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OIL SECTOR REVENUE, MACROECONOMIC VARIABLES AND ECONOMIC GROWTH IN NIGERIA

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Abstract

The challenges in oil sector revenue are so enormous that can overwhelm macroeconomic variables thereby reducing their potentials of contributing to the gross domestic product and reduce the rate of unemployment. The inability to create value is the major problem which oil sector revenue are faced with in today's dynamic economic environment. This study investigated the influence of the oil sector revenue and macroeconomic variables on gross domestic product, Nigeria. The Dynamic Capability View Theory was used to underpin the study. The study employed a time series through secondary data. Unit root test and Multiple Regression were utilised for data analysis. The findings revealed that oil sector revenue contributed negatively to growth and development process of Nigeria which is not as expected, because unit increase in oil sector revenue has negative effect on economic growth to the tune of 6%. The macroeconomic variables interest rate show negative interest on GDP as expected but government expenditure too shows negative effect on GDP as against expectation. Thus, it was recommended that government should develop alternative source of income because too much reliance on oil to the neglect of other source of revenue is harmful to the economy. Other sector of the economy can as well be functional properly through diversification of resources.

Keywords: *Economic Growth, Macroeconomics, Macroeconomic Variables, Oil Revenue.*

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1. INTRODUCTION

It is not disputable that the oil sector revenue has substantially contributed to the economy of Nigeria since the crude oil was discovered in Nigeria in 1956 at Oloibiri in the Niger Delta. Before the discovery of crude oil Nigeria's export trade was largely dominated by non-oil products such as groundnuts and cotton in the North, palm kernel in the East, cocoa in the West,

rubber and coffee in the Mid-West. Generally from early 60s up to early 70s, agriculture through export of non-oil products had contributed up to 80% of the gross domestic product and providing employment for over 70% of the work population and about 74 per cent of total government revenue (LCCI, 2016; Ogbona, 2012). By the end of the 1970s, however, the oil sector had taken over dominance of the economy, accounting for over 90 percent of export earnings and more than 80 per cent of government revenue. Consequently, the oil and gas industry constitutes nearly 90% of Nigerian revenue and foreign exchange earnings (LCCI, 2016; Odularu, 2008).

Nigeria is richly endowed with abundant natural resources comprises of oil and non- oil resources. However, empirical findings in development economics has shown that the abundance of resources in developing countries does not translate into substantial economic growth and development as the developing countries with abundant natural resources does not perform efficiently like those that are deficient in natural resources (Ranis, 1991; Auty, 2001; Abayomi, Adam & Alumbugu 2015). Most studies shows that the per capital incomes of the countries with poor resources increases at the rates of two or three times faster than those of the countries with abundant resources (Ranis, 1991). It is evident that the enormous revenue from oil export only benefits less than 3% of the population in Nigeria (Odularu, 2012).

Oil sector revenue has contributed in the provision of intermediate inputs which are crucial to the development of the manufacturing sub-sector. Manufacturing sector plays a crucial role in the growth and development of the developing countries. Generally, as a result of oil production, refining and distribution, there is tendency for oil sector-related services to spring up. These oil sector-related services will not only provide opportunity for employment but also serve as sources of earnings for the operators (Usman, Madu & Abdullahi, 2015; Ogbona, 2012.) .Also, the activities in the oil sector often lead to inflow of foreign resources such as Foreign Direct Investment (FDI) and portfolio investment. Indeed, the bulk of FDI into majority of the countries that export oil are concentrated in the oil sector. Specifically, FDI inflows to developing countries not only help in increasing their stock of capital but may also assist in boosting labour productivity and incomes in the host country. Consequently, the levels of output, employment creation, and potential tax revenues are enhanced in the host countries (Ramirez, 2006; Egwakhide, 2012). In addition, oil sector is belief to provide the major sources of energy worldwide. Because of its versatility as it currently satisfies a wide variety of energy and related needs (Usman,Madu & Abdullahi,2015).

However in spite of the huge revenue from the oil sector, the economy is still grapples with many problems such as political instability, corruption, and poor macroeconomic management, the rising unemployment, poor infrastructural development, declining manufacturing production output.(Akinlo, 2012; Agbaeze, Udeh & Onwuka, 2015). .Adenikinju, (2008).asserted that the oil boom era has not been translated into increase in the standard of living of Nigerians instead it aggravate hopelessness and poverty most especially around the communities within which the oil wells are exploited. Some of these communities still suffer environmental degradation, which leads to deprivation of means of livelihood and other economic and social factors with the resultant emergence of militants in the Niger delta region (Agbaeze, Udeh & Onwuka(2015).

Though crude oil has contributed largely to the economy, her overdependence on the capital-intensive oil sector, has led to the neglect of other sectors in the economy. This makes Nigeria economy to be tending at a faster rate towards mono- economic economy as agriculture has been abandoned. For instance the largely subsistence agricultural sector has not kept up with rapid population growth, and Nigeria, once a large net exporter of food, now imports some of its food products as a result of neglect, ineffective agricultural policies and programs(PWC, 2016; Adenikinju, 2008).

Also failure to properly manage the oil proceeds has catastrophic effects on Nigeria in view of the heavy reliance on petroleum as the mainstay of the nation's economy. In 2014, petroleum industry contributed only 14% to the economy (PWC, 2016). Nigeria is an important oil supplier to the United States. In first half of 2012 drop to 5% of the share of total of total United State crude oil imports compare to between 9-11% in the previous years. In addition the emergence of shale oil has reduced the relevance of sub Saharan oil and the subsequent reduction in the revenue of the affected countries. Couple with this is the global oil price fluctuations. Considering the fact that there are other sectors in the economy, the excess revenue made from the oil sector during the oil boom era should have been invested in those sectors to diversify but hindered by corruptions and lack of accountability (Donwa, Mgbame. & Julius, 2015).

The non-oil sector of the economy can be described as those economic activities which are outside the petroleum and gas industry or not directly linked to them **(** Riti, Gubak and Madina

2016). These includes; telecommunication services; financial sectors services; tourism and hospitality services; trade services- wholesale and retail; manufacturing and so on. Thus it is a misconception to view non-oil sector as refers only to agriculture and non-oil mineral resources (Riti, Gubak and Madina 2016). This sector also faces its own challenges which can be attributed to the loss and decline in the market share in the global market (Abogan, Akinola & Baruwa ,2014).

The global oil market has, in recent time, experienced a steady decline in the price of crude oil after some years of wind fall. The current dwindling in the oil price since 2014 has affected the economy negatively which resulted to the current economic recession (NBS, 2015; Kale, 2014) being experienced in the economy. Since other sectors most especially agriculture has been push to the state of moribund, hence, the need to evaluate the relative impacts of oil sector on the economy. Thus, the dismal performance of the Nigerian economy in the face of huge revenues from oil in relation to the macroeconomic variables has rekindled interest on the importance of oil in the growth and development process in Nigerian. Hence, the objective of the project is to examine the contribution of the oil sector revenue and macroeconomics variables on economic growth in Nigeria between 1970 and 2015.

A good number of research works (Odularu, 2008, Uwakonye, Osho and Amucha 2006, Akinlo 2012, Abayomi, Adamu and Alumbugu,2015, , Baghebo and Atima 2013, and lot of others) majorly works on oil sector revenue and Gross Domestic Product(GDP) without considering macroeconomic variables, though uses various estimating techniques such as VAR, Co.integration, Ordinary Least Square and so on. This research work is focused on interactive impact of oil sector revenue and macroeconomic variables on economic growth which has not been addressed by the previous writers. The period of 1970 to 2015 is considered based on available and accessibility of the data for the variables proxies.

The main objective of this study is to determine the effect of oil sector revenue and macroeconomic variables on economic growth in Nigeria from 1970 to 2015. The specific objectives sought to: Evaluate the impact of oil sector revenue on economic growth in Nigeria for the period under review, investigate the effect of macroeconomic variables on economic growth in Nigeria for the period under review and examine the direction of causality between the oil sector revenue and macroeconomic variables in Nigeria. The following are the research questions: How does oil sector revenue impact on economic growth in Nigeria within the period under review?, To what extent do the macroeconomic variables affect economic growth

in Nigeria for the period under review? And To what extent does causal relationship exist between oil sector revenue and macro-economic variables in Nigeria? While the following are the research hypotheses: There is no significantly positive relationship between oil sector revenue and economic growth in Nigeria, There is no significant correlation between macroeconomics variables and economic growth in Nigeria and There is no causal relationship between oil sector revenue and macroeconomic variables in Nigeria.

2. LITERATURE REVIEW

Crude Petroleum Oil and Refined Petroleum Products.

According to Wikipedia, (2015**)** the free encyclopedia, Petroleum (from Latin: Petra: "rock" + Oleum: "oil".) is a naturally occurring, yellow-to-black liquid found in geological formations beneath the Earth's surface, which is commonly refined into various types of fuels. Investopedia (2015) explained that crude oil is a naturally occurring, unrefined petroleum product composed of hydrocarbon deposits and other organic materials. It explained further that crude oil was first discovered and developed during the Industrial Revolution, while its industrial uses were first developed in the 19th century. The name petroleum covers both naturally occurring unprocessed crude oil and petroleum products that are made up of refined crude oil and natural gas **(**Donwa, Mgbame & Julius, 2015). Crude oil is typically obtained through oil drilling, where it is usually found alongside other resources, such as natural gas (which is lighter, and therefore sits above the crude oil) and saline water (which is denser, and sinks below). It is then refined and processed into a variety of forms, such as gasoline (Petro), kerosene, diesel, asphalt and various forms of petrochemicals through the process of fractional distillation which is the first stage in refining before selling it to the consumers. Thus the terms oil and petroleum are sometimes used interchangeably It is a nonrenewable resource which means that it can't be replaced naturally at the rate we consume it and is therefore a limited resource.

Economic Growth

Investopedia (2016), define economic growth as an increase in the capacity of an economy to produce goods and services, compared from one period of time to another (Investopedia, 2016). In simplest terms, economic growth refers to an increase in aggregate productivity. It can be measured in nominal or real terms, the latter of which is adjusted for inflation. Traditionally, aggregate economic growth is measured in terms of Gross National Product (GNP) or Gross Domestic Product (GDP). Gross Domestic Product (GDP) is the monetary value of all the

finished goods and services produced within a country's borders in a specific time period.(Adebayo,2010). Though GDP is usually calculated on an annual basis, it can be calculated on a quarterly basis as well. GDP includes all private and public consumption, government outlays, investments and exports minus imports that occur within a defined territory. Put simply, GDP is a broad measurement of a nation's overall economic activity.

Empirical Review

Oil Sector Revenue and Macroeconomic Variables: -Evidence from Developed and Developing Economies

Although there are plenty of studies that have tested the relationship between oil price and macroeconomic aggregates, most of these studies were conducted on developed economies (Emami &Adibpour, 2012). Such studies focusing on oil-importing countries have shown that oil price shocks affect industrial production negatively. These studies include among others, Hamilton (1983), Gisser and Goodwin (1986), Hamilton (1996), Huang (2006) and Schmidt and Zimmermann (2007). Nevertheless, most of these studies pointed to the fact that the strength of the oil-economy relationship has not been stable for these economies over time. It is clear that the oil price fluctuation effect on developed economies has become weaker since the eighties **(**Farzanegan and Markwardt, 2011).

The government would follow expansionary fiscal policy and would use such money to finance its development and infrastructure which will induce investment, consumption and economic growth (Emami & Adibpour,2012). However, such positive effect could be weakened by real exchange rate appreciation which leads to the contraction of tradable sectors and so the country will be under the risk of the Dutch disease. In addition, when oil prices decrease governments are not able to adjust their current spending immediately. This will lead to budget deficits which are a critical issue for most developing countries (Farzanegan, 2011). These findings were supported by Iwayemi and Fowowe (2011) who employed Granger causality tests, impulse response functions, and variance decomposition for the same country. While positive oil price shocks do not significantly affect government expenditure, inflation, real exchange rate and output, their results suggest the existence of asymmetric effects of oil price shocks.

Oil Price and Macroeconomic Variables Volatility

Farzanegan (2011) studied the asymmetric effects of oil price shocks on the Iranian economy for 1975-2006 with quarterly data, using a VAR and 6 variables (oil prices, inflation, government expenditure, real effective exchange rate, industrial production and imports). He found a strong positive relationship between increasing oil prices and industrial production and both positive and negative oil prices shock significantly increase inflation. Bouchaout and Al-Zeaud (2012) used a Vector Error Correction Model (VECM) and Variance Decomposition analysis (VD) to explore the effect of oil price volatility on the Algerian economy during the period 1980-2011. Their results reveal that oil prices changes have a very limited impact on most macroeconomic variables in the short run except a positive effect on inflation and a negative influence on the real exchange rate. However, in the long run oil price changes positively affect real GDP and inflation and have a negative effect on unemployment and real exchange rate.

Oil Sector Revenue and Economic Growth

Abayomi, Adam and Alumbugu (2015) examines the economic impact of oil exportation on Nigerian economy from 1970 – 2012. Based on the secondary data collected and the model used in the research work and unit root test was conducted on the data to test their stationary, after which the co-integration test was performed to analyze the long run relationship among the variables and Vector Error Correction Model (VECM) and impulse response was also employed for the analysis. The result from the study shows that there exist a long run relationship between the dependent variable and the explanatory variables. The conclusion of the study was that Exports should not be promoted at all cost, but rather the utilization and allocation of the physical resources and labor complement of the country in the most advantageous combination as between production for the local and foreign markets and that diversification should be seen as an economic management strategy aimed at ensuring stability of incomes.

The findings from a study conducted by Usman, Madu and Abdullahi (2015) on the impact of Petroleum on Nigerian Economy shows that petroleum has significant and positive impact on Nigeria economy during the period covered, 2000-2009 using only GDP and Oil Revenue for the period. They argue that the sector has been the main source of foreign reserve and development capital for the country but concluded that nothing has been done to support the

sector. The researchers therefore recommended that the sector should be supported so that the country can derive the full benefits of the sector.

Baghebo and Atima (2013) examines the impact of petroleum on economic growth of the Nigerian economy from the period covering 1980-2011. Using econometric approach the stationary status of the time series data was examined using Augmented Dickey Fuller Test. The dependent variable is Real Gross Domestic Product (RGDP)while the independent variables are Foreign direct investment (FDI), Oil revenue (OIL), Corruption index (CI), External debt (EXDEBT). The series attained stationary after differencing. The Johansen cointegration test was conducted to ascertain the long run equilibrium condition of the variables in the model. The variables were cointegrated because four cointegrating equations were found. The Parsimonous model was established to account for the short run dynamic adjustments required for stable long run equilibrium. It was discovered that the variables: oil revenue and corruption index impacts negatively on Real GDP, while FDI and EXDEBT have positive impact on the growth of the economy. This means that the resource curse theory is proven to be true in Nigeria. The study concludes that, if the petroleum industry bill is passed and implemented to the letters, there exists hope for the Nigerian nation.

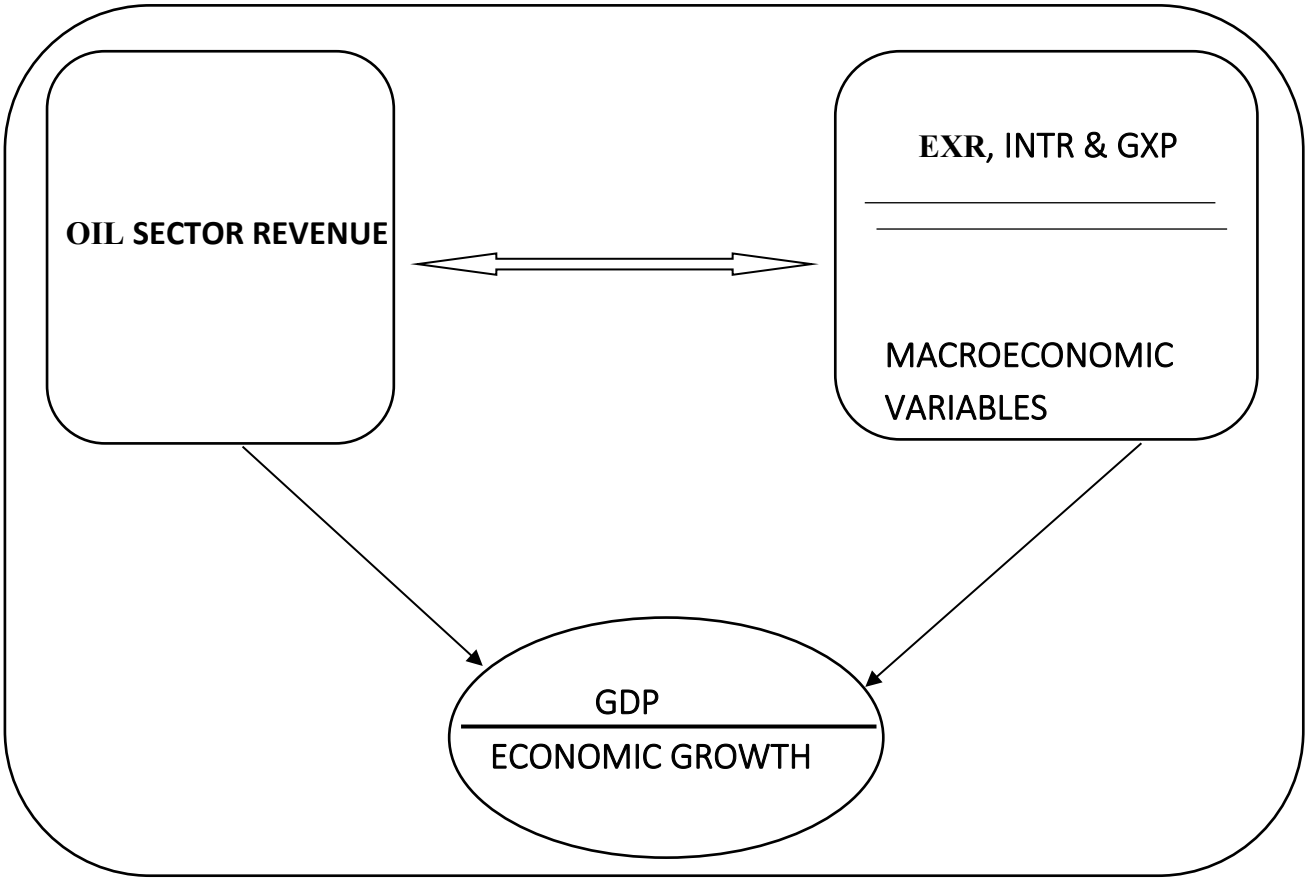
Hosseini and Tang (2014) attempted to re-investigate the role of oil and non-oil exports in economic growth in Iran using the multivariate co integration and Granger causality methods. The study covers the annual data from 1970 to 2008.

According to Akylbekova (2015), for many years' resource abundant countries such as Nigeria, Congo, Venezuela and others were experiencing low economic growth and living standards. While Asian Tiger economies with hardly any natural resources like Korea, Hong Kong, Singapore and Taiwan were experiencing miraculous economic growth and achieved high living standards. The features of the resource curse countries include extreme dependence on resource wealth for fiscal revenues, export sales or both; low saving rates; poor growth performance; and highly volatile resource revenues. Specifically, the per capita incomes of the resource poor countries increased at rates two or three times faster than those of the resource abundant countries .A commonly cited example of the resource curse is the Dutch disease, a situation which occurred in the Netherlands in the 1960s when the economic boom following natural following large natural gas discoveries led to a decline in manufacturing and real exchange rate appreciation (Kronenberg, 2004; William, 2011).

Conceptual framework

The conceptual link between oil sector revenue, macroeconomic variable and economic growth can be presented in analytical form, this is because growth performance of an economy with oil revenue depends largely on efficiency of the macroeconomic variables.

FIG 1: Analytical Frame Work of Oil Sector Revenue, Macroeconomic Variable and Economic Growth In Nigeria



The figure above suggests that increase in oil sector revenue has a positive effect on economic growth while reduction in oil sector revenue reduces the growth strength of the economy. However, in order to address the specific objective of this research, this study will focus on the insider mechanism of oil sector revenue, macroeconomic variables and economic growth in Nigeria.

3. METHODOLOGY

The research design adopted for this research is the *ex-post facto* research design. Ex- post design also known as 'causal- comparative' design is a quasi-experimental study examining how an independent variable, present prior to the study in the participant affects an independent variable. This is a kind of research in which the researcher cannot manipulate the data that is been used. The design is used when the researcher intends to determine cause-effect relationship between the dependent and independent variables with a view to establishing a causal link between them (Kerlinger, 1973; Cohen, Manion and Morison, 2000). This leads to the adoption of this research design for this study.

Model Specification

The model that we be used to evaluate the performance of the oil sector of Nigeria with the dependent variable as Real Gross Domestic Product while independent variables are presented as: Oil Sector Contribution to RGDP, Interest rate, Government Expenditure, and Exchange Rate.

$RGDP = \int (OSR, INTR, GEX, EXRT)$

Rewriting the above model in linear form as:

$RGDP = \alpha_0 + \alpha_1 OS + \alpha_2 INTR + \alpha_3 GEX + \alpha_4 EXRT + \mu t.$

Where:

RGDP = Real Gross Domestic Product, OS = Oil sector Contribution to real Gross Domestic Product, INTR = Interest Rate, GEX = Government Expenditure, EXRT = Exchange Rate, Where: α_0 = Intercept, $\alpha_1 - \alpha_5$=elasticity coefficients, μt = stochastic term or error term at time t.

Techniques of Data Analysis

This study used Ordinary Least Square (OLS) multiple regressions analysis to determine the effect of the independent variable on the dependent variable. Also, Granger causality test was conducted to determine the direction of causality between the variables under consideration (Odularu,2008; Handi and Sbia, 2013; Hosseini and Tang, 2014; Baghedo and Atima,2015).The choice of OLS is mainly because it minimizes the error sum of squares and

has a number of advantages such as unbiasedness, consistency, minimum variance and efficiency (Koutsoyannis: 1977) The E-view econometric software 7.0 was used for the analysis. All the steps was adopted to arrive at a conclusion on oil sector revenue, macroeconomic variable and economic growth in Nigeria.

4. EMPIRICAL ANALYSIS AND PRESENTATION OF RESULTS

STATIONARY/ROOT TEST RESULT

UNIT ROOT TEST/ ADF

Group unit root test: Summary

Series: GDP, OSR, EXR, RIR, GXP

Date: 01/11/17 Time: 23:46

Sample: 1970 2015

Exogenous variables: Individual effects

Automatic selection of maximum lags

Automatic lag length selection based on AIC: 0 to 9

Newey-West automatic bandwidth selection and Bartlett kernel

Method	Statistic	Prob.**	Cross-sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t*	2.01758	0.9782	5	214

Null: Unit root (assumes individual unit root process)

Im, Pesaran and Shin W-stat	-2.65868	0.0039	5	214
ADF - Fisher Chi-square	58.2968	0.0000	5	214
PP - Fisher Chi-square	62.0476	0.0000	5	225

** Probabilities for Fisher tests are computed using an asymptotic Chi square distribution. All other tests assume asymptotic normality.

Research conducted unit root to ascertain the stationarity of time series**.** The ADF statistic of 58.2968 shows that there is an asymptotic chi square distribution, which means that all other test assume asymptotic normality. The test also shows that the 5 variables are stationery at difference

RESULT OF THE REGRESSION MODEL USING OLS

Model 1

GDP = *f*(OSR)

RGDP = $\alpha_0 + \alpha_1$OSR

GDP = 7.548875 – 0.065778OSR

Dependent Variable: GDP

Method: Least Squares

Date: 01/15/17 Time: 12:24

Sample: 1970 2015

Included observations: 46

Variable	Coefficient	Std. Error	t-Statistic	Prob.
OSR	-0.065778	0.077580	-0.847871	0.4011
C	7.548875	2.510101	3.007399	0.0043

R-squared	0.016076	Mean dependent var	5.584783
Adjusted R-squared	-0.006286	S.D. dependent var	6.535713
S.E. of regression	6.556223	Akaike info criterion	6.641211
Sum squared resid	1891.299	Schwarz criterion	6.720717
Log likelihood	-150.7479	Hannan-Quinn criter.	6.670995
F-statistic	0.718885	Durbin-Watson stat	1.627327
Prob(F-statistic)	0.401099		

From model above which depicts the relationship between GDP and OSR, it can be inferred that the coefficient of OSR is negative which is not in line with expected apriori expectation as highlighted from the objectives. The coefficient value of -0.0060778 shows that a unit increase in oil sector revenue will decrease economic growth by 0.06 percent which does not conform to expectation, probably due to the corruption and macroeconomic mismanagement in the public sector.

The R square of 0.016076 gives co-efficient of determination which shows that variations in GDP is accounted for by 0.16 dependent variable oil sector revenue.

The F-statistics of 0.718885 which shows joint significance of the explanatory variable is not statistically significant at 0.5 percent.

The DW value of 1.627327 shows the presence of autocorrelation.

Model 2

RGDP = (RIR,GEX,EXR)

RGDP = α_0+ α_1INTR + α_2GEX + α_3EXR

GDP – 4.418684 – 646E-14 GXP – 0.003422 RIR + 0.035928 EXR

ependent Variable: GDP

Method: Least Squares

Date: 01/15/17 Time: 12:28

Sample: 1970 2015

Included observations: 46

Variable	Coefficient	Std. Error	t-Statistic	Prob.
EXR	0.035928	0.024860	1.445188	0.1558
RIR	-0.003422	0.065643	-0.052133	0.9587
GXP	-6.46E-14	6.45E-14	-1.001847	0.3222
C	4.418684	1.360728	3.247294	0.0023

R-squared	0.050654	Mean dependent var	5.584783
Adjusted R-squared	-0.017157	S.D. dependent var	6.535713
S.E. of regression	6.591540	Akaike info criterion	6.692392
Sum squared resid	1824.833	Schwarz criterion	6.851405
Log likelihood	-149.9250	Hannan-Quinn criter.	6.751959
F-statistic	0.746990	Durbin-Watson stat	1.621777
Prob(F-statistic)	0.530207		

The model above described the influence of macroeconomic variables on GDP and these variables are exchange rate, real interest rate and government expenditure.

The co-efficient value of – 6.45E-14GXP shows that a unit increase in GXP will decrease GDP by 6% while the coefficient of Real Interest Rate is 0.003422 which shows that a unit increase in RIR will decrease GXP by - 0.3% which is conformity with apriori expectation. While the coefficient value of 0.035923 of EXR shows that a unit increase in EXR will increase GDP by 0.4% which is in conformity with apriori expectation.

The F-Statistic of 0.746990 shows that the co-efficient of determination of 0.746990 shows that all the variables are statistically significant at 5% level.

5. SUMMARY OF FINDINGS, CONCLUSION AND POLICY RECOMMENDATIONS

Summary of Findings

Oil Sector Revenue, Macroeconomic variables and economic growth in Nigeria were viewed in this study for the period 1975-2020. The findings however revealed that oil sector revenue contributed negatively to growth and development process of Nigeria which is not as expected based on A priori Expectation, because unit increase in oil sector revenue has negative effect on economic growth to the tune of 6% while expectation was that the revenue generated from oil should have positive contribution to economic growth in Nigeria. The macroeconomic variables interest rate show negative interest on GDP as expected but government expenditure too shows negative effect on GDP as against expectation. The study used GDP as a proxy for growth under the assumption that gross domestic product is a measure of standard of living, while macroeconomic variables were proxies with exchange rate (EXR), Interest Rate (INTR) and Government Expenditure (GXP).

Two out of four variables were conspicuously in conformity with apriori expectation and with the Oil Sector Revenue and Government Expenditure coming out negative, it is simply a reiteration of the theory that Real Interest Rate slows down growth which is a clear inference in this study.

Conclusion

The oil sector revenue is very essential to Nigeria economic growth and development, because it is catalyst to economic growth and development in majority of oil producing economies but result depicts otherwise for Nigeria economy which could be traced to mismanagement,

corruption and other negative factors. The study utilized the macroeconomic variables especially, exchange rate, real interest rate and government expenditure. The study ascertained that there have been some macroeconomic variables that failed to contribute positively to growth and development of Nigeria economy as well as oil sector revenue.

Researcher opined that corruption, mismanagement and misappropriate of fund, human and natural resources in the Nigeria economy might responsible negative contribution observed from oil sector revenue and some of the macroeconomic variables towards the economic growth in Nigeria. For instance some allegations against some of influential politicians and retired military officers that were offered oil licenses in which the proceeds does not reflect in government cover rather private pocket of those people only.

Policy Recommendations

In the light of the above summary, observations and conclusion, this study hereby makes the following policy recommendations:

- Since oil revenue reflected negative effect on economic growth, government needs to develop alternative source of income because too much reliance on oil to the neglect of other source of revenue is harmful to the economy. Other sector of the economy can as well be functional properly through diversification of resources.
- There is need to renew ageing facilities, working hard to reduce the number of spill in the course of operational waste, getting new technology to curb the amount of gas that flared and reduce waste product to the barest minimum.
- Environmental management and monitoring must be instituted because the concept of environmental impact assessment (EIA) should be imposed and optimistic by government regulatory agencies. This will as well curb the manipulating practices within the system.
- Moreover, there should be contingency team that will comprise the stakeholders' representatives (The captain of industry, academic scholars, government committee on oil sector etc.) that will be responsible for plans and implementation in all ramifications.
- There is also, the need for establishing befitting internal control within the system. This will help to minimize (if not completely eradicated) various leakages in the oil sector and will enable federal government to achieve reasonable percentage of their plan and also reflect positively on economic growth of the country.

Suggestions for Further Study

An interesting variant to this study would be an in –depth review of past approaches to the effect of macroeconomic variables on the economic growth of a nation with abundant of resources and with particular reference to economic development.

REFERENCES

Abayomi, A., Adam, S O.& Alumbugu, I. A. (2015).Oil Exportation and Economic Growth in Nigeria. Developing Country Studies Vol.5, No.15, 2015.PP.83 -92

Abogan, O. P.,Akinola, E. B. & Baruwa, O. I. (2014). Non-Oil Export And Economic Growth In Nigeria(1980-2011),Journal Of Research In Economic And International Finance (JREIF), 3(1)pp.1-11.Available online on:http://www.interesjournals.org.

Adenikinju, A. (2008). "Efficiency of the Energy Sector and its Impact on the competitiveness of the Nigeria Economy." Int. Assoc. Energy Econ. Fourth Quarter, pp. 27-31.

Agbaeze,E.K.,Udeh,S.N. & Onwuka,I.O.(2015). Revolving Nigeria's Dependency on Oil- the Derivation Model. Journal Of African Studies And Development.7(1),pp.1-14.DOI:10.5897/JASD2014.0303.

Akinlo,E,A.,(2012):How Important is Oil in Nigeria's Economic Growth? Journal of SustainableDevelopmentVol.5,No.4;pp165172:http://dx.doi.org/10.5539/jsd.v5n4p165

Akylbekova, Dina (2015).Analyzing the Resource Curse theory: A comparative study of Kazakhstan and Norway. Department of Economic History Mark .https://lup.lub.lu.se/student papers/search/publication?q=author+exact+utv12dak

Baghebo, M andAtima,T. O.(2013) The impact of petroleum on economic growth in Nigeria . Global Business and Economics Research Journal . 2 (5): 102 – 115

Bouchaour, C. & Al-Zeaud, H. A. (2012). Oil Price Distortion and Their Impact on Algerian Macroeconomic. International Journal of Business and Management, Vol. 7(18), pp.99-114

Cohen, L., Manion, L., & Morrison, K. (2000). *Research Methods in Education*. London: Routledge/ Falmer.

Donwa,P.A.,Mgbame,C.O.&Julius,O.M.(2015).Corruption In The Oil And Gas Industry: Implication For Economic Growth. European Scientific Journal.11(22) pp.212-230.

Egwakhide C.I. (2012) The impact of foreign direct investment on Nigeria‟s economic growth; 1980-2009:Evidence from the Johansen‟scointegration approach. *International journal of business and social science. Vol.3. No.6.*

Emami, K., & Adibpour, M. (2012). Oil income shocks and economic growth in Iran. *Economic Modelling*, *29*(5), 1774-1779.

Farzanegan, M. R. (2011). Oil revenue shocks and government spending behavior in Iran. *Energy Economics*, *33*(6), 1055-1069.

Gisser, M. and Goodwin, T.H. (1986) Crude Oil and the Macroeconomy: Tests of Some Popular Notions. Journal of Credit Money and Banking, 18, 95-103. http://dx.doi.org/10.2307/1992323

Hamilton, J.D. (1983), Oil and the macroeconomy since World War II, Journal of Political Economy 9(1),228-248.Available:http://ftp.zew.de/pub/zew docs/dp/dp08136.pdf

Hamilton J.D. (1996), 'This is What Happened to the Oil Price-Macroeconomy Relationship', Journal of Monetary Economics Vol. 38, No.2, pp. 215-220

Hamdi, H., & Sbia, R. (2013). Dynamic relationships between oil revenues, government spending and economic growth in an oil-dependent economy. *Economic Modelling*, *35*, 118-125.

Hosseini,S.M.P & Tang,C.F. (2014) The effects of oil and non-oil exports on economic growth: a case study of the Iranian economy, Economic Research-EkonomskaIstraživanja,27:1,427441,DOI:10.1080/1331677X.2014.967534,http://dx.doi.org/10.1080/1331677X.2014.967534

http://www.resourcegovernance.org/sites/default/files/nrgi_Resource-Curse.pdf

http://www.investopedia.com/terms/e/economicgrowth.asp#ixzz4KdxYS3Kc

http://www.investopedia.com/terms/r/resource-curse.asp

ttps://en.wikipedia.org/wiki/Resource_curse

https://en.wikipedia.org/wiki/Petroleum

http://www.nationalplanning.gov.ng/index.php/news-media/news/news-summary/333

Nigeria's oil sector contribution to GDP lowest in OPEC – Blueprint

Iwayemi, A. & Fowowe, B. (2011).Impact of oil price shocks on selected macroeconomic variables in Nigeria Energy Policy, vol. 39, issue 2, pp 603612http://econpapers.repec.org/scripts/redir.pf?u=http%3A%2F%2Fwww.sciencedirect.com

Kale, Yemi (2014):Measuring Better:Rebasing And/Re-Benchmarking Of Nigeria Gross Domestic Product. *National Bureau of Statistics*. Presentation At The Lagos Business School Breakfast Meeting Lagos.

Kerlinger, F. N. (1973), "*Foundations of Behavioural Research Techniques in Business and Economics", 11ed*, Boston

Koutsoyiannis, A. (1977), "Theory of Econometrics: An Introductory Exposition of EconometricMethods", 2nd ed, Palgrave, Publishers Ltd, 175 Fifth Avenue, New York.

Kronenberg, T. (2004). The curse of natural resources in the transition economies. *Economics of transition*, *12*(3), 399-426.

LCCI-PWC, (2016):Nigeria:Looking Beyond Oil.Available on www.lcci.com.

NBS,(2015) *"Nigerian Gross Domestic Product Report Q2 2015". National Bureau of Statistics. Retrieved 22 September 2015.*

Odularu,G.O.(2008):Crude Oil And The Nigerian Economic Performance.Oil And Gas Business.Availableon:http://www.ogbus.ru/eng/

Ogbonna, G.N.(2012):Petroleum Income And Nigerian Economy: Empirical Evidence Arabian Journal of Business and Management Review (OMAN Chapter) Vol. 1, No.9;

Price Walter Consulting, (2016). Review of the Nigeria Oil and Gas 2015.http://www.pwc.com/ng/en/assets/pdf/review-of-nigeria-oil-and gas industry.pdf?utm_source=mondaq&utm_medium=syndication&utm_campaign=view-original

Ramirez, M. D. (2006). Is foreign direct investment beneficial for Mexico? An empirical analysis,19602001.*WorldDevelopment,*34,802817.http:dx.doi:10:1016/j.worlddev.2006.01.001

Ranis, G. (1991). Towards a model of development. In L. B. Krause and K. Kihwan (Eds.), *Liberalization in the process of economic development* (pp.59-101). Berkeley, CA: University of California Press.

Riti, S. J., Gubak, H. D. & Madina, A. D. (2016).Growth Of Non-Oil Sector: A Key To Diversification And Economic Performance In Nigeria. Public Policy And Administration Research. 6(3).pp.64-75.

Usman . A Madu, I.Abdullahi, F,A.(2015): Evidence of Petroleum Resources on Nigerian Economic Development(2000-2009) Business and Economics Journal 6:2.pp.149-152. doi:10.4172/2151- 6219.1000149

Uwakonye, N.G. ;Osho,S.G. ; and Anucha,H.(2006): The Impact of Oil and Gas Production on The Nigerian Economy: A Rural Sector Econometric Model. International Business & Economics Research Journal 5 (2) 61 -75.

Williams, A. (2011). Shining a light on the resource curse: An empirical analysis of the relationship between natural resources, transparency, and economic growth. *World Development*, *39*(4), 490-505.

Appendix

The table below presents the statistical records for forty five years in respect of GDP, Oil Sector Revenue, Exchange Rate, Real Interest Rate and Government Expenditure of Nigeria.

GDP	OSR	EXR	RIR	GXP
25	3.29	0.71	-29.27	9,213,000,000
14.2	9.32	0.71	5.58	10,665,400,000
3.4	8.83	0.66	3.99	11,126,000,000
5.4	12.81	0.66	1.57	12,182,000,000
11.2	35.06	0.63	-25.67	17,524,000,000
-5.2	23.35	0.62	-13.97	23,976,300,000
9	23.24	0.63	-6.87	30,244,100,000
6	25.57	0.64	-4.26	32,795,900,000
-5.8	23.15	0.64	-6.29	37,570,700,000
6.8	53.82	0.6	-3.32	40,442,900,000
2.9	41.1	0.55	-3.55	45,153,000,000
20.8	28.35	0.62	-8.06	53,758,790,000
-1.1	26.89	0.67	4.49	54,775,500,000
-5.1	33.18	0.72	-3.33	56,783,670,000
-2	44.56	0.77	-2.67	59,307,610,000
8.3	43.8	0.89	3.69	67,018,590,000
-8.8	27.23	1.75	-1.5	72,724,420,000
-10.8	30.04	4.02	-31.92	98,218,090,000
7.5	26.17	4.54	-5.13	132,559,000,000
6.5	37.98	7.36	-16.96	165,465,000,000
12.8	43.03	8.04	14.65	231,833,000,000
2.2	41.26	9.91	2.07	268,109,000,000
3.2	38.47	17.3	-25.77	477,751,000,000
4.8	62.21	22.07	4.37	646,937,000,000
3.6	50.02	22	-8.03	885,877,000,000
2.2	34.95	21.9	-43.57	1,772,450,000,000
7.6	37.83	21.88	-9.71	2,609,090,000,000
5.3	36.86	21.89	16.61	2,712,190,000,000
5.2	22.65	21.89	25.28	3,007,650,000,000
2.8	28.16	92.34	2.77	2,918,330,000,000
7.7	40.49	101.7	-10.32	3,204,000,000,000
7	36.62	111.23	23.84	4,463,580,000,000
6.9	25.67	120.58	-10.81	6,518,900,000,000
11.9	38.6	129.22	8.61	8,361,740,000,000
8.8	32.63	132.89	19.37	10,287,600,000,000
8.7	38.24	131.27	-3.34	12,883,700,000,000
8.3	34.17	128.65	-0.37	14,666,000,000,000
9.1	31.13	125.81	11.61	20,313,900,000,000

8	32.04	118.55	4.19	21,016,400,000,000
9	23.73	148.9	23.71	25,303,100,000,000
10	16.27	150.3	-42.31	51,100,100,000,000
4.9	19.05	153.86	5.94	57,427,700,000,000
4.3	16.35	157.5	6.88	59,170,600,000,000
5.4	13.5	157.31	10.25	76,918,200,000,000
6.3	10.84	158.55	11.36	84,817,000,000,000
2.7	11.03	192.44	12.21	95,435,200,000,000

Source: (CBN) Statistical Bulletin, Annual Reports, World Bank Economic

Statistics, DM0 (http://www.indexmundi.com/facts/nigeria)