

OIL PRODUCTION AND ENERGY CONSUMPTION: IS OPEC A BLESSING OR IMPEDIMENT TO THE NIGERIAN OIL AND GAS INDUSTRY? *

Abstract

The impact of oil in Nigeria could either be a blessing or impediment as this can be seen as two sides of a coin because of the blessings of oil industry to the economy of Nigeria, it has assisted in increased export and revenue generation which has been used for developmental purposes while impediments cannot be ruled out as a result of neglects in the developments of other sectors of the economy like Agriculture, manufacturing and sea mining. Nigeria is one of the Top 12 oil producers as of 2001 and Nigeria occupies the 8th position concerning crude oil reserves, thanks to OPEC objectives. The role played by OPEC in regulating production, export and reserve had been a blessing rather than curse to Nigeria oil industry. Currently, there is a shift towards alternative energy sources, future technological projection, environmental awareness, and the sources of our energy are coming under closer scrutiny and this has led to the rise of many alternative energy sources because of lower emissions, lower fuel prices and the reduction of pollution are all advantages that the use of alternative fuels can often provide and this is a paradigm shift and an impediment to oil production and revenue from it as well as danger to future oil production as conflicts and pandemic had contributed to the threat, similarly, failure on the part of Nigerian government to institutionally support diversification of other sectors is the real impediment, not our membership of OPEC and these are the issues this article intends to discuss so as to explore diversification of other sectors for meaningful contribution to the country's economy. The method adopted is doctrinal; the approach is analytical and comparative while the purpose is both descriptive and normative.

Keywords: Oil, Energy, Economy, consumption, OPEC

1. Introduction

Lack of equal distribution of the wealth of the nation had necessitated Amnesty International to affirm in 2009 that the oil revenue from the oil industry is responsible for over eighty percent of Nigeria's wealth which has been usurped by only one percent of the population of the country. The corruption over oil revenues has been the source of endemic conflicts perpetrating various parts of Nigeria as well as environmental degradation and displacement of the community hosting various oil companies¹. The oil industry is responsible for over 80 per cent of Nigeria's wealth. Despite such huge earnings, it is said that much of these proceed go to only one per cent of the population. In addition to the environmental degradation and community displacement caused by the oil companies in the regions, the corruption over oil revenues has been the source of various conflicts over the years². The rhetorical question therefore due to the happenings in the country is whether natural resources endowed the country is indeed a blessing or a curse? Over six decades in Nigeria after the discovery of oil, the soars in income generation through oil sector led to drastic shift from other sources of income that had been supporting the country before the discovery especially solid minerals, agriculture and agricultural related products. The oil boom in Nigeria brought about a great revenue turnaround and further brought it to international limelight. This however brought lots of challenges like an irrational desecration of the environment especially in the oil sector (particularly in Niger Delta), indigenous occupation among local communities were forsaken, corrupt practices and rural to urban migration in search of perceived oil related white collar jobs among others escalated. Oil wealth should have transformed the country like ones of the developed countries but the wealth generated has not passed down to the citizens of Nigeria as about 80 percent of the population of Nigeria still live below the poverty line³. One will be tempted to ask why the oil sector had not made significant impacts in the lives of Nigerians, the answer is that the government depends hugely only on one natural resources⁴ as a primary source of revenue⁵. The increase in world market price could lead to increase in revenue as well as increase in local consumption and this will be a blessing to an extent of the capacity of the government to harness the revenue for the well beings of the citizens without ending in private accounts of some individuals⁶. The impact of oil revenue on industrial growth in Nigeria is sacrosanct and a sustained policy formulation and implementation in the industrial/petroleum sector of the

***Vincent.O. ADEDARA, LLB, LLM (Ife), LLM (Sheffield, UK), BL(Abuja), PhD (Igbinedion University Okada)**, Solicitor, England and Wales, Email: voadedara@gmail.com,+2348033893753; and

* **E. K. ADETIFA, PhD**, Senior Lecturer and Acting Head of Public Law Department, Faculty of Law, Ekiti State University, Ado Ekiti. emmanuel.adetifa@eksu.edu.ng

¹ Bamiduro, J.A , *Nigeria and the Petroleum Resource Curse: What Ghana Can Learn For Improved Management of Oil and Gas Revenues*. Global Journal of Human Social Sciences,(2012) 12 (1):9-17

² Agbaeze, E.K, *Oil a blessing or a curse: The Nigeria Experience*, European Journal of Social Sciences ISSN 1450-2267 Vol. 56 No 3 April-May, (2018), pp.262-270 <http://www.europeanjournalofsocialsciences.com/> accessed on the 26th of July 2022

³ Ibid

⁴ Ibid

⁵ Essia, U. (2012). Oil Revenue and Development Performance in Nigeria: Cursed by Resources, Institutions or Capabilities. *British Journal of Economics, Finance and Management Sciences* , 6(November), 64–79

⁶ Akinlo, A.E *How Important is Oil in Nigeria's Economic Growth?*. *Journal of Sustainable Development*, (2012) 5(4):69-7

economy through the involvement of stakeholders is required. The formulation and implementation of oil revenue should be judiciously used to facilitate infant industries through advanced industrial policies like import substitution⁷

The herald of the birth of the Organisation of the Petroleum Exporting Countries (OPEC) of which Nigeria is a member is germane to help Nigeria organise the sector and formulate policies in the oil industry as advised above, OPEC started in Baghdad, Iraq in 1960 by the first five founding members but as of June 2018, many member countries joined the organisation. OPEC's members are Algeria, Angola, Ecuador, Equatorial Guinea, Gabon, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Republic of the Congo, Saudi Arabia (the de facto leader), United Arab Emirates, Venezuela while Indonesia is a former member and the headquarter is in Vienna, Austria⁸. OPEC controls almost 62 percent of the world's oil exports and sits on about 81 percent of the world's proven oil reserves⁹ of which Nigeria has been a member since 1971. They are responsible for administering, coordinating, and determining the quantities and price of petroleum commodities of their member countries for uniformity in the price of products for members. The first five founding members: Venezuela, Iran, Kuwait, Iraq, and Saudi Arabia registered with the UN on November 6, 1962. Saudi Arabia remains the largest producer, contributing almost one-third of total OPEC oil production.

OPEC's existence had been germane to an extent that non-OPEC members often voluntarily adjust their oil production in response to OPEC decisions, these non-OPEC countries are Mexico, Norway, Oman, and Russia¹⁰. On some occasions, the oil Shale producers deliberately refused to follow the voluntary decision of non-OPEC members in 2014 as they kept production going till the price fell to \$65 per barrel which affected them without much consequence on OPEC members' countries and without lowering production because of oil shale producers¹¹. The Petroleum Industry Act, 2021 (PIA) was signed into law in August 2021. The PIA introduces significant changes to the legal and governance framework, administrative processes, regulatory and fiscal terms, and host community engagements in the oil and gas industry. There is renewed hope that a robust implementation of the PIA will lead to a transformation of the Nigerian oil and gas industry, thereby attracting the much needed investment into the industry. The Nigerian Upstream Petroleum Regulatory Commission (NUPRC) has also published several draft regulations and guidelines for review by stakeholders in the industry. The new fiscal framework in the PIA is applicable to existing licences upon renewal, while marginal field operators are required to convert to Petroleum Mining Leases (PMLs) within 18 months from the effective date of the Act. Although the Petroleum Profits Tax Act (PPTA) will continue to apply to existing Oil Mining Leases (OMLs) obtained prior to the emergence of the PIA until the mandatory timeline for conversion, operators can opt for the application of the PIA prior to the renewal of their existing OMLs¹².

The control of the market price depends on the equilibrium of supply and demand and the supply often can be determined by OPEC which may in one way or the other affects the world market price through supply. In that circumstance, it may be ill-advised for the non-OPEC members and the oil Shale producers to treat the voluntary decision as irrelevant¹³.

3. Nigeria and OPEC

The original intention of the founding members regarding the formation of OPEC was gingered by the quest to correct the injustice ongoing then in the supply of world energy especially because of geometrical regression of crude oil price due to deliberate manipulation and oversupply which had made several oil-producing countries to have dwindled revenue and low GDP. Where there is no control of sort, abuse is likely going to be inevitable.

This necessitated the intervention of OPEC with Venezuela championing the course against the perceived injustice. As deliberate high supply could be a ploy to slump the price, some countries with concern were not having economic fortune and they considered this an injustice. In 1960 when OPEC was formed, the daily crude oil production rates for Venezuela, Kuwait, Saudi Arabia, Iran, and Iraq were 2.85, 1.69, 1.31, 1.07, and 0.97 million barrels per day respectively, while that of Nigeria at that time a non-OPEC was 0.02 million barrels per

⁷ Ijirshar, V. U. *The empirical analysis of agricultural exports and economic growth in Nigeria. Journal of Development and Agricultural Economics*, 7(3), 113–122.(2015) <https://doi.org/10.5897/JDAE2014.061> accessed 29 th July 2022

⁸OPEC, 'Brief History' https://www.opec.org/opec_web/en/about_us/24.htm accessed on 29 October 2020

⁹Kimberly Amadeo, 'OPEC and Goals, Its Members and History' 2019 <<https://www.thebalance.com/what-is-opec-its-members-and-history-3305872>> accessed 29 October 2020

¹⁰ OPEC: Declaration of cooperation https://www.opec.org/opec_web/en/publications/4580.htm accessed on 30th of July 2022

¹¹Paul Ilesanmi Akanmidu, 'A Historical Perspective of Petroleum on Nigeria's Economic Crisis Since Independence' (2015)15(2)*Global Journal of Human-Social Science: E Economics*17

¹² The Petroleum Industry Act, 2021 (PIA)

¹³ Paul Ilesanmi Akanmidu, opcit p 15

day.¹⁴ The present OPEC countries produced over 60% of the daily world traded crude oil production. In 2008, Venezuela, Kuwait, Saudi Arabia, Iran, Iraq, and Nigeria's daily production numbers were 2.43, 1.75, 7.09, 3.25, 2.13, and 1.80 million barrels per day for each of the countries respectively, with OPEC currently supplying about 15% of the world's natural gas, over 41% of world's oil output just as at 1960 produced figure, and OPEC is responsible for 61% of the oil traded internationally and possessing 78% of the world's oil total proven crude oil reserves. Generally, nine OPEC members feature in the top 12 net crude oil exporters¹⁵(million barrels per day) they are: Saudi Arabia 7.38; Russia 4.76 ; Norway 3.22 ; Iran 2.74 ; Venezuela 2.60 ; United Arab Emirates 2.09 ; Nigeria 2.00 ; Iraq 2.00 ; Kuwait 1.80 ; Mexico 1.65 ; Libya 1.24 ; Algeria 1.24. Indonesia and Qatar are the OPEC member countries that didn't make the top 12 in 2001¹⁶. In 2020, the top 10 exporters are Saudi Arabia with 15 percents of the global oil exports and 12 million barrels production per day and followed by Russia with 11.6 percent of global exports and 10.5 million barrels production per day¹⁷, USA is next and third largest oil exporter with 8.17 percent of global exports and produces 18.61 million barrels of oil per day. Canada is the fourth largest exporter of oil with 7.37 percent of the global total. Iraq was the second largest oil exporter before and now the fifth in 2020 with 7.06 percent of global export while UAE with 6.57 percent is the sixth exporter and Nigeria with 4.68 percent is the seventh global exporter, Kuwait accounted for 4.32 percent oil export in 2020 as the eighth country, Kazakhstan was the ninth with 3.94 percent of the global total and Norway is the tenth with 3.53 of the global oil trade¹⁸.

The first Nigeria concession started in 1959 with the oil companies but this yielded poor revenue. However, the decision of Nigeria to join OPEC in 1971 marked a new beginning as revenue from oil production increase; this was made possible through the adjustment of Nigeria's profit tax which was first introduced in 1967 to align with that of OPEC members as Nigeria learned from OPEC members who had been there since 1960. The major success of OPEC is the collective representation of member countries. Nigeria cannot avoid losing that collective representation and benefits which include receiving the right information, recommendation, and advice (especially in the area of oil conservation and preservation for the future), supportive guidance, participation, and collective decisions. In compliance with OPEC's Resolution¹⁹In June 1968, the Nigerian government, after joining OPEC in 1971 acquired 33.33% equity interest in Nigerian Agip Oil Company following its concession agreement and 35% in Elf. Nigeria National Oil Company (NNOC) established by Decree No. 18 Of 1971 became operational and was charged with the responsibility of all upstream and downstream activities in the industry. All these achievements comply with the requirements of OPEC membership and with a production of about 1.5 million barrels per day, in 1971, representing 3%, of total world oil production and about 6.7 % of OPEC production, Nigeria became a significant net exporter of crude oil²⁰.

The Concession is given to oil companies before 1971 making oil companies short-change Nigeria due to poor negotiation. These foreign companies were able to make more money than Nigeria made from their products. In line with OPEC's aim of securing better terms from international oil companies, Nigeria negotiated and signed the Lagos agreement for monthly payments instead of quarterly payments. This raised the tax to 55% and provided for periodic increments in the price, this sudden awakening was due to the OPEC objective and this had increased Nigeria's revenue considerably.

The Nigerian National Petroleum Corporation (NNPC) is the state oil corporation that was established on April 1, 1977. In addition to its exploration activities, the Corporation was given powers and operational interests in refining, petrochemicals, and product transportation as well as marketing. Between 1978 and 1989, NNPC constructed refineries in Warri, Kaduna, and Port Harcourt and took over the 35,000-barrel Shell Refinery established in Port Harcourt in 1965.²¹ In 1988, the NNPC was commercialised into 12 strategic business units, covering the entire spectrum of oil industry operations: exploration and production, gas development, refining, distribution, petrochemicals, engineering, and commercial investments.²²

¹⁴<https://www.eia.gov/totalenergy/data/annual/index.php> accessed 27 June 2018

¹⁵OPEC, 'Brief History' https://www.opec.org/opec_web/en/about_us/24.htm accessed on 29 October 2020

¹⁶ Ibid

¹⁷ The world's 10 Biggest oil exporters, <https://www.investopedia.com/articles/company-insights/082316/worlds-top-10-oil-exporters.asp> accessed on 1st August 2022

¹⁸ Ibid

¹⁹ Resolution xvi.90 of June 1968

²⁰Ibrahim Babalola Olayinka, 'Nigerian Oil Industry and the Relevance of OPEC to Nigeria' (2012)<www.academia.edu/15567394/Nigerian_Oil_Industry>accessed 26 June 2018

²¹NNPC, 'About NNPC' <https://nnpcgroup.com/Pages/About-NNPC.aspx> accessed 29 October 2020

²²Ibid.

4. Nigerian Crude Oil and OPEC

In Nigeria, oil was discovered in commercial quantities in 1956 with subsequent discoveries in different parts of the Niger Delta which is one of the world's largest wetlands and the largest in Africa; with over 20,000 square kilometres. The type of crude oil exported by Nigeria are Bonny light oil, Forcados crude oil, Qua Ibo crude oil, and Brass River crude oil²³. It is important to note that only a relatively small proportion of the possible Nigerian oil-bearing strata had so far been investigated. Regarding this, over half of Nigeria's surface area of 357,000 square miles is covered by sedimentary basins where oil-bearing rocks are most likely to be found. British Government in her report through the International Management and Engineering Group (IMEG) commented that 'offshore Niger Delta is regarded as one of the most prolific oil-producing prospects in the world, and the excellent quality of its crude and Nigeria's relative proximity to markets in Western Europe, North and South America, should ensure that it will continue to be a major area of offshore interest and activity.'²⁴ Before 1969, the grant of the right to explore and produce oil in Nigeria was by concession. The concession was the term used to describe the grant, by the sovereign State to private persons or companies of the right to find, explore and produce oil, the oil companies were also in charge of the operation, sales, and marketing, and the government had no vital participation. The investor was entitled therefore to all profits while the government was entitled to a per ton royalty²⁵. It was a long-term agreement that may have a tenure of up to 40 years and it vested the absolute control and management of government affairs in the oil company. The concession granted Shell and other multinationals was overwhelmingly in favour of the transnational corporations, they had exclusive responsibility for marketing, distribution, and all related matters such as control of the production of oil and gas, pricing, and further development. The government only received a token from oil production under the concession agreement. The concession granted Shell and other multinationals companies were absolute one with effective management and control over exploration as earlier stated with exclusive responsibility for marketing, distribution, and all incidental matters connecting to control of the production of oil and gas, pricing, marketing, exporting and as they may deem fit. Peanut of the profit from oil production is remitted to the government under the concession agreement²⁶. For instance, Paragraph 3(1) of the concession agreement granted to Shell B.P in 1949 provides:

The licensee shall pay to the Accountant-General of the Federation of Nigeria on behalf of the Governor-General during the term hereby granted or any renewal thereof for each square mile or part thereof comprised in the said lands a certain yearly rent as follows;

- a. In respect of each year of the said term, the certain rent of 5 shillings
- b. In respect of each year of a renewal of the said term the certain rent of 10 shillings.

Paragraph 5 of the agreement addresses the royalty payment,

the licensee shall pay to the Accountant-General of the Federation of Nigeria on behalf of the Governor-General within two months after the end of the year of the term hereby granted or any renewal thereof, the royalties hereunder specified

1. A royalty of four shillings a ton of 2.440lbs of all crude oil won and saved and casing head petroleum spirit recovered by the licenses from the said lands within such year ascertained in the manner provided by clause 6...²⁷

The lack of effective control over the management of Nigeria's natural resources became a serious concern for the government and serious efforts were made to swing the control to the side of the government, consequent upon this, the Petroleum Act of No. 51 of 1969 was enacted. This Act reduced and limited the period and span of oil licenses and leases after it came into operation. This Act had been re enacted in 2021²⁸ with series of reform introduced. In spite of this, the oil companies are indebted to Nigeria in several ways, Seventy-seven international and Nigerian oil and gas companies currently owe the Nigerian government \$6.48 billion (over N2.6 trillion), the debts were a result of the companies' failure to remit petroleum profit tax, company income tax, education tax, value-added tax, withholding tax, royalty, and concession on rentals ,the Executive Secretary of the Nigeria Extractive Industries Transparency Initiative (NEITI), Orji Ogbonnaya affirmed this in 2021²⁹.

²³ The economy of Nigeria, <https://en.m.wikipedia.org> accessed 26th June 2018

²⁴International Management and Engineering Group of Britain, Study of Potential Benefits to British <https://beta.companieshouse.gov.uk> accessed 26 June 2018

²⁵Lawrence Atsegbua, *Oil and Gas Law in Nigeria: Theory and Practice* (New Era Publications 2011)

²⁶ *ibid*

²⁷ Anthony Enisan Akinlo, 'How important is Oil in Nigeria's Economic Growth (2012) (5)4 Journal of Sustainable Development <<https://www.ccsenet.org/jsd>>accessed 26 June 2018

²⁸ The Petroleum Industry Act, 2021 (PIA)

²⁹As Nigeria expands borrowing, 77 oil companies owe govt N2.6 trillion <https://www.premiumtimesng.com/news/headlines/487194-as-nigeria-expands-borrowing-77-oil-companies-owe-govt-n2-6-trillion.html> accessed 1st of August 2022

After Nigeria joined OPEC in 1971, the government was encouraged to have effective control over its natural resources. For Nigeria, to remain a member of OPEC, there was a need to control production, quantity, and price due to quota allocation to Nigeria. Based on this, Nigeria decided to stop granting further concessions as it used to do and by Legal Notice No. 311 of 1972, all non-allocated and or abandoned acreage became government property³⁰. Since Nigeria joined OPEC, production increased from 395.7 million barrels in 1970 to 660.1 and 845.5 million barrels in 1975 and 1979 respectively. The increase in production witnessed during this period was escalated by the Middle East crisis and the 1973/74 oil embargo which caused a sharp reduction in world oil supply³¹. The increased oil prices that the crisis generated as a result of low supply due to the reduction in production helped to boost local oil production in the country due to large market demand that the then supply could not meet. This boom however did not last, as the early 80s witnessed a glut in the international crude oil market owing to oversupply, which led to the sharp drop in prices and eventual reduction in the production quotas by OPEC member countries. Consequently, oil production in Nigeria dropped from 760.1 million barrels in 1980 to 535.9 and 383.3 million barrels in 1986 and 1987 respectively³². The situation improved in the 90s as crude oil output rose from 383.3 million barrels in 1987 to 711.3, 742.3, and 772.9 million barrels in 1992, 1996, and 1998 respectively. The development continued between the years 2000 and 2009. The cumulative crude oil production for the country increased from 20,575,881 million barrels in 2000 to 27,052, 0677 million barrels in 2009³³. Nigeria's current oil reserve stands at 37 billion barrels.³⁴

Nigeria was an agricultural economy before the discovery of oil. The discovery of oil transformed Nigeria's political economy and oil has for the past three (3) decades provided approximately 90 percent of foreign exchange earnings and 80 percent of federal revenue.³⁵ The gross domestic product (GDP) of any economy depicts the total goods and services produced in that economy. A cursory examination of Nigeria's GDP shows that the huge revenue from oil has not however translated into enhancing the Nigeria gross domestic product³⁶. The extractive sector in the Nigerian economy is big and wide, with oil playing a dominant role. With nearly 37.2 billion barrels in reserves and 2.13% of global production, Nigeria has the world's tenth-largest proven reserves (3.1% of global reserves) and is among the top 10 oil producers. Since the discovery and production of oil in Nigeria in 1958, the subsector has continued to play a major and dominant role in the Nigerian economy. In terms of production output and product contribution, oil witnessed steady progress since its period of discovery to date; the impact of oil on Nigeria's economy in the 21st century is immense. However, continuous dependence on fossil fuels is a great risk to the international community because it is not sustainable³⁷.

The Oil and energy ministers from the OPEC member countries, Nigeria inclusive, meet a minimum of two times a year to harmonize their oil production policies and each member country must honour the agreement in respect of production to a certain quantity agreed to, each country is responsible for reporting its quantity of production.³⁸ Member countries may cheat but most often they cannot go too far above the quota given to them, otherwise, they may be expelled from the organisation.

5. The Blessings of the Nigerian Oil Industry

Education: The oil industry has contributed immensely to the education, scholarship, training, and retraining of Nigerians. The education trust fund, PTDF(Petroleum Trust Development Funds) is mostly financed with oil revenue, and more schools, colleges, and universities have been established through the revenue derived from oil³⁹. Scholarships for undergraduates and postgraduates are also in place for Nigerian students awarded by the oil companies.

³⁰ Oil and Gas Business 2007 <https://www.ogbus.rute> accessed 26 June 2018

³¹ Oil output, exports and revenue in Nigeria, 1960-2009, <https://www.researchgate.net> accessed on 1st of August 2022

³²Ibrahim Babalola Olayinka, 'Nigerian Oil Industry and the Relevance of OPEC to Nigeria' (2012) www.academia.edu/15567394/Nigerian_Oil_Industry accessed 26 June 2018

³³ibid

³⁴D.A Fashion, G.Y Moses and A Rabiatu 'An Examination of the Role of International Policy and Regulatory Regimes in Promoting Sustainable Energy Development in Nigeria' 2017 (10) *Journal of Public Law and Constitutional Practice* p 57

³⁵ibid

³⁶ Onyeukwu, A. J. *Resource Curse in Nigeria: Perception and Challenges*, Central European University Centre for Policy Studies(2007) , 1-4

³⁷ibid p 57

³⁸OPEC, 'Brief History' < https://www.opec.org/opec_web/en/about_us/24.htm> accessed on 29 October 2020

³⁹ Oil and Gas company Scholarship, www.currentschoolnews.com accessed on 1st August 2022

Growth in GDP

During the oil boom era, roughly 1970-1978, GDP grew positively by significant growth of 6.2 percent annually. The oil boom led to the downward and negative growth of Agriculture in the 1970s. Importantly, the oil boom lured people who had been engaging in agriculture from the rural area to the urban centre, this labour flight was a result of the oil boom. Agriculture had contributed 63% to the GDP in 1960 and the flight of labour to the urban centre due to the oil boom as well as neglect of the agriculture sector declined its contributions to 34% in 1988. This singular reason led to a dearth of food and there was no option but to start importing food from neighbouring countries since 1975 while the populace depends absolutely on crude oil at the expense of minor attention on agriculture; however, there was an increase in industry and manufacturing in the 1980s due to the booming activities in the mining sector.⁴⁰ Two decades ago, oil and gas export accrued over 96% of total export earnings and about 85% of federal government revenue⁴¹. The huge profit was not properly managed by the government to develop other sectors and everyone in the rural area was desirous of having a bite of the national cake and therefore started migrating to the urban sector while agriculture was neglected by 80%⁴². Beneficially, Nigeria had debt Relief in April 2006, as a result, Nigeria became the first African country to fully pay off its debt owed to the Paris club, thanks to the revenue accrued from oil and gas production. (Based on very old data. From October to December 2020, the oil industry contributed to 5.9 percent to the total real GDP and in 2021 the contribution increased to 7.5 percent⁴³.

Foreign Exchange Reserves

The growth in foreign exchange in Nigeria emanates from the oil sector, because over 90% of the country's revenue accrued from the oil sector. The growth in foreign reserves is from the oil and gas sector. The oil industry in Nigeria has substantial foreign exchange reserves and is in the best position to finance the foreign cost of her development program. However, despite the increasing price of crude oil, Nigeria's external reserves depreciated by \$1.37 billion or 3.37 percent in the first six months of 2022 to 39.16 billion as of June 30 from \$40.52 billion it closed in 2021 according to CBN data⁴⁴. Nigeria earned 394 billion dollars in oil revenue in ten years⁴⁵

Employment Opportunities

Employment opportunities had been the major benefits of the oil sector right from the 'concession' of the sector to the present regime. Oil production offers employment to Nigerians both in the upstream and downstream sectors. It is part of the contractual agreement between Nigeria and the oil companies to give above 70 percent of the job in the sector to Nigeria citizens. Most of the oil companies are however deviant to the agreement as they rarely follow it, for the moment, total oil industry employment in Nigeria represents only 1.3 percent of total modern sector employment in the country.⁴⁶

Expenditure on Goods and Services

The huge availability of funds for the oil companies had been a major stimulant in purchasing power, the oil industry stimulates its purchasing power through its local expenditure on goods and services. The oil industry in Nigeria takes the form of boosting this through payments of wages and salaries, payment of dues and allowances, payments to contractors, donations, scholarships, bills, charges, etc. All these stimulate the producers of these goods and services and indirectly increase the output of some of these goods and services as well as means of provision of employment⁴⁷.

Government Revenue

The government of Nigeria was in a disadvantaged position in the past when it relied absolutely on Agriculture by granting concessions to foreign companies to explore, produce, market oil, and take the profit while paying peanuts to the federal government. The terms negotiated at that time were favourable to the oil company and the government derived relatively low revenue from oil. But as the country's oil prospects improved government took

⁴⁰A. H. Ekpo & O. J. Umoh 'An overview of The Nigeria Economic Growth and Development' <https://onlinenigeria.com/links/economyadv.php?blurb=488> accessed 29 October 2020

⁴¹ ibid

⁴²Anthony Enisan Akinlo, 'How important is Oil in Nigeria's Economic Growth (2012) (5)4 *Journal of Sustainable Development* <<https://www.ccsenet.org/jsd>>accessed 26 June 2018

⁴³ GDP contributions by oil sector in Nigeria, www.statista.com/statistics/1165865/contribution-of-oil-sector-to-gdp-in-nigeria/ accessed on 1st of August 2022

⁴⁴ Nigeria external reserve depreciates, www.thisdaylive.com/index.php/2022/07/04/nigerias-external-reserves-depreciate-by-1-37bn-in-6-months/ accessed on 1st of August 2022

⁴⁵ www.thecable.ng/report-nigeria-earned-394bn-revenue-oil-revenue-in-10-years/ accessed 1st of August 2022

⁴⁶ Oil and Gas Business 2007 <https://www.ogbus.rute>

⁴⁷Ibrahim Babalola Olayinka, 'Nigerian Oil Industry and the Relevance of OPEC to Nigeria' op cit

the bull by the horn and strengthened its bargaining power and make huge revenue from every of the oil explored. Today, crude oil and gas provide for about 93% of total government revenue to date. The danger of this however is that a fall in market price will affect the economy and revenue sharing formula, the effect is seen in States owing to the salary of workers at all levels up to eight months. We, therefore, need to develop the agricultural sector as an alternative means of generating revenue⁴⁸.

6. Three Major Goals of OPEC

OPEC has three major goals, first to keep prices stable at least for members to get a reasonable price for their oil. The forces of demand and supply at the equilibrium point determine the price rate and if the supply of the uniform commodity can be controlled, then the price of it can also be stabilised. OPEC traditionally fixed prices from \$70 to \$80 per barrel and anytime the price is to fall below the traditional fix, OPEC members can restrict supply to push the price up. Iran however believes in the lower price of \$60 with the astute belief that only a lower price will make them excel over United States shale oil (high-quality crude oil that lies between layers of shale rock) producers⁴⁹, which need a higher price to sustain their production. Saudi Arabia needs a break-even price of \$70 to cover administrative and exploration costs even if their cash reserve could allow them to lower the price, the country believes it might lead to hardship in her country and other member countries⁵⁰. The agreement of Baghdad is important because if there is no such agreement, individual oil-exporting countries like Nigeria could have possibly winded up by increasing their supply astronomically and such an increase may lead to competition that could have driven the price to a ridiculous level. OPEC countries could have exhausted their precious resources out of competition and supply to meet global demand at a lower price. To forestall this ugly trend, OPEC members agreed to keep the price high for all members for uniform benefits. Anytime the price increases to \$80 per barrel, it will be easier for member countries to maintain their oil field while a \$100 per barrel increase will make it cost-effective for countries like Canada to explore their shale oil field. Anytime OPEC increases production, it benefits US shale companies, when there is cheap production of oil, it creates a problem for many of the shale companies, and often went bankrupt⁵¹. On the 30th of November, 2017, OPEC agreed to continue withholding 2 percent of global oil supply by cutting production by 1.2 million barrels and producing only 32.5 million barrels per day which started in January 2017 to protect and maintain the price for member countries⁵².

The second major goal is to reduce oil price instability, this is important because, closing down ocean facilities due to oil precariousness, could damage oil installation and even the oil fields. It is therefore, in the interest of member countries for OPEC to keep the global price stable and the strategy of OPEC always allows slight modification in production to restore price stability. An example is the price boom in 2008, oil price rose to an all-time high of \$143 per barrel, OPEC agreed to increase production which led to excess supply above demand and the price came down to \$33.73 per barrel, OPEC swiftly responded by cutting production and supply and the move helped to stabilise the global price⁵³.

The third major goal is to adjust the world's oil supply in response to the scarcity of the commodity. An example of this can be seen during the gulf crisis in 1990. Saddam Hussein's armies destroyed Kuwait refineries, and OPEC cut off several millions of barrels of oil per day. OPEC also boosts supply in 2011 during the Libya crisis in response to the crisis. In some way, OPEC is still relevant; it is a very large source of current and future supply and can still affect the market technically, physically, and psychologically.

The Secretary-General of the Organisation of Petroleum Exporting Countries (OPEC), Mr. Muhammad Barkindohas reiterated several times that no pressure from any country can make OPEC increase oil production⁵⁴. It is a collective decision of member countries. The transformation of OPEC had made the organisation remain a strong voice in the global energy industry. For some years, it was as if the Organisation of the Petroleum Exporting Countries appeared powerless to stop a downward slide in oil prices and this inability has been devastating to the economies of oil-dependent members, including Saudi Arabia. Such a state of affairs calls into question whether the once-powerful cartel is still a relevant force in today's market. This, however, may not be correct to some extent because every market is ruled by the forces of supply and demand, and the oil market is not exempted but OPEC is relevant in its ability to effectively monitor and control supply against the demand for the forces of the market to move in favour of member countries. The recent agreement in Algiers reminds us that the potential for

⁴⁸ www.thecable.ng/report-nigeria-earned-394bn-revenue-oil-revenue-in-10-years/amp accessed 1st of August 2022

⁴⁹ Kimberly Amadeo, 'OPEC and Goals, Its Members and History' 2019 op cit

⁵⁰ Major roles of OPEC, www.opec.org/web/en/918.htm accessed on 1st August 2022

⁵¹ *ibid*

⁵² *ibid*

⁵³ *Ibid*

⁵⁴ Opening Remark of OPEC Secretary General, http://www.opec.org/opec_web/en/press_room/4186.htm accessed 1st of August 2022

OPEC market management still exists. And OPEC remains relevant because of its ability to affect market sentiment, discourage short-sellers and change risk perceptions.

There are countries like the U.A. E. and Kuwait that have already embarked on expansion plans, but perhaps will be more amenable to participate in modest cut sift as led by Saudi Arabia, the highest oil producer in the group. There are also some countries like Nigeria and Libya that have been suffering from output disruptions due to internal disruption, pipeline vandalism, and a series of production disruptive crisis, but now they are seeing some recovery in their output and they are demanding special treatment.⁵⁵OPEC is considered relevant in determining a price to some extent through a decision made by the organisation. But bringing these countries back within the quota system will prove to be the most challenging⁵⁶. Outside OPEC, the signals from Russia about cooperating on an output freeze or cut have been conflicting so far, and in the past, Russia did not abide by its output agreements with OPEC. Without collective effort, members like Saudi Arabia will act on their own to mess up price range, and without Saudi Arabia being on board, there is no chance for a meaningful OPEC agreement⁵⁷.

7. Impediments in the Oil Industry

Nigeria as one of the major world suppliers of crude oil is responsible for more than 90% of the nation's total foreign exchange earnings. Oil is therefore Nigeria's monoculture economy, the rise and fall of the economy depend on the rise and fall of global oil price and this, in turn, affects the budget in surplus or deficit trend depending on the oil price fluctuation. The fluctuation had affected increment in wages as well as payment of workers' salaries in the country; there cannot be any other reason for this than over-dependency on oil. Despite frequent government commitments to reduce this dependence on oil, its annual budgets, are purposely always denominated in the foreign currency of dollars rather than in the local currency of Naira, with oil as the dominant sponsor of the budget. This reflects an increasing dependence on oil. Oil has reduced Nigeria to a trading company 'Nigeria Oil & Gas, PLC' with the president as 'CEO', the state governors as 'non-performing members of the board of directors', and citizens as 'grumbling shareholders' to whom 'dividends' are reluctantly declared periodically⁵⁸. Alternative energy sources like Hydrogen gas, Tidal Energy (which uses the power of water to generate energy), biomass energy, wind energy, geothermal power, natural gas, biofuels, wave energy, hydroelectric energy, nuclear power, and solar power are an alternative source of energy that may affect the future source of revenue from oil in Nigeria⁵⁹. There is therefore urgent need to return to agriculture with a good quality road and rail transportation network; a comprehensive energy policy with renewable and non-renewable sources in the mix, and stable power supply as a critical factor; a viable iron-and-steel industry with intermediate tool-and-die facilities; the promotion of small- and medium scale enterprises; and a more- than-nodding acknowledgment of information technology (including re-training of personnel and the use of free/open-source software) are essential to our rapid national development⁶⁰. Corruption is the bane of functional leadership in Nigeria, there is so much fraud in the management of Nigeria's oil wealth which is a result of the visionless, clueless and corrupt leaders we have in the country. Nigeria by now should be one of the top ten countries in the world if our leaders have not mismanaged our commonwealth, most especially under the military junta.

Nigeria then joined OPEC in July 1971 and oil price increased in 1973 this suddenly made Nigeria awash in so much oil money that General Yakubu Gowon (1 August 1966 – 29 July 1975) once declared in a Caribbean country that money was not Nigeria's problem but how to spend it and promptly paid the salary of all the civil servants of that country for that year during his visit. International oil prices rose through the regimes of Generals Murtala Mohammed (29 July 1975 – 13 February 1976) and Olusegun Obasanjo (13 February 1976 – 1 October 1979) and hit their peak during the civilian regime of Alhaji Shehu Shagari (1 October 1979 to 31 December 1983), when Nigeria reached its depth of financial extravagance, resulting in the clogging of our seaports by mainly unnecessary importation due to corrupt contractors in collusion with politicians looking for ways of siphoning money.⁶¹ It is succinct to state that Nigeria had accrued over 800 billion dollars on oil since 1959 when we discovered oil in Nigeria, this figure is enough to make Nigeria a great country with stable electricity, water supply, and reliable infrastructures but instead, we have extravagance leaders lavishing our money and in addition, the oil that supposed to be a blessing had resulted in very strife, for example, the conflicts and pipeline vandalism in

⁵⁵K. Amadeo, 'Oil Price Forecast 2017 – 2050' (2017) <<https://www.thebalance.com/oil-price-forecast-3306219>> accessed 27 October 2020,

⁵⁶Ibid p 39

⁵⁷ibid

⁵⁸Mobolaji E. Aluko, 'Nigeria and Her Membership of OPEC' <<https://www.AfricaEconomicAnalysis.org>> accessed 23 October 2020

⁵⁹Yakubu Francisco Yakubu, 'Future of Nigeria's Petroleum Industry because of Global Development in Energy Alternatives' (2018) <https://www.researchgate.net/publication/324210107> accessed 27 October 2020

⁶⁰ibid

⁶¹ibid

Niger Delta and other inter-tribal conflicts are not unconnected to desire to share from the national cake having seen the way our insensitive leaders are stealing, looting and laundering our monies from the common treasury. This mismanagement of public funds is a major 'virus' cankerworm that has infected the Nigerian government and the effectual results are mass poverty, insecurity, brain drain, and poor infrastructure⁶².

We must not shy away from the obvious truth that the climate is changing, environmental degradation, global warming, and pollution, drastic shift are following the trend as well, there is an 80 percent likelihood of shift from oil consumption to technological innovations in a few years⁶³, even if OPEC leaders don't believe the world is shifting from the consumption of oil any time soon, they should be able to discern and recognize the greater possibility that demand for oil could begin to follow a downward slide in equilibrium point in no distant period in response to climate policy, technological innovations like electric vehicles⁶⁴, and structural economic shifts in places like China and Japan. Oil production process and use also poses a serious threat to the ecosystem, particularly oil spills which have a devastating impact on the ecosystem, oil, and other mining have stripped lands of their vitality⁶⁵.

8. Conclusion

Assuming Nigeria has no oil, we might have developed the agricultural sector better than this level of development but in terms of economic growth and infrastructural development, Nigeria will be far backward without oil, the oil industry is, therefore, a great blessing and opportunity to Nigeria, the blessing can fast track the country to one of the top 10 best countries in the world with economic potentials and power if our resources are properly managed since economic power strengthens political and social power of a state, Nigeria could spread her tentacles of influence all over the world with a good leader and manager. There is no gainsaying the fact that the gain so far garnered by Nigeria in its operation of the oil industry in all ramifications is attributable to the activities of OPEC as a collective organ. Nigeria is one of the Top 10 oil producers as of 2020 and Nigeria occupies the 8th position concerning crude oil reserves thanks to OPEC objectives. There have however been divergent opinions despite the benefits of OPEC that Nigeria should withdraw from OPEC and the reason for the aggregated opinion is that Nigeria on withdrawal will have the opportunity to produce and sell a larger quantity of oil daily to get more revenue. The opinion has been criticised and described as avaricious tendencies of looters in the position of power with the desire to loot more now and forget about future generations. Going with the opinion will amount to selling our future for the immediate needs. Moreover, the plan will strike an equilibrium of demand and supply of oil on the downward side to project a low price for our oil and at the same time, we will be depleting our oil for a lower price.

It is strongly advised that we stay with OPEC like we have done since 1971 so far that Nigeria cannot solely influence oil prices considerably. Nigeria with a population of 180 million has limited oil reserves unlike Kuwait, Saudi Arabia, and UAE, we must therefore not deplete the limited reserve cheaply for immediate needs. OPEC being a collective voice of the largest group of oil reserves in terms of reserve base is a proper instrument of representation of its member countries and adhering to the objectives of OPEC on production and supply quotas, Nigeria by so doing will be saving and reserving a great resource for the future development of the nation. Instead of demanding for withdrawal of Nigeria from OPEC, the best thing to do is for Nigeria and other member countries to diversify their economies and means of generating income outside crude oil as a long-term measure to avoid and cushion the effect of a fall in the price of oil. In a few decades to come, if we will still depend only on oil production, Nigeria may become a failed state urgent step is taken now to focus on mining and Agriculture with incidental developments as viable alternative sources of revenue for Nigeria.

The overall overview shows that the Nigerian economy is largely dependent on its petroleum resources with 75% of government revenue and 95% of total export revenue from its Petroleum industry and leaving the economy vulnerable to oil and gas price fluctuations is detrimental especially since Nigeria's Petroleum industry is primarily located in the South South's Niger Delta region, an area which has been a source of conflict till date. Sustainable renewable energy utilisation has seen significant improvements in the last decade and the Falling cost of solar energy has made Solar the largest market for new investments. The wind is the second most popular form

⁶² Onyeukwu, A. J. *Resource Curse in Nigeria: Perception and Challenges* opcit p 4

⁶³D Chandler, 'How to Predict the Progress of Technology' (2013) <<http://news.mit.edu/2013/how-to-predict-the-progress-of-technology-0306>> accessed 14 October 2020

⁶⁴A Berman, & J Dorrier, 'Technology Feels Like It's Accelerating — Because It Is' (2016). <<https://singularityhub.com/2016/03/22/technology-feels-like-its-accelerating-because-it-actually-is/>> accessed 14 October 2020

⁶⁵ F.T.I Consulting, 'Cheap Fossil Fuels Impact on Renewable Energy: Critical Thinking at Critical Time' <www.fticonsulting-emea.com/-/media/files/us-files/insight/brochure/cheap-fossil-fuels-impact-on-renewable-energy-pdf> accessed 29 October 2020

of sustainable renewable energy. Bio-energy ranks third after wind and solar energy. Geothermal energy is capable of supplying base load electricity generation compared to other forms of renewable energy like wind and solar, eliminating the need for energy storage technologies. U.S.A. imports of Nigerian crude oil had plunged; a major reason is shale oil. Even though India has taken over from the U.S.A. as the biggest importer of Nigerian oil; consumption of renewable energy in India is growing steadily and transportation is still heavily dependent on petroleum as an energy source. Notwithstanding, electric vehicles, and fuel cell vehicles are promising technologies. Renewable energy sources will continue to rise well into the next century. Nigerian crude oil export volumes will gradually decline in Europe and North America, nevertheless, India and other developing countries in Africa, Asia, and South America will emerge as important export destinations. Global oil prices will remain relatively favourable to the Nigerian economy and its Petroleum industry. Domestic consumption of Nigerian crude oil and natural gas will however increase due to population increase as two factors that determine fuel consumption are transportation and population increase. Natural gas will primarily be used for electrical power generation. Natural gas export destinations will be Africa, Asia Pacific, and Europe. The natural gas market will be competitive, particularly with big players like Russia, Iran, Qatar, and the U.S.A. U.S. gas prices will affect Nigerian natural gas prices. In all, technological development could affect revenue from oil production and the degree is unknown due to unpredictable and uncertainty on how fast the technological projection can take its course. Incessant conflicts and protests like 'EndSARS', and Pandemic like COVID-19 may also have a negative impact on Nigeria's future revenue from oil production.