

# THE IMPACT OF REVENUE GENERATION AND OIL EXPLORATION ON ECONOMIC GROWTH IN NIGERIA (1981-2022)

By

Ime T. AKPAN<sup>1</sup>  
Fabian Ajijias OKWAJIE<sup>2</sup>  
Sylvanus UDOH<sup>3</sup>

<sup>1</sup>Professor, Department of Banking and Finance, Faculty of Management Sciences, University of Uyo, Uyo, Akwa Ibom State – Nigeria. Email: [imeakpanphd8@gmail.com](mailto:imeakpanphd8@gmail.com)

<sup>2</sup>Department of Banking and Finance, Faculty of Management Sciences, University of Uyo, Uyo, Akwa Ibom State – Nigeria. Email: [cletusfabian@gmail.com](mailto:cletusfabian@gmail.com)

<sup>3</sup>Department of Banking and Finance, Faculty of Management Sciences, University of Uyo, Uyo, Akwa Ibom State – Nigeria. Email: [sylvanusudoh2306@gmail.com](mailto:sylvanusudoh2306@gmail.com)

Corresponding Author's Email: [cletusfabian@gmail.com](mailto:cletusfabian@gmail.com)

## ABSTRACT

This study investigates the relationship between oil revenue, oil exploration, and economic growth in Nigeria from 1981 to 2022. Data employed for analysis were obtained from Central Bank of Nigeria statistical bulletin published in 2023, World Bank, International Energy Agency and National Bureau of Statistics (NBS) (2023). Using annual time-series data and advanced econometric techniques, including cointegration, Vector Error Correction Model (VECM) and regression analysis, the study reveals significant positive correlations between GDP growth and oil revenue, oil exploration, investment, and trade openness. Conversely, oil price volatility negatively impacts GDP growth. The findings suggest that oil revenue and exploration play crucial roles in driving economic growth, while investment, trade openness, and exchange rate stability also contribute to economic expansion. The study recommends policy interventions to diversify revenue streams, promote fiscal discipline, stabilize oil prices, and foster trade relationships. Addressing oil price volatility through hedging, diversification, and strategic reserves is also essential. Furthermore, investing in human capital development, innovation, and infrastructure is critical for driving economic diversification and sustainable growth.

**Keywords:** *oil revenue, oil exploration, economic growth.*

## INTRODUCTION

### Background of the Study

Nigeria, a country richly endowed with natural resources, particularly oil, has struggled to achieve sustainable economic growth despite its vast wealth. The oil sector has dominated Nigeria's economy since the 1970s, accounting for approximately 90 percent of the country's export earnings and 70 percent of government revenue (Central Bank of

Nigeria, 2020). However, the volatility of global oil prices and the country's over-reliance on oil exports have exposed the economy to significant vulnerabilities.

Revenue generation in Nigeria is heavily dependent on oil exports, which has led to a neglect of other potential revenue streams, such as non-oil taxes, agriculture, and manufacturing (Ajayi, 2017). This over-reliance on oil revenue has resulted in Dutch Disease, characterized by an appreciation of the real exchange rate, making non-oil exports uncompetitive (Iyoha, 2013).

Oil exploration has also had significant environmental and social impacts on local communities, leading to conflicts and instability in the Niger Delta region (Ukiwo, 2007). Furthermore, the mismanagement of oil revenues has contributed to corruption, inequality, and poverty (Ross, 2012).

Despite these challenges, oil revenue remains crucial for Nigeria's economic growth. Studies have shown that oil price shocks significantly affect Nigeria's GDP growth, inflation, and exchange rates (Odusola, 2017). Therefore, diversifying revenue streams and managing oil revenues effectively are essential for achieving sustainable economic growth.

Efforts to diversify the economy and increase non-oil revenue have been ongoing. The Nigerian government has introduced initiatives such as the Economic Recovery and Growth Plan (ERGP) and the Petroleum Industry Bill (PIB) aimed at reforming the oil sector and promoting economic diversification (Federal Government of Nigeria, 2017). However, the impact of these initiatives remains uncertain, and the country's economic growth continues to be heavily influenced by oil price fluctuations.

Nigeria, a major oil-producing country, has heavily relied on oil revenue as a significant source of government income and foreign exchange. Since the discovery of oil in the 1950s, the sector has dominated the Nigerian economy, influencing its growth trajectory, economic policies, and social dynamics (Okon, 2018; Adeniyi, 2020).

In view of the foregoing, this study seeks to investigate the impact of revenue generation and oil exploration on Nigeria's economic growth.

### **Statement of the Problem:**

Nigeria, despite being Africa's largest oil producer, faces a perplexing paradox. Decades of oil exploration and billions of dollars in revenue have failed to translate into meaningful economic growth and development. The country's overdependence on oil revenue has rendered its economy vulnerable to fluctuations in global oil prices, resulting in volatile growth patterns.

Furthermore, the lack of economic diversification has stifled the development of other sectors, leaving Nigeria's economy precarious and unbalanced. Corruption and

mismanagement of oil revenue have exacerbated this issue, leading to inadequate investment in human capital, infrastructure, and social services.

The environmental and social consequences of oil exploration are equally alarming. The oil-rich Niger Delta region grapples with devastating environmental degradation and social unrest, perpetuating poverty and inequality.

At the heart of this problem lies a critical question: how can Nigeria optimize its oil revenue to achieve sustainable economic growth and development? This study seeks to address this pressing concern by investigating the impact of oil revenue on Nigeria's economic growth, examining the effects of oil price volatility, and identifying strategies for effective revenue management and economic diversification.

By exploring these issues, this research aims to provide valuable insights for policymakers, stakeholders, and researchers, ultimately contributing to a more comprehensive understanding of the complex dynamics between oil exploration and economic development in Nigeria.

### **Objectives of the Study**

The primary objective of this study is to examine the impact of oil revenue and exploration on economic growth in Nigeria. The specific objectives include:

- i. To examine the impact of oil revenue on Nigeria's economic growth.
- ii. To investigate the relationship between oil exploration and the development of other sectors of the economy.
- iii. To analyze the effects of oil price volatility on Nigeria's economic growth.
- iv. To provide policy recommendations for diversifying the economy and optimizing oil revenue for economic development.

Based on this, the hypotheses for this study stated as follows:

**H01.** Oil revenue and oil exploration do not have any significant relationship with Nigeria's GDP growth rate.

### **Significance of the Study**

This study will contribute to the existing literature on the relationship between oil revenue and economic growth in Nigeria. The findings will provide valuable insights for policymakers, stakeholders, and researchers seeking to understand the complex dynamics of oil exploration and economic development in Nigeria. The study's recommendations will inform policy decisions aimed at diversifying the economy, optimizing oil revenue, and promoting sustainable economic growth.

This paper is structured into five sections. Following introduction in section one, we review theoretical and empirical literature in section two. Econometric methodology is presented in section three. In section four, we conduct the various econometric tests as

well as discussing the findings of tests, while in section five; we present the conclusion of the study and the recommendations of the study.

## **Literature Review**

### **Conceptual Framework**

The relationship between oil revenue generation and economic growth in Nigeria is complex and influenced by several conceptual frameworks.

Firstly, the Resource Curse Hypothesis suggests that Nigeria's abundance of oil resources has led to lower economic growth rates, increased corruption, reduced economic diversification, and inefficient institutions (Sachs & Warner, 1995; Ross, 2012). The country's overdependence on oil exports, accounting for 90% of its export earnings, has created vulnerabilities that hinder sustainable economic growth (OPEC, 2013).

Secondly, the Dutch Disease Model explains how Nigeria's oil boom has led to an appreciation of the Naira, increased costs of production in non-oil sectors, reduced competitiveness, and decreased economic diversification (Corden & Neary, 1982). This phenomenon has resulted in the decline of non-oil sectors, such as agriculture and manufacturing (Adeniyi et al., 2017).

To mitigate these challenges, economic diversification is crucial. This involves reducing Nigeria's dependence on oil exports and promoting growth in non-oil sectors (Eboh, 2016). Diversification will encourage foreign investment, develop infrastructure, and create employment opportunities (CBN, 2019).

Effective revenue management is also essential. This involves transparent and accountable allocation of oil revenue, efficient utilization for economic development, investment in human capital and infrastructure, and savings mechanisms for oil revenue fluctuations (IMF, 2019). Nigeria's history of corruption and mismanagement of oil revenue underscores the need for robust revenue management (Transparency International, 2020).

Understanding these conceptual frameworks is critical to analyzing the relationships between oil revenue generation, economic growth, and development in Nigeria. The Resource Curse Hypothesis and Dutch Disease Model contribute to limited economic diversification and reduced economic growth (Akinlo, 2014). Economic diversification and revenue management are interconnected, as effective revenue management promotes diversification (Iyoha & Oriakhi, 2015).

### **Theoretical Framework**

These theories provide a foundation for understanding the complex relationships between oil revenue generation, economic growth, and development in Nigeria.

### **The Resource Curse Hypothesis**

This theory holds that countries which are rich in natural resources, such as oil, tend to experience lower economic growth rates, increased corruption, reduced economic diversification, and inefficient institutions than countries without such resources (Sachs & Warner, 1995; Ross, 2012). It suggests that oil wealth can lead to rent-seeking behavior, corruption, and a lack of economic diversification, ultimately hindering economic growth (Karl, 1997). For instance, Nigeria's oil wealth has led to corruption and mismanagement, which has stifled economic growth (OPEC, 2013).

### **The Dutch Disease Model**

A concept explaining how a surge in oil exports can lead to an appreciation of the exchange rate, making other sectors of the economy less competitive. This model explains how a surge in oil exports can lead to an appreciation of the exchange rate, increased costs of production in non-oil sectors, reduced competitiveness of non-oil sectors, and decreased economic diversification (Corden & Neary, 1982). This theory posits that oil booms can result in the overvaluation of currency, decline of non-oil sectors, and increased reliance on imported goods (Gelb, 1988). Nigeria's oil boom, for example, led to an appreciation of the Naira, making non-oil sectors less competitive (CBN, 2019).

### **Economic Diversification Theory:**

Economic Diversification Theory suggests that diversifying the economy leads to increased economic growth, reduced dependence on oil exports, and increased competitiveness (Hirschman, 1958). By diversifying, countries can reduce their vulnerability to oil price shocks, increase economic resilience, and promote sustainable growth (IMF, 2019). Countries like Singapore and South Korea, which diversified their economies, achieved rapid economic growth (World Bank, 2020).

### **Revenue Management Theory:**

Effective revenue management is also crucial, as posited by Revenue Management Theory. This theory proposes that effective revenue management leads to increased economic growth, reduced corruption, and increased economic diversification (IMF, 2019). Effective management of oil revenue can promote transparency and accountability, support infrastructure development, and encourage economic diversification (Transparency International, 2020). Norway's effective management of oil revenue, for instance, has supported economic growth and diversification (Norwegian Ministry of Finance, 2020).

### **Empirical Review**

A study by Sala-i-Martin & Subramanian (2003) used cross-country regression analysis to examine the relationship between oil revenue and economic growth in oil-rich countries, finds a positive impact when institutions are strong. The study recommends strengthening institutions to ensure effective management of oil revenues.

Similarly, Gupta et al. (2014) employed Instrumental Variable (IV) estimation to investigate the effects of oil wealth on economic growth narrowing down on the role of institutional quality in managing oil revenues. The research highlights the importance of institutional quality in translating oil revenues into economic growth and recommends improving institutional quality.

Using Saudi Arabia as a case study, Al-Khateeb et al. (2017) applied an Autoregressive Distributed Lag (ARDL) model to examine the impact of oil revenue on Economic Growth. The work reveal a positive impact of oil revenue on Saudi Arabia's economic growth and suggest diversifying the economy to reduce dependence on oil revenues.

Adeniyi et al. (2015) study the impact of oil exploration on economic growth in Nigeria, employing a Vector Autoregression (VAR) model and the study revealing a significant positive impact of oil exploration on Nigeria's economic growth. The authors recommend increasing investment in oil exploration to boost economic growth.

Adedipe (2004) used a Vector Autoregression (VAR) model to analyze the impact of oil revenue on Nigeria's economic growth from 1970 to 2002. The study found that oil revenue had a significant positive impact on economic growth. The study suggests that Nigeria should diversify its economy to reduce its dependence on oil revenue and promote economic growth through investments in human capital and infrastructure. Similarly, Odusola and Akinlo (2011) employed an Error Correction Model (ECM) to examine the relationship between oil revenue and economic growth in Nigeria from 1960 to 2007. Their results indicated that oil revenue had a positive and significant impact on economic growth. They recommended that Nigeria should implement effective fiscal policies to manage oil revenue, reduce corruption, and promote transparency in revenue allocation.

More recently, Adebisi et al. (2020) employed an Autoregressive Distributed Lag (ARDL) model to examine the relationship between oil revenue and economic growth in Nigeria from 1980 to 2019. Their findings indicated that oil revenue had a positive and significant impact on economic growth, and they suggested that Nigeria should prioritize effective revenue management, reduce corruption, and promote transparency in revenue allocation to support economic growth.

Bringing diversification to the discourse, Hesse (2008) utilized panel data regression analysis to investigate the impact of oil revenue on economic diversification, finding a hindering effect. The study suggests implementing policies to promote economic diversification.

Utilizing simulation-based analysis, Thunderlake et al. (2016) examine the impact of effective oil revenue management frameworks on economic growth. The research

emphasizes the importance of establishing effective revenue management frameworks to ensure sustainable economic growth.

Hamilton's (2003) paper, "What is an Oil Shock?" applied a Vector Error Correction Model (VECM) to examine the impact of oil price shocks on economic growth, revealing significant negative effects. The author advises diversifying energy sources to reduce oil dependence.

### Data and Specification of Model

This study is designed to examine the effect of revenue generation and oil exploration on economic growth in Nigeria. Annual time series secondary data between 1981 and 2022 employed in the econometric analysis were collated from the Central Bank of Nigeria (CBN) statistical bulletin 2023, World Bank, International Energy Agency, and the National Bureau of Statistics (NBC) 2023.

The variables of study are GDP growth rate which represents dependent variable; while independent variables are oil revenue, oil exploration (proxied by oil production), Oil price volatility (standard deviation of oil prices), exchange rate, investment, and trade openness.

The model linear partial equilibrium relationship between the oil revenue and exploration growth of real GDP in Nigeria is stated as follows:

$$\text{GDP}_r = f(\text{OilRev}, \text{OilExp}, \text{OilPVol}, \text{EX}_r, \text{INVEST}, \text{TOP})$$

Equ 1

Equation 1 is transformed into a linear relationship and a stochastic error term ( $\epsilon$ ) is integrated and presented as in equation 2 below:

$$\text{GDP}_r = 130 + 131(\text{OilRev}) + 132(\text{OilExp}) + 133(\text{OilPVol}) + 134(\text{EX}_r) + 135(\text{INVEST}) + 136(\text{TOP}) + \epsilon$$

Equ 2

Where

$\text{GDP}_r$  = Growth rate of Gross Domestic Product (GDP) in Nigeria.

$\text{OilRev}$  = Oil revenue (billions of USD)

$\text{OilExp}$  = Oil exploration (proxied by number of wells or oil production),

$\text{OilPVol}$  = Oil price volatility (standard deviation of oil prices)

$\text{EX}_r$  = Exchange rate

$\text{INVEST}$  = Investment (% of GDP)

$\text{TOP}$  = Trade openness (% of GDP)

130 is the regression intercept

131- 136 are the estimated coefficients of explanatory variables

$\mu_1$  is the stochastic term

From the foregoing functional relationship, it is expected that all the explanatory variables will produce positive coefficients except oil price volatility thus in terms of a priori,  $131 > 0$ ;  $132 > 0$ ;  $133 < 0$ ;  $134 > 0$ ,  $135 > 0$ ,  $136 > 0$ . Hence, Oil price volatility is expected to

negatively impact economic growth due to uncertainty and risk while all other explanatory variables are expected to boost economic growth.

## Results and Discussions

### Unit root test

**Table 1**

#### Result of Unit Root Test at 5 Percent Level Significance

Variables	LEVELS		FIRST DIFFERENCE		Order of integration	Lag Length
	ADF Stat.	Critical Values	ADF Stat.	Critical Values		
GDP <sub>r</sub>	-2.85341	-2.88746	-4.21345	-2.88746	I(1)	1
OilRev	-2.41459	-2.88746	-3.51328	-2.88746	I(1)	1
OilExp	-3.01428	-2.88746			I(0)	
OilPVol	-2.19418	-2.88746	-3.38418	-2.88746	I(1)	1
Exr	-2.58345	-2.88746	-3.82345	-2.88746	I(1)	1
INVEST	-2.81459	-2.88746	-3.91328	-2.88746	I(1)	1
TOP	-2.49341	-2.88746	-3.67345	-2.88746	I(1)	1

Source: Researchers' Computation 2024.

In the light of the above, all the variables except OilExp failed to reject the null hypothesis of non-stationarity at 5% level of significance at levels. Hence, OilExp was stationary at levels, all other variables became stationary after first difference.

Table 4.2

Hypothesized No. of CE(s)	Johansen Cointegration Test results		
	Eigenvalue	Trace Statistic	p-value
None	0.4211	103.1191	0.0000
At most 1	0.2919	63.1919	0.0011
At most 2	0.1819	30.5919	0.0231

Source: Researchers' computation (2024)

The above Johansen cointegration tests result show that there are two cointegrating relationships among the variables:

AGDP<sub>r</sub>, AOilRev, OilExp, AOilPVol, AExr, AINVEST, ATOP

This implies that a long-run relationships exist among the variables and that the variables move together in the long run, but may deviate in the short run.

Based on the unit root tests where all variables are non-stationary in levels (except OIL\_EXP) and all variables are stationary in first difference; and the cointegrating relationships expressed in both equations below:

Equation 1: GDP<sub>r</sub> = f (OilExp, OilPVol, Exr)

Equation 2: OilRev = f (OilExp, OilPVol, INVEST), it can be inferred that: GDP<sub>r</sub> and OilRev are endogenous variables, meaning their values are influenced by other variables within the system. Specifically, GDP<sub>r</sub> is influenced by OilExp, OilPVol, and Exr, while OilRev is influenced by OilExp, OilPVol, and INVEST.

On the other hand, OilExpl, OilPVol, Exr and INVEST are exogenous variables, meaning they are external factors that affect the system. OilExpl and OilPVol have a broader impact, influencing both GDP<sub>r</sub> and OilRev. Exr specifically affects GDP<sub>r</sub>, while INVEST has a direct impact on OilRev.

These relationships suggest that changes in OilExpl, OilPVol, Exr, and INVEST can have significant effects on GDP<sub>r</sub> and OilRev in the long run. Policy interventions targeting these exogenous variables may be effective in influencing GDP<sub>r</sub> and OilRev

The cointegrating relationships also imply that there are long-run equilibrium relationships between GDP<sub>r</sub>, OilExpl, OilPVol, and Exr, as well as between OilRev, OilExpl, OilPVol, and INVEST. This suggests that these variables move together over time, with changes in one variable affecting the others.

### Regression Analysis

The Ordinary Least Square (OLS) regression result output from E-views 12.0, is presented in Table 3. This indicates the functional nature of the relationship between the explained variables and explanatory variables used in the study based on the null hypothesis that Oil revenue and oil exploration do not significantly affect GDP growth rate in Nigeria.

$$\text{GDP}_r = 2.41 + 0.025(\text{OilRev}) + 0.038(\text{OilExpl}) - 0.031(\text{OilPVol}) + 0.018(\text{Exr}) + 0.034(\text{INVEST}) + 0.027(\text{TOP}) + \varepsilon$$

**Table 4.2: Summary of Regression Output**

	OilRev	OilExpl	OilPVol	Excr	Inv	TOP	$\varepsilon$
SE	=0.540	0.008	0.013	0.012	0.010	0.013	0.011
t- stat.	=4.467	30125	2.923	-2.583	1.800	2.615	2.455
P-value	=0.000	0.003	0.005	0.012	0.077	0.011	0.016
n =42, R-squared = 0.83, Adjusted R-squared=0.80, F-statistic = 22.19, DW=1.91							

**Source: Researchers' computation (2024)**

The regression analysis reveals a significant relationship between GDP growth (GDP<sub>r</sub>) and various economic indicators. The model explains approximately 83% of the variation in GDP growth, indicating a strong fit.

GDP growth is positively influenced by:

- Oil revenue (OilRev), with a coefficient of 0.025, indicating that a 1-unit increase in oil revenue leads to a 0.025-unit increase in GDP growth.
- Oil exports (OilExpl), with a coefficient of 0.038, suggesting that a 1-unit increase in oil exports results in a 0.038-unit increase in GDP growth.
- Investment (Inv), with a coefficient of 0.034, indicating that a 1-unit increase in investment leads to a 0.034-unit increase in GDP growth.
- Trade openness (TOP), with a coefficient of 0.027, suggesting that a 1-unit increase in trade openness results in a 0.027-unit increase in GDP growth.

Conversely, GDP growth is negatively affected by:

- Oil price volatility (OilPVol), with a coefficient of -0.031, indicating that a 1-unit increase in oil price volatility leads to a 0.031-unit decrease in GDP growth.

The exchange rate (Excr) has a positive, albeit marginally significant, impact on GDP growth, with a coefficient of 0.018.

The standard errors, t-statistics, and p-values indicate that the coefficients are statistically significant, with most p-values below 0.05.

The Durbin-Watson statistic (DW) of 1.91 suggests that there is no significant autocorrelation in the residuals.

Overall, this model provides valuable insights into the drivers of GDP growth, highlighting the importance of oil revenue, exports, investment, and trade openness, while also underscoring the negative impact of oil price volatility.

### **Conclusions and Recommendations**

In conclusion, this study has provided profound insights into the intricate relationships between GDP growth and various economic indicators, with a particular focus on oil-dependent economies, like Nigeria. Through rigorous empirical analysis, employing advanced regression and cointegration techniques, the research has uncovered significant positive correlations between GDP growth and key economic variables, including oil revenue, oil exploration, investment, and trade openness.

The study has demonstrated that oil revenue and oil explorations play a vital role in driving GDP growth, underscoring the importance of these sectors in oil-dependent economies. However, the research has also highlighted the debilitating impact of oil price volatility on GDP growth, emphasizing the need for policymakers to implement effective measures to mitigate this risk.

Furthermore, the study has revealed that investment and trade openness have a positive impact on GDP growth, suggesting that policies aimed at promoting foreign investment and international trade can contribute to economic expansion. The exchange rate, although marginally significant, also plays a role in influencing GDP growth.

Therefore, arising from the above conclusion, the following recommendations are put forward for policy:

- i. Policymakers must adopt a multifaceted approach, diversifying revenue streams, maintaining fiscal discipline, and implementing monetary policy adjustments to stabilize oil prices and promote economic resilience.
- ii. Investing in strategic sectors, fostering trade relationships, regional cooperation, and private sector development are crucial for cultivating sustainable economic growth. Moreover, policymakers must consider the impact of geopolitical factors, institutional quality, technological innovation, and environmental considerations on economic growth.
- iii. The study's results also underscore the importance of addressing oil price volatility, which can be achieved through measures such as hedging, diversification, and strategic reserves. Additionally, policymakers should prioritize investments in human capital development, innovation, and infrastructure to drive economic diversification and sustainable growth.

## References

- Adebiyi, M. A., Oyinlola, M. A., & Adeniyi, O. (2020). Oil revenue and economic growth in Nigeria: An ARDL bounds testing approach. *Journal of Economic Development*, 45(2), 107-124.
- Adedipe, N. (2004). Analysis of the impact of oil revenue on Nigeria's economic growth (1970-2002). *Journal of Economic Studies*, 31(3), 257-272.
- Adelman, M. A. (1995). *The genie out of the bottle: World oil since 1970*. MIT Press. ISBN: 0262011536
- Adeniyi, O., et al. (2015). Oil exploration and economic growth in Nigeria: A VAR approach. *International Journal of Energy Economics and Policy*, 5(3), 761-771.
- Adeniyi, O., et al. (2017). The impact of oil price volatility on Nigeria's economic growth. *Journal of Economic Studies*, 44(3), 541-555.
- Ajayi, S. I. (2017). Nigeria's economic challenges: the way orward. *Journal of African Development*, 19(2), 107-124.
- Akinlo, A. E. (2014). Oil price shocks and Nigeria's economic growth. *Journal of Economic Policy Analysis*, 4(1), 1-15.
- Alhajji, A. F., & Huettner, D. (2000). OPEC and other commodity cartels: A comparison. *Energy Policy*, 28(15), 1151-1164. DOI: 10.1016/S0301-4215(00)00094-4
- Al-Khateeb, A. M., Al-Sayyed, O. M., & Al-Enzi, A. M. (2017). The impact of oil revenue on economic growth in Saudi Arabia. *Journal of Economic Cooperation and Development*, 38(2), 1-22.
- Al-Sultan, A. (2017). *The relationship between oil prices and economic growth in oil-exporting countries*. PhD thesis, University of Kuwait.
- Arezki, R., & Blanchard, O. J. (2014). The 2014 oil price drop: Seven questions. NBER Working Paper No. 20957.
- Baumeister, C., & Kilian, L. (2016). Understanding the effects of oil price shocks. Bank of Canada Working Paper No. 2016-21.
- Central Bank of Nigeria (2019). *Annual Report and Statement of Accounts*.
- Central Bank of Nigeria. (2020). *Annual Report and Statement of Accounts*.
- Cologni, A., & Manera, M. (2008). Oil prices, inflation and interest rates in a structural cointegrated VAR model for the G7 countries. *Energy Economics*, 30(3), 856-888
- Corden, W. M., & Neary, J. P. (1982). Booming sector and de-industrialisation in a small open economy. *Economic Journal*, 92(368), 825-848.
- Eboh, E. (2016). Diversification of the Nigerian economy: A critical analysis. *Journal of Business and Economic Studies*, 2(1), 1-12.
- Federal Government of Nigeria. (2017). *Economic Recovery and Growth Plan (ERGP)*.
- Gupta, S., Segura-Caley, D., & Feinberg, R. (2014). Oil wealth and economic growth: Lessons from five oil-rich countries. *Journal of International Development*, 26(6), 833-846.
- Hamilton, J. D. (2003). What is an oil shock? *Journal of Econometrics*, 113(2), 363-398
- Hesse, H. (2008). Export diversification and economic growth. *World Development*, 36(9), 1647-1662.

- International Association for Energy Economics (2019). 42nd IAEE International Conference.
- International Monetary Fund (2019). Oil exporters facing unprecedented challenges. IMF Report.
- Iyoha, M. A. (2013). Dutch disease and the Nigerian economy. *Journal of Economic Issues*, 47(3), 559-576.
- Iyoha, M. A., & Oriakhi, D. E. (2015). Oil price volatility and economic growth in Nigeria. *Journal of Economic Theory*, 7(2), 1-11.
- Kilian, L. (2008). The economic effects of energy price shocks. *Journal of Economic Literature*, 46(4), 871-909.
- Mohaddes, K., & Pesaran, M. H. (2016). Oil prices and the global economy: Is it different this time around? *Energy Economics*, 56, 152-166.
- Oduola, A. F. (2017). Oil price shocks and Nigeria's economic growth. *Journal of Economic Policy Analysis*, 11(1), 1-15.
- Okon, E. E. (2018). The impact of oil revenue on Nigeria's economic growth. *Journal of Economics and Finance*, 9(2), 137-148.
- Ross, M. L. (2012). *The oil curse: how petroleum wealth shapes the development of nations*. Princeton University Press. ISBN: 978-0-691-15556-6
- Ukiwo, U. (2007). Nigeria's oil Jihad: the Niger Delta insurgency and the future of peace. *Journal of Asian and African Studies*, 42(1-2), 35-53.