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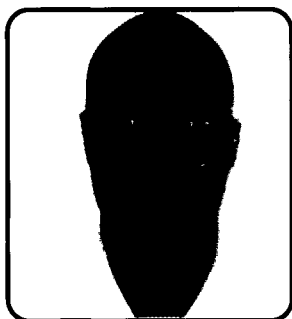
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IS THE DISCOVERY OF OIL A CURSE OR A BLESSING TO NIGERIA?



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1.1 INTRODUCTION

Many countries in the world are endowed with natural resources such as agriculture, minerals and fossils deposits, which are meant to promote the wealth of those nations when efficiently harnessed. The exploitation of such natural resources generate revenues, foreign exchange,

Abstract

The discovery of oil in commercial quantity in Oloibiri in Niger Delta in 1956 opened a new chapter in the economic landscape of Nigeria. Before the discovery of oil resources, agriculture was the main source of government revenue. Over the years however, revenue from oil export became the backbone of the economy.

The annual budget, which defines economic direction the country charts, is solely based on crude oil revenue. This situation can be likened to one putting his eggs in one basket. And it is exactly this situation that has become the major source of agitation by oil producing areas of Nigeria for resource control; put in other words, fiscal federalism. It is over dependence on oil as the only major source of revenue for the function of government that has been the major cause of instability, lack of meaningful progress and dysfunctional government we have in Nigeria.

The unpredictability of international oil price which can drastically increase or reduce oil revenue with its immediate effect on the economy, a case in point is the fall of oil price in the international market in November, 2014. This has led to a situation that many states government in Nigeria cannot pay salary for many months. Also, the phenomenon called "Dutch disease may have terrible effect on the economy; this is a situation where the resource sector drives up the value of the local currency, thereby hurting the competitiveness of manufacturing sector, which can kill domestic production.

Because of this and for reasons that we will look at later in this study, one can safely say that the discovery of oil in commercial quantity far from being a blessing has become a curse to the economic development of Nigeria.

In this study, we found that oil revenue and government expenditure (budget) are significant variables to measure economic progress. It was against this background that the researchers argued that the discovery of oil in Nigeria in commercial quantity, instead of being a blessing has become a curse to the development aspiration of the country. The Ordinary Least Square (OLS) method for data analysis was employed

Keywords: natural resources, economic growth, exchange rate, resource curse, GDP, living standard, resource control.

employment opportunities, and provides raw materials for the production of goods and services for consumption. However, some empirical literature indicates that economic growth negatively relate to abundance of natural resources across developing countries. In other words, natural resources abundance, though an important source of revenue, is not a sufficient condition for economic prosperity and progress

(Sachs & Warner, 1997). This is evident by the relatively underdevelopment of countries as Nigeria, Angola, Gambia, Ghana, etc, despite their relatively endowed natural resources. This notwithstanding, countries like Botswana and Kuwait have made greater use of their resources to develop due to the efficient resources management by these countries (World Bank, 1989).

Nigeria is endowed with major natural resources that have been exploited for many years for economic growth and development. Unfortunately, for many years, the nation could not find itself among the most economic developed nations of the world, and more so, could not reap its benefits. Nigeria's history of oil and gas exploration dated back to the 19th century. Nigeria joined the league of oil producing nations on August 3rd, 1956 when oil was discovered in commercial quantity, and today ranks as one of the leading oil and gas produces in Africa and the 6th largest oil exporter in the world. Nigeria is also Africa's most populous nation with over 170 million population according to National Census conducted in 2006. As oil was struck in commercial quantity in Nigeria, it also signaled the beginning of a profound transformation of Nigeria's political and economic landscape. Since the 1970s, oil has accounted for about 90% of the Nigerian government's revenue and 95% of the country's export earnings, thereby relegating agriculture to the background.

When we look at other Africa countries that have oil resources, Jalloh (2013) stated that part of the factors responsible for the inability of natural resources to transform most economies in Africa is high corruption in the public sector and frequency of civil conflicts in resource rich economies. For the natural resources of any region to fully benefit its citizens, these countries need to improve on the management of natural resource revenues and apply effective policy measures to mitigate incidences of rampant corruption in the public sector.

Furthermore, those governments that control natural resources windfalls tend to waste them through profligate spending. In consequence, natural-resource-intensive economies end up with

inadequate funds development. Akanji (2011) summarizes the impact of oil and gas on the Nigerian economy as follows: Nigeria has earned billions of dollars exporting oil and natural gas, but the industry has not generated the type of multiplier effects necessary to facilitate sustainable natural development and economic growth. The 'Dutch Disease' phenomenon, which traditionally afflicts natural resources dominated economies, has ravaged the Nigerian economy.

The impact of resources either positive or negative, critically depends on the strength of institutions and human capital (Breisinger, Diao, Schweickert, & Wiebelt, 2009).

It is in the light of the possible benefits or curses that oil production has brought to Nigeria that this paper sets out to look at and explain the economic effects of oil and gas production on the Nigerian economy. It is also to provide recommendations for the effective use of the revenues from Nigeria's oil and gas for the development of the Nigerian economy. Section 2 looks at some of the literature that deal with natural resources endowment.

1.2 STATEMENT OF PROBLEM

With the Nigerian oil sector accounting for almost all the country's export and government revenue (a nation which has earned billions of dollars from its oil export) and currently considered one of the poorest country in the world her earnings alone from the oil sector in 1990 was over \$30 billion a fall out from the Gulf war at a time oil was selling above \$100 per barrel.

In spite of this, fifty-five percent (55%) of the population are living below the poverty line. There is lack of infrastructural facilities; the educational system is decayed. The health sector has nothing

good to write about, and standard of living has deteriorated. The discovery of oil which created false wealth has continue to encourage corruption and practically eliminated the private sector because of government's inability to provide an enabling environment for the private sector to flourish. (World Bank, 1995).

The discovery of oil in Nigeria expected to galvanize rapid economic growth has rather slowed down the pace of growth and development. From this perspective, therefore, the question to ask is: has the discovery of oil in Nigeria being a blessing or a curse? This will be the focus of this paper.

1.3. OBJECTIVES OF THE STUDY

The objective of this study is therefore directed investigating the impact of the oil sector on the development of the Nigeria economy in relation to standard of living and other human development index.

1.4. STATEMENT OF HYPOTHESIS

- H0 - The oil sector has no significant impact on Nigeria economic development.
- H1 - The oil sector has a significant impact on the economic development of Nigeria.

1.5. SCOPE/SIGNIFICANCE OF THE STUDY

This paper looks at the economic development of Nigeria since the discovery of oil in commercial quantity. It examines the impact of revenue accruing from oil export on the general economic progress practically on the living standard of the people and development index using GDP as a proxy of measurement. Just as people are affected by the kind of food they eat, governments are also affected by the amount of revenues they collect. Since most

governments receive the same kind of revenues year after year, it is easy to overlook their significance. Only when there is a sharp change in these revenues, such as when oil was discovered in Nigeria does their underlying importance become clear.

Oil revenues are hallmarked by their exceptionally large size, volatility, and secrecy. The volatility of oil revenues usually hurts government's fiscal policies and economic growth when it nosedived. Therefore, the focus of this study is to show the urgent need for the government to diversify the economy in order to achieve rapid economic progress and social stability.

The paper is organized into six sections. The first section provides an introduction with the following: statement of the problem, objective of the study and finally the significance of the study, the second section is the literature review. The third section looks at oil and the Nigeria economy. The fourth section deals with methods and materials, while section five deals with presentation of result and section six presents the conclusion and recommendations.

2.0 LITERATURE REVIEW

A large number of studies have presented evidence to suggest that abundance of natural resources or at least of a particular one stems economic growth. Wheeler (1984), for instance, found out that within Sub-Sahara Africa, countries that were rich in minerals grew more slowly than those that were not during the 1970s. Similarly, Gelb and Associates (1988) found out that mineral endowed economies experienced a more serious deterioration in the efficiency of domestic capital formation during the boom period of 1971-1983 than non-mineral endowed economies, portraying negative

growth. Sachs and Warner (1995) examined the experiences of some large and diversified set of resource endowed economies between 1970 and 1989 and found out that natural resources abundance has negative relation to economic growth. Wood and Berge (1997) came out with a verdict that resource abundant countries are less likely to export manufactured goods than resource poor countries

Specific problems that are associated with a country with oil like Nigeria are that, once a contract has been negotiated and the money begins to flow in, new problems arise. For instance, in the 1970s, the Netherlands discovered one of these problems. Following the discovery of natural gas in the North Sea, the Dutch found out that their manufacturing sector suddenly started performing more poorly than before. Resource-rich countries that have similarly experienced decline in preexisting domestic sectors of the in economies are now said to have caught the "Dutch disease" (Ebrahim-Zadeh 2003). The symptom of the "disease" is unambiguous. A boost in the value of natural resources exports produces appreciable returns in foreign exchange in the 1970s and early 1980s the Naira was at par with American dollar in terms of exchange and value. Foreign exchange earned from the non-oil resources were used to purchase to import foreign goods that the nation has to capacity to produce at the expense of domestic manufacturers of the goods. In the Dutch case, it was the manufacturing; in the developing countries, like Nigeria it is agriculture, Jalloh (2013)

Natural resources ownership exposes countries to price volatility, particularly in the commodity market; with its attendant adverse impact on economic growth. Isham et. al. (2003) provides an excellent

summary of the mechanisms of causation identified in the economics as well as in the political science literature. In the latter, emphasis is placed on the "rentier" effects, whereby large revenues from natural resources allows government to mollify dissent, and avoid accountability or insulating governments from pressures for institutional reform; and "anti-modernization" crusades. Where is governments successfully thwart pressures for modernization and institutional reform because their "budgetary revenues are derived from a small workforce that deploys sophisticated technical skills that can only be acquired from abroad." Finally, natural resource ownership makes countries susceptible to Dutch Disease. This is the tendency of the real exchange rate to become overly appreciated in response to positive shocks, that tends to lead to a contraction of the tradable sector. This outcome, combined with the (largely unproven) proposition that tradable (usually manufacturing) sectors are "superior" because of learning-by-doing and other positive externalities, leads to the conclusion that natural resources ownership exerts a drag on long-run growth.

3. OIL AND THE NIGERIA ECONOMY

The best way to see at a glance if the discovery of oil in Nigeria has been a blessing or a curse is to look at Human Development Index (HDI). Despite huge revenue derived from oil exploration in Nigeria a look at Human Development Index of the country compared to other countries in similar position e.g. Libya, Algeria, Kuwait and Venezuela that have oil, Nigeria's oil revenue has not impacted on the living standard of its citizen going by table 2.1 below.

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Table 2.1: Human Development Index Comparism in some selected countries

S/N	Countries	Overall life expectancy	Literacy rate	Unemployment rate	Infant Mortality rate (Per 1,000 birth)	HDI
1	Algeria	77.12	91.8	10.2	22	0.717
2	Angola	52	70.4		102	0.526
3	Brazil	76.6	95.8	4.9	12	0.744
4	China	76	95.1	4.1	11	0.719
5	Ghana	66	71.5	3.6	52	0.573
6	Iran	73.5	85	16	14	0.749
7	Iraq	68.5	80.2	16	28	0.642
8	Kuwait	78.2	94	3.4	8	0.814
9	Libya	74.5	94.2	13	12	0.783
10	Niger	56	28.7		60	0.337
11	Nigeria	53	61.3	23.9	77	0.504
12	Russia	70.5	99.7	5.5	9	0.778
13	United Arab Emirates	79.2	77.9	4.3	7	0.827
14	United Kingdom	81	99	5.6	4	0.892
15	United States	79.8	99	5.5	6	0.914
16	Venezuela	75	95.5	6.7	13	0.764
17	Ecuador	76	91.6	4.2	19	0.711
18	Qatar	75.5	96.3	0.3	7	0.851
19	Saudi Arabia	74.3	86.6	12.1	13	0.836

Source: World Bank

Table 2.1 shows the Human Development Index (HDI) which measures life expectancy, literacy, education, and standards of living for some selected countries worldwide. It is a standard means of measuring well-being. It is used to distinguish whether the country is a developed, developing, or underdeveloped country, and also to measure the impact of a country's wealth on quality of life.

From table 2.1 the infant mortality rate which measures the number infant death per 1000 shows that Angola has 102 deaths per 1000 births followed by Nigeria with 77 deaths per 1000 birth. This mean that for every 1000 births 77 of them dies before the age of one (1) due to preventable diseases. When compared to infant mortality rate in developed countries like the United Kingdom and United State of America which infant mortality rate stood

at 4 and 6 deaths per 1000 birth respectively. These countries have the lowest infant mortality rates in the world which may be the attributed to their improved standard of living.

Comparing the unemployment rate from table 2.1 indicates that Nigeria has one of the highest unemployment rates which stood at 23.9 per cent relative to Iran and Iraq which unemployment rate stood at 16.0 and 16.0 per cent respectively. Similarly Qatar in the period has an unemployment rate of 0.3 per cent which is the lowest in the world and this is closely followed by Kuwait and Ghana whose unemployment rate stood at 3.4 and 3.6 percent respectively.

Life expectancy at birth compares the average number of years to be lived by a group of people born in the same year, if mortality at each age remains constant in the future. Life expectancy at birth is also a measure of overall quality of life in a country and summarizes the mortality at all ages. Table 2.1 life expectancy shows that United Kingdom, United State of America and United Arab Emirate whose life expectancy stood at 81.0, 79.8, and 79.2 years respectively has the highest life expectancy in the world when compared to that of Angola, Nigeria and Niger which indexes stood at 52, 53 and 56 years respectively.

Despite oil wealth Nigeria literacy rate stands at 61.3 compared to Algeria 91.8 and Libya 94.2 that are at similar level of economic development. See Table 2.1 above.

The many side effects of oil resources wealth on the economy of Nigeria is that, it has led to a number of risks. It tends to undermine democracy, boost the likelihood of instability, and generate economic growth that is "disappointingly low compared to the population size." While the rest

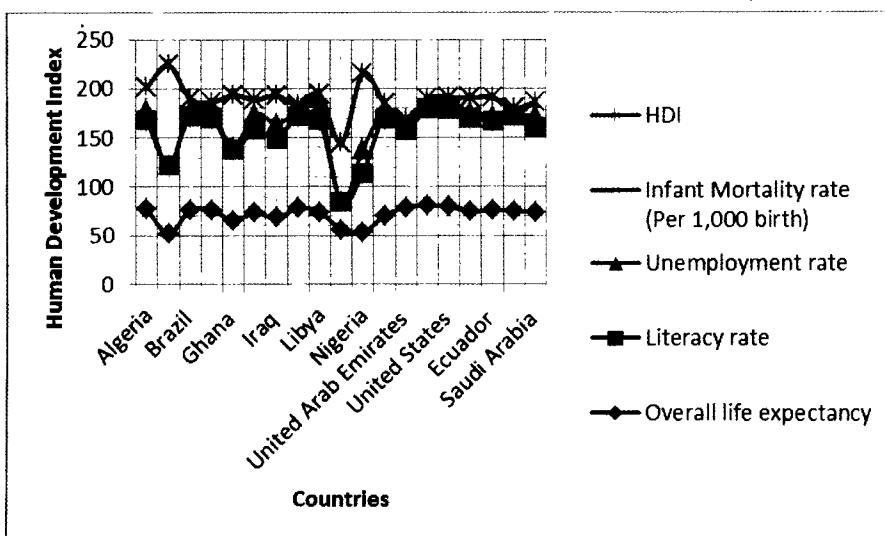


Figure 2.1 Graph Showing HDI for various countries

of the world has enhanced stability, oil states like Nigeria are ten times more likely than non-oil producing nations to become "red-flagged politically troubled," nation prone to violence.

Oil resources can create shifts in the economic set up. These shifts can have adverse effects on the economy through several channels, and any shift can be costly for the overall economy, as workers need to be trained and find new jobs, and capital needs to be readjusted. Beyond this, the particular shifts induced by the Dutch disease may have other adverse consequences. If the manufacturing sector is a long term source of growth for example, through the generation of new technologies or improved human capacity, then the decline of this sector will have adverse growth consequences (Sachs and Warner 2001). Another channel is through income distribution. If returns to exports sectors such as agriculture or manufacturing are more equitably distributed than returns to the natural resources sector, this sectorial shift can lead to a rise in inequality. In any case, the Dutch disease smells trouble down the road when activities in the natural resources sector eventually slow down, other sectors may find it very difficult to recover.

The Dutch disease problem arises because of the quantity of oil money coming in; other problems arise because of the timing of the earnings. Earnings from oil and gas production, if viewed as a source of income, are highly volatile. The volatility of income comes from three sources: the variation over time in rates of extraction, the variability in the timing of payments by corporation to states, and fluctuations in the value of the natural resources produced. As an example of the first two sources of variability consider figure 2.2, which shows one projection for Nigeria's earning from the sale of oil over

the period 2004-2040. We see a sharp rise, followed by a rapid decline, a second rise, and a second decline.

This pattern emerges from two distinct sources. The first is the variation over time in the rate of extraction. A typical pattern is to have a front-loading of extraction rates since production volumes tend to reach a peak within the first few years of production and then gradually descend until production stops. In practice, risks exist in Nigeria and elsewhere that this volatility will be compounded further by interruptions that result from political instability in the country, and in producing regions. The second major source of volatility derives from the nature of the agreement between the producing companies and the government. In the Nigeria case, the oil companies were initially

exempted from taxes on earnings for the first years of production. Since taxes constitute a major source of government earnings, the eventual introduction of taxes should provide a major boost to Nigeria's earning

The third major source of volatility not even accounted for in Figure 2.2 arises from the highly volatile nature of oil and gas prices. The figure presented by the World Bank is based on price of \$105.25 a barrel; a number that now appears hopelessly out of date. Figure 2.2 shows the price of oil over the past 20 years. Note that, while there is a very clear upward trend over these years, the variation around this trend is very great with week on week changes of plus or minus 5 or 10 percent relatively common.

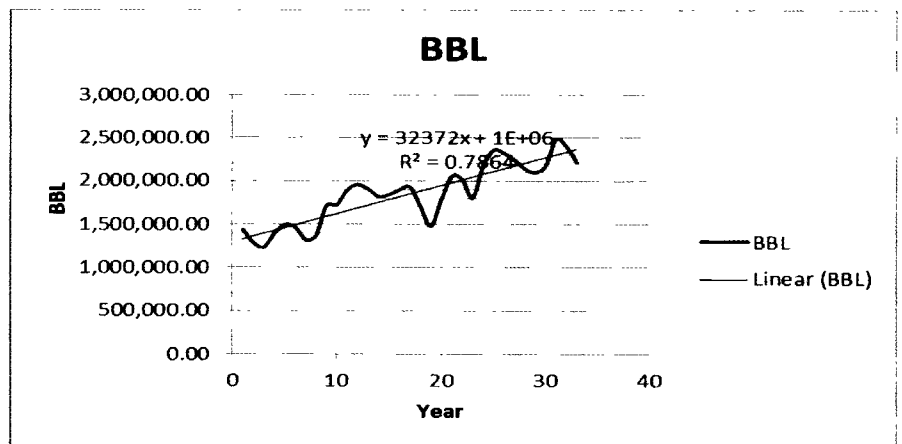


Figure 2.2 Revenues to Nigeria, US\$/BBL. ?
Source: Based on estimates presented in the OPEC (2000)

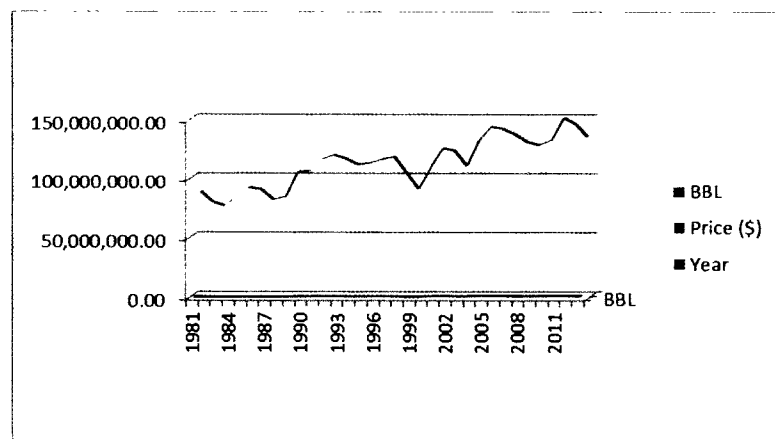


Figure 2.3 Estimated Export Volumes (Dollar per Barrel).

There are a number of difficulties with a highly volatile income sources. Most obvious is the fact that longer term planning is rendered difficult by great uncertainty over future financing, especially as a result of fluctuations in the value of the commodity. Even when the volatility is not associated with uncertainty or with capital market imperfections, volatility in receipt often translates into volatility in expenditure. The result can be high level of expenditure in good years followed by deep cuts in bad years. These in turn lead to "boom bust cycles". All too often, the benefits in the good years are transitory whereas the problems generated during the bad years endure.

The magnitude of these fluctuations can be increased by international lending. When times are good (prices and output are high), the country borrows from abroad, exacerbating the boom. But when prices fall, lenders demand repayment, forcing expenditure reductions which increase the magnitude of the down turn. On some occasions, particularly the most famous oil price boom of the 1970s, several oil producing states mortgaged their futures by borrowing against booming oil revenues, only to end up in debt crisis when oil price fell in the early 1980s. Mexico, Nigeria, and Venezuela typified the oil debt boom and bust. This is not quite as irrational as it seems. Most poor countries are rationed in international borrowing, and may be unable to borrow to secure financing for infrastructure needed for growth. Oil can serve as collateral, or at least as an informal guarantee (since the oil earning are easy to identify and direct toward debt servicing). Thus, an oil boom, either through higher prices or quantities, can unleash not only a higher cash flow but also increased access to international loans. If the infrastructure investments are indeed high as an economic

priority, it may make sense to borrow against future oil earnings. However, that "if" has been a big one, since much international borrowing has been wasted or stolen, and international capital inflows have been subject to panic and sharp reversals, often throwing the borrowing countries into deep debt crisis. This is true for non-oil as well as oil producing states, but the very nature of natural resources endowment makes resources rich countries even more susceptible to this dynamic.

Another problem that arises in a country like Nigeria with oil resources is the presence of higher levels of corruption. This presents the most obvious political risk that can arise from large holdings of natural resources. The short run availability of large financial assets increases the opportunity for the theft of such assets by political leaders. Those that control these assets can use that wealth to maintain themselves in power, either through legal means (e.g. spending at political campaigns) or coercion (e.g. funding militias). By some accounts, corruption is a hallmark of the oil business itself. But oil and gas dependence can also affect corruption indirectly. The presence of oil and gas wealth can produce weak state structures that make corrupt practices considerably easier for government officials. These risks are also likely to be exacerbated if the growth of the oil and gas sector is associated with a concentration of bureaucratic power, which increases the difficulty of ensuring transparency and other constraints on those in power.

Corruption related to natural resources takes many forms. International mining and oil companies that seek to maximize profits find that they can lower the costs of obtaining resources more easily by obtaining the resources at below market value by bribing government officials than by

figuring out how to extract the resources more efficiently. In other cases, the natural resources are sold to domestic firms at below full value, with government officials either getting a kickback or an ownership share. In practice, the risks of corruption in resources-rich environments are very large and the costs of such corruption to the national economy are enormous. Although one might expect the added resources available to states from oil and gas revenues might make them stronger, there are a number of reasons why, paradoxically, it can make them weaker (Kark 1997). Countries that are able to generate revenue from the sale of oil and gas are less reliant on citizens, which can result in weak linkages between governments and citizens. When citizens are untaxed they sometime have less information about state activities and, in turn, may demand less of state. Even if they disapprove of state action, they lack the means to withdraw their financial support from states. As a result, states have less need to engage with civilians. Moreover, in relying on external income sources rather than on domestic revenue, states have less of a need to develop a bureaucratic apparatus to raise revenue (Fearon and Laitin 2003). The need to collect taxes is widely thought to have contributed to the emergence of strong states and even democratic institutions in many western countries (Ross 2004). The lack of reliance on tax revenue in favor of reliance on external sources of revenue is thus thought to hinder the development of effective states in many resources-rich developing countries (Moore 1998).

Further, since a resources-rich country's revenue is largely independent of the strength and success of the overall economy, the government of the resources-rich country has less of a need to engage in activities that support the economy. Without a broad support base in the economy, a

government can instead invest its earnings in an oppressive capacity. Doing so does not, however, produce strong states. The structures that result are often not resilient and indeed, the capacity of repression can be turned against the incumbent. Even if such a strategy is successful at protecting leaders, it will not necessarily produce the capacity needed to engage productively with the national economy.

Also, the adverse political effects associated with high levels of corruption and weak states ultimately have consequences for the political system itself. Countries rich in natural resources, particularly in oil and gas are less likely to have democratic political systems. Specifically, non-democratic oil states are less likely to become democratic than states that do not export oil. This relationship has been established over a given period democratic changes in the past decades (Tsui 2005). In effect, access to oil wealth can allow leaders to successfully repress or co-opt their oppositions, and thus avoid having to relinquish power through electoral competition.

The production of natural resources is also liable to give rise to various types of political frustrations within a country and especially in producing regions. The extraction process itself may result in forced out migration, new immigration and the attendant population pressures, environmental pollution or degradation. Even if such changes to local conditions are minimal, resources-rich regions may feel that they have a particular claim on resource wealth and may be aggrieved if they see the wealth leaving their region and benefiting others. Such complaints have been raised in oil producing region of Niger Delta area in Nigeria.

Despite impressive economic growth, Nigeria's Gross Domestic

Product (GDP) (which measures economic growth) was worth 522.64 billion US dollars in 2013 due to high oil price. The GDP value of Nigeria represents 0.84 percent of the world economy. GDP in Nigeria averaged 70.94 USD billion from 1960 until 2013, reaching an all-time high of 522.64 USD Billion in 2013 and a record low of 4.20 USD billion in 1960. However, it must be noted that despite having very robust macro-economic growth in terms of foreign exchange stability, growth in GDP and the rest of them, this growth has not translated into real economic development because of the effect of resource curse.

Multidimensional Poverty Index (MPI)

A look at Multidimensional Poverty Index (MPI) that measures living standard showed that the country has not fared well despite oil wealth. The Multidimensional Poverty Index (MPI), which identifies multiple deprivations in the same households in education, health and standard of living. The education and health dimensions are based on two indicators each, while the standard of living dimension is based on six indicators. All of the indicators needed to construct the MPI for a household are taken from the same household survey. The indicators are weighted, and the deprivation scores are computed for each household in the survey. A cut-off of 33.3 percent, which is the equivalent of one-third of the weighted

indicators, is used to distinguish between the poor and non poor. If the household deprivation score is 33.3 percent or greater, that household (and everyone in it) is multidimensionality poor. Households with a deprivation score greater than or equal to 20 percent but less than 33.3 percent are vulnerable to or at risk of becoming multidimensional poor.

The most recent survey data available for estimating MPI figures for Nigeria were collected in 2008. In Nigeria 54.1 percent of the population lived in multidimensional poverty (the MPI 'head count') while an additional 17.8 percent were vulnerable to multiple deprivations. The intensity of deprivation that is, the average percentage of deprivation experienced by people living in multidimensional poverty –in Nigeria was 57.3 percent. The country's MPI value, which is the share of the population that is multi-dimensionally poor, adjusted by the intensity of the deprivations, was 0.31 which indicated that despite oil wealth Nigerians still leave in abject poverty.

4.0 METHODS AND MATERIALS

This section explains the methodology of the study which involves data identification and sources, model specification, estimation techniques definition of variables in the model, evaluation techniques among others.

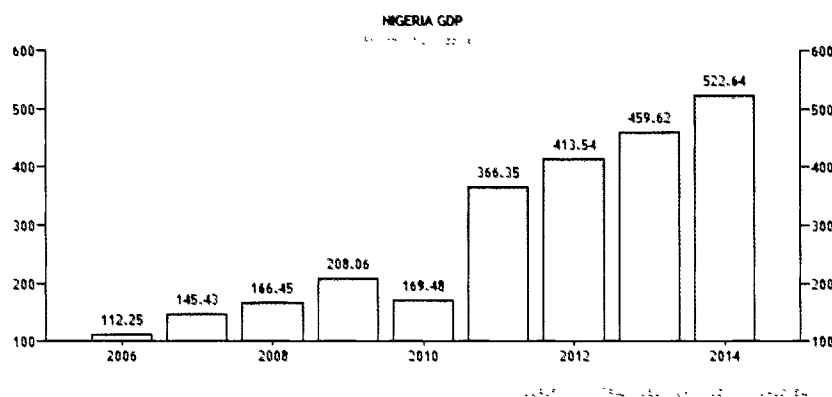


Figure 2.4 GDP Growth Rate

The data used were obtained from secondary sources and therefore, no sampling was done neither was any sampling technique used. The websites of some government agencies as the CBN and Organization of Petroleum Exporting Countries (OPEC) were tools in the collection of statistical information used to carry out the least squares regression.

The secondary sources also include CBN statistical bulletins and annual reports from previous research works and other materials from the internet database. Descriptive and inferential statistical tools were used for analysis of the data gathered. Frequency distribution and simple percentages were used for the descriptive analysis and least squares (LS) regression was used for the inferential statistics. The hypothesis formulated was tested. The statistical application, E-Views was used for the analysis.

The linkage between oil resources and economic growth has occupied a central position in the development literature. The focus is particularly on how oil resources affect economic growth in Nigeria.

4.1 DATA COLLECTION

The data employed are sourced from the National Bureau of Statistics; and the Central Bank of Nigeria (CBN). Data on oil price and export of crude oil and petroleum products are sourced from the annual statistical bulletins of Organization for Petroleum Exporting countries (OPEC). Data on aggregate consumption, investment, standard of living, government spending, non-oil export and import are collected from the Central Bank of Nigeria database and the United Nation Development Programme.

4.2 MODEL SPECIFICATION

Suppose the data consists of n observations $\{y_i, x_i\}_{i=1}^n$. Each observation includes a scalar response y_i and a vector of p predictors (or regressors) x_i . In a linear regression model the response variable is a linear function of the regressors:

$$y_i = x_i^T \beta + \epsilon_i \quad (i)$$

where β is a $p \times 1$ vector of unknown parameters; ϵ_i 's are unobserved scalar random variables (errors) which account for the discrepancy between the actually observed responses y_i and the "predicted outcomes" $x_i^T \beta$; and T denotes matrix transpose, so that $x_i^T \beta$ is the dot product between the vectors x and β . This model can also be written in matrix notation as

Where y and ϵ are $n \times 1$ vectors, and X is an $n \times p$ matrix of regressors, which is also sometimes called the design matrix.

As a rule, the constant term is always included in the set of

regressors X , say, by taking $x_{i1} = 1$ for all $i = 1 \dots n$. The coefficient β_1 corresponding to this regressor is called the intercept.

There may be some level of relationship between the regressors. For instance, the third regressor may be the square of the second regressor. In this case (assuming that the first regressor is constant) we have a quadratic model in the second regressor. But this is still considered a linear model because it is linear in the β s.

5.0 PRESENTATION OF RESULT

Long-term progress can be assessed relative to other countries—both in terms of geographical location and HDI value. For instance, during the period between 2005 and 2012 Nigeria, Togo and Senegal experienced different degrees of progress toward increasing their HDIs. Nigeria's 2012 HDI of 0.471 is above the average of 0.466 for countries in the low human development group and below the average of 0.475 for countries in Sub-Saharan Africa. (See figure 5.1)

Nigeria's 2012 HDI of 0.471 is above the average of 0.466 for countries in the low human development

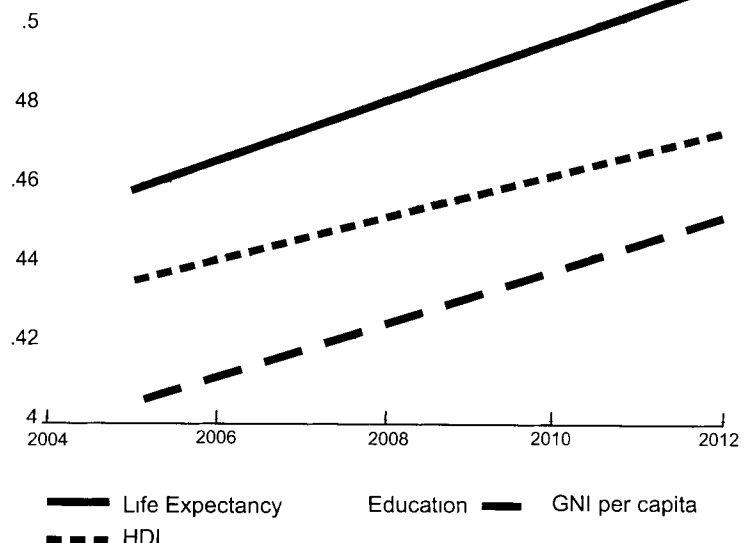


Figure 5.1 Nigeria HDI

group and below the average of 0.475 for countries in Sub-Saharan Africa. Some countries in Sub-Saharan Africa that are contiguous to Nigeria in 2012 HDI rank and population size are Ethiopia and Democratic Republic of Congo, which have HDIs ranked 173 and 186 respectively.

The HDI is an average measure of basic human development achievements in a country. Like all averages, the HDI masks inequality in the distribution of human development across the population at the country level. The 2010 HDI introduced the Inequality Adjusted HDI (IHDI), which takes into account inequality in all three dimensions of the HDI by 'discounting' each dimension's average value according to its level of inequality. The HDI can be viewed as an index of 'potential' human development and the IHDI as an index of actual human development. The 'loss' in potential human development due to inequality is given by the difference between the HDI and the IHDI, and can be expressed as a percentage.

The Human Development Index for Nigeria's (HDI) in 2012 was 0.471. However, when the value is discounted for inequality, the HDI falls to 0.276, a loss of 41.4 percent due to inequality in the distribution of the dimension indices. Ethiopia and Democratic Republic of the Congo show losses due to inequality of 31.9 percent and 39.9 percent respectively. The average loss due to inequality for low HDI countries is 33.5 percent and for Sub-Saharan Africa is 35 percent.

The Gross Domestic Product (GDP) in Nigeria expanded 3.96 percent in the first quarter of 2015 over the same quarter of the previous year. GDP annual growth rate in Nigeria averaged 6.08 percent from 2005 until 2015, reaching an all-time high of 8.60 percent in the fourth quarter of 2010 and a record low of 3.46 percent in the first quarter

of 2012. GDP annual growth rate in Nigeria is reported by the Central Bank of Nigeria.

The estimates from the regression carried out are presented and analyzed in this section. The modeling procedure employed in the study is the Ordinary least method.

From the table 5.1, it could be said that Nigeria GDP has been characterized by increase while there was general decrease in the standard of living. The result of recent survey report shows that the standard of living of Nigerians dipped to 52.45 points.

This table disclosed that the Pearson Correlation which comprises the standard of living index and other indices experienced a decline of 0.52 points to close at 45.26 points from 45.78 points in previous research

result. The Standard of Living Index measures factors impacting on the lives of everyday Nigerians.

Fifty-five years of Nigeria managing its own affairs has shown that the country has immense potential, and is blessed with human and natural resources, yet exhibiting significant deprivation in the midst of plenty. There is no doubt that the economy has expanded and deepened, but it has also failed to keep pace with rapid growth in the population, increasing expectations and the development of performance of peer countries.

From the table we could also conclude that there is a strong correlation between GDP growth rate and Human Development Index, which in a way measures standard of living.

The result of the regression
Correlations

		GDP	HDI	Exch	Oil REv	Non Oil Rev
Pearson Correlation	GDP	1.000	-.469	.822	.950	.990
	HDI	-.469	1.000	-.389	-.418	-.480
	Exch	.822	-.389	1.000	.875	.816
	Oil REv	.950	-.418	.875	1.000	.928
	Non Oil Rev	.990	-.480	.816	.928	1.000
Sig. (1-tailed)	GDP		.029	.000	.000	.000
	HDI	.029		.061	.048	.026
	Exch	.000	.061		.000	.000
	Oil REv	.000	.048	.000		.000
	Non Oil Rev	.000	.026	.000	.000	
N	GDP	17	17	17	17	17
	HDI	17	17	17	17	17
	Exch	17	17	17	17	17
	Oil REv	17	17	17	17	17
	Non Oil Rev	17	17	17	17	17

Table 5 1

Model Summary^a

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig F Change	
1	.994 ^a	.988	.984	1.80267E6	.988	244.134	4	12	.000	3.101

a Predictors: (Constant), Non Oil Rev, HDI, Exch, Oil REv

b Dependent Variable: GDP

Table 5.2

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig
		B	Std. Error	Beta		
1	(Constant)	97723 059	2015023 385		.048	.962
	HDI	-111377.698	3619546 225	-.001	-.031	.976
	Exch	-11844 782	14948 027	-.052	-.792	.444
	Oil REv	1 388	539	.265	2.573	.024
	Non Oil Rev	14.499	1 642	.786	8.829	.000

a Dependent Variable: GDP

Table 5.3

From Table 5.1, if we used GDP as a proxy to measure improvement in living standard, we observed that the oil sector contribution to improvement in living standard has been dismally poor; as it accounted for less than 1.00% and has remained unstable over time and despite the high revenue accruing from oil sector.

6.0 SUMMARY, CONCLUSION AND POLICY RECOMMENDATIONS

6.1 SUMMARY

The study's outcome on the impact of oil resources on the economic development of Nigeria held the general view that Nigeria is a mono culture economy. The problem addressed was to determine whether the discovery oil minerals resources is a blessing or a curse to the economic development of Nigeria.

The variables used are gross domestic product (GDP), revenue generated from the sale of oil. Econometric techniques of ordinary least square (OLS) and E-view statistical package was employed in the evaluation. The summary of the findings is that the oil resources that Nigeria is endowed with have become a curse because of its many negative effects on the economic health of Nigeria.

This work started by introducing the topic under study and

followed by literature review section 2. Section 3 took a look at oil and the Nigeria economy, while section 4 dealt with research methodology and data with section 5's presentation of result and section 6 presents conclusion and policy recommendation.

6.2 CONCLUSION

This study has attempted to assess the impact of oil resources on the Nigeria economy based on the strength of evidence amassed from the literature reviewed and analyse of the available data, we uphold the result in section 3 and 5 of this study which shows that the discovery of oil resources in 1956 at Oloibiri in Niger Delta of Nigeria has been a curse to the development of Nigeria.

In this paper, we have empirically verified and discussed the negative impact of the discovery and exploitation of crude oil on economic growth of Nigeria. The aim of the study was to ascertain the negative impact of crude oil on the Nigeria economy. Generally, it is observed that crude oil production has had a negative impact on the economic growth in Nigeria. Consequently, and based on the results obtained as interpreted in section six above, the null hypothesis (H0) which states that "crude oil has not significantly improved or is a curse to the growth of the Nigerian economy" will be accepted. Thus, from the foregoing, we can conclude that the discovery and

exploitation of oil in commercial quantity in Nigeria despite its earlier positive contribution to the economy growth in the 1960s and 1970s, later became a serious drag to the economic health and development of Nigeria.

6.3 RECOMMENDATIONS

The Federal government being at the forefront of nation's development should articulate a viable policy that will help to encourage the diversification of the economy. This is to make the country less dependent on oil sector for revenue.

To enable the oil resources impact positively on the Nigerian economy, it is recommended that the government should allocate substantial amount of oil and gas revenue towards critical infrastructural needs, that will create an economic environment where there is expanding economic opportunities.

The economic policy aimed at the development of the real sector is the key to economic growth and improvement in living standard. Improvement of the production sector can be done through creating the enabling environment for industries to thrive in Nigeria.

Finally, the government should come up with a consistent economic programme and policies. This will help to create a positive impact on investment flow into the economy, particularly in sectors like agriculture and manufacturing. The stability of such policies and programme will further strengthen investors' confidence consequently draw more investments into the economy.

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