

An Empirical Analysis of Oil Revenue, Non-Oil Revenue and Economic Development in Nigeria (1980-2015)

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Abstract

This paper empirically examined the relationships among oil revenue, non-oil revenue and economic development in Nigeria over the period from 1980 to 2015 employing time series data, Augmented Dickey Fuller test, Phillip-Perron test, Johansen Cointegration test and Ordinary Least Square estimating technique (OLS). Findings from the analysis revealed that oil revenue has a statistically significant positive relationship with economic development in Nigeria which is in conformity with apriori theoretical expectation. The results further revealed that a one naira increase in oil revenue would bring about 3.94 units rise in economic development proxied by real gross domestic product. The results also show that there exists a statistically significant positive relationship between non-oil revenue and economic development. A one naira increase in non-oil revenue would bring about 14.51 units rise in economic development. Based on the results, government at all levels should invest massively in both the oil and non-oil sectors of the economy in order to boost nationally generated revenue for economic development; credible people should be elected into political offices by Nigerians who would make judicious utilization of the oil revenue and non-oil revenue for the improvement of the living standard of the people and overall development of the country; domestic and foreign investors should be encouraged by the government to invest in the oil and non-oil sectors through provision of basic infrastructural facilities like uninterrupted power supply, good road network, efficient and effective communication system and regular supply of drinkable water; and loanable funds at reduced interest rates should be made available to domestic investors in the non-oil sector of the Nigerian economy especially the agricultural and manufacturing sub-sectors. In addition, existing refineries in the country should be well maintained to produce at full capacity and new ones be established to produce refined petroleum products that can be exported to foreign countries which would boost the nationally generated revenue for economic development; and incentives for ease of doing business should be provided for both domestic and foreign investors in the oil and non-oil sectors of the economy in form of favorable fiscal policy.

Keywords: Oil Revenue, Non-oil Revenue, Economic Development, Unit Root, Cointegration, Ordinary Least Square, Nigeria

Introduction

The attainment of rapid economic growth and development by both developing and advanced countries of the world necessitates provision of basic infrastructure, good governance, institutional quality and dependable sources of revenue by those who are entrusted with political powers in these nations. Most economies of the world are open so as to enable them derive colossal amount of revenue through exportation of goods and services across international boundaries to implement their social obligations and provide infrastructural amenities to their citizenry. Involvement in bilateral and multi-lateral trade relations is seen by these nations as a catalyst necessary for the overall development of their economies. This explains the reason why the governments of these countries embrace the theory of export-led growth. It was observed by Ricardo (1817) that engagement in foreign trade by various countries would facilitate inflow of foreign capital needed for the growth and development of their respective economies. Exportation would raise the earnings of a country thereby creating an avenue for growth and development by increasing the national income of the country. It also accelerates the level of employment in the economy as a result of higher demand for exports by local consumers and foreign trading partners will require more production which will in turn lead to a significant reduction in the unemployment level. Exportation by a country also facilitates attainment of a favorable balance of trade and balance of payment position for the exporting country provided its exports reasonably exceed its imports. Nigeria, the giant of Africa, is characterized by low level of investment and thus requires foreign capital in order to accelerate the sluggish rate of economic growth and development.

Before the discovery of crude oil, the major export commodity was cocoa and the leading sector was agricultural sector but today, the major export commodity is crude oil and the leading sector is now the petroleum sector. This has not allowed for balanced growth in the economy as some sectors have been allowed to grow while growth has been impeded in others and this has made the country remain a developing country. For the purpose of this study, oil revenue refers to the income realized or earned from the sales of crude oil to domestic consumers and the foreign trading partners while non-oil revenue can be described as the income derived from the sales of non-oil products like cocoa, palm oil, timber, groundnut and others. The non-oil sector include such sub-sectors like the agricultural sector, service sector, building and construction, wholesale and retail trade, utilities and other

manufacturing activities that are not related to oil. It is therefore worth investigating the contributions of oil revenue and non-oil revenue derivable by the federal government of Nigeria over the years from the exportation of agricultural products and crude oil to the economic development of the country.

Successive administrations in Nigeria over the years have derived or realized colossal amount of revenue from both the oil and non-oil sectors of the economy with a view to accelerating economic growth and development and improving the standard of living of her citizenry. In 1980, oil revenue and non-oil revenue figures were #12.35 billion and #2.88 billion respectively. These figures rose astronomically to #71.89 billion and #26.22 billion in 1990. This trend continues as oil revenue and non-oil revenue figures rose to #1,591.68 billion and #314.48 billion in 2000. In 2005, oil revenue figure was #4,762.40 billion while non-oil revenue figure amounted to #785.10 billion. In 2010, oil revenue figure stood at #5,396.09 billion while non-oil revenue was #1,907.58 billion. These figures rose to #8,025.97 billion and #2,628.78 in 2012. In 2014, oil revenue figure declined to #6,793.82 billion while non-oil revenue figure rose to #3,275.03. The aforementioned scenario clearly underscores the fact that both oil revenue and non-oil revenue figures have been on the increase over the years except 2014 when oil revenue figure experienced a minor decline.

It should however be noted that despite the increase in the amount of oil revenue and non-oil revenue derived or realized by successive administrations in Nigeria, the extent and magnitude of its impact on economic growth and development especially that of non-oil revenue is undetermined. This paper intends to fill the existing gap in the literature by providing answers to the following array of questions: Does oil revenue exert positive or negative contribution to economic growth and development in Nigeria? What relationship exists between non-oil revenue and economic growth and development in Nigeria? What are the trends of oil revenue and non-oil revenue in Nigeria? What nexus exists between inflation and economic growth and development in Nigeria?

Objectives of the study

The overall objective of the study is to empirically examine the impact of oil revenue, non-oil revenue on economic development in Nigeria over the period 1980 and 2015. The specific objectives are:

- To investigate the relationship between oil revenue and economic development over the studied period.
- To examine the nexus between non-oil revenue and economic development over the studied period.
- To recommend policy measures based on the estimated result on how nationally generated revenue could be utilized to accelerate economic development.

Research Questions

This paper is expected to provide answers to the following questions:

- What relationship exists between oil revenue and economic development over the studied period.?
 - Does non-oil revenue exert statistically significant positive contribution on economic development in Nigeria over the studied period.?
 - What nexus exists between inflation and economic development in Nigeria over the studied period?
- What policy measures should be formulated and implemented to ensure that oil revenue and non-oil revenue impact positively on economic development in the country?

Study Hypotheses

The hypotheses to be verified by this study are stated below:

1. H_0 : Oil revenue has no statistically significant positive contribution to economic development in Nigeria over the studied period.
 H_1 : Oil revenue has statistically significant positive contribution to economic development over the studied period.
2. H_0 : Non-oil revenue has no statistically significant positive contribution to economic development in Nigeria over the studied period.
 H_1 : Non-oil revenue has statistically significant positive contribution to economic development in Nigeria over the studied period.

Literature Review

Several studies have been conducted on the relationship between crude oil abundance and economic performance in various developing countries with mixed results. Gelb (1988) and Everhart and Duval (2001) observed that oil discoveries and oil price spikes lead to high government spending, real exchange rate appreciation and a loss of competitiveness in the non-oil tradable sector. However, the worst consequence to the Nigerian economy as a result of the oil boom was the disease infected on Nigeria called the Dutch Disease Syndrome. Dutch disease syndrome is a situation where a particular sector of the economy flourishes especially the oil sector at the expense of other sectors of the economy. Moradi (2007) examined the effects of oil resource abundance on economic growth and income distribution in Iran within the period 1968 and 2005. The result of the study showed a positive and significant effect of oil abundance on GDP but the value of the estimated coefficient was too small, and he

concluded that oil abundance is not a blessing for Iran. Odularu (2007) examined the relationship between the crude oil sector and the Nigerian economic performance employing ordinary least square regression method for the period 1970 to 2005. He found that crude oil consumption and export have contributed significantly to the improvement of the Nigerian economy. The study recommends that government should implement policies that would encourage the private sector to participate actively in the crude oil sector. Also, security should be boosted on the high sea where crude oil products are being smuggled as it will help to reduce the loss from illegal export of crude oil products.

Ogbona (2012) conducted an empirical investigation of the relationship between petroleum income and Nigerian economy using ordinary least square regression analysis with the aid of SPSS for the period 2000 to 2009. The result indicated that oil revenue has a positive and significant relationship with gross domestic product and per capita income, but a positive and significant relationship with inflation. The study therefore concludes that petroleum income has positively and significantly impacted on the Nigerian economy for the studied period. Adedokun (2012) examined the effect of oil export revenue on economic growth in Nigeria between the period 1975 and 2009. The study revealed that oil export revenue had a positive and significant effect on growth both in the short-term and long-term in the country. The study further revealed that the primary determinant of foreign exchange earnings in Nigeria was changes in the world crude oil prices. Akilo (2012) examined the significance of oil in the development of Nigerian economy over the period 1960 and 2009. The study showed that oil could cause other non-oil sectors to develop. However, oil had adverse effect on manufacturing sector. Findings revealed bidirectional causality between oil and manufacturing, oil and building and construction, manufacturing and building and construction, manufacturing and trade and services, and agriculture and building and construction. It also confirmed unidirectional causality from manufacturing to agriculture, and trade and services to oil. However, the study found no causality between agriculture and oil, likewise between trade and services and building and construction. In conclusion, the study recommended appropriate regulatory and pricing reforms in the oil sector in order to integrate it into the economy, and as well reverse the negative impact of oil on the manufacturing sub-sector in Nigeria.

Oladipo and Fabayo (2012) examined global recession and oil sector, based on its effects on economic growth in Nigeria. Analysis from the study revealed a negative and significant relationship between economic growth and oil produced in the country. The result also showed the existence of a decline in the oil sector due to global recession. The study, therefore, recommended deregulation of the oil sector for efficient performance, and more rigorous policies that will reduce global effects on the sector as it contributes the largest percentage of income to the Nigerian economy. Ude and Agodi (2014) investigated the impact of non-oil revenue on economic growth in Nigeria over the period 1980 and 2013 by employing cointegration methodology alongside error correction mechanism. Empirical analysis from the study revealed that agricultural revenue, manufacturing revenue and interest rate have significant impact on economic growth in Nigeria. The study therefore concluded that non-oil revenue has the potential to unlock Nigeria's economic morass. Abogan et. al (2014) empirically investigated the impact of non-oil export on economic growth in Nigeria over the period 1980 and 2010 employing ordinary least square, error correction mechanism, over-parametization and parsimonious methods. Analysis from the study showed that non-oil export had a significant positive impact on economic growth in Nigeria. The study recommended that government should strengthen the legislative and supervisory framework of the non-oil sectors in Nigeria and diversify the economy to ensure maximum contributions from all faces of the sectors to economic growth.

Ishola et. al (2015) empirically investigated the relationships among oil revenue, government expenditure and economic growth in Nigeria employing a simple regression models and statistical package for social sciences for the period 1982 and 2011. Analysis from the study revealed that oil revenue had a positive and significant effects on economic growth in Nigeria over the studied period. Omo and Bashir (2015) also empirically examined the relationships among oil revenue, government spending and economic growth over the period 1980 and 2012 using time series data, ordinary least square, cointegration, vector error correction model and granger causality test. Findings from the analysis revealed that oil revenue granger caused both of total government spending and growth, while there was no causality between government spending and growth in the country. The study, therefore, recommended that government should increase spending on capital projects as well as intensify efforts at increasing output in the oil sub-sector in order to boost economic growth in Nigeria. Victor (2015) investigated the relationship between oil revenue and industrial growth in Nigeria using Augmented Dickey Fuller test, Johansen Cointegration test, Ordinary Least Square and Vector Error Correction mechanism. The result of the study revealed that oil revenue significantly impacted positively on industrial growth in Nigeria. The study recommended a sustained policy formulation and implementation in the industrial/petroleum sector of the economy through the involvement of stakeholders. Joseph et. al (2016) examined the contribution of oil revenue to economic development in Nigeria over the period 1991 to 2012 using regression analysis with the aid of SPSS version 20. Empirical analysis from the study revealed that a unit change in growth rate of oil revenue will lead to an equal unit change in growth rate of gross domestic product.

Description of Variables

Economic Development- This is the **dependent or endogenous variable** in the model to be influenced by a number of **explanatory or exogenous variables**. Economic development can be defined as the elimination or reduction in poverty, inequality and unemployment within a growing economy (Adams, 2006). Mansell and Wehn (1998) explained that economic development involves economic growth, namely the increase in per capita income and attainment of standard of living equivalent to that of industrialized nations. Musgrave (2004) lend credence to the fact that the requirements for economic development in low-income nations include those needed for consistent economic growth as compared with highly developed nations. Economic development can also be described as a sustained increase in economic growth plus structural transformation. No nation can experience economic development without having economic growth. But it is possible for an economy to be experiencing economic growth without witnessing economic development. Economic development can also be viewed as a combination of persistent and sustained increase in the output of goods and services of various sectors of an economy plus good governance by those who are elected into political offices in the country. The figures of real gross domestic product extracted from the Central Bank of Nigeria Statistical Bulletin of various issues would be used as proxy for economic development.

The **independent or explanatory or exogenous variables** in the model are :

Oil Revenue- This is the total amount of income derived from the sale of crude oil to both local consumers and foreign countries in an economy. This variable theoretically is expected to exert a positive influence on economic growth and development in an economy that is endowed with abundant crude oil resource. The revenue derived from oil is expected to contribute positively to the development of other sectors of the economy. In Nigeria, oil revenue is the major source of the economy upon which budgets and other fiscal policies are majorly estimated.

Non-oil Revenue- This refers to the total amount of revenue realized from the sale of non-oil products to both domestic consumers and foreign trading partners. The exportable non-oil products in Nigeria are numerous as they include cash crops, food crops, manufacturing, entertainment, tourism, transport, banking and others. This variable should have a positive relationship with economic growth and development theoretically.

Inflation Rate- This is defined as a persistent and sustained increase in the general price level over a long period in an economy. It is a sustained rise in the general level of prices of goods and services in an economy over a period of time. This variable is expected to have an inverse relationship with economic growth and development in an economy.

Random Variable- This variable takes care of other exogenous variables influencing the endogenous variable which are not included in the model. It represents the unexplained part of the model.

Data and Methodology

The research work made use of secondary data collected from Central Bank of Nigeria's Statistical Bulletin. The empirical measurement covers the sample period between 1980 and 2015. Augmented Dickey Fuller unit root test, Phillips-Perron unit root test, Johansen Cointegration test and Ordinary Least Square (OLS) Regression technique were employed to carry out an extensive analysis of the endogenous and exogenous variables which include Real Gross Domestic Product (RGDP), Oil revenue (OREV), Non-oil revenue (NOREV) and Inflation rate (INFR).

Model Specification

For the purpose of analysis, data for this research work are secondary data obtained from the Central Bank of Nigeria's Statistical Bulletin and National Bureau of Statistics for the period 1980 and 2015. The mathematical representation of the variables identified from this model is presented as follows:

$$RGDP = f(OREV, NOREV, INFR), \text{ where} \quad (1)$$

RGDP = Real Gross Domestic Product

OREV = Oil Revenue

NOREV = Non-oil Revenue

INFR = Inflation Rate

The regression analysis of Ordinary Least Square (OLS), Augmented Dickey Fuller (ADF) unit root test, Phillips-Perron (PP) unit root test and Johansen Cointegration test were employed to examine the relationships among economic development, oil revenue and non-oil revenue in Nigeria over the period 1980 to 2015. Specifically, the estimated regression equation is of the following form:

$$RGDP = b_0 + b_1OREV + b_2NOREV + b_3INFR + E \quad (2)$$

b_1 , b_2 and b_3 are elasticity of the parameters of the respective variables.

The Apriori Test Expectation

An apriori argument, reason or probability is based on assumed principles or facts, rather than actual or observed fact. These in economic terms are based on economic theory and they seek to determine whether the expected is

equal to the observed, i.e. whether the economic expectations are in line with actual observations in the analysis. Therefore, from the OLS linear equation, it was expected that the following conditions are derivable: $b_0 > 0$, $b_1 > 0$, $b_2 > 0$, $b_3 < 0$

Stationary Test

Table 1 Augmented Dickey Fuller Statistics of the Variables

Variables	ADF Statistics	1%	5%	10%	Order of Integration	Maximum No. of Lag
RGDP	-5.089104	-3.689194	-2.971853	-2.625121	I(1)	9
OREV	-8.222301	-3.646342	-2.954021	-2.615817	I(1)	9
NOREV	-6.272599	-3.639407	-2.951125	-2.614300	I(1)	9
INFR	-5.767798	-3.639407	-2.951125	-2.614300	I(1)	9

Source: Author's Computation using E-view 7.1

Table 2 Phillips Perron Statistics of the Variables

Variables	PP Statistics	1%	5%	10%	Order of Integration	Maximum No. of Lag
RGDP	-9.855887	-3.639407	-2.951125	-2.614300	I(1)	9
OREV	-10.63114	-3.639407	-2.951125	-2.614300	I(1)	9
NOREV	-10.59272	-3.639407	-2.951125	-2.614300	I(1)	9
INFR	-14.40574	-3.639407	-2.951125	-2.614300	I(1)	9

Source: Author's Computation using E-view 7.1

Unit root tests are conducted for the variables using the Augmented Dickey Fuller test and the Phillips-Perron test and the results are presented in the table 1&2 above. Note that the Mackinnon (1996) critical values for the Augmented Dickey Fuller test and the Phillips-Perron test estimation at 1%, 5% and 10% significance levels are stated in the tables above. Stationary (unit root) test conducted for the set of variables enumerated above revealed that all the variables are I(1) variables (Integrated of order 1). That is, they are not stationary at levels but are all stationary at their various first differences.

Table 3

Date: 11/09/17 Time: 15:09
 Sample (adjusted): 1982 2015
 Included observations: 34 after adjustments
 Trend assumption: Linear deterministic trend (restricted)
 Series: RGDP OREV NOREV INFR
 Lags interval (in first differences): 1 to 1
 Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.798891	110.1543	63.87610	0.0000
At most 1 *	0.476656	55.62136	42.91525	0.0017
At most 2 *	0.462619	33.60581	25.87211	0.0045
At most 3	0.307438	12.49018	12.51798	0.0505

Trace test indicates 3 cointegrating eqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.798891	54.53292	32.11832	0.0000
At most 1	0.476656	22.01555	25.82321	0.1472
At most 2 *	0.462619	21.11564	19.38704	0.0278
At most 3	0.307438	12.49018	12.51798	0.0505

Max-eigenvalue test indicates 1 cointegrating eqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

Table 3 above presents the cointegration result for the variables. Here, it could be observed that the variables in the equation are cointegrated. The existence of cointegration suggests that there is a long-run relationship among

the variables in the equation. Trace test and Max-eigenvalue test indicate cointegration at 5% level of significance respectively. As a result of this, an ordinary least square regression was estimated because the variables are stationary at their various first differences.

Table 4

Date: 11/09/17 Time: 14:58

Sample: 1980 2015

Included observations: 36

Variable	Coefficient	Std. Error	t-Statistic	Prob.
	7.570283	0.002876	2632.029	0.0000
OREV	0.000394	0.000218	1.806585	0.0802
NOREV	0.001451	0.000189	7.665901	0.0000
INFR	-2.740005	2.110005	-1.298934	0.2032
R-squared	0.839720	Mean dependent var		7.599638
Adjusted R-squared	0.824694	S.D. dependent var		0.005275
S.E. of regression	0.002208	Akaike info criterion		-9.288640
Sum squared resid	0.000156	Schwarz criterion		-9.112694
Log likelihood	171.1955	Hannan-Quinn criter.		-9.227230
F-statistic	55.88357	Durbin-Watson stat		1.999384
Prob(F-statistic)	0.000000			

Table 5 Presentation of Regression Result

Dependent Variable : RGDP

Sample : 1980-2015

Variables	Estimated Coefficient	T-Value	Apriori Expectation	Inference
Constant term	7.570283	2832.029	$b_0 > 0$	Correct sign and significant
OREV	0.000394	1.806585	$b_1 > 0$	Correct sign and significant
NOREV	0.001451	7.665901	$b_2 > 0$	Correct sign and significant
INFR	-2.740005	-1.298934	$b_3 > 0$	Correct sign and significant
Significant at 5%		$R^2 = 0.83$		DW = 1.9

Empirical Findings

The short run result in table 4 shows that there is a positive relationship between oil revenue and economic development in the Nigerian economy, given the coefficient of 0.000394, which is statistically significant with a t-value of 1.806585. This can be interpreted as a one naira increase in oil revenue would bring about 3.94 units increase in economic development proxied by real gross domestic product (RGDP). This suggests that oil revenue is a significant factor that can bring rapid growth and development of an economy. Judicious utilization of the revenue derived or realized from the domestic consumption and exportation of crude oil to foreign countries could serve as a catalyst for faster economic growth and development of a country like Nigeria. From the estimated result, there exists a statistically significant positive association or correlation between non-oil revenue and economic development in Nigeria, given the coefficient of 0.001451 with a t-value of 7.665901. This implies that a one naira increase in oil revenue would bring about 14.51 units increase in economic growth and development. The coefficient of inflation in the estimated regression equation is -2.740005 which is statistically significant with a t-value of -1.298934. This can be interpreted as a one unit rise in inflation rate would bring about 12.98 units reduction in economic growth and development. This is in conformity with the apriori theoretical expectation that there is an inverse relationship between inflation rate and economic development.

The coefficient of determination (R^2) indicates that over 83 percent changes in economic development are explained by Oil revenue (OREV), Non-oil revenue (NOREV) and Inflation (INFR) taken together. This is a nice fit as the unexplained variation is just 17 percent. The remaining 17 percent could be attributed to some other forces influencing economic growth and development outside this model. The adjusted coefficient of determination (R^2) is 0.82 and this shows that 82 percent variation in economic growth and development is caused by variations in Oil revenue (OREV), Non-oil revenue (NOREV) and Inflation (INFR). This model as specified is statistically significant given its F-test to be 55.88357. The F-statistic value of 55.88357 is high enough, this shows the overall significance of the model and this indicates that collectively, all the explanatory variables included in the model are important determinants of economic growth and development.

The value of Durbin-Watson is 1.999384 for the model. This falls within the determinate region and this

implies that the model is free from autocorrelation problem. Since oil revenue exerts a statistically significant positive relationship with economic development in the model, null hypothesis is rejected which states that there is no significant positive relationship between oil revenue and economic development in Nigeria. Similarly, non-oil revenue also exhibits a statistically significant positive relationship with economic development in the model, thus, the null hypothesis is rejected which states that there is no significant positive relationship between non-oil revenue and economic development in Niger

Conclusion and Recommendations

This paper investigated the economic development implications of oil revenue and non-oil revenue in Nigeria. Empirical analysis was conducted by applying the multiple regression of the ordinary least square technique to the annual data on the Nigerian economy for the period 1980 to 2015. The model was found to be significant and most of its estimates are as expected. The study found that both oil revenue and non-oil revenue have sustained impact on economic growth and development. The findings show that oil revenue and non-oil revenue are positively and significantly related with economic growth and development which is in conformity with a priori theoretical expectation. The study further revealed that non-oil revenue's positive contribution to economic development is greater or higher than that of oil revenue ($0.001451 > 0.000394$). This could be largely due to the past and present policies of the various tiers of successive governments to develop the non-oil sector due to the fluctuations in the international oil market and the incessant conflict in the oil producing areas of Nigeria. The better performance of the non-oil revenue relative to the oil revenue within the studied period could be attributed to the good governance demonstrated by past administrations in the 60s, 70s and 80s which judiciously spent the nationally generated revenue on provision of basic social amenities which translated to improved economic growth and development. After these decades, the mantle of leadership has been taken over by corrupt politicians who are not interested in the welfare of Nigerians but in looting the national treasury for selfish reason.

Based on the estimated results, the following recommendations are made:

- credible people should be elected into political offices by Nigerians who would make judicious utilization of the oil revenue and non-oil revenue for the improvement of the living standard of the people and overall development of the country.
- government at all levels should invest massively on the oil and non-oil sectors of the economy so that greater revenue could be realized for the economic development of the country.
- domestic and foreign investors should be encouraged by the government to invest in the oil and non-oil sectors through provision of basic infrastructural facilities like uninterrupted power supply, good road network, efficient and effective communication system and regular supply of drinkable water.
- loanable funds at reduced interest rates should be made available to domestic investors in the non-oil sector of the Nigerian economy especially the agricultural and manufacturing sub-sectors.
- the existing refineries in the country should be well maintained to produce at full capacity and new ones be established to produce refined petroleum products that can be exported to foreign countries which would boost the nationally generated revenue for economic development.

Incentives for ease of doing business should be provided for both domestic and foreign investors in the oil and non-oil sectors of the economy in form of favorable fiscal policy

References

- Abogan, O. P., Akinola, E. B., & Baruwa, O. I. (2014). Non-oil Export and Economic Growth in Nigeria (1980-2011). *Journal of Research in Economics and International Finance*, 3(1), pp. 1-11.
- Adams, W. M. (2006). *The Future of Sustainability: Rethinking Environment and Development in the Twenty-First Century*. The World Conservation Union.
- Adedokun, A. J. (2012). Oil Export and Economic Growth: Descriptive Analysis and Empirical Evidence from Nigeria. *Pakistan Journal of Social Sciences*, 9(1), pp. 46-58.
- Akilo, A. E. (2012). How Important is Oil in Nigeria's Economic Growth? *Journal of Sustainable Development*, 5, pp. 165-179.
- Gelb, A. H. (1988). *Windfall Gains: Blessings or Curse?* New York Oxford University Press.
- Everhart, S., & Duval, H. R. (2001). *Management of Oil Windfalls in Mexico: Historical Experience and Policy Options for the Future*. Policy Research Working Paper No. 2592, World Bank, Washington DC.
- Ishola, S. A., Olaleye, S. O., Olajide, A. R., & Abikoye, O. A. (2015). Government Expenditure, Oil Revenue and Economic Growth in Nigeria. *International Journal of Economics, Commerce and Management*, 3(5), pp. 180-202.
- Joseph, U. M., Micheal, C. E., & Stella, O. O. (2016). Evaluation of the Contribution of Oil Revenue on Economic Development in Nigeria. *International Journal of Economics and Finance*, 8(6), pp. 210-218.
- Mackinnon, J. G., Haug, A. A., & Michelis, L. (1999). Numerical Distributions Functions of Likelihood Ratio Tests for Cointegration. *Journal of Applied Econometrics*, 14, pp. 563-577.

- Mansell & Wehn (1998). *Knowledge Societies: Information Technology for Sustainable Development*. UK: Oxford University Press for the United Nations Commission on Science and Technology for Development.
- Moradi, M. A. (2007). *Oil Resource Abundance, Economic Growth and Income Distribution in Iran (1968-2005)*. The Proceedings of International Conference on Policy Modeling, Ottawa, Canada.
- Musgrave, R. (2004). *Public Finance 5/E*. India: McGraw-Hill Education Pvt Limited.
- Odularu, G. O. (2008). *Crude Oil and the Nigerian Economic Performance*. *Oil and Gas Business*, pp. 1-29. Retrieved from <http://www.ogbus.ru/eng/>
- Ogbona, G. N. (2012). *Petroleum Income and Nigerian Economy: Empirical Evidence*. *Arabian Journal of Business and Management Review*, (9), <http://dx.doi.org/10.12816/0002159>.
- Oladipo, S. O., & Fabayo, J. O. (2012). *Global Recession, Oil Sector and Economic Growth in Nigeria*. *Asian Transactions on Basic and Applied Sciences*.
- Omo, A., & Bashir, O. K. (2015). *Oil Revenue, Public Spending and Economic Growth Relationships in Nigeria*. *Journal of Sustainable Development*, 8(3), pp. 113-123.
- Ricardo, D. (1817). *On the Principles of Political Economy and Taxation*. London: John Murray Publication.
- U. L. (Victor 2015). *The Empirical Analysis of Oil Revenue and Industrial Growth in Nigeria*. *African Journal of Business Management*, 9(16), pp. 599-607.