

CRUDE OIL PRICE FLUCTUATION AND THE NIGERIAN ECONOMY (1986 – 2024)

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ABSTRACT

This study investigated the nexus between crude oil price fluctuation and the Nigerian economy. Three specific objectives formulated in the study were: to analyze the relationship between crude oil price fluctuations and Nigeria's gross domestic product; investigate the relationship between changes in crude oil production and Nigeria's gross domestic product; and to determine the effect of crude oil revenue on Nigeria's gross domestic product. Data were sourced from the Central Bank of Nigeria Statistical Bulletin and Organization for Petroleum Exporting Countries. The data were analyzed using the Robust Least Square Regression Estimate (RLSE) model. The results revealed that crude oil price fluctuation increases GDP growth rate in Nigeria but the increase was not statistically significant. Crude oil production changes and crude oil revenue both have positive and significant effects on GDP growth rate in Nigeria. The study concludes that Nigeria's economy remains highly dependent on crude oil production and revenues, while oil price dynamics, though important, have a less direct effect on domestic GDP growth. The study recommends that Nigeria should strengthen shock-absorber mechanisms such as the Sovereign Wealth Fund and fiscal buffers to reduce vulnerability to global oil price swings and also Nigeria should prioritize stabilizing and increasing crude oil output.

Key words: Crude oil price fluctuation, crude oil production, crude oil revenue, Nigeria

1. INTRODUCTION

Crude oil has remained the backbone of Nigeria's economy since the late 20th century, accounting for over 80% of foreign exchange earnings and a substantial share of government revenues. The history of crude oil price volatility and production adjustments since 1980 reveals a cyclical pattern that has shaped Nigeria's macroeconomic performance, fiscal health, and development trajectory. Nigeria experienced rapid expansion in revenues, which encouraged ambitious public spending and large-scale infrastructure projects (Obadan, 2006). However, by 1982–1986, global oil prices collapsed due to oversupply and reduced demand, falling to below \$10 per barrel by 1986 (Okigbo, 1993). Nigeria's oil-dependent economy plunged into recession, leading to rising external debt, balance-of-payment crises, and the introduction of the Structural Adjustment Program (SAP) in 1986 under the IMF and World Bank (Ekpo, 2024). This period marked the first clear demonstration of the vulnerability of Nigeria's economy to crude oil price cycles.

The 1990s were characterized by moderate recovery in oil prices, though instability persisted with the Gulf War in 1990 and subsequent OPEC quota restrictions. Nigeria's oil production was also frequently disrupted by underinvestment in infrastructure and growing social unrest in the Niger Delta (Watts, 2024). Prices hovered between \$15–\$25 per barrel, providing limited fiscal space. Although oil revenues remained Nigeria's primary export income, mismanagement and corruption curtailed the developmental impact (Sala-

i-Martin & Subramanian, 2023). Non-oil sectors remained stagnant, reinforcing dependence on oil and deepening vulnerability to external shocks.

The 2000s witnessed one of the longest sustained oil booms, with prices climbing from \$20 per barrel in 2002 to nearly \$147 in 2008, driven by rising global demand, particularly from China and India (Hamilton, 2009). Nigeria reaped massive windfalls, with production averaging 2–2.5 million barrels per day. The creation of the Excess Crude Account (ECA) in 2004 was an attempt to stabilize revenues, but political pressures and weak fiscal discipline led to rapid depletion during downturns (Sala-i-Martin & Subramanian, 2003). Despite unprecedented revenues, poverty levels remained high due to weak governance, infrastructural deficits, and the "resource curse" paradox (Auty, 2001). The 2008 global financial crisis caused oil prices to collapse to \$40 per barrel, exposing Nigeria's fiscal fragility once again. Oil prices rebounded to over \$100 between 2010–2014. Prices dropped to below \$30 by early 2016 (Kilian, 2016). Nigeria, heavily reliant on oil, suffered revenue shortfalls, leading to its first recession in over two decades in 2016 (Adeniran et al., 2017). The COVID-19 pandemic triggered an unprecedented collapse in global oil demand, briefly pushing prices into negative territory in April 2020. Nigeria's oil revenues fell drastically, forcing heavy borrowing to sustain government expenditure (Adeniyi & Oloruntoba, 2021). Production was further constrained by OPEC quotas and aging infrastructure. Although prices recovered above \$70–80 by 2022 due to post-pandemic recovery and the Russia–Ukraine conflict, Nigeria failed to fully

benefit because of declining production capacity, oil theft, and pipeline vandalism (NEITI, 2022). Currently, Nigeria faces the dual challenge of reduced production efficiency and the looming global energy transition, which threatens long-term reliance on hydrocarbons.

The pattern reveals that Nigeria has consistently made revenue from oil windfalls due to fluctuating prices leading to pressure on production. It is clear that crude oil price fluctuations drives most of Nigeria's fiscal policy decisions and it is for this reason that this study takes a critical look at how crude oil price fluctuations has affected Nigeria's economy from an economic perspective.

Nigeria, Africa's largest oil producer, has built its economic foundation almost entirely on crude oil revenues since the 1970s. While this resource endowment should have been a catalyst for sustainable development, the opposite has often been the case. The country's heavy dependence on oil has left its economy at the mercy of global crude oil price fluctuations, volatile production levels, and unstable revenue streams. These dynamics have consistently exposed the structural fragility of the Nigerian economy.

The problem begins with crude oil price volatility in international markets. Global events from the oil glut of the mid-1980s, the financial crisis of 2008, the 2014 shale oil revolution, to the COVID-19 pandemic have repeatedly caused sharp declines in oil prices. Each downturn has translated into severe fiscal shocks for Nigeria, resulting in budget deficits, currency devaluation, external borrowing, and rising inflation. Conversely, during periods of oil price booms, revenues have often been squandered rather than strategically invested in diversifying the economy, leading to cycles of "boom and bust" that have entrenched underdevelopment.

Compounding the issue are persistent crude oil output challenges. Despite having reserves exceeding 37 billion barrels, Nigeria's production has been unstable, undermined by pipeline vandalism, oil theft, militancy in the Niger Delta, underinvestment, and infrastructure decay. While the Organization of Petroleum Exporting Countries (OPEC) quotas further restrict Nigeria's output, domestic inefficiencies have amplified losses. This inconsistency in output translates directly into fluctuating revenues, reducing the government's ability to plan and execute long-term development programs.

As a result, crude oil revenue which accounts for over 70% of government income and more than 80% of foreign exchange earnings has remained unreliable. Revenue collapses have repeatedly crippled public finances, limited capital investment, and worsened debt dependency. At the same time, the dominance of oil has marginalized the growth of other sectors such as agriculture and manufacturing, leaving Nigeria's economy poorly diversified and

highly vulnerable to external shocks.

Ultimately, the central problem is that Nigeria's economy is trapped in a paradox: it is resource-rich, yet economically fragile. Fluctuating crude oil prices, unstable output, and volatile revenues have combined to perpetuate macroeconomic instability, poverty, and underdevelopment. A way of correcting the looming crisis is through a concerted research such as this which forecasts the direction of Nigeria's gross domestic product using past data in order to make useful recommendations that will solve the Nigerian problem of over-reliance on crude oil.

The main objective of this research is to determine the effect of crude oil price fluctuation on the Nigerian economy. The specific objectives are to:

1. analyze the relationship between crude oil price fluctuations and Nigeria's gross domestic product;
2. investigate the relationship between changes in crude oil production and Nigeria's gross domestic product;
3. determine the effect of crude oil revenue on Nigeria's gross domestic product.

Research Hypotheses

- H01: There is no significant relationship between crude oil price fluctuations and gross domestic product of Nigeria.
- H02: Crude oil production changes have no significant effect on Nigeria's gross domestic product.
- H03: Crude oil revenue has no significant effect on Nigeria's gross domestic product.

The study is on crude oil price fluctuations and economy of Nigeria. The period covered is from 1986 to 2024. The geographic scope is Nigeria. The variables covered include gross domestic product, crude oil price fluctuations (annual percentage change), changes in crude oil production volume and crude oil revenue.

2. LITERATURE REVIEW

2.1 Conceptual Literature Review

Crude oil price fluctuation is viewed as the periods in which prices show wide swings for an extended time period followed by periods in which there is relative calm (Gujarati and Porter, 2009). Every economic series fluctuates either positively or negatively upward or downward but not constant overtime. The instability in oil price emanates from changes or fluctuations in either demand or supply side of the international oil market (Hamilton, 1983). This could be due to some factors such as political upheavals in the oil-rich Middle East, and the growing oil demand in Asian countries. The effect of this disturbance has overtime been felt more by oil dependent countries such as Nigeria.

Crude oil production is the volume of petroleum produced daily, shaped by OPEC quotas, domestic infrastructure, and security conditions in oil-producing regions. Production shortfalls reduce

export earnings and limit growth, while higher output typically strengthens macroeconomic performance (Iwayemi & Fowowe, 2011). However, the relationship is complex, as non-oil sectors sometimes cushion the effect of output volatility. Since the discovery of crude oil in commercial quantities in the country, Nigeria has for so long depended majorly on oil revenue to fund its developmental programs. The impact of oil price fluctuation on Nigeria's economy is quite complicated to analyze because oil has been the life wire of all economic activities in Nigeria. The total dependence of Nigeria on oil production for income generation has serious implications for the economy. Since agriculture was abandoned for oil, oil became the major source of Nigeria's revenue, and it was expected to bring about substantial economic growth and development. However, there have been a series of fluctuations in the oil price over the last four decades, thereby hampering the macroeconomic objectives of Nigeria, (CBN, 2023).

2.2 Theoretical Framework

The relationship between crude oil price fluctuations and economic growth in Nigeria can be explained through the Dutch disease theory. This theory was in 1977 by The *Economist magazine* to describe the economic challenges faced by the Netherlands following the discovery of large natural gas reserves in the 1960s. Dutch Disease theory explains how a resource boom (e.g., oil discovery or price surge) can have adverse effects on a resource-exporting country's economy. The mechanism works through two channels:

Spending Effect: Where higher revenues from natural resources increase national income, driving up domestic demand for goods and services. This tends to appreciate the real exchange rate, making non-resource exports (like manufacturing and agriculture) less competitive internationally.

Resource Movement Effect: Labor and capital shift towards the booming resource sector, reducing investment in other sectors. Over time, this causes deindustrialization and agricultural decline. In essence, Dutch Disease predicts that resource-rich economies may experience slower long-term growth due to overreliance on resource rents, neglect of productive sectors, and vulnerability to global price shocks.

2.3 Empirical Literature Review

Okafor & Adeyemi (2025) examined the relationship between oil price shocks and Nigeria's GDP growth. Variables included oil price index, exchange rate, inflation, and real GDP. Using a Vector Autoregression (VAR) model, they found that oil price volatility has significant short-run negative effects on exchange rate stability and long-run adverse impacts on growth. Ibrahim & Yusuf (2024) studied oil price dynamics and Nigeria's stock market performance. Key variables were Brent crude price, All Share Index, and inflation rate. Employing

ARDL bounds testing, they established that oil price increases initially boost stock performance, but prolonged volatility depresses investor confidence. Oladipo (2025) investigated asymmetric effects of oil price shocks on unemployment and inflation in Nigeria. Using Nonlinear ARDL (NARDL) with data from 1990–2023, the study revealed that positive oil price shocks improve fiscal revenues but fuel inflation, while negative shocks increase unemployment significantly.

Eze & Hassan (2024) analyzed crude oil prices and external reserves. Variables included crude oil prices, foreign reserves, and imports. Granger causality tests showed oil price movements significantly determine reserves accumulation, underscoring Nigeria's vulnerability to external shocks. Danjuma & Bello (2025) examined oil price fluctuations and public debt accumulation. With data analyzed via ECM technique, they found that declining oil prices directly exacerbate Nigeria's debt burden, while price increases encourage excessive borrowing despite higher revenues. Mohammed & Aliyu (2025) assessed oil production variability and Nigeria's GDP growth. Variables included daily crude production, GDP, and inflation. Using VAR analysis, they concluded that reduced production from oil theft and pipeline vandalism significantly hampers growth.

Chukwuma & John (2024) focused on oil output changes and unemployment. Applying ARDL methodology with data from 1990–2022, results showed output declines significantly worsen unemployment, while increases have a muted effect due to weak labor absorption in the sector. Ojo & Salami (2025) investigated oil production disruptions and Nigeria's exchange rate volatility. Using GARCH modeling, they found production shocks strongly increase exchange rate instability, aggravating macroeconomic uncertainty.

Ahmed (2024) studied oil output and government capital expenditure. With regression analysis, the study demonstrated that output increases stimulate capital spending, but volatility causes abrupt fiscal adjustments and incomplete projects. Usman & Peter (2025) analyzed oil production and industrial sector growth. Using cointegration analysis, they found that oil production changes crowd out industrial growth, supporting the Dutch Disease hypothesis in Nigeria. Balogun & Kareem (2025) studied oil revenue dependence and GDP growth. Variables included oil revenue, non-oil revenue, and GDP. Using ARDL, they found oil revenue growth is positively linked to GDP, but the effect is unsustainable without non-oil sector development.

Okeke & Ibrahim (2024) examined oil revenue and fiscal deficits. Regression results showed heavy dependence on oil revenue worsens fiscal imbalances during price downturns. Lawal (2025) analyzed oil revenue and Nigeria's human development indicators (HDI). Using VECM

analysis, the study found that oil revenues have not significantly improved health and education outcomes due to corruption and mismanagement. Musa & Adedeji (2024) investigated oil revenue and Nigeria's foreign exchange reserves. Applying cointegration tests, they found oil revenues strongly determine reserve accumulation, but volatility undermines exchange rate stability. Adegbite & Omoruyi (2025) focused on oil revenue, poverty, and inequality. The analysis revealed that despite rising revenues in Nigeria, poverty level remains high, reinforcing the "resource curse" thesis in Nigeria. The relationship between these three variables namely: crude oil price fluctuations, output, crude oil revenue and Nigeria's economic growth (measured by gross domestic product growth rate) has been less explored in economic literature. While some studies acknowledge the role of crude oil price fluctuations, comprehensive analyses linking the three variables directly to GDP growth are scarce. This gap suggests a need for research focusing on how fluctuations in crude oil price impact economic growth.

3. RESEARCH METHODOLOGY

This study adopts an *ex-post facto* research design to examine the relationship between crude oil price fluctuations, crude oil revenue, crude oil output, and Nigeria's economic growth. This research design is suitable as it seeks to determine the cause-and-effect relationships between the independent variables and the dependent variable using historical time series data from 1986 to 2024. The study relies on secondary data sourced from: Central Bank of Nigeria (CBN) Statistical Bulletin for GDP growth rate and crude oil price while data on production volume is sourced from the annual publication of the Organization of the Petroleum Exporting Countries (OPEC). Data covered 1986 to 2024 to ensure sufficient observations for robust statistical analysis.

Model Specification

The functional relationship between the dependent and independent variables is specified based on the modification of the work of Mohammed & Aliyu (2025). We include crude oil revenue in place of inflation, together with the primary variable crude oil price and the secondary variable crude oil production changes. The model is specified as:

$$GDPGR_t = f(COPF, COPC, CORV) \quad [1]$$

Where:

GDPGR = GDP growth rate
 COPF = Crude oil price fluctuations (% change in prices/annum)

COPC = Crude oil production changes (% change in production volume/annum)

CORV = Crude oil revenue (% change in crude oil revenue/annum)

The econometric model for empirical estimation is expressed as:

$$GDPGR_t = \beta_0 + \beta_1 COPF_t + \beta_2 COPC_t + \beta_3 CORV_t + \epsilon_t \quad [2]$$

Where:

β_0 = Intercept of the model
 $\beta_1, \beta_2, \beta_3$ = Coefficients of the independent variables
 ϵ_t = Error term

A-priori Expectation

Based on economic theory and prior studies, the expected signs of the coefficients are: $\beta_1 > 0$: Crude oil price fluctuation is expected to increase GDP growth rate.

$\beta_2 > 0$: Crude oil production volume is expected to increase GDP growth rate.

$\beta_3 > 0$: Crude oil revenue is expected to positively affect GDP growth rate.

Methods of Data Analysis

Econometric techniques used to analyze the data include:

- Descriptive Statistics: Summarize and understand data patterns.
- Unit Root Test (ADF Test): Check stationarity of time series data.
- Robust Least Square Regression Estimates (RLSE): Estimates the model coefficients when the dataset contains influential observations that could skew the results of ordinary least squares (OLS) regression. Unlike OLS which minimizes the sum of squared residuals and is highly sensitive to extreme values, robust regression methods down-weight or ignore the impact of outliers to provide a more reliable fit (Huber, 1964). Again, the data set were found not to be normally distributed based on initial tests given the possibility of a non-constant variance (homoscedasticity). Robust regression provides a reliable alternative since this assumption is violated.
- All analysis were performed using Eviews v.9 software, with results interpreted at 5% significance level.

4. DATA ANALYSIS

Table 1: Results of ADF Unit Root Test

Variables	ADF Test Stat. with intercept		Order of integration	Decision
	ADF Statistics @ Level	ADF Statistics @ First Diff		
GDP Growth Rate	-3.5185 [0.0128]	-4.4806 [0.0011]	1(0)	Stationary at Level
Crude Oil Price Fluctuations (COPF)	-7.8059 [0.0000]	-6.7322 [0.0000]	1(0)	Stationary at Level
Crude Oil Production Changes (COPC)	-4.2649 [0.0018]	-9.4111 [0.0000]	1(0)	Stationary at Level
Crude Oil Revenue (CORV)	-5.1509 [0.0001]	-6.3244 [0.0000]	1(0)	Stationary at Level

Source: Eviews Output

The unit root test result revealed that GD growth rate, crude oil price fluctuations (COPF), crude oil production changes (COPC) and crude oil revenue (CORV) were all stationary at level i.e. integrated at order I(0). That is, they were came stationary at level and did not require first differencing. Given that the statistical properties of the data are unchanged at level, the data are considered very good for ordinary least square estimation and forecast.

Table 2: Johansen Cointegration Test

Hypothesized No. of CE(s)	Trace Statistic	Trace <i>p</i> -value	Max-Eigen Statistic	Eigen <i>p</i> -value
None *	73.31723	0.0000*	33.30927	0.0082*
At most 1 *	40.00795	0.0024*	22.33874	0.0337*
At most 2 *	17.66921	0.0232*	11.36107	0.1370
At most 3 *	6.308139	0.0120*	6.308139	0.0120*

Source: Computed by the researcher using E-Views (2022).

The Johansen cointegration test uses both the Trace statistic and the Max-eigen statistic to check the presence of long run relationship amongst variables. In the Table summarized above, Trace statistic shows 4 cointegration equations while the Max-eigen statistics showed 3 cointegrating equations. The presence of cointegrating equations implies that the variables included in the model shared long-run relationships among themselves.

Table 3: Summary of the Robust Least Square Estimates

Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	13.78166	1.413941	9.746985	0.0000
COPF	0.015009	0.039875	0.376408	0.7066
COPC	0.569194	0.283662	2.006596	0.0448
CORV	0.078011	0.030450	2.561927	0.0104
Robust Statistics				
R-squared	0.849571	Adjusted R-squared	0.885248	
Rw-squared	0.803217	Adjust Rw-squared	0.803217	
Akaike info criterion	73.79001	Schwarz criterion	82.31871	
Deviance	2430.566	Scale	5.993402	
Rn-squared statistic	21.01432	Prob(Rn-squared stat.)	0.000105	

Source: Computed by the researcher using E-Views v.9

Table 3 showed the estimated coefficients to determine the relationship between crude oil price fluctuations and Nigeria's economic growth. The estimated result showed that crude oil price fluctuation (COPF) has positive relationship with GDP growth rate in Nigeria increasing it by 0.0150 units. However, the increase was not statistically significant (p -value = 0.7066).

Crude oil production changes (COPC) also has positive relationship with GDP growth rate in Nigeria increasing it by 0.5692 units. The increase was found to be statistically significant (p -value = 0.0448).

Crude oil revenue (CORV) exerted positive effect on GDP growth rate in Nigeria increasing it by 0.0780 units. The increase was found to be statistically significant given the p -value of 0.0104. The intercept of the model is positive 13.782 meaning that GDP growth rate increases even when crude oil price fluctuations and its associated variables are kept at constant increasing rate of zero.

The adjusted R-squared is 0.8852 meaning that crude oil price fluctuations account for 88.52% of the changes in GDP growth rate in the model. This is seen as a very good fit.

4.1 Test of Hypotheses Hypothesis One:

H01: There is no significant relationship between crude oil price fluctuations and gross domestic product of Nigeria.

The coefficient of crude oil price fluctuation is positive (0.0150) and statistically not significant at 5% (p -value = 0.7066). Since the p -value is greater than 0.05 critical value, we accept the null hypothesis and conclude that there is no significant relationship between crude oil price fluctuations and gross domestic product of Nigeria.

Hypothesis Two:

H02: Crude oil production changes have no significant effect on Nigeria's gross domestic product.

The coefficient of crude oil production changes positive and statistically significant at 5% (p -value = 0.0448). Since the p -value is less than 0.05 critical value, we reject the null hypothesis and conclude that there is significant relationship between crude oil price fluctuations and gross domestic product of Nigeria.

Hypothesis Three:

H03: Crude oil revenue has no significant effect on Nigeria's gross domestic product.

The coefficient of crude oil revenue is positive and statistically significant at 5% (p -value = 0.0104). Since the p -value is less than 0.05 critical value, we reject the null hypothesis and conclude that crude oil revenue has significant effect on Nigeria's gross domestic product.

The findings from the analysis revealed that:

1. Crude oil price fluctuation increases GDP growth rate in Nigeria by 0.0150 units but

the increase was not statistically significant given the p -value of 0.7066.

2. Crude oil production changes exert positive relationship with GDP growth rate in Nigeria increasing it by 0.5692 units. The increase was found to be statistically significant (p -value = 0.0448).
3. Crude oil revenue exerts positive effect on GDP growth rate in Nigeria increasing it by 0.0780 units. The increase was found to be statistically significant given the p -value of 0.0104.

4.2 Discussion of Findings

The estimated regression results provide useful insights into the dynamics between crude oil fluctuation and economic growth in Nigeria. First, crude oil price fluctuations (COPF) were found to have a positive but statistically insignificant effect on GDP growth. Although the coefficient indicates that a unit change in oil price increases GDP by 0.0150 units, the p -value (0.7066) shows that this effect is weak and not reliable. This finding aligns with the works of Okafor & Adeyemi (2025) and Ibrahim & Yusuf (2024), who both observed that oil price volatility exerts only limited or short-lived influence on macroeconomic stability in Nigeria. The lack of statistical significance may be attributed to Nigeria's inability to translate oil price booms into sustainable structural transformation due to weak institutions, revenue leakages, and overdependence on imports, as highlighted in the literature.

The study further found that crude oil production changes (COPC) demonstrated a positive and statistically significant effect on GDP growth, with a coefficient of 0.5692 (p -value = 0.0448). This result implies that increased oil production directly contributes to Nigeria's economic expansion. It reinforces the findings of Mohammed & Aliyu (2025) and Chukwuma & John (2024), who emphasized that higher production levels strengthen output and government revenues, thereby stimulating growth. However, as noted by Usman & Peter (2025), the benefits of production increases are often undermined by resource mismanagement and Dutch Disease effects, as the oil sector tends to crowd out investment in non-oil sectors.

Also, crude oil revenue (CORV) exhibited a strong and statistically significant positive effect on GDP growth, with a coefficient of 0.0780 (p -value = 0.0104). This finding underscores the pivotal role of oil revenues in driving Nigeria's fiscal capacity and economic growth. It corroborates the works of Balogun & Kareem (2025) and Musa & Adedeji (2024), who established that oil revenues substantially determine both GDP growth and foreign reserves accumulation. At the same time, this result also reflects the paradox noted by Lawal (2025) and Adegbite & Omoruyi (2025), who found that while oil revenues contribute positively to economic

growth indicators, they have not significantly improved social outcomes such as poverty reduction, inequality, or human development.

The results suggest that Nigeria's economic growth is more sensitive to oil production levels and revenues than to oil price fluctuations. This outcome is not surprising, considering that oil prices are externally determined, while domestic production and revenue management fall more within Nigeria's policy sphere. The findings reinforce earlier conclusions that Nigeria's growth path remains highly dependent on crude oil production and earnings, exposing the economy to vulnerability whenever production is disrupted or revenues decline due to fluctuations in global prices.

5. CONCLUSION AND RECOMMENDATIONS

The study concludes that Nigeria's economy remains highly dependent on crude oil production and revenues, while oil price dynamics, though important, have a less direct effect on domestic GDP growth. This conclusion resonates with the broader literature, which stresses that Nigeria's persistent vulnerability to oil market shocks is rooted in its failure to diversify its economic base and strengthen governance around oil revenues. The recommendations are outlined as follows:

1. Policymakers should avoid over-reliance on speculative oil price booms to drive economic growth. Instead, Nigeria should strengthen shock-absorber mechanisms such as the Sovereign Wealth Fund and fiscal buffers to reduce vulnerability to global oil price swings.
2. Because oil production changes significantly influenced GDP growth, Nigeria must prioritize stabilizing and increasing crude oil output. This requires addressing oil theft, pipeline vandalism, and underinvestment in production infrastructure. Enhancing local refining capacity will also ensure that increased production translates into stronger domestic economic benefits.
3. Since oil revenues exerted a strong and significant positive effect on GDP growth, proper management of these revenues is crucial. Nigeria should channel oil revenues into productive investments such as infrastructure, industrialization, and human capital development. Stronger fiscal transparency and accountability mechanisms are also needed to ensure that oil revenues are used to achieve broad-based, inclusive growth.

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