

## COMPARISON OF AGRICULTURE WITH OIL ENHANCEMENT: SURVIVING STRATEGY FOR ECONOMIC MELTDOWN IN NIGERIA

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### ABSTRACT

*This paper compares the place of Agriculture and Oil in repositioning Nigerian economy towards a path of steady economic growth with a view to establishing which strategy (agriculture or oil enhancement) that is appropriate to checkmate the associated pains of ongoing global economic, financial and food crisis in the country. The secondary data used in this study are those relating to the contributions of Agriculture and Oil to Gross Domestic Product (GDP) (Principal variables) while Manufacturing and Service Sectors serve as control variables. These were obtained from Central Bank of Nigeria Annual Reports and Accounts and were analysed using Ordinary Least Square after conducting Augmented Dickey Fuller Unit Roots (ADF), Granger Causality Test as well as Johanson Co-integration Test while Actual Fitted and Residual plot was generated to test the presence of auto or serial correlation in the data. The study reveals that although Oil contributes more to export earnings in Nigeria, it has little contribution to GDP due to its associated vices of communal classes, uneven development, its limited life and crowd out of other sectors of the economy. This is in comparison with Agriculture that has more impact on GDP, generates more employment opportunities, reduces world food crisis and has no identifiable vices. It is recommended that Nigerian economic base should be diversified from oil dependence to agricultural advancement with a view to generating employment opportunities, raising the standard of living and improving economic growth.*

**Keywords:** Gross Domestic Products, Economic and financial Crisis and Foreign Exchange Earnings

### INTRODUCTION

The focus of Nigeria on agriculture as the mainstay of the economy was shifted to petroleum with the discovery of oil and derivation of first revenue from oil-related activities. Prior to the oil boom of the 1970s, agriculture contributed immensely to domestic production, employment and foreign exchange earnings (Saraki, 2013). This shift

in focus was the genesis of Nigeria's overdependence on oil revenue. A review of the Nigerian economy by International Monetary Fund (IMF, 2013) pointed out that from sectoral contribution of just 6.0% of the GDP in 1970, oil revenue reached 48.2% in 2000. The review went further by reporting that agriculture declined from 41.3% in 1970 to 26.3% in 2000. The stagnancy recorded by

the agricultural sector in the oil boom of the 1970s led to decline in infrastructural support for agriculture and a downward spiral in its contribution to economic development. However, the Nigeria Economic Summit Group, NESG in 2012, concludes that the neglect of this sector has led to a continued increase in unemployment which is as high as 24 percent.

The dramatic shift in economic base from agriculture to oil dependence occur when the massive increase in oil revenue as an aftermath of the civil war, created an unprecedented, unplanned and unexpected wealth for Nigeria (Ross 2003). Oil thereafter became the pivot upon which every economic decision relies on in Nigeria. Its importance is aptly captured in the words of Gary and Karl, (2003) that "the sensitivity of petroleum resources is virtually indicated in the fact that it has continued to remain the goose that lay the golden eggs for the Nigerian economy as the supreme foreign exchange earner, contributing over 90% of the nation's foreign exchange earnings and over 80% of the Gross Domestic Product (GDP)".

Earnings from oil were deployed in socio-economic infrastructure across the country while agriculture was neglected and left for those that cannot move from the villages to enjoy the new facilities in the cities. Henceforth food production declines as noted by Chigbu, (2005), and agriculture as the 'engine house' of world economies needs to be over hauled and serviced in order that tears of the Nigerian masses may dry up. In the 1960's, agriculture provided over 80% of both export earnings and employment generation, about 65% of the total output of GDP and about 50% of the government revenue (Federal Republic of Nigeria 2000). The CBN (2010) brief reported that agriculture only accounts for 34.6% of the GDP

presently compared to its leading contribution of about 50% of the government revenue in the past.

Nigeria, being the leading oil and gas producer in Africa, ranking 7<sup>th</sup> in the whole world, was able to generate oil revenue which were deployed in infrastructure development such as road construction, water provision, electricity, and industrialization, creation of more states, government agencies and building of external reserves (Ross, 2003). This had led to over-dependence on oil and subsequently created vulnerability to the vagaries of the international market which had influenced government income and expenditure to fluctuate.

Moreover, removal of subsidy on oil products and deregulation of the downstream sector of the Nigerian oil sector as well as lack of infrastructural development in the territories where the oil is explored generated communal classes /conflict in the Niger-Delta. This conflict had left many dead in the struggle for development and compensation for damages which constitute drain on the country's resources. Furthermore, Oil resources are wasting assets whose reserves are neither infinite nor easily replenished. In addition, Oil exploration and refining activities constitute environmental hazard that may not be easy to restore (Akinlo, 2012). The aforementioned led to the following research questions:

- i. What is the magnitude of contributions of agriculture and oil to economic growth of Nigeria?
- ii. Which alternative, Agriculture or Oil Enhancement is more viable in driving Nigeria's economy towards a sustained growth level?

**Objective of the Study**

The major objective of this study was to examine the role Agriculture plays on pulling Nigeria out of its present economic travails based on its ability to serve as an alternative to Oil revenue. This is done with a view to determining the impact of Agriculture on Nigeria economy compared with that of oil and makes recommendations in line with policy direction and way forward for a stable and developed economy.

**Literature Review**

Saraki (2013) posits that Agricultural revenue can once again be the driving force of our economy. He noted that the minimal contribution of agriculture to the economy is due to overreliance on oil revenue. Agriculture is responsible for over 70% of Nigeria's labour force, yet, it constitute only 0.2 percent of her total exports. The table below reveals this unfavourable trend:

**Table 1. Sector by Sector Contribution of Agriculture, Oil, Non-Oil, Industry and Service to Exports**

	1970	1980	1990	2000	2003	2004
Oil sector	6.0	29.1	39.3	48.2	44.6	48.2
Non-oil sector	94.0	70.9	60.7	51.8	55.4	51.8
Agriculture	41.3	20.6	29.7	26.3	26.4	16.6
Industry	7.8	16.4	7.4	4.5	4.8	8.7
Services	45.0	33.8	23.6	21.0	24.2	26.5

**Source:** National Bureau of Statistics/IMF Publications (Several Issues).

Nigeria's import bill is being weighed down by the value of products that could be produced locally. Nigeria imports over \$4bn worth of wheat, \$2bn worth of rice and N50bn worth of fish annually. The country is also the largest producer of cassava, yet, it accounts for zero percent of the global trade in value added cassava products (Saraki, 2013). With more than 70 percent of her arable land uncultivated, Nigeria has the potential to remove these items off the import bill. However, before this can be done, necessary infrastructure needs to be put in place by utilizing funds gained from

Oil trading into Agriculture and allied industries before the oil reserves run out or a cheaper synthetic alternative to Oil is found.

According to Lipsey and Chrystal (1999), economic growth is the positive trend in the nation's total real output of GDP over long term in form of raised living standards, removal of recessionary gaps, structural unemployment and allocative inefficiencies, because growth can go on indefinitely.

Barber, (2005) saw economic growth as increase in production, that is, the gross domestic product (GDP) while Nnadi and Fa-

Iodun (2003) described it as a process by which the productive capacity of an economy increases over a given period leading to a rise in the level of national income.

The Nigeria economy according to Ekpo and Umoh (2005) had a truncated history. In the period between 1960-1970, Gross Domestic Product (GDP) recorded 3.1% growth annually. During the oil boom roughly 1970-1978, GDP grew positively by 6.2% annually, a remarkable growth. However, in the 1980's, GDP had a negative growth rate in the periods between 1986-1993, which constituted the period of structural adjustment programmes, the GDP responded and grew at a positive rate of 4.5%.

Besides oil, the major strength of the Nigeria economy is its rich agricultural resources base, its human resources base and its huge market. It has been disclosed that Nigeria could earn N28billion annually from the use of cassava flour in bread production in the country and with the request of China; agriculture has offered employment to about 40% of the population while Oil has only been able to offer employment to 1.3% of the Nigerian population (Akinlo, 2005). Worse still the economy remains vulnerable to external shocks emanating from fluctuations in the world prices of crude oil and rising prices of petroleum imports. The resulting external and internal imbalances are manifested in the adverse balance of payment position, unemployment, persistent inflation and low capacity utilization in virtually all sectors as well as the deteriorating power of the populace (Adedipe, 2004).

The challenges created by the current economic meltdown in the form of reduction in purchasing power, job loss and high dependency ratio as well as high inflation rates and interest rates calls for appropriate

strategies for reviving the economy from the downturn or recession, as well as revive companies from losses and bankruptcy tendencies to profit making. Although, agriculture which serves as a means of livelihood to about 80% of the Nigerian populace was neglected (Adedipe, 2004), the discovery of oil led to infrastructure development, construction of refineries and creation of many government parastatals and more states with a view to spreading out development but these structures could not be maintained due to corruption and lack of supervision and poor policy implementation which make every Nigerians and every activity to be economically and socially sensitive to oil prices. Ajakaiye (2001) further explained that the dramatic improvement in the performance of the oil sector created a weak technological base while industrial activities in the country were organized to depend largely on imported inputs. Oil came along with pollution (water), which endangered agriculture and fishing in the environment. At the same time, oil will not be there forever, thus, there is a need for alternative/complementary source of foreign exchange earnings for the country in the event of oil dry up. However, agricultural resources are renewable natural resources and will not finish as long as we have rain and sunshine and we maintain our soil.

Matsuyama (1992) considered a two-sector model of agriculture and non-agriculture (industry) and concludes that in a closed economy, agricultural productivity increases are crucial in inducing growth while Sarris (2005) proposed large expenditure allocation, allocation of land titles to farmers and competitive prices for agricultural products for agricultural to enhance growth and development. Additionally, monetization of oil revenue has created liquidity problems with its

adverse effect on the three key macro-economic prices in terms of distortions and inflationary pressure on inflation rates, interest rates and exchange rates while deregulation of the petroleum sector due to low capacity utilization of the nation's owned refineries and petro-chemical plants thought to generate employment, reduce wastage and hence bring about increased national output (National Development) could not materialize due to lack of transparency (Oyeleye, 2002).

Environmental hazards caused by Nigerianoil is aptly captured to include oil spillage that claims lives and properties, farmland, and render river waters undrinkable as well as killed aquatic animals as well as emission of toxic waste and depletion of ozone layers, which led to global warming (Gilfason, 2001). Unfortunately, the biological dimensions of evidence of serious environmental damages have been overshadowed by claims for monetary compensation at the local level that does not translate to structural development of the region (Ighodalo, 2012). More so, inequality in oil revenue sharing had also undermine democracy and spark violent conflicts (Ross, 2004) which led to the creation of Niger Delta Development Council (NDDC) to extend development to oil producing state

Going by these, it is not misleading to conclude that Nigeria oil is a restrictive blessing since it cannot bring to an end the presence of poverty in terms of hunger, lack of shelter, inadequate health care facilities, unemployment as well as insecurity, lack of freedom of choice and action (Narayan 2000, and Oyesanmi, Eboiyehi and Adereti 2006). This is evident by Human Development Index (HDI) categorisation that ranked Nigeria as the 142<sup>nd</sup> (with HDI of 0.40)

among the poorest countries of the world. Conversely, the studies of Morrison,(1998), Ravallion and Chen (1997) interpreted their findings as suggesting that "in many countries, increasing the level of productivity in traditional agriculture may have become the most effective way of reducing inequality and poverty. This view is also in line with (Squire, 1993), Lipton and Ravallion (1995); Deinings and Squire (1996), and (Chigbu, 2008).

Baker (2006) evaluated the impact of petroleum on Nigeria economy whiles other researchers including: Ross, (2001), Ibimilua, (2005) and Bedford, (2004) had also worked on the way forward between Oil and other sectors of the economy. These were all conducted in the pre-world economic and Nigeria Political crisis periods. However, this study is different from others as it examines the contribution of the agriculture and petroleum sectors of the economy to Nigeria economic growth as a way of reshaping the economy in the face of the current global crisis and economic meltdown over a relatively longer period of time (1970 to 2010). This is achieved by adding others sectors (Manufacturing and Service) serving as control variables.

## METHODOLOGY

### *Data Description, Sources and Method of Analysis*

This study made use of secondary data that spans between 1960 and 2010 and were obtained from the CBN statistical bulletins.

### **Model Specification**

The study adopted the use of Ordinary Least Square regression Model. Economic growth was taken as the independent variable and was proxied by GDP at Constant factors

while the independent variables employed were contributions in terms of revenue from Oil, Agriculture, Manufacturing and Services to GDP.

The regression equation is given below:

$$Y = f(X)$$

Where  $X = (\mathcal{X}_1, \mathcal{X}_2, \mathcal{X}_3, \mathcal{X}_4)$ .

Thus,

$$Y = f(\mathcal{X}_1, \mathcal{X}_2, \mathcal{X}_3, \mathcal{X}_4); \text{ thus,}$$

$$Y = \beta_0 + \beta_1 \mathcal{X}_1 + \beta_2 \mathcal{X}_2 + \beta_3 \mathcal{X}_3 + \beta_4 \mathcal{X}_4 + e_0$$

Where Y is the dependent variable GDP and  $\mathcal{X}_1 - \mathcal{X}_4$  are independent variables representing revenues from Oil, Agriculture and Manufacturing Service sectors respectively. That is:

$$\text{GDP} = f(\text{Revenues from Oil, Agric., Man and Serv.}) \dots\dots\dots (ii)$$

Where:

Oil = Contribution of Oil to GDP

Agric = Contribution of Agriculture to GDP

Man = Contribution of Manufacturing Sector to GDP

Serv = Contribution of Service Sector to GDP

The explicit form of the equation is represented as:

$$\text{GDP} = \beta_0 + \beta_1 \text{Oil} + \beta_2 \text{Agric} + \beta_3 \text{Man} + \beta_4 \text{Serv} + e \dots\dots\dots (iii)$$

Where  $\beta_0$  = intercept of the relationship in the model/constant and  $\beta_1 - \beta_4$  are coefficients of each of the independent variables and  $e$  = stochastic/ error terms.

The hypotheses of the test are thus formulated as follows:

Hypothesis I

$H_0 : \beta_1 = \beta_2 = \beta_3 = \beta_4 = 0$  (No long run relationship i.e. no co-integration)

$H_1 : \beta_1 \neq \beta_2 \neq \beta_3 \neq \beta_4 \neq 0$  (Presence of long run relationship i.e. co-integration exist).

Hypothesis II

$H_0 : \beta_1 > \beta_2, \beta_3, \beta_4$  (Over-reliance on Oil-related Revenues)

$H_1 : \beta_1 \leq \beta_2, \beta_3, \beta_4$  (Absence of over-reliance on Oil activities)

For valid estimation and inference, the set of non-stationary data was first co-integrated which means that a linear combination of these variables; that is, stationary must exist. To determine if the time-series data are stationary, the unit root test was carried out which resulted in a linear combination of series called co-integration equation. It also ignores the short run dynamics that might cause the relationship not to hold in the short run.

The tests used are the Johansen co-integration test, Granger causality test and Augmented Dickey-Fuller unit root test. These tests were carried out using the Econometric Software Package (Eviews 5.0) and the results are presented below.

### Data Presentation Analysis and Discussion of Result

The data used in this study in line with the model specification are presented below while the analysis follows:

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**Table 4.1.** Contributions of Agriculture, Oil, Service and Manufacturing Sector to GDP.

Years	GDP (N'm)	AGRIC (N'm)	OIL (N'm)	SERV (N'm)	MAN (N'm)
1960	2233	1417.6	7	303	108
1961	2361.2	1456.6	21.2	340.2	122.8
1962	2597.6	1605.8	29	365.6	146.4
1963	2755.8	1673.8	28.8	389.8	173
1964	2894.4	1676.4	42.2	453.6	173.6
1965	3110	1691.6	106.8	476.4	214.6
1966	2374.8	1855	129	508	233
1967	2752.6	1527.8	71.8	415.6	194.2
1968	2656.2	1415.2	43	497.2	198.6
1969	3549.3	1711.7	230.5	642.6	281.8
1970	5281.1	2576.4	489.6	851.9	378.4
1971	6650.9	3033.7	944.2	979.2	415.8
1972	7187.5	3092.7	1144	1031.3	511.1
1973	8630.5	3261.2	1899.2	1252.2	622.4
1974	18823.1	4377.9	4108.7	2782.33	1589.02
1975	21475.24	5872.92	4165.5	3619.77	1170.44
1976	26655.78	6121.96	6105.91	4164.6	1464.3
1977	31520.34	7041.64	7071.6	4755.61	1695.58
1978	34540.1	8033.55	7539.39	5105.54	2915.82
1979	41974.7	9213.14	10687.66	5478.28	3815.57
1980	49632.32	10011.46	14137.35	6157.84	5162.21
1981	47619.66	13580.32	10219.8	9005.04	4699.95
1982	49069.28	15905.5	8512.94	9633.17	5047.61
1983	53107.38	18837.19	7388.73	10109.16	5542.96
1984	59622.53	23799.43	9037.44	10849.45	4847.51
1985	67908.55	26625.21	11375.15	12338.3	6422.64
1986	69146.99	27887.19	9558.86	13455.84	6591.12
1987	105222.8	39204.22	26722.84	14550.52	7468.45
1988	139085.3	57924.38	29859.19	16745.33	11017.78
1989	216797.5	69713	76530.31	21656.53	12475.51
1990	267550	84344.61	100223.4	27425.6	14702.4
1991	312139.7	97464.06	116525.8	31355.45	19356
1992	532613.8	145225.3	246828	44227.32	27004.01
1993	683869.8	231832.7	242109.7	60863.26	38987.14
1994	899863.2	349244.9	219109.3	98336.16	62897.69
1995	1933212	619806.8	766518	151822.91	105289.59
1996	2702719	841457.1	1157911	194941.22	132897.66
1997	2801973	953549.4	1068979	221391.89	144106.95
1998	2708431	1057584	736795.3	299450.08	141496.44
1999	3194015	1127693	1024464	373576.15	150946.52
2000	4582127	1192910	2186682	471814.64	168037.02
2001	4725086	1594896	1669001	572666.19	199079.32
2002	6912381	3357063	1798823	692179.53	236825.53
2003	8487032	3624579	2741554	843690.5	287739.38
2004	11411067	3903759	4247716	124672.69	349316.32
2005	14572239	4773758	5664883	1620111.98	412706.6
2006	18564595	5940237	6982935	2143487.42	478524.14
2007	20657318	6757868	7533043	2502832.04	520883.03
2008	24296329	7981397	9097751	2785654.78	585573.04
2009	24794239	9186306	7418149	3106819.54	612308.89
2010	29205783	10273652	9747355	3430111.69	647822.79

**Source:** Extract from CBN Statistical Bulletin (various Issues)

**Table 4.2: Result of ADF Unit Root Test**

	1960-2010		1970-2010		1980-2010		1990-2010		Remarks
	Lag length	Differ-ence level							
Gdp	0	2nd	0	2nd	0	2nd	0	2nd	Stationary
Oil	0	2nd	0	2nd	0	2nd	0	2nd	Stationary
Agric	0	2nd	0	2nd	0	2nd	0	2nd	Stationary
Man	0	2nd	0	2nd	0	2nd	0	2nd	Stationary
Serv.	0	1st	0	1st	0	1st	0	1st	Stationary

The unit root test as shown in Table 4.2 for all the time period shows that all the data achieved stationarity at Second difference except Services which was stationary at first difference. The unit root test was ignored

for 2000-2010 time period due to unreliability of the test for the small number of observations. Thus, the null hypothesis that the data has unit root was rejected. The data were thus regressed using OLS technique.

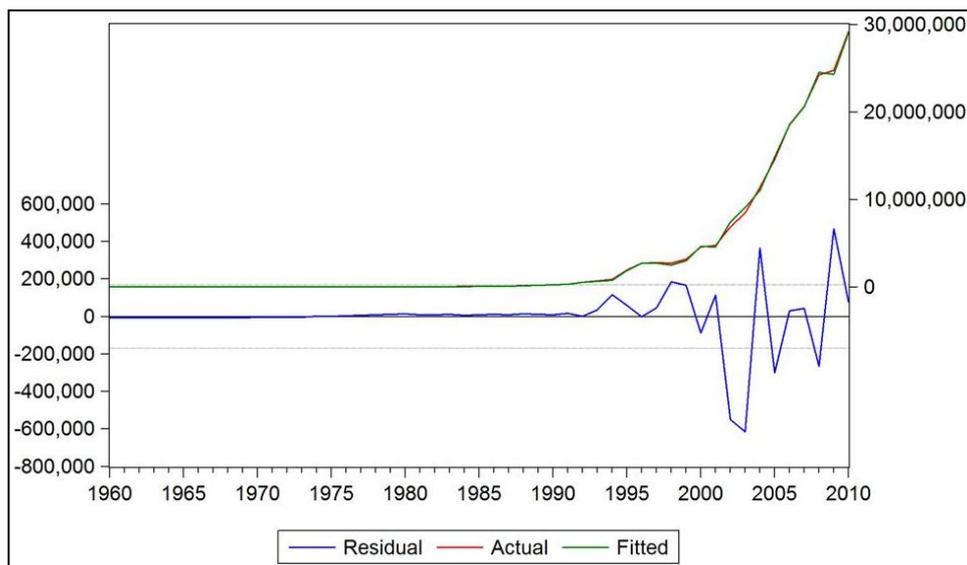
**Table 4.3: OLS Result for the Selected Time Periods**

	1960-2010		1970-2010		1980-2010		1990-2010		2000-2010	
	B	t-stat	$\beta$	t-stat	B	t-stat	$\beta$	t-stat	B	t-stat
Oil	1.305	21.278	1.306	18.683	1.306	15.591	1.299	11.38	1.181	5.042
Agric.	1.519	20.203	1.520	17.712	1.521	14.735	1.511	10.57	1.351	5.494
Man.	-1.419	-1.564	-1.452	-1.355	-1.464	-1.060	-1.204	-0.516	5.0797	0.7668
Serv.	0.501	3.580	0.501	3.161	0.500	2.683	0.502	2.112	0.374	1.130
B0	5567	0.186	8004	0.196	8774	0.136	-	-0.086	-	-1.381
							13173		945699	
DWt	2.21		2.21		2.22		2.19		2.07	
R2	0.999		0.999		0.999		0.999		0.999	
F-stat	23632		17376		11226		5359		1311	

The result of the Ordinary least square analysis in table 4.3 shows that over the five time-period analysed, agriculture contributed consistently more to GDP than Oil. All the result were significant at five percent (5%) confidence level except Manufacturing which was continually negatively co-signed against GDP for all the periods except in the period between 2000-2010. Services contributed positively to economic growth as measured by GDP though at a low rate. The Coefficient of determination was 99%

all through the time periods selected while the F-statistics was also consistently significant showing the fitness of the model employed. The study also tested for serial autocorrelation using Durbin-Watson test. The results ranged from 2.07 to 2.22 indicating absence of serial autocorrelation. This position was further tested using the Actual, Fitted and Residual (AFR) plot (Fig. 1) to verify the absence of Serial Autocorrelation and to ensure that the model obeyed the test of independence.

Figure 1: Actual, Fitted and Residual Plot



The AFR test shows that the model fulfils the independence test by having the past inputs uncorrelated with residuals. Thus,

the AFR test attests to the lack of serial autocorrelation in the model.

**Table 4.3 : Pairwise Granger Causality Test among the study Variables**

Pairwise Granger Causality Tests			
Date: 12/15/13 Time: 10:08			
Sample: 1960 2010			
Lags: 1			
Null Hypothesis:	Obs	F-Statistic	Prob.
OIL does not Granger Cause GDP	50	4.99838	0.0302
GDP does not Granger Cause OIL		23.0136	2.E-05
AGRIC does not Granger Cause GDP	50	9.24110	0.0039
GDP does not Granger Cause AGRIC		6.16814	0.0166
SERV does not Granger Cause GDP	50	3.46108	0.0691
GDP does not Granger Cause SERV		76.7711	2.E-11
MAN does not Granger Cause GDP	50	16.2695	0.0002
GDP does not Granger Cause MAN		21.2355	3.E-05

The result of the Granger causality test (Table 4.3) shows that there is bi-way causality between the GDP and the independent variables used. This indicates that as the contributions of agriculture, oil manufacturing and services to GDP increases, performance of the economy measured by GDP also increases and vice versa.

In *a priori* expectation, the contribution of agriculture to GDP being greater than that of oil should be unexpected; this is because while most people thought that oil will greatly outweigh the contribution of agriculture just because oil constitutes a substantial portion of Nigeria foreign exchange earnings. This general belief is devoid of any theoretical foundation and was buttressed by the studies of Adesoji and Sotubo (2013) who pointed out that contribution of non-oil exports to GDP was sub-optimal. This was because their study used inconsistent predictor variables against the response variable, hence, spurious results emanates.

However, the result of this study contradicted that of Adesoji and Sotubo (2013)

and rested its logic on the fact that mere contribution of oil sector to exchange earnings does not purport significant contribution to GDP. More so, foreign earnings is a tool to achieving economic development provided other structural and institutional changes (which Nigeria absolutely lack) are in place in the economy as pointed out by (Abou-Strait, 2005). That was why there was an outcry for diversification of export base from oil, and this position was supported by Abebefe (1995), Lyakurwa(1991) and Osuntokun, Edordu and Oramah (1997).

The finding of this study was in agreement with the view of Saraki (2013) who stated that the only structural changes in the economy since the oil boom was that oil became the principal source of foreign exchange contrary to what was previously obtained when agriculture used to be the mainstay of the economy both in terms of employment and contribution to economic growth.

Oil employs only one percent (1%) of the populace while more than seventy percent (70%) are either directly or indirectly em-

ployed by agriculture and allied industries. Probably contributing to this is the fact that the other principal way that Oil could have substantially contributed to GDP, such as refining, has been neglected. Nigeria is probably the only OPEC nation that imports refined Oil products. Nigeria spends huge sums of money yearly on Oil subsidy with this amount reaching a peak of N1.2 Trillion in 2011 as reported in the fuel subsidy probe of 2012. This huge amount of funds further reduces the magnitude of oil's

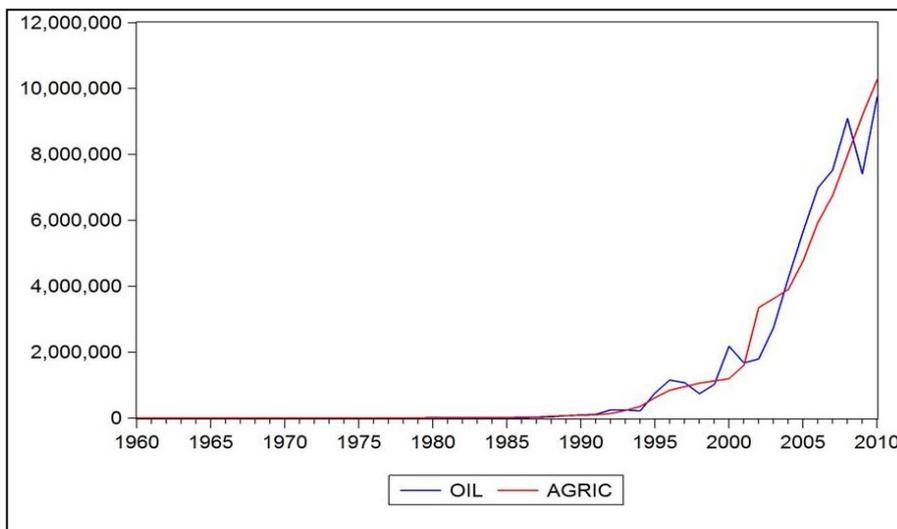
contribution to Nigeria's economic growth. However, if agricultural resources are effectively tapped and utilized, it has more potential of driving economic growth. Recent fluctuations in the prices of oil in the world market, as well as the fact that oil is a wasting asset (having a useful economic life) makes the movement of funds to the agricultural sector for infrastructural development a pertinent pursuit.

Date: 12/15/13 Time: 09:38  
 Sample (adjusted): 1962 2010  
 Included observations: 49 after adjustments  
 Trend assumption: Linear deterministic trend  
 Series: GDP AGRIC MAN OIL SERV  
 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 *	0.998865	622.1080	69.81889	0.0001
At most 1 *	0.989275	289.8253	47.85613	0.0001
At most 2 *	0.717004	67.59939	29.79707	0.0000
At most 3	0.110287	5.745616	15.49471	0.7253
At most 4	0.000401	0.019676	3.841466	0.8883

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



### Conclusion and Recommendations

It can be concluded from this study that the contribution of oil to Gross Domestic Product and indeed economic growth in Nigeria is low compared to that of agriculture that has significant impact on the economy both in terms of contribution to GDP and employment opportunities. Notably is the fact that Oil remain the principal foreign exchange earner for the country but this does not translate to contributing more to GDP and probably economic growth. However, the existence of oil and its contribution to foreign exchange earnings is undermined by its associated vices like violent conflicts, uneven development and crowd out of agriculture and manufacturing sectors thereby subjecting Nigeria to the vagaries of a mono-economic nation such as unemployment and corruption as everybody is in search of his/her share of the oil wealth. This, in comparison with agriculture which employs a significant proportion of the population and has no negative effects on any economic agent, is therefore of less importance in terms of economic growth. Agriculture is therefore an appropriate strategy when it comes to repositioning the Nigerian economy on the path of consistent and even economic development in the face of the current global economic and food crisis.

It is thereby recommended that Nigeria's government should formulate policies that will ensure judicious use of oil resources, inhibit corruption, ensure stable pump prices and redirect people's mindset towards agriculture and other sectors with a view to raising employment level, standard of living and mitigating the agony of the global financial, economic and food crisis that are biting hard on most economies of

the world.

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