01
1986	205971.4	8368.5	913.9	3587.4	1.75	13.53
1987	204806.5	28208.6	3170.1	4643.3	4.02	17.73
1988	219875.6	28435.4	3803.1	3272.7	4.54	14.24
1989	236729.6	55016.8	4671.6	13457.1	7.36	17.31
1990	267550.0	106626.5	6073.1	34953.1	8.04	22.26
1991	265379.1	116858.1	7772.2	44249.6	9.91	18.62
1992	271365.5	201383.9	19561.5	13992.5	17.30	18.44
1993	274833.3	213778.8	41136.1	67245.6	22.07	16.62
1994	275450.6	200710.2	42349.6	30455.9	22.00	18.44
1995	281407.4	927565.3	155825.9	49333.2	21.90	16.33
1996	293745.4	1286215.9	162178.7	174309.9	21.88	20.29
1997	302022.5	1212499.4	166902.5	262198.5	21.89	18.86
1998	310890.1	717786.5	175854.2	226702.4	21.89	12.28
1999	312183.5	1169476.9	211661.8	546873.1	92.34	17.44
2000	329178.7	1920900.4	220817.7	1090148.0	101.70	27.60
2001	356994.3	1839945.3	237106.8	1181652.0	111.23	23.12
2002	433203.5	1649445.8	361710.0	1013514.0	120.58	24.36
2003	477533.0	2993110.0	398922.3	1065093.0	129.22	28.10
2004	527576.0	4489472.2	318114.7	2232837.0	132.89	36.05
2005	561931.4	7140572.2	797298.9	364799.7	131.27	50.59
2006	595821.6	7191085.6	718578.9	5425578.6	128.65	61.00
2007	634251.1	8110500.4	776762.70	6055717.0	125.81	69.04
2008	672202.6	9659772.6	1319435.6	7025860.2	118.55	94.10
2009	716949.7	8543261.2	1063544.8	6339615.2	148.90	60.86
2010	546120.2	8402000.6	1130000.0	3233900.3	150.30	77.38
2011	575110.4	8598000.6	1432300.2	3263900.8	154.74	107.46
2012	599290.9	8173000.3	1426000.0	4383000.4	156.81	109.45
2013	632180.7	7105000.3	1413100.8	4284700.3	155.25	109.78
2014	671520.8	7011000.8	1200700.0	3424100.5	156.48	109.64

Source: CBN statistical bulletin December, 2015