

Oil Revenue and Economic Growth in Nigeria: An Empirical Analysis

EKEZIE, Wisdom Uchenna¹, PROF. ABU, Maji² & MAMMAN, Andekujwo Baajon³

¹A Postgraduate Student, and ^{2&3}Lecturers, Department of Economics, Faculty of Social Sciences, Federal University Wukari, Taraba State, Nigeria

Corresponding Authors email add: andekujwo@fuwukari.edu.ng

DOI: 10.56201/ijefm.v10.no8.2025.pg9.32

Abstract

Oil revenue is a significant component of Nigeria's economy since the last five decades after displacing agriculture, accounting for a large portion of the government revenue and export earnings, thereby becoming both blessing and curse. This study examined the impact of oil revenue on economic growth in Nigeria. It spanned through the period 1986 to 2024. The specific objectives are to evaluate the impact of crude oil export earnings, domestic crude oil sales, petroleum profit tax, oil royalties, on real gross domestic product in Nigeria. And also, ascertain whether the exchange rate moderates the impact of oil revenue on economic growth in Nigeria. The study employed an ex post facto research design and the secondary data used for the investigation were sourced from the Central Bank of Nigeria (CBN) statistical bulletin, National Bureau of statistics, Federal Inland Revenue Service (FIRS) Fact Book and the World Bank Development Website. Descriptive Statistics, Augmented Dickey-Fuller (ADF), ARDL bound test for Co-integration and Autoregressive Distributed lag model (ARDL) Statistical tools were used in the study. The results revealed that Crude oil export earnings have significant and positive impact on the real gross domestic product in Nigeria; Domestic crude oil sales have an insignificant but positive impact on real gross domestic product in Nigeria; Petroleum profit tax has a positive and insignificant impact on real gross domestic in Nigeria; Oil royalties have a significant and positive impact on real gross domestic product in Nigeria; The study concluded that oil revenue has a positive and significant impact on the economic growth of Nigeria. The study recommends that the government should utilize crude oil export earnings to invest in infrastructural projects that will help promote economic expansion and alleviate poverty in the country, engage in resuscitating the local refineries in Nigeria to encourage and increase domestic crude oil sales, strengthen the FIRS for effective petroleum profit tax administration, and more so, the government should allocate a higher percentage of oil royalties to host communities to promote local development, environmental remediation and conflict reduction.

Keywords: Oil Revenue, crude oil export earnings, domestic crude oil sales and Petroleum Profit Tax

1.0 INTRODUCTION

1.1 Background to the Study

Nigeria is one of the largest oil producers in Africa and is a member of the Organization of Petroleum Exporting Countries (OPEC). Nigeria produces 1,316,192 million barrels of crude oil per day (bpd), placing it as the 15th-largest producer in the world (Statista, 2022). With an output

of 1.184 million barrels per day (bpd), Nigeria reclaimed its position as Africa's largest producer of crude oil in May 2023 (OPEC, 2023).

Oil revenue refers to the money or income received from the sales of crude oil. It is the returns of the exported crude oil. Audu and Kolawole (2022) indicated that Nigeria's public revenue is broadly classified into two categories which are oil revenue and non-oil revenue. Oil revenue is shown to be income for the government which are raised from taxes, investments, royalties, penalties, fines amongst others that are linked Oil revenue in Nigeria is a significant component of the country's economy, accounting for a large portion of government revenue and export earnings to the oil extractive processes.

Furthermore, the impact of oil revenue on GDP growth in Nigeria is a crucial aspect of the country's economic dynamics. Akinlolu and Nsejo (2020) maintained that the discovery of oil in commercial quantity made the oil and gas sector in Nigeria one of the leading producers of crude oil in the world. They also asserted that Oil provided 90% of foreign exchange earnings and approximately 80% of Federal revenue and contributes to the growth of the Nigerian economy over other sectors of the economy.

The earnings from oil exploration and exportation over time have been the mainstay of the economy (Efanga, Okon, Ugwuanyi and Okanya; 2020). Oil being the backbone of the Nigerian economy performs a major function in influencing the economic well-being of the country. More to that, Efanga et al (2020) stated that the Nigerian economy is largely reliant on oil and gas revenue to finance its budget; therefore, the Nigerian economy is oil and gas-dependent for the achievement of its major macroeconomic goals. Akinlolu & Nejo (2020) noted that the oil and gas sector in Nigeria has also been pronounced to have delivered 95% of foreign exchange earnings and about 65% of government budgetary revenues.

Initially, the agricultural sector served as the cornerstone of the Nigerian economy. Prior to the discovery of oil, the agricultural sector was a key driver of the economy, accounting for more than 60% of job opportunities, 95% of foreign exchange earnings, and almost 56% of GDP (Akinleye et al., 2021). Cash crops which included cocoa, palm oil, cotton, groundnuts, timber, and rubber, accounted for the majority of Nigeria's exports. At the time, Nigeria's economy was mostly dependent on agriculture, with little chance of oil exportation. According to Nweze and Edame (2016), between 1958 and 1969, petroleum contributed only 0.07% of Nigeria's gross domestic product, with the country's economy being predominantly dependent on agriculture.

The history of crude oil exploration in commercial quantity began in Nigeria in 1956 when Shell D'Arcy (now Shell Petroleum Development Company of Nigeria) struck oil in at Oloibiri in old Rivers State (now Bayelsa State). But the first oil barrel was pumped out from the Oloibiri field in 1957, thus paving way for the first export of 245 tons of oil in February 1958 (Otto, 2014). By the year 1986, the quantity crude oil production in Nigeria stood at 1.467 million barrels per day (bpd), and by 1990, it rose to 1.810 million barrel per day. This increment continued in 1995 with 1.993 million bpd. Furthermore, due to the effect of COVID 19 pandemic, crude oil production fell significantly to 1.775 million barrels per day in the year 2020. By the end of 2023, Nigeria' quantity of crude oil production stood at 1.442 million barrels per day, making it the largest oil producer in Africa, IES (2023), This single success of shell Development Company of Nigeria attracted other oil companies to join the market for oil exploration, mining and market/shipment in Nigeria. Through the activities of this sector, the oil industry grew to become the backbone of Nigerian economy.

1.2 Statement of the Problem

Crude oil revenue brought a significant shift in the economy of Nigeria. In fact, the earnings from the sales of crude oil have become a fundamental tool for policy formulation and implementation in Nigerian economy. More to that, the crude oil has attracted high foreign earnings and revenue in general, thus, leading to a boost in the gross domestic product of the country (Henry; 2021). Therefore, the discovery of crude oil in Nigeria was expected by other nations, agencies and the general populace to have been a means to achieving rapid economic growth and contribute greatly to the sustainable development of the Nigerian populace. On the contrary, the discovery of crude oil in Nigeria seemed to have caused Nigeria great harm and shattered the aspiration of Nigeria to be among the 20th leading economies in the 21st century (Ikpe; 2022).

Before the advent of petroleum, agriculture was the mainstay of the Nigerian economy. As noticed in the 1960s, agriculture accounted for over 60% of the nation's export earnings and the main cash crops were cocoa, palm oil, kernels, cotton and groundnut (Akinleye, Olowookere and Fajuyagbe; 2021). The move however, reversed in favour of crude oil which though increased the nation's gross domestic product (GDP) came with its massive shortfalls such as the turning of the Nigerian economy into a mono-economy, creating little or no income channels for the Nigerian citizens, over dependence on foreign based development and foreign life style and destruction of the eco-system.

More to that, according to the Ministry of Petroleum Resources (2024), Nigeria government has engaged in many policies, programmes and strategies like, Petroleum industry act - 2021, 13% derivative allocation to oil producing states, amnesty programme for Niger delta region, petroleum industry bills, Nigerian content development and monitoring Board, tax incentive or deep offshore oil and gas production (production sharing contracts (Amendment) Act 2019), The gas flaring prohibition and punishment bill - 2016, promotion of marginal fields licensing rounds, Enabling Nigerian National Petroleum Corporation Reforms, to normalize the oil sector for inclusive economic growth in the country yet the impact of the abundant oil revenue remains unyielding. The oil revenue seems not to have provided a significant feedback on the economy especially with the counter reports of the scholars that have carried out research on this subject matter. Nigeria has remained one of the poorest countries in the world despite the nation's huge crude oil returns. The adverse side includes high level of corruption, mismanagement of national revenue, environmental degradation in the oil producing regions (Niger Delta) and gross neglect of agricultural and other sectors of the economy (Macrotrend;2023). So, despite being one of Africa's largest oil producers, Nigeria's economic growth has not kept pace with its oil revenue, with many Nigerians remaining impoverished and the country's infrastructure underdeveloped. This paradox raises questions about the impact of oil revenue on economic growth in Nigeria.

From the forgoing, whether the revenue from the crude oil sales has impact on economic growth or not remains an empirical question that needs attention, this has necessitated the interest to study the impact of oil revenue on economic growth in Nigeria.

1.3 Research Questions

This study is guided by the following questions as:

- i. What is the impact of crude oil export earnings on economic growth in Nigeria?
- ii. What is the impact of domestic crude oil sales on economic growth in Nigeria?
- iii. What is the impact of Petroleum Profit Tax on economic growth in Nigeria?
- iv. What is the impact of oil royalties on economic growth in Nigeria?

1.4 Objectives of the Study

The broad objective of this study is to examine the impact of oil revenue on economic growth in Nigeria. However, the specific objectives include to:

- i. Analyse the impact of crude oil export earnings on economic growth in Nigeria,
- ii. Examine the impact of domestic crude oil sales and economic growth in Nigeria
- iii. Evaluate the impact of petroleum profit tax on economic growth in Nigeria
- iv. Examine the impact of oil royalties on economic growth in Nigeria

1.5 Research Hypothesis

This study has been guided by the following research hypotheses which include:

Ho₁: Crude oil export earnings have no significant impact on economic growth in Nigeria.

Ho₂: Domestic crude oil sales have no significant impact on economic growth in Nigeria.

Ho₃: Petroleum profit tax has no significant impact on Economic Growth in Nigeria.

Ho₄: Oil royalties have no significant impact on economic growth in Nigeria.

This study covered the period of 1986 to 2024; it examined the impact of crude oil revenue on economic growth in Nigeria.

The outcome of this study provided recommendations for the economy. It will serve as a reference material for future researchers. Also, it will be a guide for policy makers in the industry. Finally, this study is divided into five sections.

2.0 LITERATURE REVIEW

2.1 Conceptual Review

Crude oil

Crude oil is a thick, dark, greenish-brown liquid found underground or under sea bed in permeable rocks. It consists of hydrocarbon combined with oxygen, sulphur, nitrogen, and other elements to form a flammable substance that has become invaluable to mankind and people around the world (Azaiki; 2007).

The search for crude oil is an expensive and complex exercise which begins with geological surveys; involving geological mapping, rock sampling and analysis. When drilling, crude oil is evacuated by pipeline to gathering stations where the water and gas components are separated and the oil is either channelled to terminals for export or refineries. At the refineries, the oil is converted into products such as petrol, diesel, kerosene, domestic gas, fuel oil etc. The petroleum industry covers the exploration and production of crude oil as well as petroleum refining, marketing and servicing (Attamah 2000).

Oil Revenue

Oil revenue refers to the money or income received from the sales of crude oil. It is the returns of the exported crude oil. Audu and Kolawole (2022) indicated that Nigeria's public revenue is broadly classified into two categories which are oil revenue and non-oil revenue. Oil revenue is shown to be income for the government which are raised from taxes, investments, penalties, fines amongst others that are linked to the oil extractive processes. While non-oil revenue looks at any revenue earned from sources other than oil and gas activities.

This study has undertaken to disintegrate oil revenue to its major components for an in-depth study. They are; crude oil export earnings, domestic crude oil sales, petroleum profit tax and oil royalties. We thereby conceptualize them in the paragraphs below;

Crude Oil Export Earnings

Crude oil export involves the selling and transporting of raw and unprocessed petroleum from one nation to another. The proceeds from the crude oil exports are the earnings. Crude oil is exported to foreign markets by nations with substantial oil production capacities, where it is processed into petroleum products like jet fuel, premium motor spirit, diesel, and gasoline. A number of variables, including production levels, domestic consumption, geopolitical conditions, and demand from international markets, affect the amount of crude oil exported (Ugwo 2019).

Domestic Crude Oil Sales

Domestic crude oil sales refers to the transaction of unrefined petroleum within a country's borders, where oil producers sell crude oil to domestic refineries, traders, or other buyers for further processing and consumption. This contrasts with crude oil exports, where oil is sold to international markets (Appah 2022). Domestic crude oil is typically sold to Refineries for processing into petroleum products like gasoline, diesel, jet fuel, dual purpose kerosene.

Petroleum Profit Tax

The concept of Petroleum Profit Tax is derived from the Petroleum Profits Tax Act, 1959 (PPTA). Section 8 of the Act provides that: “There shall be levied upon the profit of each accounting period of any company engaged in petroleum operation during that period, a tax to be charged, assessed, and payable in accordance with the provision of this Act” (Oluwatomisin et al 2024). In Nigeria, the Petroleum Profit Tax is money levied by the government specifically on companies involved in upstream petroleum operations which include the exploration, production, and earlier transportation or sale of crude oil and natural gas within the country (FIRS 2024).

Oil Royalties

Royalties are one of the components of oil revenue. It is an important source of revenue for governments, which can be used to fund infrastructure, social programs, and other public services of a country. Oil royalties could be defined as payments made by petroleum or companies to the owners of resources rights, which can be governments, corporate bodies or private landowners,) in return for the right to extract and sell crude oil. As a kind of compensation for the depletion of resources, these royalties are usually computed as a percentage of the proceeds from the sale of the extracted oil (Appah, 2022).

Economic Growth

Economic growth refers to the increase in a country's production of goods and services over time. It is often measured by the growth rate of gross domestic product (GDP), which is the total value of all goods and services produced within a country's borders in a specific period, usually a year. According to Dwivedi (2004) as cited in Appah (2022), economic growth is a sustained increase in per capita national output or net national product over an extended period.

Key actors in the Nigerian Oil Industry

There are two major actors in the oil sector of Nigeria. They are: the Public and Private Organizations (Nkwede, et al, 2023). The public organization is made up of the federal government agents such as Nigeria National Petroleum Corporation (NNPC). The NNPC was established in 1977 to ensure the government’s participation in oil exploration and production, in

general, the NNPC engages in activities that would enhance the petroleum industry in the overall interest of Nigeria.

The NNPC has several subsidiaries which include Pipeline and Product Marketing Company (PPMC), Department of Petroleum Resources (DPR) and the Petroleum Product Pricing Regulation Authority (PPRA) amongst others. . The NNPC is a fully owned subsidiary of the federal government that operates in the downstream sector of the Nigerian oil and gas industry. NNPC Ltd owns fuel stations in in each state of the federation including Abuja to provide sale outlets to market petroleum products to the Nigerian populace and to ensure stability of product supply for domestic consumptions. It has a central governing body at the corporate headquarters. At the apex of the group structure is the board of directors with the Honourable Petroleum Minister as Chairman. The management team is led by the Group Managing Director (Soala, 2009).

2.2 Theoretical Review

Several theories have been reviewed to provide theoretical foundation for this study on impact of oil revenue on economic growth in Nigeria. These theories include: Resource Curse Theory, The Dutch Disease Theory, Rentier Theory, Resource Endowment Theory of Growth and Neoclassical Growth Theory.

This study is anchored on the resource curse theory. The theory states that developing nations that have natural resources in abundance and are reliant on the export of their natural resources, experience slower economic growth rate than the less developed ones that are resource-poor (Soremi, 2019, Bakpo 2023). The resource curse theory describes why resource-rich nations like Nigeria don't always benefit from their natural resources. Countries with rich natural resources like oil may have lower economic growth, higher conflict, corruption, and more authoritarianism than nations who barely have or without natural resources. In this aspect, the study verified the applicability of this resource curse theory in the Nigerian economy.

2.3 Empirical Review

The connection between oil revenue and economic growth has received a lot of attention from researchers. Several studies both in Nigeria and outside the country have been carried out to determine the impact or contribution of Oil revenue on the economic growth.

Korgbeelo and Deekor (2023) conducted an in-depth study on “Petroleum Industry and The Development of The Nigerian Economy: The Johansen co-integration test proved long-run relationships among the variables of the study. The estimated regression result showed that oil revenue, crude oil price and exchange rate have significant negative impact on economic development in Nigeria. On the other hand, crude oil output has insignificant positive impact on economic development while gross fixed capital formation has significant positive impact on economic development in Nigeria. The study concluded that the resource curse concept exists with regard to the petroleum industry in Nigeria.

Dauda, Alege, Olabanji, and Asemota (2023) investigated the nexus between Oil revenue and sustainable economic growth in Nigeria. Their scope was between 1981-2021. Johansen Co-Integration test, Granger Causality Technique as well as the Error Corrections Mechanism (ECM) were employed to analyze the secondary. The research findings reveal that economic growth (RGDP) granger caused oil revenue (OREV) and that the generated oil revenue in Nigeria (OREV) granger caused economic growth (RGDP) during the period of study. This suggests that the generated oil revenue in Nigeria and economic growth relationship is causally bidirectional.

Appah (2022) conducted a research on oil revenue and economic growth in Nigeria. The study examined the relationship between oil revenue and economic growth in Nigeria for the period 1990-2019. The method of data analysis used in the study are; Pearson Moment Correlation Coefficient and Ordinary Least Square Multiple Regression Statistical tools. The results revealed that Crude oil export has a significant and negative relationship with the real gross domestic product in Nigeria. Also, the Petroleum profit tax/royalty has a significant and positive relationship with RGDP. In contrast, Domestic crude oil sales revealed an insignificant and negative relationship with RGDP in Nigeria. More so, Oil licensing fees have an insignificant and negative relationship with real gross domestic product in Nigeria; In conclusion, the study revealed that there is a significant relationship between oil revenue and economic growth in Nigeria.

Bredino et al (2022) researched on “An Empirical Analysis of Oil Revenue Savings and Economic Growth in Nigeria (1981 -2020)” The study examined how lowering oil prices might affect economic expansion. The primary objective of the study was to examine the long-term relationship between Nigerian economic growth and savings from crude oil revenues. Findings from the study showed that there is inverse or negative relationship between government expenditure, sovereign wealth fund (used as proxy for oil revenue savings) and economic growth. Oil revenue and economic growth also have an inverse and negative relationship.

Moreso Akeerebari and Adesugba (2022) conducted a research to examine crude oil revenue and its effect on Nigerian economic development. Secondary data was used. The Gross national income per capita was used to proxy economic development (dependent variable) while oil revenue, government total expenditure, external reserves and exchange rate were used as independent variables. The research adopted Pairwise Granger Causality approach to analyze causal relationship between the variables. The research’s findings revealed that government total expenditure, oil revenue, exchange rate, and external reserves Granger caused gross national income per capita, but gross national income per capita did not Granger cause government total expenditure, oil revenue, exchange rate, and external reserves, indicating that unidirectional causality runs from all independent variables to dependent variable.

Also, Salaudeen, (2022) carried out a research on the Effect of Crude Oil Revenue on the Oil and Non-oil Sectors in Nigeria. He used secondary data from the CBN and WDI in the period between 1981 and 2020. The study adopted the autoregressive distributed lag model (ARDL) and the augmented Granger causality techniques to analyze the data. The ARDL regressions show that crude oil positively impacts oil sector performance, but the impact was only significant in the short run. Crude oil revenue revealed a positive and insignificant effect on the short-run non-oil sector output, whereas, over the long run, it had a negative but significant effect.

Sada et al (2022) did a research titled “Crude Oil Revenue, Institutional Quality and Economic Growth Nexus in Nigeria” The study examined the impact of crude oil revenue and institutional quality on economic growth in Nigeria from 1996 - 2020. It used Augmented Autoregressive Distributive Lag bound testing approach and Toda- Yamamoto causality test. The result of the bounds test showed that there is long run relationship between crude oil revenue, institutional quality and economic growth in Nigeria. Also, crude oil revenue has positive and significant impact on economic growth in the long run. Furthermore, the results of the Toda-Yamamoto causality test revealed that there is bi-directional causality between crude oil revenue, institutional quality and economic growth in Nigeria.

Ikpe, Bassey and Umuren (2022) carried out research on crude oil export earnings on economic growth in Nigeria spanning the period of (1981 - 2020). The study used Augmented Dickey - Fuller unit root test, Johansson co-integration, error correction model, and granger causality for empirical

analysis. The results of unit root suggested that RGDP, OEX, EXR TOP, and TPC were stationary at first difference. The Johansson co-integration shows a long run relationship among the variables. The findings from the ECM showed that crude oil exports have a positive and significant impact on the Nigerian economy.

Akinleye, Olowookere, and Fajuyagbe, (2021) examined the effect of oil revenue on economic growth in Nigeria for the period of 1981 to 2018. Secondary data was used for the study and it was collected from the Central Bank of Nigeria Statistical Bulletin and National Bureau of Statistics. The Augmented Dickey Fuller unit root test, autoregressive distributive lag (ARDL) method and ARDL bound test for co-integration with various other diagnostic techniques were employed for the study. The ARDL result showed that economic growth and oil revenue were directly related with the economic growth in Nigeria; it was also revealed that the petroleum profit tax, inflation rate and exchange rate were inversely related with the economic growth in both the short and long run.

Efanga, Okon, Ugwuanyi and Akanya (2020) carried out a research by investigating the effect of oil revenue on economic growth in Nigeria. The research made use of secondary data. It employed Auto Regressive Distributed lag model to analyses data. The result of the inferential analysis suggested that oil revenue had a significant positive impact on economic growth in Nigeria.

2.4 Gap in Literature

Several studies have been reviewed on impact of oil revenue on economic growth in Nigeria but with conflicting and different findings and conclusions. These reviews showed different trends; a positive, a negative, significant and insignificant impacts as possibilities in the nexus between the variables surrounding oil revenue and economic growth. These disparities prompted the need for additional inside and out research regarding the matter.

Apart from that, Most of the studies on oil revenue and economic growth in Nigeria such as; Abaka and Yebrou (2022), Abimbola and Onazi (2019), Akeerebari and Adesugba (2022), Akinye et al (2021), Al-Rasasi et al (2019), Nweze and Greg (2012), Okonkwo and Madueke (2016) failed to disaggregate oil revenue into components. However, only few studies like Appah (2022) disaggregated oil revenue. Hence, more findings on oil revenue have been obtained by disaggregating oil revenue in Nigeria into various components, ascertaining its contributions to economic growth in Nigeria. These components of oil revenue incorporated in this study are; crude oil export earnings, domestic crude oil sales, petroleum profit tax and oil royalties.

More to that, in the literature of Appah (2022) who adequately disaggregated oil revenue employed the estimation techniques of Pearson Moment Correlation Coefficient and Ordinary Least Squares multiple regression. To fill this gap, this study employed the ARDL model which is a widely used estimation technique by contemporary scholars to examine the impact of oil revenue on the GDP. This is because it yields valid results irrespective of the order of integration of variables included in the study.

Lastly, the various studies ended their scope in 2022, but this study will extend its data coverage to 2024 which makes its scope higher than the previous studies.

3.0 METHODOLOGY

This study adopted expost-facto research design to examine the impact of oil revenue on the economic growth of Nigeria using time-series secondary data. Pre-test assessments have been carried to evaluate the properties of time series data involved in the model. This research used secondary data which is sourced from the Central Bank of Nigeria (CBN) Statistical Bulletin various issues, the World Bank publications, National Bureau of Statistics of Nigeria, OPEC

database and Federal Inland Revenue Service Fact Book. The time series data that are used in the course of this study include: real gross domestic product as a proxy for Economic growth (RGDP), components of oil revenue which includes: crude oil export earnings (COEX), domestic crude oil sales (DCOS), and petroleum profit tax (PPTX), oil royalties (OILR).

Method of data analysis

This study applied four techniques to examine the impact of oil revenue on economic growth in Nigeria. These methods include descriptive and inferential statistics, Unit root test using Augmented Dickey-Fuller (ADF), ARDL bound test for Cointegration and Autoregressive Distributed lag model (ARDL) for the main result. More to that, the post estimation tests followed. Each of these techniques is explained in the subsequent sub-headings for clarification and application.

Model Specification

The model for this study assumed an underlying relationship between oil revenue and economic growth in Nigeria. The model is formulated with modifications in line with the work of Akeerebari and Adesugba (2022) when analysing the impact of crude oil revenue on the economic development in Nigeria and they stated their model as:

$$GNI_{pc} = f(GTEXP, OILREV, EXCHR, EXTR) \dots \dots \dots (3.1)$$

Model of the study

To achieve the objectives of this study, the study employed the ARDL model to analyse the data. Therefore, the model for this study is denoted as:

$$\begin{aligned} \Delta \ln GDP_t = & \partial_0 + \partial_1 \ln RGDP_{t-1} + \partial_2 \ln COEX_{t-1} + \partial_3 \ln DCOS_{t-1} + \\ & + \partial_4 \ln PPTX_{t-1} + \partial_5 \ln OILR_{t-1} + \partial_6 \ln EXRT_{t-1} + \\ & \sum_{m=0}^p \lambda \Delta \ln GDP_{t-1} + \sum_{m=0}^q \phi \Delta \ln COEX_{t-1} + \sum_{n=0}^q \psi \Delta \ln DCOS_{t-1} + \\ & \sum_{n=0}^q \Pi \Delta \ln PPTX_{t-1} + \sum_{n=0}^q \delta \Delta \ln OILR_{t-1} + \sum_{n=0}^q \gamma \Delta \ln EXRT_{t-1} + \theta ECM_{t-1} \\ & + \varepsilon_t \dots \dots \dots (3.6) \end{aligned}$$

$\partial_1 - \partial_6$ are the long run multipliers (parameters), ∂_0 is the intercept (the drafted component); $\lambda, \phi, \psi, \Pi, \delta$ and γ are the short-run parameters, θ is the coefficient of speed of adjustment while ECM_t is the error correction term and ε_t is the stochastic error term.

Where:

The null hypothesis is as follows:

$$H_0: \partial_0 = \partial_1 = \partial_2 = \partial_3 = \partial_4 = \partial_5 = \partial_6 = 0 \quad \text{(No long run relationship exist)}$$

4.0 DATA PRESENTATION AND ANALYSIS

This study presents its data in appendix I on the real gross domestic product (RGDP), crude oil export earnings (COEX), Domestic crude oil sales (DCOS), petroleum profit tax (PPTX), Oil royalties (OILR) and exchange rate (EXRT), for the research work

Descriptive Statistics.

Table 4.1: Summary of Descriptive Statistics

Sample: 1986-2024

	LOG(RGDP)	LOG(COEX)	LOG(DCOS)	LOG(PPTX)	LOG(OILR)	EXRT
Mean	10.54530	10.15399	4.345587	7.738103	3.619984	163.7428
Median	10.55526	10.23027	3.938665	7.676848	3.595667	129.0000
Maximum	11.31062	11.45786	5.842703	8.458547	5.133737	899.0900
Minimum	9.741426	8.470102	1.972691	7.054284	0.760806	3.316600
Std. Dev.	0.531087	0.844785	1.003458	0.405964	1.138169	179.3500
Skewness	-0.001489	-0.198214	-0.339598	0.193445	-0.345497	2.052549
Kurtosis	1.394429	1.831184	2.181980	2.092664	2.170253	8.419315
Jarque-Bera	4.189033	2.475340	1.837005	1.581034	1.894674	75.10881
Probability	0.123130	0.290059	0.399116	0.453610	0.387772	0.000000
Sum	411.2667	396.0055	169.4779	301.7860	141.1794	6385.971
Sum Sq. Dev.	10.71804	27.11912	38.26327	6.262671	49.22632	1222324.
Observations	39	39	39	39	39	39

Source: Extracted from Researcher's computation, 2025.

The descriptive statistics is presented in Table 4.1. It indicated the value of mean, median, standard deviation, maximum and minimum. It also shows the values of sample size for this study. The Table 4.1 revealed that the values of various central tendency and level dispersion for the study. The mean values for the variables included in the model are ₦10.54530bn for RGDP, 10.15399bn for crude oil export earnings, ₦4.345587bn for domestic crude oil sales, N7.738103m petroleum profit tax, 3.619984m for oil royalties. ₦163.7428 for exchange. More to that, the median values for each variable are ₦10.55526bn for RGDP, ₦10.23027bn for COES, ₦3.938665bn for DCOS, 7.676848million for PPTX, 3.595667m for OILR and 129 for exchange rate within the study period.

Furthermore, the maximum values for each of the variables were ₦ 10.55526bn, ₦11.45786bn, ₦5.842703bn, ₦8.458547bn, 5.133737bn and N899.0900 for RGDP, COEX, DCOS, PPTX, OILR and Exchange rate respectively. While the minimum values of ₦9.741426bn, ₦8.470102bn, ₦ 1.972691bn, ₦7.054284bn, N0.760806bn and 3.316600 for the RGDP, crude oil export earnings, domestic crude oil sales, petroleum profit tax, oil royalties and exchange rate for the Nigerian economy which shows that lowest values of both independent and dependent variables. One of the vital tools used for research is Jarque-Bera statistics and its p-values as: 4.189033 (0.123130), 2.475340 (0.290059), 1.837005 (0.399116), 1.581034 (0.453610), 1.894674 (0.387772) and 75.10881 (0.000000) which showed that the data were normally distributed variables except exchange rate. This indicated that the *p-values* were statistically insignificant at 5% level. It means that the study strongly rejects the null hypothesis and concluded that the time series data involved are normally distributed.

4.4 Unit Root Test

The study adopted Augmented Dickey Fuller (ADF) to estimate the level of stationarity of the time series data. The outcomes of the stationarity test are presented in Table 4.2.

Table 4.2: Unit root Test Using Augmented Dickey Fuller

Variables	ADF Test Statistic Value	Mackinnon Critical Value (5% Level)	Prob.*	Order of Integration	Remark
Log (RGDP)	-3.958691	-2.943427	0.0041**	I(1)	Stationary
Log (COEX)	-5.731681	-2.945842	0.0000*	I(0)	Stationary
Log (DCOS)	-3.909014	-2.943427	0.0047**	I(1)	Stationary
Log(PPTX)	-4.338931	-2.943427	0.0015*	I(0)	Stationary
Log(OILR)	-7.076756	-2.943427	0.0000**	I(1)	Stationary
(EXRT)	3.040234	-2.941145	0.0000*	I(0)	Stationary

Note: * and ** represented the variable is significant @ 5% level of statistical significance at level and first differencing respectively.

Source: Researcher's Computation, 2025.

From Table 4.2, it shows that the ADF result indicated that economic growth i.e RGDP was not stationary at level but it becomes stationary after first differencing. Its value of -2.943427 and p-value of 0.0041 prove that RGDP was stationary at first difference meaning that the null hypothesis was strongly rejected.

4.7 ARDL Bound Test

Table 4.4: ARDL Bound test for Long-run Equilibrium

F-Bounds Test		Null Hypothesis: No levels relationship		
Test Statistic	Value	Signif.	I(0)	I(1)
Asymptotic: n=1000				
F-statistic	13.31596	10%	2.26	3.35
K	5	5%	2.62	3.79
		2.5%	2.96	4.18
		1%	3.41	4.68

Note: *, ** & *** denoted level of significance @ 1%, 5% and 10% respectively.

Source: Researcher's Computation, 2025.

In Table 4.4, it revealed that there are long-run relationships among the studied variables. It is indicated that the estimated F-statistic of 13.31596 exceeds the upper critical bounds at 1%, 5% and 10% critical values respectively. The null hypothesis is rejected, indicated that there is long-run relationship among Real Gross Domestic Product (RGDP), Crude oil export earnings (COEX), Domestic Crude oil sales (DCOS), Petroleum Profit Tax (PPTX), Oil Royalties (OILR) and Exchange rate (EXRT) in the Nigerian economy.

Apart from that, this study proceeded to present the long-run coefficients for real gross domestic product, Crude oil export earnings, Domestic Crude oil sales, Petroleum Profit Tax, Oil Royalties and Exchange rate in Table 4.5. It should be noted that after establishing the evidences of long-run relationship among the variables in Table 4.4. This study then presented ARDL Long-run coefficients in Table 4.5.

ARDL Long-run Result

Table 4.5: ARDL Long-run Result on Oil Revenue and Economic growth in Nigeria for the period of 1986-2024

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LOG(COEX)	0.345739	0.045612	7.580027	0.0000**
LOG(DCOS)	0.027603	13.52619	0.711775	0.4838
LOG(PPTX)	0.134015	0.876763	0.209880	0.8356
LOG(OILR)	0.034945	21.02368	2.490023	0.0204**
(EXRT)	-0.005524	0.000938	-5.887847	0.0000**

Note: ** denoted significant @ 5% level of Statistical Significance

Source: Computed by Author Using E-views Version 10, 2025

From the Table 4.5, the result showed that the coefficient of crude oil export earnings (COEX) is 0.345739; this agreed with the apriori expectation that there is positive impact of crude oil export earnings (COEX) on economic growth of Nigeria. That is, by the coefficient of crude oil export earnings (COEX) of 0.345739, it means that crude oil export earnings would increase the Real Gross Domestic Product in Nigeria by 34.5% in the long run. The result also revealed that crude oil export earnings are significant in the model at 5% level of statistical significance, judging from the t-statistic of 7.580027 and p-value of 0.0000.

More to that, the result also indicated that the co-efficient of Domestic Crude oil Sales (DCOS) aligns with apriori expectation that is a positive relationship exists between Domestic Crude oil Sales and real gross domestic product in Nigerian economy. From Table 4.5, the coefficient DCOS of 0.027603, it means if 1% or 1 unit increase in Domestic Crude oil Sales (DCOS) would lead to 0.027603 units or 2.7% increase in RGDP. In addition, it was statistically insignificant by its *t-value* of 0.711775 and *p-value* of 0.4838 respectively in the long-run.

Furthermore, petroleum profit tax (PPTX) has a positive coefficient with Real GDP which is in line with economic theory. This assumed that all things being equal, 1 unit or 1% increase in petroleum profit tax would increase real GDP by 0.134015 units or 13.4% change in RGDP. The implication of this result is that when the country engages in collecting more of petroleum profit tax, it would result to trajectory growth in Real GDP of Nigeria which is in line with apriori expectation as stated in chapter three (3). In the same vein, its *t-value* of 0.209880 and p-value of 0.8356 proved that the variable was not significant in the model.

Also, the coefficient of Oil Royalties (OILR) is 0.034945, showing a positive impact to the RGDP which is in line with the apriori expectation. This reveals that all things being equal, 1 unit or 1%

increase in Oil Royalties would increase real GDP by 0.034945 units or 3.4% change in RGDP. Oil Royalties has significant value of *T-value* of 2.490023 and *P-value* of 0.0204. This result revealed that oil royalties are significant in the model at 5% level of statistical significance. On the other hand, the exchange rate has negative coefficient of 0.005524; this shows that if EXRT decreases by 1 unit or 1 %, the RGDP reduces by 0.005524 units or 0.05% in Nigerian economy. Thus this result agreed with appriori expectation of inverse relationships exists between EXRT and RGDP in any economy with assumptions that all other factors being equal and vice versa. Statistically, the exchange rate was significant by *p-value* of 0.0000 and *t-value* of 5.887847 respectively. This means that a unit or 1% increase in EXR would lead to reduction in the values of real GDP in Nigerian economy within the study periods.

ARDL Short-run Result

Table 4.6: Short-Run Results on impact of Oil Revenue on economic growth in Nigeria

Model	Depn. RGDP			
Variable	Coefficient	Std Error	t-Statistic	Prob.
$\Delta \text{LOG}(\text{RGDP}(-1))$	0.664694	0.068772	9.665177	0.0000**
$\Delta \text{LOG}(\text{COEX})$	0.116565	0.021648	5.384676	0.0001**
$\Delta \text{LOG}(\text{COEX}(-1))$	0.105859	0.027632	3.831046	0.0015**
$\Delta \text{LOG}(\text{COEX}(-2))$	0.063614	0.014063	2.475496	0.0017**
$\Delta \text{LOG}(\text{DCOS})$	0.035997	0.010617	3.390557	0.8158
$\Delta \text{LOG}(\text{DCOS}(-1))$	0.053719	0.015033	3.573491	0.0742
$\Delta \text{LOG}(\text{DCOS}(-2))$	0.031309	0.115911	2.129563	0.0441**
$\Delta \text{LOG}(\text{PPTX})$	0.074594	0.141650	0.526606	0.0035**
$\Delta \text{LOG}(\text{PPTX}(-1))$	0.034346	0.136430	3.183657	0.0041**
$\Delta \text{LOG}(\text{PPTX}(-2))$	0.013346	0.208417	2.084023	0.0485
$\Delta \text{LOG}(\text{OILR})$	0.043576	6.934265	0.235580	0.0025**
$\Delta \text{LOG}(\text{OILR}(-1))$	0.018668	10.25960	1.870120	0.0016**
$\Delta (\text{EXRT})$	-0.000280	0.000123	-2.275752	0.0370**
$\Delta (\text{EXRT}(-1))$	-0.000640	0.000358	-1.785096	0.0018**
$\Delta (\text{EXRT}(-2))$	-0.001411	0.000371	-3.799336	0.0016**
CointEq(-1)*	-0.735306	0.033999	-9.862272	0.0000**
$R^2 = 0.832979$	$R^2 = 0.785259$	F-stat = 17.45550	D-W = 1.888043	0.000000**

Source: Researcher's Estimation, 2025.

** denote significance @ 5% level of statistical significance.

In Table 4.6, the results of Error Correction Mechanism (ECM) which represents speed of adjustment in ARDL modelling indicated the convergent point. That is, the coefficient of the ECM shows the speed of adjustment to the deviation in the short run equilibrium. The negative value of the coefficient of ECM implies that there is long run equilibrium among real gross domestic product (RGDP), Crude oil export sales (COEX), Domestic crude oil sales (DCOS), Petroleum Profit Tax (PPTX) and exchange rate (EXRT) in the Nigerian economy. It is also statistically significant in the model by the *t-value* of -9.862272 and its probability value of 0.0000. The coefficient of ECM which is (-0.735306) indicated that the model will adjust by 73% of the equilibrium in the long run. At this point; -0.735306 implied that when there is a state of

disequilibrium among RGDP, COEX, DCOS, PPTX, OILR and EXRT in Nigeria, this phenomenon would be adjusted back to equilibrium in one (1) year and four (4) months, a based on the outcome of the estimation.

In the short run, the coefficient of determinant $R^2 = 0.832979$ or 83%; it means that all the variables (COEX, DCOS, PPTX, OILR and EXRT) in the model can cause the variation in Real gross domestic product (RGDP) by 83% and leaving only 17% out to other factors not captured in this study. This shows that the model is fit and good for policy recommendations for the Nigerian economy.

In addition, adjusted R squared corroborated the fitness and goodness of the model in applying on the examination of impact of oil revenue on economic growth in Nigeria. The adjusted R squared of this $R^2 = 0.785259$ or 79%(approximately) variation in real gross domestic product was actually caused by crude oil export earning, domestic crude oil sales, petroleum profit tax, oil royalties and exchange rate in Nigeria.

Finally, by F-statistic value of 17.45550 and its *p-value* of 0.000000, this means that crude oil export earnings, domestic crude oil sales, petroleum profit tax, oil royalties and exchange rate have jointly impacted the real gross domestic product in the short-run, and they were statistically significant in this analysis.

Diagnostic Tests

This study has presented the various diagnostic tests in order to provide basis for good policy recommendations and uses of the model built in chapter three.

Table 4.7 Result of the diagnostic tests

Normality test	Jargue-Bera 0.756380	Prob. 0.685100
Serial Correlation test	F. Statistic 0.029252 Obs* R-squared 0.102793	Prob. F(2,21) 0.9712 Prob (2) 0.9499
Heteroscedasticity test	F. Statistic 0.511125 Obs* R-squared 8.293280	Prob. F(13,23) 0.8947 Prob (13) 0.8240
Ramsey RESET Test result	T. Statistic 1.320153 F. Statistic 1.742804	Prob. 0.2004 Prob. 0.2004

Source: Extracted from Researcher's Computation Using E-View Version 10, 2025.

From the Table 4.7, the normality test result indicated that with the JB-statistic (X^2) of 0.756380 which is statistically insignificant at 5% given the probability value of 0.685100 is less than 0.05, this means that in this study the error terms are normally distributed at 5% level of insignificance. In addition, the result of the Serial correction "Breusch-Godfrey (BG)" general test of autocorrelation indicated that with F-statistics of 0.029252 which is statistically insignificant at 5% given the *p-value* of 0.9712 is greater than 0.05, this proved that the analysis strongly rejects

the null hypothesis of serial correlation. Hence, it concluded that there is no serial correlation associated in the model.

Stability test result

The stability test is an important test to check if the model estimated passes the test of stability. It is done using the cumulative sum of recursive residuals test (CUSUM) and cumulative sum of squares recursive residuals test (CUSUM Q). The output is presented in Figure 4.7 and 4.8 respective

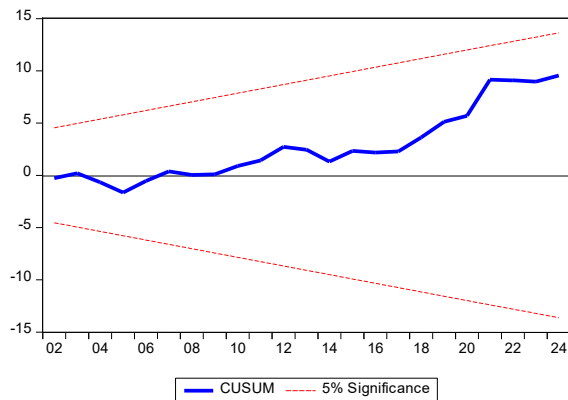


Figure 4.7: CUSUM

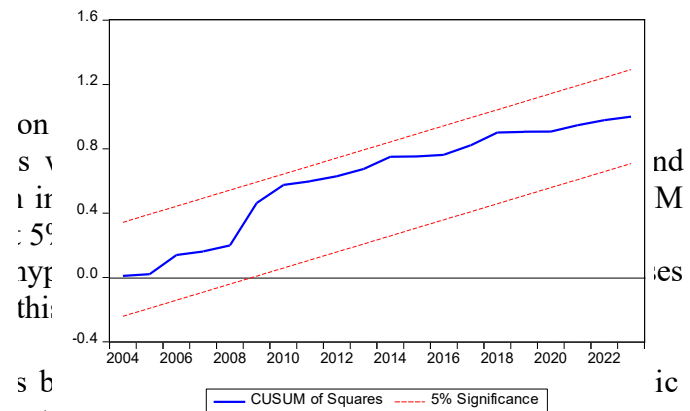


Figure 4.8: CUSUM(Q)

economic growth in Nigeria has some practical implications on the economy. Therefore, this part discussed the major findings of the research based on its objectives as:

Objective (i): To evaluate the impact of crude oil export earnings on economic growth in Nigeria

On the first variable of crude oil export earnings (COEX), it has coefficient of 0.345739 which implied 1% increase in crude oil export sales would lead to 0.345739 units or 34.5% rise in economic growth in Nigeria. The COEX is statistically significant in the model as seen in *t-value* of 7.580027 and *p-value* of 0.0000. Thus, the result revealed that crude oil export earnings have a positive and significant impact on Economic growth in Nigeria within the study period.

The implication of this result on Nigerian economy is that as revenue from crude oil export increases, the real Gross Domestic product increases assuming that all other factors are held constant. This result is contrary to the outcome of Olojede and Michael (2020), Appah (2022), Ilori and Efuntade (2020), and Shahdani et al (2022) whose researches on Oil revenue and Nigerian economic growth revealed a negative relationship between crude oil export revenue and the economic growth of Nigeria. On the other hand, the outcome of this study agreed with the result of Ikpe et al (2022), Awujola et al (2015), Sade et al (2022), Shahdani et al (2022), Olawunmi et al (2021), Bassey and Umoren (2020), Ugwo et al (2019), Haque and Khan (2019), Eravwoke et al (2014), who all revealed in their works that crude oil export earning has positive and significant impact on the economic growth of Nigeria.

Objective (ii): To examine the impact of Domestic crude oil sales on Economic Growth in Nigeria.

The ARDL result showed that the coefficient of Domestic crude oil sales (DCOS) is 0.027603; it indicated that a unit or 1% increase in DCOS would lead to 0.027603 units or 2.7% increase in economic growth in Nigeria. However, the Domestic crude oil sales (DCOS) is insignificant in

this analysis as seen in its *p-value* of 0.4838 and *t-value* of 0.711775. This revealed that Domestic crude oil sales are not optimal in Nigerian economy.

In this regard, the outcome of this study does not agree with Appah (2022) whose research revealed that Domestic crude oil sales have an insignificant and negative relationship with RGDP in Nigeria. It agreed with the work of Ewubara and Uzoma (2019) who asserted in his work that domestic crude oil price had a positive effect on economic growth in Nigeria.

Objective (iii): To evaluate the impact of Petroleum Profit Tax on Economic Growth in Nigeria.

The result indicated that the co-efficient of Petroleum profit tax (PPTX) aligns with apriori expectation that a positive relationship exists between Petroleum profit tax (PPTX) and real gross domestic product in Nigerian economy. From Table 4.5, the coefficient of PPTX is 0.134015, it means if 1% or 1 unit increase in Petroleum profit tax (PPTX) would lead to 0.134015 units or 13.4% increase in RGDP, thereby showing a positive relationship to the RGDP. In addition, it was statistically insignificant by its *t-value* of 0.209880 and *p-value* of 0.8356 respectively in the long-run.

The result is in line with the work of Inimino et al (2020), Aminu (2020), Nnamaka and Brown (2014) whose work showed that Petroleum Profit Tax has a significant impact to economic growth in Nigeria. On the other hand, this result disagrees with the work of Akinleye et al (2021)

Objective (iv): To examine the impact of oil royalties on economic growth in Nigeria

The result indicated that the co-efficient of Oil royalties (OILR) aligns with apriori expectation that a positive relationship exists between Oil royalties and real gross domestic product (RGDP) in Nigerian economy. From Table 4.5, the coefficient of oil royalties (OILR) is 0.034945, it means that 1% or 1 unit increase in (OILR) would lead to 0.034945 units or 3.4% increase in RGDP, thereby showing a positive relationship to Real Gross Domestic Product. In addition, it was statistically significant by its *t-value* of 2.490023 and *p-value* of 0.0204 respectively.

Objective (v): To determine the Long-run impact of oil Revenue on economic growth in Nigeria.

In Table 4.4 It is indicated that the estimated F-statistic; 13.31596 exceeds the upper critical bounds at 1%, 5% and 10% critical values respectively in the long run bound test. It revealed that there are long-run relationships among the studied variables. The null hypothesis is rejected, indicating that there is long-run relationship among oil revenue and the real GDP within the study period.

5.0 SUMMARY, CONCLUSION AND RECOMMENDATIONS

This study analyzed the impact of oil revenue on economic growth in Nigeria. It used Time series data obtained from the Central Bank of Nigeria statistical Bulletins, National Bureau of Statistics of Nigeria, World Bank Development Indicators, OPEC database and Federal Inland Revenue Service Fact Book for the periods of 1986 to 2024. The study underpinned its analysis on the Resource Curse theory in Nigerian economy. This theory has been confirmed that Nigerian economy experiences low impact of other sectors of the economy as a result of over dependence on crude oil revenue from the oil sector.

The ARDL result showed that crude oil export earnings have positive and significant impact on economic growth in Nigeria. This agreed with the apriori expectation. Also, Domestic crude oil

sales (DCOS) aligned with apriori expectation that is; it has a positive impact on the real gross domestic product in Nigeria, but it is statistically insignificant in the model.

Furthermore, petroleum profit tax (PPTX) has a positive impact on the economic growth of Nigeria. This assumed that all things being equal, PPTX would increase RGDP by 13%. The implication of this result is that when the country engages in collecting petroleum tax, it would result to trajectory growth in RGDP of Nigeria. In the same vein, its *t* and *p*-values proved that the variable was not significant in the model. Also, oil royalties (OILR) has a positive and significant impact on economic growth in Nigeria. On the other hand, the exchange rate (EXRT) has negative and significant impact on the real gross domestic product. Thus this results agreed with apriori expectation that inverse relationships exist between EXRT and RGDP. This means that 1% increase in EXRT would lead to reduction in the value of real GDP in Nigerian economy within the study periods.

On the short-run dynamics, the empirical results indicated that the coefficient of determinant $R^2 = 83\%$; it means that all the components of oil revenue in the model can cause the variation in Real gross domestic product (RGDP) by 83% and leaving only 17% out to other factors not captured in this study. This shows that the model is fit and good for policy recommendations for the Nigerian economy. The error correction mechanism confirmed long-run equilibrium in this analysis. The coefficient of ECM indicated that the model will adjust by 73% to the equilibrium in the long run. Therefore, this study submitted that oil revenue has significant and positive impact on economic growth within the period of 1986 to 2024. Based on this outcome of the study, the following policy recommendations are proffered.

Recommendations

This study on impact of oil revenue on economic growth in Nigeria has recommended the following policy options for the country. These recommendations were based on the objectives of this empirical analysis as:

- i. Government should utilize crude oil export earnings to invest in infrastructural projects that will help promote economic expansion and alleviate poverty in the country.
- ii. Government should engage in resuscitating the local refineries in Nigeria to encourage and increase domestic crude oil sales and subsequently refine the crude oil within Nigeria for its multiplier effects on the Nigerian economy.
- iii. The federal government should strengthen the Federal Inland Revenue Service (FIRS) and other tax authorities to enhance their capacity for effective petroleum profit tax administration. The government should also consider enhancing tax incentives to encourage more investment in the oil sector.
- iv. The federal government should establish an efficient system for collecting oil royalties to reduce leakages and increase revenue. More so, the government should allocate a higher percentage of oil royalties to host communities to promote local development, environmental remediation and conflict reduction.
- v. The Government should also prioritize economic diversification to reduce dependence on oil revenue and ease the impact of oil price fluctuations on the economy.

REFERENCES

- Abada, F. C., Manasseh, C. O., Ogbuabor, J. E., Okoro, E. U., Egele, A. E, Kenneth C. Ozuzu, K.C. (2019). Oil price fluctuation, oil revenue and well-being in Nigeria. *International Journal of Energy Economics and Policy*, 9(1), 346-355.
- Abaka, L.M & Yebrou, F. J. (2022) The Impact of the Oil Industry on the Economic Development of Nigeria. *The International Journal of Engineering and Science* 13(9):297-305
- Abimbola, W.O. and Onazi, A. A. (2019) An Investigation into the Nexus between Oil Revenue and Economic Growth in Nigeria, *International Journal of Business and Management Studies*, CD-ROM. ISSN: 2158-1479: 07(02):597–606 (2018)
- Abomaye-Nimenibo, W. A. S., Michael, J. E., & Friday, H. C.(2018), An empirical analysis of tax revenue and economic growth in Nigeria from 1980 to 2015. *Global Journal of Human Social Science*, 18(3), 8-33.
- Adams, S. O. & Bello, J.O. (2022) Modeling the effect of crude oil production and other factors on Nigeria's economy: an autoregressive distributed lag approach. *International Journal of Management Studies and Social Science Research* 3(1):72-79 DOI: 10.47587/SA.2022.3109.
- Adedokun, A. (2018). The effects of oil shocks on government expenditures and government revenues nexus in Nigeria (with exogeneity restrictions). *Journal of Future Business*, Vol. 4 (2018) pp. 219–232.
- Adegbola, O. O., Samuel, A. F., Damilola, F. E., Ademola, A. O., Okoye, N. J., Sarah, I., (2022) examined the impact of oil and non-oil tax revenue on economic growth in Nigeria. *International Journal of Energy Economics and Policy* ISSN: 2146-4553.
- Adeyemo, O.O. & Robinson, M.O. (2022). Crude Oil Exports and Imports and Carbon Dioxide Emission in Nigeria, *International Journal of Environment and Pollution Research*, Vol.11, No.2 pp.1-17
- Ahuja, H.L (2012). Macroeconomics: Theory and Policy. S Chand And Company Limited, Block B-1, House No. D-1, Ground Floor, Mohan Co-operative Industrial Estate, New Delhi – 110 044.
- Akeerebari, T.J. & Adesugba, C.N (2022) Crude oil revenue and its effect on economic development: the Nigeria's scenario. *International Journal of Research and Innovation in Social Science* Vol – 1 Issue – 3 1(2):01-08 DOI: 10.5281/zenodo.7676699
- Akinleye, G.A. Olowookere, J. K. Fajuyagbe, S.F. (2021). The Impact of Oil Revenue on Economic Growth in Nigeria (1981-2018) Conference Paper · January 2021 ISSN: 2065-0175 oeconomica.
- Akinlo, A. E (2012). How important is oil in Nigeria's economic growth? *Journal of Sustainable Development*, 5(4).
- Akinlolu, A. O. & Nejo, F.M.(2020). Oil revenue and Nigerian economic growth from 1981 – 2018: A resource curse? *International Journal of Management Studies and Social Science Research*, 2(4), 291 – 304.
- Alexandra, T (2024) The World's 10 Biggest Oil Exporters. <https://www.investopedia.com/articles/company-insights/082316/worlds-top-10-oil-exporters.asp#:~:text=Crude%20oil%20is%20the%20world's,1>
- Alkofahi, A. K. and Bousrih, J. (2022) The Nexus between Oil Consumption, Economic Growth, and Crude Oil Prices in Saudi Arabia. *International Journal of Energy Economics and Policy* 12(5):105 DOI: 10.3390/economies12050105.

- Al-Rasasi, M. H., Qualls, J. H. & Algamdi, B.K. (2019). Oil revenue and economic growth in Saudi Arabia. *International Journal of Economics and Financial Research*.
- Aminu, M., Ibrahim M., Mahmud, S-G (2020) Impact analysis of petroleum profit tax and economic growth in Nigeria: (1985-2019) *International Journal of Accounting Research*. VL - 4, 10.12816/0059064
- Anyanwu, J. C. Oaikhenan, H. Oyefusi, A. Dimowo, F.A (1997): The structure of the Nigerian economy (1960-1997). Joanee educational Publishers ltd Onitsha.
- Appah, E. (2022), Oil Revenue and Economic Growth of Nigeria: (1990 – 2019). *African Journal of Economics and Sustainable Development* ISSN: 2689-5080 Volume 5, Issue 1, 2022 (pp. 17-46) 5(1), 17-46. DOI: 10.52589/AJESDJWZXIFNW
- Appah, E. & Zibaghafa, S. (2018). Anatomy of Public Sector Finance & Accounting, Vinson Printing and Publishing House.
- Asagunla, T.M & Agbede, M.O.(2018) Oil Revenue and Output Growth in Nigeria, IIARD *International Journal of Economics and Business Management* ISSN 2489-0065 Vol. 4 No. 6 www.iiardpub.org
- Audu, S.I and Kolawole, O. B. (2022) Accountability and revenue generation in Nigeria. *Research Journal of Business and Economic Management* Volume 6(4), Article Number: E31BB6F01 ISSN: 2756-6676
- Awujola, A., Adam, S.O. & Alumbugu, A.I. (2015) Oil Exportation and Economic Growth in Nigeria. *Developing Country Studies*. Vol.5, No.15, 2015
- Bakpo, T.M (2023) Economic Implication of Crude Oil Theft in Nigeria. Social Science, Humanities and Sustainability Research ISSN 2690-3628 (Print) ISSN 2690-3636 (Online) Vol. 4, No. 4, 2023. doi:10.22158/sshsr.v4n4p1
- Bassey, C.E. and Umoren, P. (2020) crude oil export earnings and economic growth in Nigeria, *Open Researcher and Contributor ID publications*, orcid.org/0000-0003-2389-8055
- Bayuasi, N. L. Abdallah, A.N. Hussein, S. Muntari, M. (2013) The Impact of Oil and Gas Extraction in Sub-Saharan Africa: *Academic Journal of Interdisciplinary Studies*, Vol 12 No 2, E-ISSN 2281-4612 ISSN 2281-3993
- Beblawi, H., & Luciani, G. (1987) *The Rentier State*. Oxford University Press London: Croom Helm, 1987.
- Bordo, D. M. (2003) Exchange rate regime choice in historical perspective. NBER Working Paper 9654
- Bredino, S. Orenuga, B. Abiodun, B.O (2022). An Empirical Analysis of Oil Revenue Savings and Economic Growth in Nigeria (1981 -2020). *IRJEMS International Research Journal of Economics and Management Studies* Published by Eternal Scientific Publications ISSN: 2583 – 5238 / Volume 2.
- Central Bank of Nigeria (2021) Central Bank of Nigeria Annual Report. Abuja, Nigeria: Central Bank of Nigeria.
- Central Bank of Nigeria (2022) Central Bank of Nigeria Annual Report. Abuja, Nigeria: Central Bank of Nigeria.
- Central Bank of Nigeria (2023) Central Bank of Nigeria Annual Report. Abuja, Nigeria: Central Bank of Nigeria.
- Dauda M., Alege, P. O., Olabanji, O. E., Asemota, F. F. (2023) Oil Revenue and Sustainable Economic Growth in Nigeria: Empirical Analysis, *International Journal of Energy Economics and Policy*, ISSN: 2146-4553 .13(4), 150-155,
- Department of Petroleum Resources (DPR) Report (2021)

- Doki, N.O. & Sule, A. (2015) The Impact Of Petroleum Production On Economic Growth In Nigeria (1986-2012), *POLAC International Journal of Economics and Management Science* (PIJEMS), Vol. 1, No. 1, Pp. 72-84, ISSN: 2465-7085, Nigeria Police Academy, Wudil-Kano-Nigeria.
- Eche E., Akighir D. T., Ajegi S. O., & Awa-Eche N. (2023) The Employment Channel of Foreign Direct Investment Through Oil Sector to Economic Growth in Nigeria. *International Journal of Advanced Studies in Economics and Public Sector Management* | IJASEPSM p-ISSN: 2354-421X.
- Efanga, U.O., Okon O., Ugwuanyi, G.O. & Okanya, C. (2020). Analysis of the impact of Oil Revenue on Economic Growth of Nigeria between 1981 and 2018. *Journal of Economic and Finance*, 11(2), pp. 25-34.
- Efuntade, O. O. and Efuntade, A. O (2023) Global Crude Oil Price, Oil Revenue and Economic Performance: Dutch Disease Hypothesis. *International Journal of Economics and Financial Management* (IJEFM) E-ISSN 2545-5966 P-ISSN 2695-1932 Vol 8. No. 1 www.iiardjournals.org
- Ekaette, U. J. (2009). Development Challenges in the Niger Delta and the Implications for the Nigerian Economy. Port Harcourt: PANAM Nigeria Publishers
- Eravwoke, K. E. E. Alobari, C. M. and Ukavwe, A. (2014). Crude Oil Export and its Impact in Developing Countries: A Case of Nigeria. *Global Educational Research Journal*, 2(6)
- Ernest, G. (2024) A Critical Analysis of Petroleum Profit Tax Avoidance and Evasion Nigerian *Journal of Energy Law*
- Ewa,U.E., Adesola, W.A., Essien, E.N. (2020), Impact of tax revenue on economic development in Nigeria. *International Business Research*, 13(6), 1-12
- Ewubara, D.B. and Uzoma, C. (2019) Oil Revenue and Economic Growth; an Empirical Evidence from Nigeria. *International Journal of Science and Management Studies* (IJSMS) DOI: 10.51386/25815946/ijms-v2i6p104
- Frankel, J.A. (2010). The natural resource curse: a survey of Diagnoses and Prescriptions,. *National Bureau of Economic Research. Working paper No.15836*.
- Ganyam, A. I., Ivungu, J. A. & Anongo, E. T. (2019). Effect of tax administration on revenue generation in Nigeria: Evidence from Benue state tax administration (2015-2018). *International Journal of Economics, Commerce and Management*, 7(7), 394-414.
- Gbadebo, O. O. (2008) Crude Oil And The Nigerian Economic Performance. College of Business and Social Sciences, Covenant University, PMB 1023, Km 10 Idiroko Road, Ota, Ogun State, Nigeria.
- Hahn, F. H. (2017) Neoclassical Growth Theory. *Research journal publications* DOI: 10.1057/978-1-349-95121-5_704-2
- Haque, M. I. & Khan R. (2019) Role of Oil Production and Government Expenditure in Improving Human Development Index: Evidence from Saudi Arabia. *International Journal of Energy Economics and Policy* 9(2):251-256, DOI: 10.32479/ijeep.7404.
- Havard, D. (2013) Oil and gas production handbook; An introduction to oil and gas production, transport, refining and petrochemical industry, ISBN 978-82-997886-3-2 P.O. Box 6359 Etterstad NO-0603 Oslo
- Henry, E. U. (2021). Effects of Oil and Non-oil Revenue on Economic Growth in Nigeria. *International Journal of Management Studies, Business and Entrepreneurship Research*, Vol. 6, No. 1.

- Humphrey M, Jeffrey D. S, & Joseph E. S. (2007). Escaping the Resource Curse. New York: Columbia University Press.
- Ibeh, D. S. (2013). Diversification and development of the UAE's economy: Messina, Italy: University of Messina
- Idris, A. and Usman, I.(2022). Empirical Analysis of FDI and International Businesses In an emerging Economy. 1986-2021. *Interdisciplinary Journal of Contemporary Research in Business*. 4(11). 770-789.
- IEA (2020). International Energy Outlook. International Energy Agency
- Igbeasere, T. (2013). The Effect of Oil Dependency on Nigeria's Economic Growth. *Journal of International Institute of Social Science*, 3(1), pp. 23-32.
- Ijirshar, V.U. (2015); The empirical analysis of oil revenue and industrial growth in Nigeria. *African Journal of Business Management*. Vol. 9(16), pp. 599-607, 28 August, 2015 DOI: 10.5897/AJBM2015.7801 Article Number: 78BDBE754831 ISSN 1993-8233
- Ikoh, I., Ubom, U.B., Ele, L. (2024) Exchange rate fluctuation and economic growth in Nigeria. *Journal of business strategies and Policies (JBSP)* Vol 1, No 1
- Ikpe, K. I. Bassey C.E., Umoren, P. (2022) Crude Oil Export Earnings and Economic Growth in Nigeria (1980-2020),
- Ilaboya, O.J. & Ofiafor, E. (2014). Petroleum profit tax and economic growth in Nigeria. *British Journal of Business and Management Research*, 1(2), 55 – 67.
- Ilori, F.O. & Efuntade, A.O. (2020). Comprehensive Analysis of the Effect of Oil and Non-oil
- Inimino, E. E., Otubu, O. P. & Akpan, J.E. (2020). Petroleum profit tax and economic growth in Nigeria. *Asian Journal of Sustainable Business Research*, 1(2), 121 – 130.
- International Energy Statistics IES (2023) Energy Information Administration .
ycharts.com/indicators/nigeria_crude_oil_production_annual.
- Isiwu, G D. (2022) Impact of Export Diversification on Economic Growth in Nigeria. *Saudi Journal of Economics and Finance*, VL - 6, 10.36348/sjef.2022.v06i01.004
- Jabir, I. M., Karimu, A., Fiador, V. O., & Abor, J.Y. (2020). Oil revenues and economic growth in oil-producing countries: The role of domestic financial markets. *Resource Policy*, *International Journal of Economics and Financial Management(IJEFM)* 69(1), 1-15
- Jina, K. G., Lawrence M. D., and Bezum D. Y. (2017). Impact of Petroleum Profits Tax on Economic Growth in Nigeria: A Longitudinal Study, *Tax Academy Research Journal*, Vol. 1 No.1 pp 139 –150.
- Jonathan, D. J. (2010). The 'Resource Curse': Theory and Evidence, Real Instituto Eleano Area: Sub-Saharan Africa ARI 172/2010.
- Korgbeelo, C. & Deekor, L.N. (2023) "Petroleum Industry and The Development of The Nigerian Economy: Is There Resource Curse?" *International Journal of Research and Innovation in Social Science* VII(XII):119-135 DOI: 10.47772/IJRISS.2023.7012012
- Kpoghul, Okpe and Anjande (2021) Trade openness, foreign direct investment and economic performance in Nigeria *journal of Economics*, BSU Makurdi.
- Krugman, P. R., & Obstfeld, M. (2009). *International Economics: Theory and Policy*. Pearson.
- Laurenceson, J., and Chai, J. C. H. (2003). Financial reforms and economic development in China. Cheltenham, UK, Edward Elgar., 1-28.
- Lawrence, U. E. & Victor, E.O. (2016). A dynamic analysis of oil revenue and the economic performance in Nigeria. *Journal of Economics and Public Finance*, 2(1), 203 – 219.
- Lippi, M., & Sbracia, M. (2001). Exchange Rate Regimes and Economic Performance. *Journal of International Economics*, 54(2), 167-184

- Macrotrends (2023) <https://www.macrotrends.net/2516/wti-crude-oil-prices>
- Makio Y. & Steffen H. (2020) Revisiting Rentierism: The Changing Political Economy of Resource-Dependent States in the Gulf and Arabian Peninsula. *British Journal of Middle Eastern Studies* Volume 47, 2020 – Issue1
- Ministry of Petroleum Resources(2024) Federal Republic of Nigeria. <https://petroleumresources.gov.ng/policies/>
- Mishkin, F. S. (2015). The Economics of Money, Banking, and Financial Markets. (5th ed., pp. 227-243) Pearson.
- Moro, R. S. (2002). Petroleum and Energy Economics. Port Harcourt: Pearl Publishers.
- Nagat, A.M, Abda, E. and Heba, A, (2022) The Impact of Oil Revenue on Food Security in Saudi Arabia. *International Journal of Energy Economics and Policy*, DOI: 10.1007/978-3-031-46704-2_3
- Nagmi, M. and Moftah, A.(2016). The effects of fluctuations of oil price on economic growth of Libya. *Energy Economics Letters*, 3(2): 17-29 AESS Publications.
- Najeb, M. (2013) Neoclassical economic growth theory: an empirical approach. *Far East Journal of Psychology and Business* Vol. 11 No. 3 June 2013
- NBS, (2017) Annual financial Report 2016
- NBS, (2020). Annual financial Reports 2019
- NBS, (2021). Annual Financial Report 2020
- NBS, (2023) Annual Financial Report 2022
- Nigerian National Petroleum Corporation Statistical Bulletin, (2021), (2022), (2023)
- Nkwede, M..C, Chinedu, G.N and Nkwagu, L. C (2023) Subsidy Removal And Independent Oil Marketers’ Activities In The Nigerian Downstream Sector: A Catalyst For Progress. *The Certified National Accountant Journal* (CNAJ) – Vol 32 (1)
- Nnamaka, U. C. & Brown, E. D., (2014). Oil revenue and economic growth: An empirical evidence from Nigeria. *Research Journal of Finance and Accounting*, 5(7), 56 – 71.
- Nsaka, M. O. (1998): *Journal: Impact of oil revenue in Nigeria economy*.
- Nweze, P. N., & Greg, E. E. (2016). An Empirical Investigation of Oil Revenue and Economic Growth of Nigeria. *European Scientific Journal*, Vol. 12, No. 25,
- Nwezeaku, B.T (2010). Oil export and economic growth nexus for Nigeria from 1980-2010. *Yobe Journal of Economics* (YOJE), (03), 90-100.
- Nwoba, O. E. & Abah, E. O (2010) Impact of Crude Oil Revenue (COR) On Economic Growth in Nigeria (1960-2010) *KeIOSR Journal Of Humanities And Social Science* (IOSR-JHSS) 22(7), 85-99
- Odularu, G. O. (2008). Crude oil and the Nigerian economic performance. World Trade Organization (WTO), Centre William Rappard, Rue de Lausanne.
- Odularu, O. G. (2010) An Analysis of the Impact of Oil Exports and Economic Growth in Nigeria. *International Journal of Innovative Research in Social Sciences & Strategic Management Techniques/ IJIRSSMT* 4(2), 56-67.
- Ogbonna, G. N. & Appah, E. (2012). Petroleum Income and Nigerian Economy: Empirical Evidence. *Arabian Journal of Business and Management Review*, 1(9).
- Ogbonna, G. N. (2012). Effects of Petroleum Income on Nigeria Economy from 1970 - 2009. Rivers State, Nigeria: PhD Thesis, University of Port Hacourt .
- Okonkwo, I. V. & Madueke, N. M. (2016) Petroleum Revenue and Economic Development of Nigeria (1980 – 2013) *IOSR Journal of Polymer and Textile Engineering* (IOSR-JPTE)e-ISSN: 2348-019X, p-ISSN: 2348-0181, Volume 3, Issue 2 (Mar. - Apr. 2016), PP 39-55

- Olawunmi, O., Ifeanyi, O. J., Olowo, S. O., Aderemi, T. A. (2021) Crude Oil Exports and Economic Growth in Nigeria: An Implication for Export-Led Growth Hypothesis. *Journal of Management & Science*. 19. 12. 10.57002/jms.v19i1.222.
- Olawunmi, O., Adedayo, E. L., & Shehu, M. (2018). The impact of oil price and revenue variations on economic growth in Nigeria. *OPEC Energy Review*, 42(4), 387-402.
- Olayemi, O. A-A and Adeleye, M. A. (2023) The Nexus Between Revenue Generation and Economic Growth in Nigeria. *IIARD International Journal of Economics and Business Management* E-ISSN 2489-0065 P-ISSN 2695-186X Vol 9. No. 5
- Olayungbo, D. O. (2019). Effects of oil export revenue on economic growth in Nigeria: A time-varying analysis of resource curse. *Resource policy*, 64(1), 1-10.
- Olayungbo, D. O., & Kazeem, A. A. (2017). Effects of oil revenue and institutional quality
- Olojede, A. A.; Michael, N. F. (2020). Oil revenue and Nigerian economic growth from 1981–2018: A resource curse. *International Journal of Management Studies and Social Science Research* 2(4): 291–296.
- Oludimu, S. and Alola, A. (2021). Does crude oil output aid economy boom or curse in Nigeria? An inference from “Dutch disease”. *Management of Environmental Quality: An International Journal* 33(2): 185–201
- Oluwatomisin, T., Azeezah, M. and Briska, J. (2024) Assessment of petroleum profit tax under the petroleum industry act. Faculty of Law, University of Abuja. Research gate publications 384562130
- Omo, A., & Bashir, O. K. (2015). Oil Revenue, Public Spending and Economic Growth Relationship in Nigeria. *Journal of Sustainable Development*, Vol. 8, No. 3. on Economic growth with an ARDL Approach. *Energy and Policy Research*, 4(1), 44-54.
- Onifade, S.T., Alagöz, M., Erdoğan, S., Obademi, O. (2020), Inflation, oil revenue, and monetary policy mix in an oil-dependent economy: Empirical insights from the case of Nigeria. *International Journal of Business Economics and Management*, 7(2), 96-109
- OPEC (2020) Annual Statistical Bulletin. Organization of the Petroleum Exporting Countries
- OPEC (2022) Annual Statistical Bulletin. Organization of the Petroleum Exporting Countries
- Otaha, J. I. (2012) Dutch Disease and Nigeria Oil Economy. An International *Multidisciplinary Journal, Ethiopia Vol. 6 (1), Serial No. 24, January, 2012* ISSN 1994-9057
- Otawa, M. (2001). The National Security Strategy of the United States. Washington DC: US Government Printing Office
- Otto, G. (2014): Issues in Petroleum Economics. Brushmark Printers uniport shopping centre, Choba Port Harcourt.
- Paulo, G., Jhean, C. & Guilherme, M. (2017). The resource curse reloaded: Revisiting the Dutch disease with economic complexity analysis. *Real-World Economics Review*, 81(2), 40-51.
- Pearson, R.G. (1997) Chemical Hardness: Applications from Molecules to Solids. Wiley-VCH Verlag GMBH, Weinheim. <https://doi.org/10.1002/3527606173>
- Pesaran, H.M., Shin, Y., Smith, R. J. (2001) Bounds Testings Approaches to the Analysis of Level Relationship. *Journal of applied econometrics*. J. Appl. Econ 16: 326 2001. DOI: 10.1002
- Petar, K. and Marija, S. (2016) The Resource Curse in Sub-Saharan Africa: *A Reality Corroborated By the Empirical Evidence*. Conference Paper -June 2016, University North, Koprivnica, Trg Žarka Dolinara 1, Croatia
- Petroleum Industry Bill (PIB) (2021) www.pwc.com/ng

- Raifu, I A., Aminu A. and Folawewo, A. O. (2020) Investigating the relationship between changes in oil prices and unemployment rate in Nigeria: linear and nonlinear autoregressive distributed lag approaches, *Future Business Journal*, 6:28
- Revenues on Economic Growth in Nigeria. *KIU Interdisciplinary Journal of Humanities and Social Sciences*, 1(3), 161-186
- Richard, S. & Seif, R. M. (2022) The Relationship between Crude Oil Price Fluctuations and Economic Growth in Tanzania *African Journal of Empirical Research* 5(4):1089-1106 DOI: 10.51867/ajernet.5.4.90.
- Sachs, J.D and Warner, A.M (1995) Natural Resource Abundance and economic growth. NBER working paper No. 5398.
- Sada M, Shamsuddeen Y. N. and Suleiman M. S. (2022) Crude Oil Revenue, Institutional Quality and Economic Growth Nexus in Nigeria: An Augmented ARDL Cointegration Approach and Toda-Yamamoto Causality Test. *International Journal of Economics And Financial Management*. 7(4):14-30 DOI: 10.56201/ijefm.v7.no4.2022.pg14.30
- Salaudeen, M.B. (2022) Effect of Crude Oil Revenue on the Oil and Non-oil Sectors in Nigeria. Lead City University, Ibadan, Nigeria Act Univ. Spientie, conomic nd Bine, 11 138–161 DOI: 10.2478/auseb-2023-0007
- Sayed, M. A. (2016) The Impact of Oil Prices on the Economic Growth and Development in the MENA countries, MPRA Paper No. 89073, posted 20 Sep 2018 03:47 UTC
- Shahdani, M., Mohammadi, S. A., Koupaei, M. (2022) The Effects of Oil Consumption and Export on Economic Growth Empirical Evidence from Iran. *SSRN Electronic Journal* 10.2139/ssrn.4044589-
- Soala, A. (2009): The political economy of oil and gas in Africa 2009; Roulledge Publishers.
- Soremi, T. (2019). The Implication of Oil Theft on Social and Economic Development in the Niger Delta. *Global Journal of Social Science*, 19, 1-11. <https://doi.org/10.4314/gjss.v19i1.1>