

**Enitan Odupitan**

**EFFECTS OF CRASHING CRUDE OIL PRICES ON OIL  
PRODUCING COUNTRIES**

**Nigeria's perspective**

**Thesis  
CENTRIA UNIVERSITY OF APPLIED SCIENCES  
Degree Programme in Business Management  
December 2017**

**ABSTRACT**

<b>Centria University of Applied Sciences</b>	<b>Date</b> December 2017	<b>Author</b> Enitan Odupitan
<b>Degree programme</b> Business Management		
<b>Name of thesis</b> EFFECTS OF CRASHING CRUDE OIL PRICES ON OIL PRODUCING COUNTRIES. Nigeria's perspective		
<b>Instructor</b> Eija Torkinlampi	<b>Pages</b> 37 + 4	
<b>Supervisor</b> Katarina Broman		
<p>The objective of the thesis research was to carry out an extensive study and provide the impacts dwindling crude oil prices had on oil producing countries, using Nigeria as a case study and the palliative measures the government had put in place in managing the situation effectively.</p> <p>In 2015, Nigeria emerged as having the largest economy in Africa, with an estimate of about \$1.1 trillion. The country moved significantly from agriculture being the main sector of the economy to oil exploration since oil discovery in the late 1950s. Due to the overreliance on oil, several other sectors of the economy such as manufacturing, energy, transportation, banking and telecommunications are directly influenced and dependent on the activities within the oil sector.</p> <p>In 2008, at the height of the global boom when crude oil price reached its record highest price, the other sectors of the economy experienced a positive turnaround. Without doubt, the country had witnessed around 3% fall in GDP since the start of when the global prices of crude oil crashed in 2014, the government revenues also declined and the other non-oil sectors of the economy also contracted as a result.</p> <p>This thesis has provided in details both in facts and economic figures the negative effects the economy had suffered such as increase in external debt due to borrowing to finance capital projects, stagnated savings, job loss. The palliative measures which included economy policies and diversification plans the government had introduced to prevent further downturn of the economy and preventing future occurrence are also discussed herein.</p>		

<p><b>Key words</b> Crude Oil, Economic Development, Nigeria, OPEC.</p>
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## **CONCEPT DEFINITIONS**

BP:	British Petroleum
EPNL:	ELF Petroleum Nigerian limited (EPNL)
GDP:	Gross Domestic Product
GSA:	Gas Supply Agreements
IOCs:	International Oil Companies
JVA:	Joint Venture Accounting
LNG:	Liquefied Natural Gas
NAOC:	Nigerian Agip Oil Company Limited
NDDC:	Niger Delta Development Commission
NLNG:	Nigerian Liquefied Natural Gas
NNPC:	Nigerian National Petroleum Company
OECD:	Organization for Economic Co-operation Development
OPEC:	Organization of Petroleum Exporting Countries
PFA:	Petroleum Fiscal Agreements
POCNL:	Phillips Oil Company Nigeria Limited
SPDC:	Shell Petroleum Development Company of Nigeria Limited

**ABSTRACT**  
**CONCEPT DEFINITIONS**  
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## 1 INTRODUCTION

Crude oil (Petroleum) has proved to be of very important use to humans it can be traced as far back as 4,000 years ago. Around 347AD, the earliest known oil wells were drilled in China. It has also been known in ancient history (BC) that it found its way in firing weapons to invade castles and cities. Aside from this, before the invention of electricity petroleum has been used as a source of energy (Paraffin) for lighting street lamps, road construction with tar which is one of the several refined products from crude oil, some medicines e.g. vitamin capsules, aspirin are also known to contain this product.

In modern age, crude oil has found its way to be the top most sought source of energy for use in automobiles, aircrafts, and electricity generating engines. Pharmaceutical companies are not left out of those who have discovered use of this, mineral oil and petrolatum are byproducts used in many body creams and topical pharmaceuticals. Other unexpected products containing or made from petroleum are toilet seats, crayons, ink, hair coloring, and lipsticks. With the highlighted great importance of petroleum, this has correspondingly leads to a high demand and subsequently an increased price cost, which makes a great source of income revenue for oil producing countries.

Nigeria is often referred to as the “Giant of Africa”, a nation of well over 182 million inhabitants which makes it the most populous black nation and one of the leading oil producing countries in the world. The country is well endowed with cultivable land, forests, very good climatic and weather condition, livestock, bountiful mineral resources e.g. tin, copper, crude oil and natural gas. The country has great potentials to compete with the most industrialized nations of the west when it comes to economy strength, but unfortunately a lot of these potentials have been barely exploited. Nigeria’s economy which has been negatively affected as a result of the fall in oil price has shown clearly the negligence of the government over the years in developing other sectors of the economy. Nevertheless, a window of great opportunity is presently available for these areas to be exploited in the best possible way, this paves way for the economy to be on the path of sincere diversification, sustainable economic growth and well improved living standards.

This thesis objective is centered on establishing a relationship between the crashing crude oil prices in the global market and the negative impact on the economy of oil producing countries with focus on Nigeria. It's very important to highlight the negative impacts on Nigeria's economy as it's totally dependent on the oil sector and a very significant percentage of the government's revenue is coming from the oil industry. Measures like diversification from being solely dependent on oil earnings that have been taken by the government in de-escalation of the economic crisis are also covered.

With the above topic introduction and objective description, the thesis goes further in chapter two describing basic facts about Nigeria, its geographical location, population and its economy index.

In chapter three, the Nigeria oil industry is discussed beginning with the first oil discovery dating back to 1956, oil and gas reserves, challenges facing the industry and lastly the structure of the oil industry emphasizing the importance of the upstream, mid-stream and downstream sectors were all covered.

Chapter four takes a look at the happening in the global stage taking a first look back at the history of oil prices in the global market, the various causes for the drop in oil price, supply and demand factors on the oil price shock. These aforementioned factors established the relationship between drop in oil prices and inflation, food prices, GDP, real income of exporting countries.

The following chapter is focused on how Nigeria as an oil producing and exporting country has been greatly affected by this incident, the effects ranged from sharp rise of inflation, exchange rates volatility, depletion of foreign reserves. Fiscal and monetary response being implemented by the CBN, and the necessity of the country's economy diversification. The final chapter 6 is the conclusion, it was a resultant of the overview of statements, facts and figures that were discussed between chapters two and five.

To attain the objective of this research a qualitative approach is employed, secondary data will be collected from books, articles, journals, newsletter and publication on the subject market as well as publications from the Central intelligence agency and Nigeria government agencies websites etc. the aforementioned institutions have comprehensive statistical data which are published periodically and which are important to substantiate the information contained herein.

## **2 BASIC FACTS ABOUT NIGERIA**

Nigeria is a highly heterogeneous country filled with people of diverse cultures and beliefs, this diversity is seen as one of the strengths that place the country at an advantage. This chapter will briefly cover the history of the country dating back to pre-independence era and not forgetting to look at its population, language, political and economy structure.

### **2.1 Geographical location, people, population and culture**

Nigeria is located in West Africa, sharing boundaries with Niger to the north, Republic of Benin to the west, Cameroon to the east, Chad Republic in the North-East and bordering Gulf of Guinea between Benin and Cameroon along its southern coast. It has a land area of about 923,768 sq km (almost twice the size of California or Spain) and it's the 10<sup>th</sup> largest country in sub-Saharan Africa. English language is recognized as the country's official language, though there are over a hundred other indigenous languages being spoken, the major ones are Hausa, Igbo and Yoruba.

Nigeria is Africa's most populous country, a designation it wears with pride. It had more than 182m citizens in 2015, according to the World Bank, and is poised to have the world's third-largest population, behind India and China, by 2050 (Economist 2017). The country also finds itself among the top ten most populous nations in the world.

The country is divided into six main geo-political zones with thirty-six (36) states in total namely; North-Central, commonly referred to as middle-belt consists of these states (Benue, Kogi, Kwara, Nasarawa, Niger, Plateau, Federal Capital Territory), North-East (Adamawa, Bauchi, Bornu, Gombe, Taraba, Yobe), North-West (Jigawa, Kaduna, Kano, Katsina, Kebbi, Sokoto, Zamfara), South-East (Abia, Anambra, Ebonyi, Enugu, Imo), South-South (Akwa Ibom, Bayelsa, Cross River, Delta, Edo, Rivers) and South-West (Ekiti, Lagos, Ogun, Ondo, Osun, Oyo). (PICTURE 1) below shows the structure of the geopolitical zones in the country. These classifications are not entirely limited to geographical location, but also rather states with similar cultures, ethnic groups, and shared history are classified within the same zone.

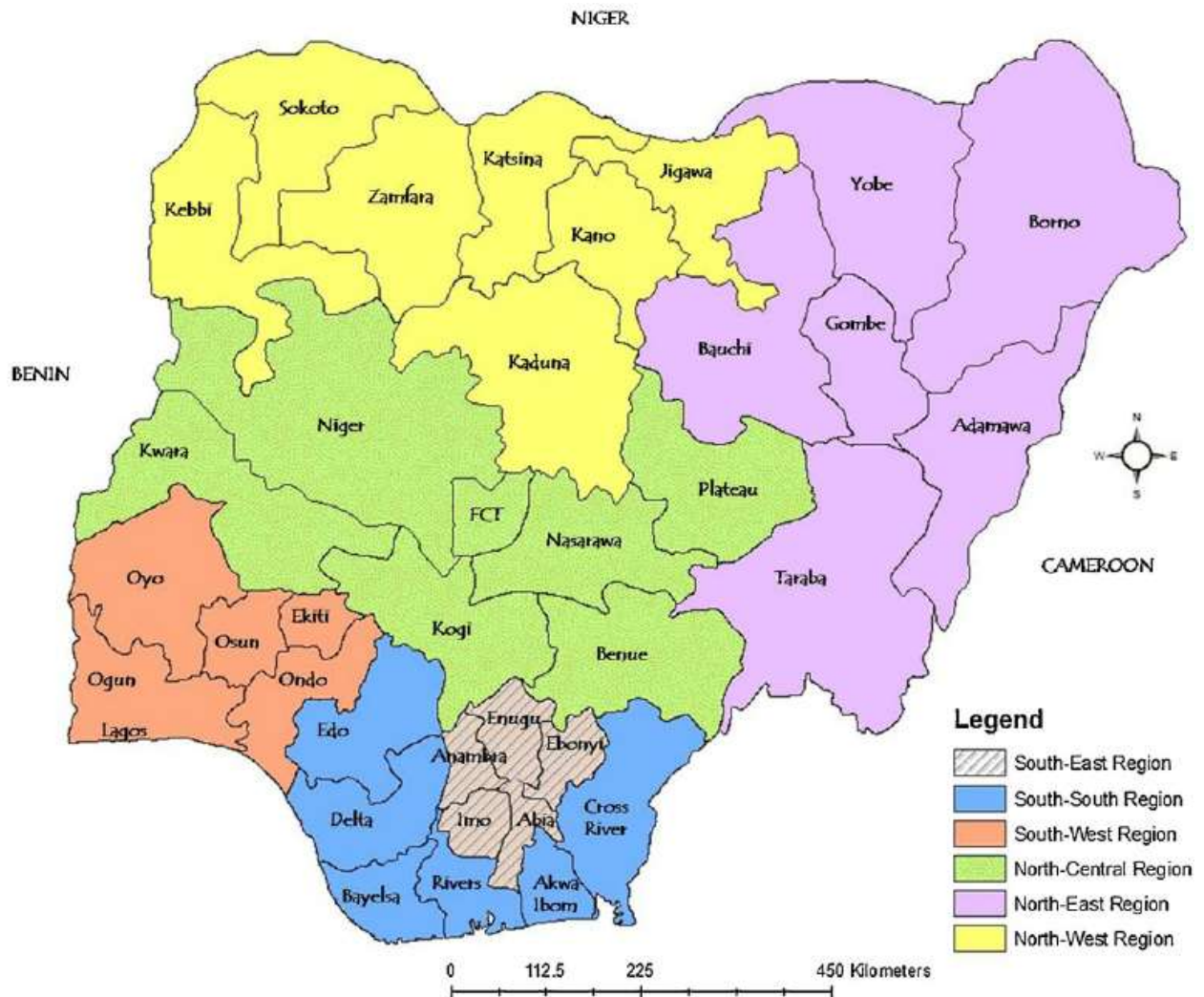


FIGURE 1. Map of Nigeria showing the six (6) geopolitical zones (adapted from Research Gate)

## 2.2 Political history

Flora Shaw coined the word 'Nigeria', this was suggested by her for the British protectorates (Northern and Southern Protectorates) on the Niger River. In 1914 there was an amalgamation of these protectorates into what is now the modern Nigeria and on October 1<sup>st</sup>, 1960 the country gained independence from Britain. The country still continued to be under the British control until 1963 when



it finally became an independent republic. Between 1960 and 1966, the country was being led by a civilian president Dr. Nnamdi Azikwe and Sir Abubakar Tafawa Balewa who was the prime minister.

Barely seven years after independence, had the nation descended into a bloody civil war (commonly known as Biafra's war) from 1967 to 1970 when a secessionist agitation came from the eastern part of the country. The military instigated its first coup d'état in 1966 when they unseated the civilian government and for a long time they were very active in the political history that shaped the country, they were in control of the administration for over thirty years. The country has witness uninterrupted democratic dispensation since military handover on May 29<sup>th</sup> 1999, there has been about 5 democratic elections that have been held since then, which has been the longest in civilian leadership the country has ever witnessed.

The style of government practiced in Nigeria is described as the federal presidential republic, in which the president is both head of state and head of government. There are three arms that make up the government, namely; legislative, executive and judiciary. President is elected by having a majority popular casted votes of 25% minimum from 24 states out of the 36 states, the president is elected for a 4-year term and eligible to stand for a second term if reelected. The National Assembly is Two-house which consists of the Senate (109 seats - 3 each for the 36 states and 1 for Abuja; members directly elected in single-seat constituencies by simple majority vote to serve 4-year terms) and the House of Representatives (360 seats; members directly elected in single-seat constituencies by simple majority vote to serve 4-year terms). Supreme Court is the apex court in the country, and consist of the chief justice and 15 other justices. The appointment of these judges come solely from the president but on the recommendation from the National Judicial Council.

### **2.3 Economy**

The Nigeria economic model can be considered a dual economy with a modern segment dependent on oil earnings, overlaid by a traditional agriculture and trading economy. Nigeria economy increased with an upward trend by 2.5% in 2015, which is considerably under the growth in 2014 which was at 6.3%. Some months preceding the fall in the global oil price in 2014, Nigeria rebased its GDP data, which pushed it above South Africa as the biggest economy in the continent.

The country is one of Sub Saharan Africa's largest economies (GDP at \$406b 2016 est) and relies heavily on oil exports as its main source of foreign exchange. The aftermath of the mid-2014 oil prices fall, growth has been a retrogression and the economy is currently in recession. Before independence the agricultural sector accounted for over half of the country's GDP until the oil sector emerged in 1960. 20% of GDP, 95% of foreign exchange and around 65% of budgetary revenues are dependent oil proceeds. The GDP composition of the economy is represented in figure 2; showing almost half (43%) of the economy is determined by the industrial sector where the oil industry wields an enormous strength. Despite the enormous wealth of the nation, 70% of the population (2010 est) are below poverty line which placed the country among the world's poorest countries. Political instability, corruption from past and present political leaders, uneven distribution of the country's wealth, unwillingness for economic diversification are parts of undesirable factors the economy has been up against for decades.

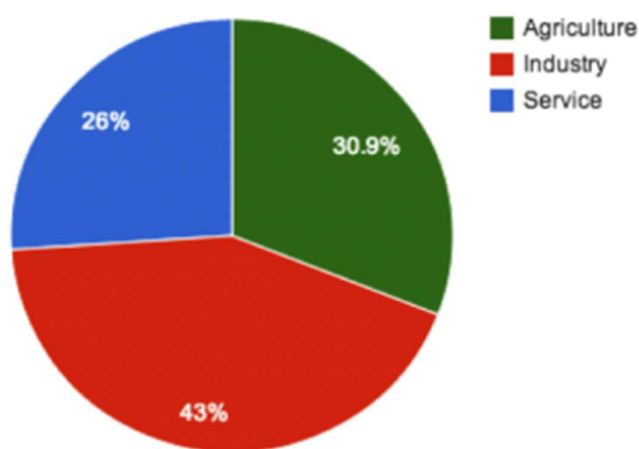


FIGURE 2. GDP composition by sector of origin (adapted from <http://nccnigeria.org/about-nigeria/>)

### **3 NIGERIA OIL INDUSTRY**

The oil industry is highly structured and serves as the backbone of foreign exchange revenue for the government, but in order to fully comprehend this important sector there is need to look back at the time when oil was first discovered in Nigeria, and companies that started exploration. There are 3 divisions that make up this industry; the upstream, mid-stream and downstream sectors. Challenges facing the industry in modern times as well as oil reserves and fields will be a subject of discussion under this chapter.

#### **3.1 Discovery of Oil**

Oil was first discovered by Shell-BP in the year 1956; at Oloibiri in the Niger Delta region of Nigeria. In the year 1958, Nigeria joined the ranks of other oil producers when it produced 5,100 bpd from its first oil field. The exploration rights in offshore and onshore areas that were adjoined to the Niger Delta were extended to foreign oil companies. The EA field was also discovered by Shell in the south east shallow water of Warri, in the year 1965. After the Biafra war, there was an increase in global oil price. Nigeria benefitted from this increase and focused on oil production. In the year 1971, Nigeria became a member of the Organization of Petroleum Exporting Countries (OPEC). The country then created the Nigerian National Petroleum Company (NNPC) in the year 1977. NNPC is a key player in both the downstream and upstream sector of the Nigerian oil industry.

After the discovery of crude oil, pioneer production of oil commenced in Shell D'Arcy Petroleum's oil field in Oloibiri, the eastern part of Niger Delta. During the late 60s and the early 70s, the country had achieved an oil production level of more than 2 million barrels in each day. However, these figures declined due to a change in economic activity in the 80s. There was a rejuvenation of oil production levels in the year 2004. In this year, Nigeria achieved an oil production level of 2.5 million barrels in each day. Nigeria then developed strategies to boost its oil production levels; the country projected oil production of 4 million barrels per day in the year 2010.

The production and export of petroleum plays a key role in the Nigerian economy. This commodity accounts for more than 90% of the country's earnings. The dominant role played petroleum production has channeled focus from agriculture. The agricultural sector was the mainstay of the Nigerian economy in the early 50s and 60s. Nigeria is a known exporter of oil to different parts of the world. It is the 8<sup>th</sup> largest oil exporter in the world. The country's oil export goes to the United States of America, India, Europe, Canada and Brazil.

The earnings from oil export are of major benefit to the country's economy provided that the country and its citizens enjoy the benefits from tangible development, export earnings and foreign direct investment. The Niger Delta region is the most prolific producer of oil in Nigeria. Besides the abundance of natural gas and crude oil resources, the states in the Niger Delta region have enormous deposits of solid minerals which could be a potential source of income for the country. From the earnings generated from the export of crude oil, oil producing regions receive 13% as allocation to these regions. The federation account also distributes allocation from crude oil earnings to all tiers of government in the different states in Nigeria. Another source of fund to the Niger Delta region is NNDC which receives 3% of the total budget of the year from all the oil companies in the region. These funds are basically used for the development of the Niger Delta region.

### **3.2 Structure of the oil industry**

The oil and gas sector in Nigeria is structured into upstream, midstream and downstream sectors. A brief highlight of the sectors is shown below (PIB Consultative Forum 2009):

The upstream sector is the most important sector as all other sectors rely on it, this sector is involved in oil exploration and development gas exploration and development. Companies involved include Chevron, Total and Shell.

The midstream sector is the second and is a highly capital intensive sector that is involved in oil transportation and gas transmission, gas processing, LNG/CNG/GTL, derivative processing/production, and oil refining. The key players in this sector include the NNPC and IOCs. The IOCs are responsible for 94% of the total production of oil in the industry.

Lastly comes the downstream sector, this sector is involved in gas distribution/sale, petroleum product distribution and storage and petroleum product retail. In this sector, local refineries process a limited amount of the domestic crude oil into various petroleum products for local consumption with distribution and marketing taking place within this sector. Such refineries include Port Harcourt Refining Company 1, Port Harcourt Refining Company 2, Warri Refining and Petrochemical Company and Kaduna Refining and Petrochemical Company.

### **3.3 Oil fields, gas sources and reserves**

There are 606 oil fields in the Niger Delta region of Nigeria. A total of 355 oil fields are on-shore while 251 oil fields are offshore. Out of these oil fields, a total of 193 are operational while 23 have either been abandoned or closed due to the drying up of oil wells or reduced prospective of the wells. About 28 exploratory oil wells in the Niger Delta region have been drilled with different prospectivity levels. These oil wells include one discovery well in Benue state and Edo state, two discovery wells in Anambra State, and Twenty-four wells in the Chad Basin. However, there is yet to be commencement of oil production in any of the aforementioned wells (Opportunities for Danish offshore companies within the Nigerian oil and gas sector 2008).

A large portion of the gas for base project is majorly NAG supplied from different gas supplier fields which include the following (PIB Consultative Forum 2009):

- SPDC - SOKU
- NAOC - OBIAFU OBIKROM
- EPNL – OBITE

An estimate carried out in the year 2003 showed that there were recoverable oil reserves of about billion barrels. This oil reserve base was projected to increase as a result of more appraisal drilling and oil explorations. More than 900 million barrels of recoverable crude oil reserves have already been identified in the country. The Nigerian government set a target to achieve an oil reserve of 40 billion barrels in the year 2010.

There is an estimate of about 159 trillion cubic feet of natural gas reserves in Nigeria. Thus, Nigeria is regarded as one of the top 10 natural gas endowments worldwide. Currently, the country flares

approximately 40% of produced natural gas and re-injects about 12% to improve the recovery of oil. The country developed a policy to put an end to gas flaring in the year 2008. It was estimated that Nigeria accounts for approximately 12.5% of total gas flaring in the world. Shell developed a new industry strategy to collect and process associated gas into liquefied natural gas (LNG). This strategy was developed to enhance the natural gas revenues generated by Nigeria while reducing the level of carbon dioxide emissions (Development of Nigeria's oil industry 2017)

TABLE 1. Crude oil reserve estimates in Nigeria 1988-2005 (Olalekan 2010)

<b>Years</b>	<b>Crude oil reserves (Billions of barrels)</b>	<b>Years</b>	<b>Crude oil reserves (Billions of barrels)</b>
1988	16.0	1997	25.0
1989	16.0	1998	27.0
1990	17.5	1999	28.0
1991	18.5	2000	30.0
1992	19.0	2001	30.5
1993	20.5	2002	32.0
1994	21.0	2003	33.0
1995	23.0	2004	33.5
1996	23.5	2005	35.0

Table 1 above shows the increase of crude oil reserves in the country between the years 1988 to 2005, this increase is as a result of discovery of new oil wells over the course of these years which are being reserved for exploration in the future.

### **3.4 Nigerian Liquefied Natural Gas, gas supply contract**

The Nigerian Liquefied Natural Gas (NLNG) project is being implemented in phases that have an initial production from two trains. The Nigerian Liquefied Natural Gas plant is situated at Bonny Island. NLNG has been able to secure the market for its moderate production volume via its base project at train three. There is yet to be a complete finalization on investment decision with the JV partners (PIB Consultative Forum 2009).

In the year 1992, the NLNG signed series of Gas Supply Agreements (GSAs) with 3 upstream gas producers. The aim of this contract was to secure a regular and adequate supply of gas for a particular project. The gas producers include the following (PIB Consultative Forum 2009):

The Shell Petroleum Development Company of Nigeria Limited (SPDC) - NNPC/SPDC/NAOC/EPNL JV: operator & sellers' representative – SPDC (Shell affiliate)

Nigerian Agip Oil Company Limited (NAOC) – NNPC/NAOC/POCNL JV: operator & sellers' representative – NAOC (Agip affiliate)

ELF Petroleum Nigerian Limited (ELF), (then Elf Nigerian Limited) – NNPC/EPNL JV: operator & sellers' representative – EPNL (Elf affiliate)

There are regulatory institutions created to monitor aspects of health, safety and environmental matters without prejudice to the responsibility of the Federal Ministry of Environment in Nigeria. Their functions include clear relinquishment, abandonment and restoration provisions provided for environmental quality management system.

### **3.5 Challenges facing the oil industry**

There are several challenges facing the Nigerian oil and gas industry. These challenges may be difficult to solve without a change to the 1999 Constitution of the country. According to an overview of the petroleum industry bill (2009), some of the major elements of these challenges include effective, progressive petroleum fiscal systems, the ownership of resources and the exclusive rights of the Nigerian government to allow the exploration and development of petroleum resources in Nigeria, funding

options for NOC and joint venture operations, an authentic indigenous participation in the Nigerian oil and gas industry, continual membership of Nigeria in OPEC and the rules of law and institutional empowerment. These challenges are briefly discussed below.

An effective and stable fiscal system, basically the Nigerian constitution is the principle that guides the development of underlying petroleum resource and the allocation of revenue generated from the extraction of minerals. Beyond this constitutional foundation, the fiscal terms that govern some of the operational and production or revenue sharing aspects of petroleum fiscal systems in the country are mainly predetermined via the national legislation. However, the non-fiscal instruments are subject to negotiation; this is where some of the political uncertainties and risk can be quantified. Undoubtedly, Nigeria's petroleum fiscal agreements (PFA) is good enough to improve the country's economy to a maximum potential. However, it is suggested that the type of contract provided is not as essential as the terms negotiated and the design of the contract.

Authentic Indigenous Participation Issue, several policies have been implemented since the inception of the oil industry. The purpose of these policies is to accomplish an increase of home participation in the oil business. Over the years, oil blocks have been awarded to indigenous firms, but quite a few of these firms are authentic. Also, the implementation of the local content development policy may be argued to be irrelevant. This is due to the unavailability of technical expertise, human skills, and inadequate financial intermediation.

Resource Ownership and Control, the exclusive ownership of oil resources by the Federal Government in Nigeria may create 'undue leakages in the economy'. This exclusive ownership has also increased corruption, the inefficiency in petroleum block allocation mechanisms, and limited transparency. The meaningful impact of petroleum taxation policies cannot be felt in petroleum producing regions in a sustainable way due to the existing rule of resource ownership. This is considered to be an underlying factor which perpetuates conflict of interests among stakeholders in the Niger Delta region. This has also resulted in several damages to Nigeria's economy. Some of the challenges include hostile activities in the Niger Delta region such as bunkering and kidnapping. These activities are due to the conflict of interests within the nation.



Institutional and Human Capital Development, there are allegations that there are inadequately skilled oil and gas professionals in the international community of the oil and gas industry. This has been the reason for the flooding of foreign petroleum professionals and contractors into the country.

Petroleum policy, the petroleum policy formulation process by the National Assembly is another challenge to the oil industry. There is also inadequate human capacity and infrastructure to independently evaluate the policy acts that govern the oil and gas sector.

Funding options for the National oil company, there is substantial funding requirements for JVA operations from the Nigerian government. The government spent, about \$3.7 billion on the JVA upstream investments from the year 2002 to 2006. The estimated projected annual funding needs for JV operations ranges between \$11 billion and \$13 billion from the year 2007 to 2011. This evidence strongly suggests that the national government has received enough revenue above its original investment.

## **4 GLOBAL OIL PRICE CRISIS**

The oil crisis in 2014 took major players in the oil industry by a huge surprise, with price going as low as \$29,64 per barrel in January 2016 with countries like Nigeria and Venezuela being among the hit with economic recession as a result. Several factors leading to the cause of the price depreciation and how countries' economies reacted to this are covered under this chapter.

### **4.1 Overview**

Historically, there have been fluctuations in the prices of crude oil, these fluctuations have existed for more than 3 decades. The major downturns are caused by the following factors like war relief in places such as the Gulf war, Iraq invasion. The crash in the stock market with examples including the Dotcom bubble financial crisis. The Russian recession after the dissolution of the Soviet Union, the Asian crisis is also included. Supply shocks in places such as Saudi Arabia increased production during the periods of 1985 to 1986, all these are represented in figure 3, (Rystad energy 2015)



FIGURE 3. Historical crude oil prices (Adapted from Rystad energy, 2015)

A drastic decline in oil prices occurred in the year 2014. This decline is speculated to bring an end to the four year era of stable and high oil prices. The recent developments in the oil markets and prospects of moderate growth prospects in developing and emerging economies suggest that oil prices might remain soft for the next couple of years. The decline in cumulative oil price during the periods of 2014 to 2015 was the third largest in the past three decades. This decline was caused by a “perfect storm” of varying conditions which imposed a downward pressure on oil prices. Additionally, the changes in demand and supply also played an important role in dwindling oil prices. Other development which contributed to the decline in oil prices include the significant shift in the policy objectives of OPEC, certain spillovers from geopolitical risks, and the significant appreciation of the United States currency (Attia 2017). Based on empirical estimations, the supply factors have contributed largely to the plunge in oil prices. Consequently, oil prices are projected to remain soft but volatile, with a steady recovery over the next ten years (World Bank 2011).

Low oil prices are likely to significantly influence the occurrence of inflation in oil producing countries. If the decline in oil prices is largely driven by supply factors, it is estimated that a 45% decrease in oil prices will increase global GDP by 0.7 to 0.8% in the medium term. Subsequently, there will be a reduction in global inflation in the short term by a full percentage point. However,

different factors may change the effects of dwindling oil prices on inflation and growth of the economy. The projected benefits for the global economy may be limited by acute pressure on oil exporters, weak global demand, policy challenges among large importers and lingering post-crisis uncertainties. Furthermore, varying taxes, sharp adjustments in currency, subsidies or other regulations may exhibit various effects on inflation patterns in different countries around the world.

Decrease in oil prices may also result in significant shifts in real income from exporting countries to importing countries, influence fiscal and current account dynamics, and/or translate into reduced prices for non-oil commodities. Such forces are likely to constrain some dimensions of macroeconomic policies. Contrastingly, it may open opportunities to tackle long-standing reform requirements in other areas (Tang, Wu & Zang 2010).

Furthermore, the decline in oil prices is expected to foster stronger growth, improve fiscal and external balances, reduce inflation, reduce macroeconomic vulnerabilities as well as widen the room for policy. Contrastingly, the growth experienced by oil exporting economies might be negatively affected. This is due to the significant losses in fiscal revenues and export caused by reduced oil prices (Tang, Wu & Zang 2010; Baffes et al. 2015).

A certain level of adjustment may be enforced in oil-exporting countries by sudden reassessment of sovereign risks and credit by investors. This may become more difficult due to limitation in diversification of the sector. The plunge in oil prices has been accompanied by substantial outflow of capital, losses in reserve, and steep depreciations in some oil exporters (Baffes et al. 2015).

Reduced oil prices may also exert a downward pressure on the prices of other commodities such as natural gas, food commodities and fertilizers. From a historical perspective, a 45% decrease in oil prices may reduce the prices of agricultural commodity by about 10%. Food commodities are a major constitute of the poor's consumption basket. Thus, reduced food prices will benefit the majority of the poor people in concerned countries (Shuddhasawtta Salim & Bloch 2010).

Additionally, reduced oil prices are likely to have significant implications on both fiscal and monetary policies. The reduced inflation and recent account improvements in oil-importing countries may allow central banks to maintain policies that are accommodative. Reduced oil prices may also provide additional fiscal opportunities which could be utilized in the stimulation of required activity. However,

there will be limited room for maneuver in oil-exporting countries. Central banks in oil exporting countries will have to balance the requirement to foster growth against the requirement to maintain investor confidence and a stable inflation. In many cases, fiscal policy will need to be tightened to cover up for the loss of revenues generated from oil production (OECD 2011).

The decline in oil prices also affects the proper design of structural policies. Reduced oil prices provide a suitable opportunity for both exporters and importers to reconsider the reform of tax policies and fiscally draining energy subsidies as a result of ongoing budgetary and environmental challenges. Even though the efficacy of energy subsidies in the alleviation of poverty and improved access to high quality energy sources have been questioned for quite some time, reforms remain difficult to implement politically. Dwindling oil prices create a suitable condition for such reforms; this limits the impact on the final price paid by customers (Natal 2009).

Other challenges facing the industry include poor control and bureaucracy, product adulteration, communal disturbances, poor funding of investments, smuggling and diversion of petroleum products and fraudulent domestic marketing practices.

#### **4.2 Causes of the drop in oil price**

According to Baffes et al. (2015), the different causes of dwindling oil prices include the following:

Developments in supply and demand; the recent developments in global oil markets have taken place; this development is against the long-term trend of 'greater-than-anticipated supply' (FIGURE 4). This is particularly true for unconventional oil sources in the United States of America, Canadian oil sands and the production of biofuels. It is speculated that the cost of unconventional oil production will decrease due to the development of new technologies. This will reduce the cost of extraction and exploration (Benes et al. 2012).

Unconventional oil projects such as the production of Shale oil differ from conventional projects because they have a relative low capital cost and reduced life-cycle. Thus, oil supply from these sources tends to be significantly more elastic to price changes compared to conventional sources. This is also true for biofuels and Canadian oil.

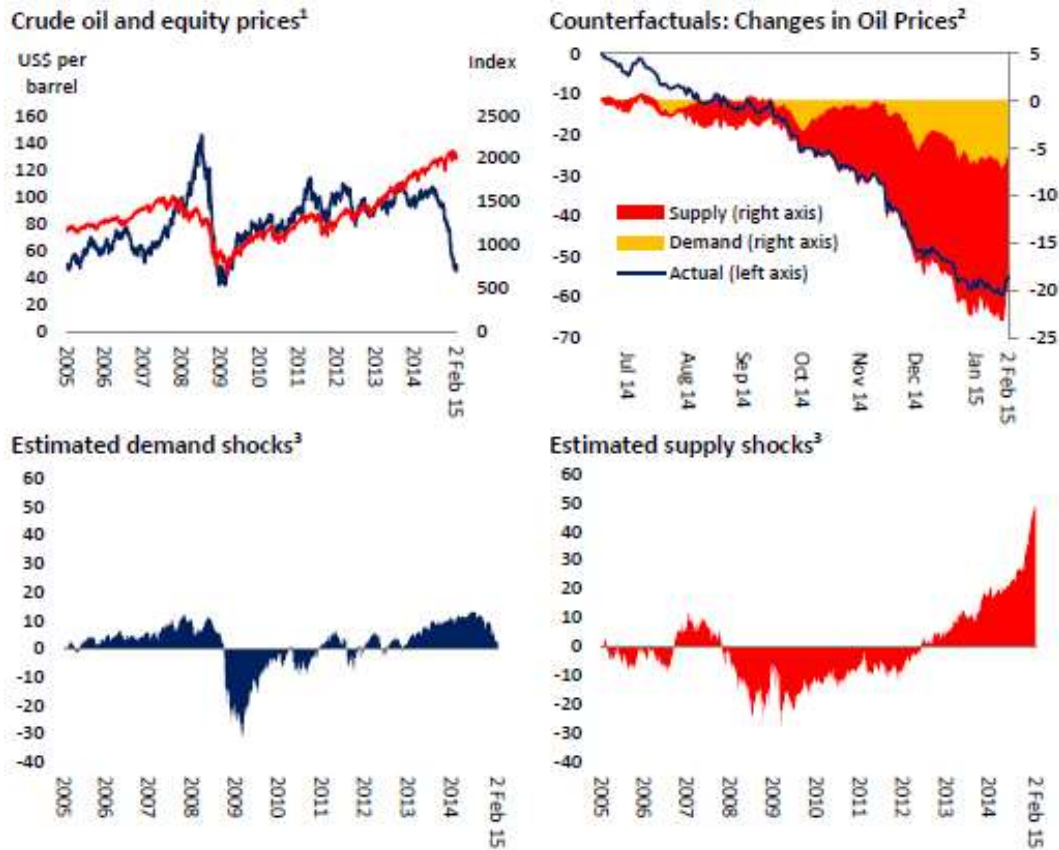


FIGURE 4. Supply and demand factors in the oil price shock (Adapted from Baffes et al. 2015)

Changes in OPEC objectives; OPEC is known to account for 40% of the global oil supply. OPEC has the potential to be a swing producer in the global oil market. The share of OPEC in the global supply of oil has been eroded due to an increase in unconventional oil production and policies. Further losses in OPEC's market share began as a result of the discounts offered to Asian oil marketers by members during the third quarter of the year 2014. This act signals the intention of OPEC to stop the use of price targeting. OPEC changed its policy to maintain an oil production level of 30 mb/d in the year 2011. This policy change infers that OPEC will no longer be the swing producer of oil. Rather, the marginal cost of unconventional oil producers will assume this role (Kaletsky 2015; Basu & Indrawati 2015).

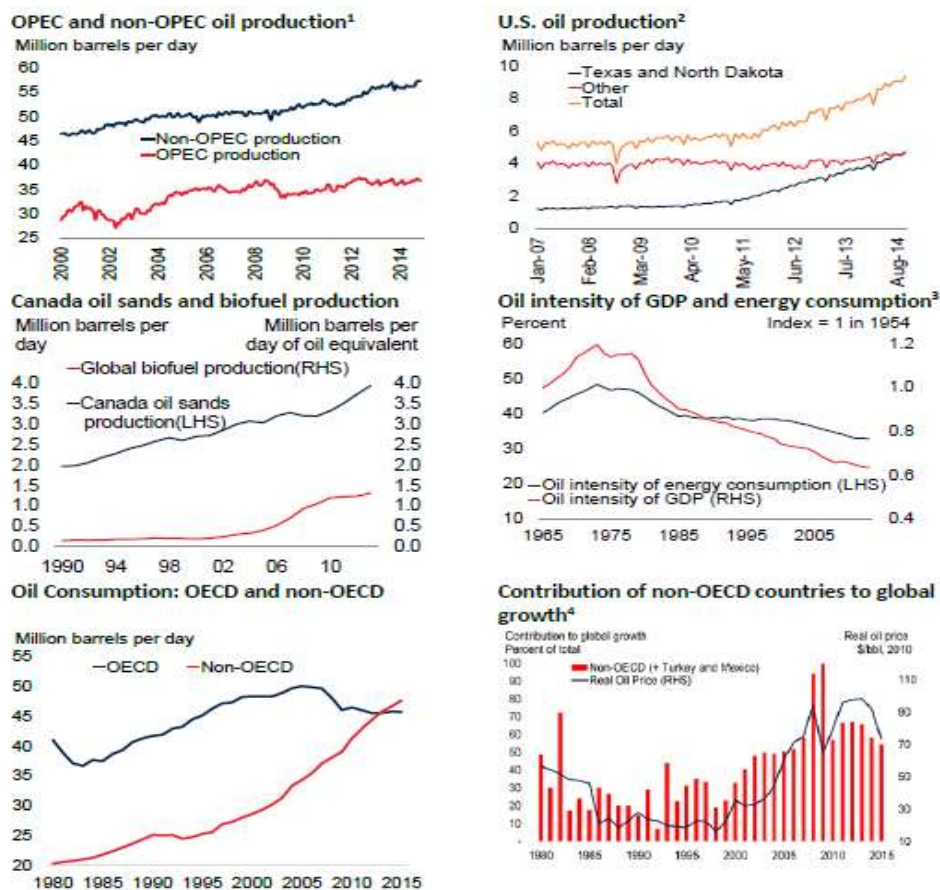


FIGURE 5. Long term drivers of oil price decline (Adapted from Baffes et al., 2015)

Appreciation of the U.S. Dollar; the U.S. dollar appreciated by over 10% against other major currencies between the periods of 2014 to 2015. The broad based appreciation of the currency increases the local currency cost of oil in countries that use currencies that are not linked to the United States dollar. Thus, the likely effect of a strong dollar is reduced oil demand in those countries and increase in supply from non-U.S. dollar producers.

The empirical estimation of the size of the effect of the United States dollar covers a wide range, the ranges include (Akram 2009):

The wide estimate suggests that a 10% increase is associated with a decrease of approximately 10% in the oil price. On the other hand, a low estimate suggests 3 percent or less and it is argued that the role of the United States dollar appreciation triggered by diverging monetary policies in the Euro Area, Japan and the US is a key contributor to the recent decrease in the prices of commodity (Frankel 2014).

Speculative demand and inventory management; there are three different forms of speculation in the oil market, these include; Changes in inventories on expectations of varying market conditions (Smith 2012). Financialization of commodities as assets under the management of commodity-based funds increased from \$40 billion to \$300 billion over a period of more than 10 years (Baffes & Haniotis 2010). Outright market manipulation (Baffes et al. 2015). The inventories of crude oil in OECD countries increased by about 6% between January and September 2014. Large inventories are typically associated with market conditions that are surplus. However, they may also be associated with speculative demand. Speculative demand shifts plays a role in dwindling oil prices (Kilian & Murphy 2014). There is yet to be a broad agreement on the different roles of changes in inventories and speculation in the oil drop that occurred during the periods of the year 2014 to 2015 (Baumeister & Kilian 2015).



## **5 ECONOMIC AND FINANCIAL CONSEQUENCES IN NIGERIA**

The global crisis news was welcomed with mixed feeling, the country had recently basked in the euphoria of being the largest economy in the continent after it rebased its economy. Hard times came along with this news, and it wasn't too long before the economy began to adjust negatively to the trend. The financial sector was the first to have a feel of the impact as most banks became short of foreign currencies to be provided for merchants. This chapter deals extensively by analyzing the effects within the economy, the current reforms that have been embarked on and the necessity for diversification to ease the over dependence on oil earnings in the future.

### **5.1 Effects analysis**

The recent crash in crude oil prices has resulted in a massive financial decline in oil producing countries (Ogochukwu 2016). Some researchers projected the likely impact of oil prices on different aspects of economy of oil producing countries (Olomola 2006; Habib & Kalamova 2007; Aliyu & Usman 2009; Ricken 2009). For instance, Olomola (2006), conducted a study to investigate the likely effect of oil prices on the total economic activity in Nigeria. The author discovered that changes in oil prices affected the foreign exchange rate in Nigeria. The author also documented that oil prices did not have any effect on the rate of inflation and general output in the country. The effect of oil prices on the exchange rate in Saudi Arabia, Norway and Russia was investigated by Habib & Kalamova (2007). The authors reported that there was a positive relationship between exchange rate and oil price in Russia. However, oil price did not have a significant impact on the exchange rate in Saudi Arabia and Norway. According to Ricken (2009), the influence of oil prices on foreign exchange rate is as a result of the unavailability of solid institutions and the country's complete dependence on the exportation of oil. The negative effects of fluctuating oil prices can be reduced by the diversification of the Nigerian economy (Aliyu & Usman, 2009).

The current decrease in oil price has significantly affected the Nigerian economy (Olomola, 2006; Ogochukwu, 2016). Crashing crude oil prices have resulted in inflation, massive laying off of employees in private companies, increased cost of living, non-payment of salaries by Nigerian state governments,

increased foreign exchange rate, reduced amount of funds flowing into the foreign reserve and depletion of the account of excess crude oil (Adeoye & Atanda 2005). The previous fluctuations in crude oil prices (\$95.16 per barrel in January 2008, \$146.15 per barrel in July 2008, and \$76.15 dollars per barrel in October 2008) eventually took a major dive in the year 2016 to less than \$28 per barrel (Sanusi 2010).



FIGURE 6. Crude Bent Oil Price from 1999 to 2014 in dollars per barrel (**Source:** Central Bank of Nigeria 2016; BudGIT 2014).

The decline in crude oil prices has made the commodity less attractive, with history of crude oil from 1999 to 2014 is shown in (FIGURE 6). The current recession in Nigeria is due to its past reliance on oil commodity for its numerous expenditures (Ogundipe & Oluwatomisin 2014). The acrimonious effect of the decline in crude oil prices is due to the non-existence of adequate regulations by financial regulators in Nigeria. The lack of a solid financial institution has resulted in the slow development of the country in this recession (Umanhonlen & Lawani 2015). If measures are not taken to reverse this ongoing recession, it will result in subsequent unfavorable effects on the Nigerian economy (Ogundipe & Oluwatomisin 2014).

## **5.2 Highlights of problems within the Nigerian economy**

The prevalence of crashing crude oil prices is inevitable; this is evident in the occurrence of the oil crisis in 1973 and 1979 (Market watch 2015). The Organization of the Petroleum Exporting Countries (OPEC) was established in the year 1960 to regulate oil prices between member state signatories. Nonetheless, the prevalence of the oil crisis in Nigeria has persisted (Ogochukwu 2016). There have been arguments over the likely cause of crashing crude oil prices; speculated causes include the inappropriate activities of certain country members of OPEC, the maintenance of the United States refinery, the inaction of OPEC and the infiltration of oil countries that are not a part of OPEC in the global production of oil.

The decline in crude oil prices has negatively affected the economy of Nigeria in several ways. Some of the effects of crashing crude oil prices on the Nigerian economy include the following:

Financial scandals; the decline in crude oil prices has caused financial scandals in the Nigerian economy. Most companies strive to maintain luxurious lifestyles during the crash in crude oil prices. Hence, the executives and directors of such companies conduct business activities that are not in agreement with the policies of the company. Such executives meddle with the firm's accounts and assign bonuses to themselves and their cohorts (Ogochukwu 2016). A notable example of such scandal in Nigeria occurred in AFREN Oil and Gas Company. The scandal resulted in the sacking of the executive directors in the company and the development of a new administration.

Unavailability of funds; the decline in crude oil prices has also resulted in the unavailability of funds required for financial services in several banks. The bank loan taken by many oil marketers has resulted in the unsettling of so many banks (Vanguard 2015). The inability of oil marketers to pay back the loan has caused negative consequences to the financial balance sheets of the concerned banks. This could subject the affected banks to paucity of funds required to pay their employee strength, retrenchment of workers in the bank thereby resulting in an increase in unemployment, and inability of affected banks to engage in core banking businesses. Furthermore, dwindling crude oil prices have caused a major financial issue in the capital market and oil sector of Nigeria. This is because oil prices play an integral role in the economy of the country (Chris & Onyinye 2015).

Volatility in exchange rates; another effect of the decline in crude oil prices the inflation induced by the depreciation in the Nigerian currency. According to Imimole & Enoma (2011), the effect of the Naira depreciation resulted in inflation in Nigeria. The authors further explained that the inflation was due to the increase in cost required to purchase services and goods in the country. Currently, the prices of commodities, services and goods have continued to increase in Nigeria. The cost of importing goods have become very expensive because of the depreciation of the Naira. Approximately 95% of Foreign Exchange Earnings are tied to crude oil prices. The Naira will be under continuous pressure due to reduced revenue in dollar terms. The country has continued to earn a reduced revenue from the export of oil and gas. This has made importation of items very expensive, thereby, inflicting burden on Nigerians (BudgIT 2014). Inflation will continue to persist and become more pronounced in Nigeria if efforts are not made to forestall the effects of dwindling crude oil prices (Imimole & Enoma 2011). Investors that were initially interested in Nigeria's huge potential for growth became nervous because of the depreciation in local currency. This was evident in sovereign bond yields which hit a high peak in the year 2015 highlighted in figure 7; when compared with South Africa and US. Also, the NSE All Share Index reduced by more than 30% since July 2014; this is shown in figure 8. There was also a decrease in the inflow of Foreign Direct Investment (FDI) (Price Water Coopers 2014).

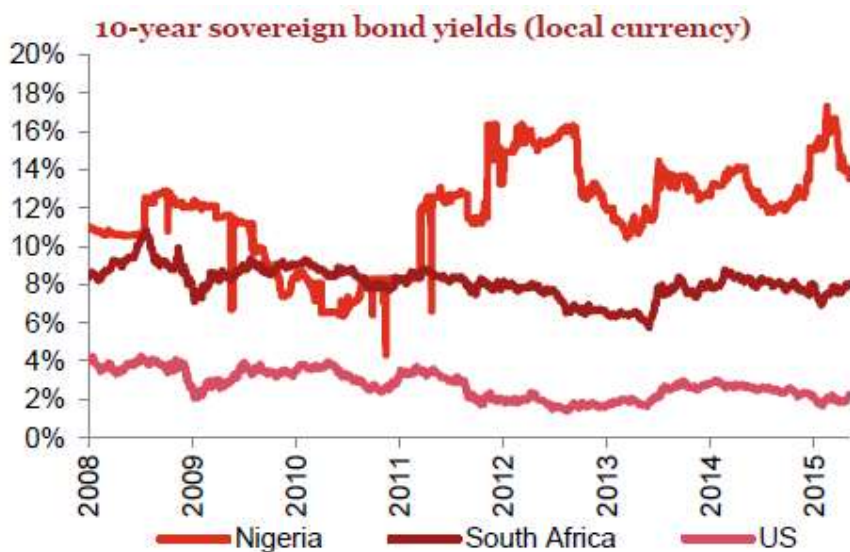


FIGURE 7. 10-year sovereign bond yields (local currency).

**Source:** Thomson Reuters Datastream (Price Water Coopers 2014)



FIGURE 8. All Share Index of Nigeria Stock Exchange  
**Source:** Thomson Reuters Datastream (Price Water Coopers 2014)

Stagnated Savings; the decline in crude oil priced has stagnated the inflow of funds into the Excess Crude Account. There is increased pressure from states for funds to run their recurrent expenditures. Dwindling crude oil prices has resulted in austerity measures in different parts of the country. Thus, the country might find it difficult to increases its savings at this point in time (BudgIT 2014). Figure 9; indicates the fall of the country’s external reserves in May 2014 which was as a result of lack of funds to be saved by the government.



FIGURE 9. Nigeria’s external reserves from 1999 to 2014  
**Source:** Central Bank of Nigeria (BudgIT 2014).

Increased debts; the crash in crude oil prices is projected to result in an increase in incurred debts in Nigeria. This is because the country will require additional funds to cover for the deficit in its existing budget. An increase in debt is a likely alternative for the country considering the stagnation in the excess crude oil account. However, this might not be enough to bridge the existing gap between the country's expenditure and decrease in revenue (Sanusi 2010; BudgIT 2014; Ogochukwu 2016).

Threat to capital expenditure; there will be a quick need for the country to spend on recurrent expenditure due to existing fixed charges. The Nigerian government is striving to maintain its daily obligations as well as keep its deficit within the limits established by the Fiscal Responsibility Act. However, the implementation of drastic reforms may help to reduce threats to the country's capital expenditure. Such reforms may include drastic cuts in overhead costs and downsizing the workforce in different sectors. The country may have to observe austerity measures in all arms of its government (BudgIT 2014). Most of the externally financed projects can be attributed to the oil sector. Such investments may continue to receive cuts in cost if the oil crisis persists; this includes investment in education and infrastructure (Price Water Coopers 2014).

Delay in salaries of government workers; the depletion in excess crude account and reduction in funds from the economic state has resulted in the delayed salaries of government workers. The decrease in crude oil price has affected the regular payment of government workers in different tiers of the Nigerian government. Federal, state and local government workers have been affected; this has resulted in hardship for most of these workers (Odeyemi 2016).

Project deferral in the oil & gas sector; the exploration of crude oil costs a huge amount of money. However, the expenditure of oil explorations no longer matches up with revenue due to the current decrease in oil prices. This may result in downsizing of personnel in such companies. This may also affect the decision of international oil companies to embark on offshore projects that cost a huge amount of money (Odeyemi 2016).

Delay and abandonment of infrastructural projects; there may be cancellation of major projects at different tiers of the Nigerian government. This is due to the paucity of funds to execute such projects. Thus infrastructural projects such as improving water and electricity supply, road constructions amongst others may be put on hold (Odeyemi 2016; Ogochukwu 2016).

Abysmal economic activities in the country's capital market; the decrease in crude oil prices affected the economic activities in the capital market. Foreign investors withdrew from the capital market to avoid being victims of the Naira depreciation. This resulted in a gloomy atmosphere in the capital market. The economic managers in Nigeria are currently striving to respond to fiscal and twin monetary crisis caused by dwindling crude oil prices (Odeyemi 2016; Ogochukwu, 2016).

Effect on the aviation sector; the crash in crude oil prices has impacted short term benefits for many airlines. The decrease in oil prices has enabled airline industries to boost the revenue generated with reduced cost. It is speculated that the benefits might not be as massive as many anticipated (Saketa 2016). According to Saketa (2016), there has been a tremendous increase in growth experienced by the airline industry. However, the profitability of the airline business is still low despite the 50% decrease in unit costs.

### **5.3 Necessity of Nigeria economy diversification**

The current decrease in oil price is an eye-opener for the Nigerian economy to consider the need for diversification (Ogochukwu 2016). The country must explore other avenues to make its economy viable rather than depending solely on oil commodity. This will forestall the effect of present or future crude oil crisis on the Nigerian economy. Hence, there is a need for Nigeria to shift to other sectors that were previously neglected when it experienced a boom in oil prices (The Nation 2016a).

Currently there has been an increased cry for diversification in Nigeria; this is due to the negative effects of oil prices on the country's economy. Diversification is considered to be the nostrum for neutralization of the harsh effects of dwindling oil prices and stabilization of Nigeria's financial economy. Other countries such as China, India and South Korea have generated massive revenue from non-oil sectors such as manufacturing and information technology infrastructures. Thus, the economy of these countries is blooming in this era of dwindling crude oil prices (Dahlman 2016).

The Nigerian economy has also begun to explore other non-oil sectors. For instance, one of the recent priorities of the financial economy of Nigeria is Small and Medium Scale Enterprises (SME)'s (Ogochukwu 2016). According to Duru & Kehinde (2012), Small and Medium Scale Enterprises (SME)'s increases output and per capita income, creates job opportunities, play crucial roles in the

process of economic growth and industrialization, and improve sectoral and/or regional economic balance via the promotion of resource use and industrial dispersal. Thus, the Central Bank of Nigeria directed Nigerian banks to diversify as well as increase their lending portfolio to non-oil sectors of the economy. This directive was passed to boost production and enhance economic activities in Nigeria (The Nation, 2016b).

The Central Bank of Nigeria (CBN) also directed Nigerian banks to increase their lending portfolio to the agricultural sector.

This is a fresh lending and a proactive move by the CBN and commercial banks to support the existing agricultural support platform of the CBN under the commercial agriculture credit scheme, which has been providing financial aids for farmers to develop the industry. This assistance by the Central Bank of Nigeria (CBN) to agriculturist is extolled. However, robust disbursement platforms should be built to ensure that the aims of the disbursed funds such as increased mechanized farming, increasing agricultural products and massive growing and production of export crops are achieved. (Ogochukwu 2016)

The proper implementation of the aforementioned agreement will neutralize the present and possible future effects of crashing crude oil prices on Nigeria's economy. Thus, the sector of agriculture can create employment opportunities, boost exportation activities and improve the Nigerian economy (Odeyemi 2016).

Prior to the oil boom era in Nigeria, the agricultural sector was the country's major source of export. The country was renowned as the destination for different agricultural products; some countries tapped from the richness of agricultural resources in Nigeria (Ogochukwu 2016). Nigeria's current stance in the agricultural sector shows how self-reliant and efficient the country could have been if the sector was adequately and efficiently managed. It is quite unfortunate that agriculture is considered to be a suitable job for the less privileged in Nigeria. However, the recent need for diversification has mandated the support of the growth of indigenous agricultural products. Current advancement in mechanized farming can be used to produce indigenous crops such as cocoa in the western region, rubber and palm oil in the eastern region, and groundnut in the northern part of the country. This will gradually increase the economic activity of the country as well as develop potential cash crops for exportation. Exploring the agricultural sector will generate revenue and boost the economy of Nigeria (Ogochukwu 2016).

Another non-oil sector that should be explored to generate revenue in the country is the real sector (Charles et al. 2013). This sector will help trigger and develop Nigeria's financial economy using the



gross manufacturing and production chain that is associated with the sector. Key players in the production chain include manufacturers, producers and consumers. The real sector can play a crucial role in the transformation of the Nigerian economy (Charles et al. 2013). This sector is considered to be cyclical because different people will continue to engage in the consumption and production of its goods and services. Hence, CBN has lent support to this view by encouraging Nigerian banks to reduce their CRR from 25% to 20%. The decision was announced at a circular to all Nigerian banks (CBN 2016). CBN has also implemented other intervention funds to the development of the real sector in Nigeria (The Nation 2015). Furthermore, to encourage the involvement of external stakeholders in this non-oil sector, the Nigerian government has been advised to rigorously engage in the sector. This will reduce the negative effect of dwindling oil prices on the Nigerian economy (Charles et al. 2013).

Additionally, the unavailability of constant power supply in Nigeria has seriously affected economic activities in the country. The power supply in the nation must be consistent to ensure the existence of serious economic activities (Price Water Coopers 2014). Thus, there is a need to focus on the development of an efficient and sustainable power sector while considering diversification. This will create several employment opportunities because this sector serves as the engine for increased production in the country (Price Water Coopers 2014). Diverse human services and endeavors depend on power to provide its services to consumers. Also, this sector is important to the survival of human health because the provision of pristine healthcare services depends on the consistency of power supply in Nigeria. Thus, the Nigerian government must develop strategies to implement a roadmap that will make the necessary adjustments to the current epileptic power supply in the country. The country's economy can only attain and maximize its potential if there is a consistent power supply (Price Water Coopers 2014).

Nigeria is a country that is endowed with several mineral deposits which could serve as a huge source of income and employment opportunities. There are many solid mineral deposits that are yet to be discovered and exploited (Obasi & Isife 2000). According to the information on the Ekiti State Government website (2016), the country has 10 solid mineral deposits that are yet to be tapped and exploited. There are many more mineral deposits that are yet to be discovered and exploited in the different 36 states of Nigeria, this includes the Federal Capital Territory (Ogochukwu 2016). These undiscovered and unexploited solid mineral deposits can be used to generate revenue and create massive employment opportunities in the country. This sector can be harnessed to reduce the effects of

dwindling oil prices in the nation. Nigerian banks should consider channeling their resources to this sector to facilitate its growth and development (Obasi & Isife 2000).

Nigeria is yet to fully explore the sector of science and technology sector to boost its financial economy. This sector has been the source of the economic boom in countries such as China, India and Japan. Such countries have enjoyed the immense benefits and advantage conferred on them by the science and technology sector. Science and technology has been a source of millions of employment opportunities to the residents in India and China (B2b International 2016). The development of science and technology is integral to diversification and the subsequent development of the Nigerian economy (Vanguard 2016). Science and technology is the foundation for development and subsequent economic prosperity.

Economic diversification requires foreign investment from both finance institutions and the private sector. Thus the country must encourage economic diversification and make it an alluring destination for the production of export goods. The proper regulations should be implemented to improve security, enforce transparency. Effective solutions should also be provided to issues such as anticorruption and unavailable infrastructure (Ogochukwu 2016).

#### **5.4 Current reforms in Nigeria**

Several reforms have been implemented to minimize the effect of crashing crude oil prices on the Nigerian economy. The country has adopted regulatory measures to ensure the existence of a sustainable and stable macroeconomic environment. It is quintessential to maintain a sound financial system in the country to boost the economy of the nation (Soludo 2007). One of such reforms includes the directive passed via a circular to Nigerian banks to restrict loan defaulters from having further access to loan facilities. Some of the defaulters were oil marketers; the purpose of the directive is to reduce the effect of loan debts on the loan profile concerned banks (Umanhonlen & Lawani 2015).

CBN also embarked on rigorous ways to ensure that loan defaulters paid up the debts. This included the circular passed to Nigerian banks to publish the names of those that defaulted the loan for at least one year on the national dailies. The names were published every three months to coerce defaulters to

pay up their debts (The Nation 2015). The defaulters were also banned by CBN from participating in the foreign exchange market. Ogochukwu (2016), documented that:

Although, it is a well calculated effort to recover loan debts and keep the affected banks in shape, however, care needs to be taken so that it does not erode confidence and confidentiality trust of investors who wants to borrow from Nigerian banks. (Ogochukwu 2016).

Also, the banks concerned sanctioned the employees that signed off on the loan; some of the affected banks stopped granting loans to oil marketers and people from the energy sector (BudgIT 2014).

There were also efforts to help the country recover from the effects of currency depreciation. There were suggestions to increase the amount of exported goods to generate additional revenue that may further result in the depreciation of the local currency (Imimole & Enoma 2011). The president of the International Monetary Fund take note of the effect of dwindling oil prices on the cost of goods and services to improve their efficiency of collection as well as compliance regime (The Guardian 2016). Banks were admonished to enroot solid risk management practices to curtail the effect of recurrent oil crisis on the financial system of Nigeria (CBN 2014).

## **5.5 Fiscal and monetary response**

The fiscal and monetary response is one of the reforms to the dwindling oil prices in Nigeria. In the year 2014, CBN made a decision to cushion the immediate pressure on the foreign exchange rate by effecting an 8% devaluation. CBN widened and devalued the Naira/ United States dollar band from 150-160 to 160-176. In the year 2015, CBN cancelled its auctions for dollars and targeted new and fixed foreign exchange rate of 196 (FIGURE 10). After a peaceful response to the results of the election, the exchange rate in the parallel market began to realign with the official exchange rate (Price Water Coopers, 2014). CBN also actively drew down its foreign exchange reserve to cushion further pressure on the local currency. However, this reform was a temporary measure to the effects of the crisis in the oil industry (Price Water Coopers 2014).

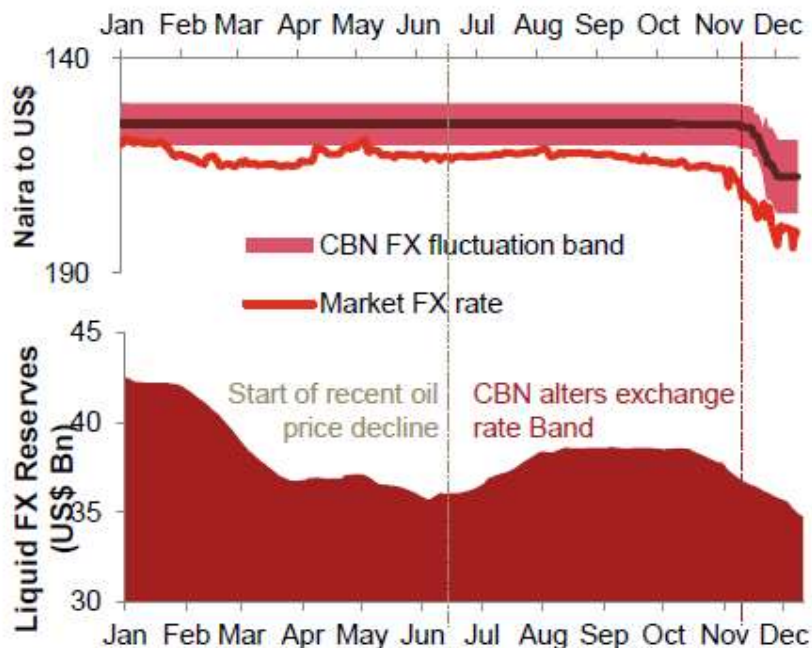


FIGURE 10. CBN response to currency pressures in 2014.

**Source:** Thomson Reuters Datastream (Price Water Coopers 2014).

Some additional reforms to help the Nigerian government to cushion the effect of dwindling oil prices include the following; The restructuring of mechanisms for the collection and expansion of revenue. Exploring private-public partnerships to encourage investment in infrastructure and education. Expansion of the Nigerian tax base to boost the revenue generated from indirect and direct taxes. Ensuring adequate enforcement of property rights to create a conducive business environment. This will facilitate private investments in non-oil sectors such as agriculture, tourism and manufacturing. The encouragement of local processing of primary commodities before exportation, this will create employment opportunities and boost foreign exchange earnings. The implementation and enforcement of local content policy for investors; this will facilitate the manufacture of locally manufactured goods.

The severely hit financial sector comes as a result of the government unwillingness in having a robust economy which will be less dependent on a single resource like the crude oil as a source of revenue. Unlike other oil exporting countries with a diversified economy, the effects were not as felt as it was in Nigeria's case. With the various highlighted economy effects, and dedication from the government in having a diversified economy, the country will be better prepared in any future crisis reoccurrence.

## 6 CONCLUSION

The information presented has shown the importance of crude oil to the sustainability of the Nigeria economy and how it has responded negatively to the dwindling price of crude oil with corresponding facts and figures gotten from the research process.

The theoretical framework of this thesis covered extensively the history of crude oil in Nigeria and its transition from relying on the agricultural sector to the oil sector as the most significant income revenue part of the economy. The structure and challenges of the oil industry were also covered. Overdependence on oil earnings has placed the Nigeria government in a difficult position in ensuring the economy stays afloat despite facing several difficulties in having a balanced budgets plans, depreciation of the currency, and lack of interest from foreign investors. The other sectors banking, agriculture, manufacturing were not left out because of their link and dependence on oil. Due to the erratic power supply in the country, most companies rely on self-power generation through the use of generators, productivity is thereby affected because of the low supply of crude oil.

Economists have made future projections that oil price might not likely increase significantly for the next ten years. Following this statement, this should serve as a wakeup call to the government that the era of cheap money from oil proceeds has come to end which has been fostering corrupt practices among government officials over the years, so alternatives for government earnings need to be sought for. This research process provides some areas that are worth investing, which means economy diversification is a must so as not to expose the economy to such a negative trend in future. The agricultural sectors that have been neglected over the years need to be revamped, as the country's population has been projected by United Nations to surpass the United States by 2050.

As earlier mentioned in the thesis, diversification of the economy is not feasible if there is no guarantee to stable power supply, as this is the sustaining force of any productivity in an economy. The government needs to do more in ensuring availability of stable power, this could be achieved by building more power generating stations, exploring other alternative sources such as wind/solar as this will lead to a boost of private businesses and several startup ideas.

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