

Crude Oil Revenue and Output Growth in Nigeria: An Error Correction Model Approach

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Abstract

The paper investigated the impact of crude oil revenue on output growth in Nigeria from 2000 to 2019 for which data were available. The disruption posed on output growth and ensuing economic recessions in Nigeria as a result of oil price shocks has provoked the study. The paper employed the Error Correction Model as the technique to estimate and analyse the impact of crude oil revenue on output growth in Nigeria. Descriptive analysis was used to present the data analysis. It was found that all the variables except net foreign assets have positive but largely insignificant impacts on GDP in Nigeria. Net foreign assets showed a negative and statistically insignificant effect on GDP growth in the country. Urgent diversification has become a policy option to fast-track growth, and the paper recommended that the Federal and State Governments should prioritise their investment expenditures more to the provision of enduring infrastructures such as efficient road networks, stable power and other public goods that will contribute to the ease of doing business for the private sector to thrive and expand Nigeria's net foreign assets as well as agricultural and manufacturing output in the country. This will reduce dependence on oil revenue which is susceptible to oil price shocks, amongst other recommendations and implementation strategies.

Keywords: Economy, Oil Revenue, Oil prices, Output Growth, Manufacturing Output

Introduction

The world economy is interconnected where nation depends on nation through trade to either export or import, earn foreign exchange or obtain goods and services that it cannot produce, or cheaper than it can produce domestically, or obtain raw materials and semi-finished goods. This is the process countries use to satisfy their production and consumption aspirations and needs. Some

countries are developed without oil deposits but with capacity to produce manufactured exports to earn foreign exchange. Some are industrialised and oil producing as well with great advantages of comparative scale, while some are developing countries rich in crude oil deposits upon which they depend to run their economies but have failed to develop their countries. Sadly, there are low-income countries that are not developed, not industrialised, non-oil producing and are poverty stricken; these are the poorest countries of the world that live in misery.

Nigeria is one of the developing nations with huge crude oil deposits, but it remains a poor country with symptoms of a failed state in spite of huge and accruable billions of petro-dollars earned from foreign exchange over the past 50 decades. Poverty, unemployment, massive food imports, industrial imports, weak education, poor healthcare system, crime and criminality such as insecurity, insurgency, kidnappings, armed robbery, banditry, 419 and yahoo-yahoo scammers, and social vices such as drug abuse, prostitution and life in slumps, are manifest features of the economy.

Prior to the discovery of oil in Nigeria, the agricultural sector was the mainstay of the economy, contributing about 95% of foreign exchange earnings, generating over 60% of employment capacity and approximately 56% of gross domestic earnings (World Bank, 2013). But the situation is not so today, as the Nigerian economy is heavily dependent on the oil sector which accounts for over 95% of export earnings (IMF, 2011). The extraction of oil and gas has generated enormous wealth for Nigeria, implying high expectations that the oil wealth would create powerful incentives for uncommon development in the country. It implies that revenue from crude oil is expected to facilitate rapid growth and development in Nigeria. However, it seems that the wealth from oil and gas has attracted the perverse phenomenon known as resource curse; where the large wealth generated has undermined economic development in the country.

This situation is worsened by rampant cases of crude oil theft, fuel subsidy scamming, smuggling of petroleum products, oil bunkering, gas flaring and air pollution, oil spillage, environmental degradation, water pollution and destruction of aquatic lives, and loss of cultivatable/arable land, especially in the Niger-Delta region. The scarcity of domestic output, widespread poverty and huge import bills amidst huge crude oil revenue is not only worrisome but requires an empirical investigation. This has motivated the paper.

Oil revenue has been the mainstay of the national economy and is likely to remain so for a long time or at least in the near foreseeable future, as it currently provides the bulk of government revenue and most of the foreign exchange earnings. Nigeria relies heavily on crude oil revenue to fund government spending. Oil accounts for 15% of GDP and 80% of government revenue (CBN, 2017). Thus, a decline in oil revenue would have an adverse impact on government revenue, thereby increasing the requirement for borrowing and debt servicing and attendant impact on the funds available for capital expenditure. Higher oil prices would mean that external reserves would grow and surplus revenue saved (in excess of budgeted income in the form of excess crude account). A consequence of these fluctuations is the un-sustainability of some of the CBN measures (for example, tightening fiscal and monetary policies) which would have adverse effects for other sectors of the economy. Despite the huge oil revenues received over the years, Nigeria has not only continued to experience poverty but glut into recession especially in recent times following the fall in oil prices in international market. The disruption posed on output growth and ensuing economic recessions in Nigeria as a result of oil price shocks has provoked the study.

The objective of the paper is therefore, to examine the impact of crude oil revenue on output growth in Nigeria from 2000 to 2019. The choice of the period covers the era of the most stable democracy in the country and to evaluate whether or not

democratic governance is prudent enough to generate and utilise crude oil revenue to facilitate economic growth and development. The paper is divided into seven sections and the foregoing is the introductory section one. Section two gives conceptual clarifications and empirical review. Section three provides the theoretical basis of the paper. Section four dwells on methodology of the study comprising pre-test analysis, the sources of data, specification of the model, the technique of analysis, the hypothesis, and the *a priori* Expectation of the paper. While section six analyses the result and discusses the findings, section seven concludes with policy recommendations and implementation strategies.

Conceptual Clarifications and Empirical Review

This paper refers to crude oil revenue as monies earned or generated by an oil producing country from the sale of its crude oil in the international marketplace. Increased dependence on crude oil revenue can easily fuel corruption and distort economic and social values in countries where oil revenues overwhelm economic policy-making. Oil revenue is hereby viewed as wealth that can be channeled to create jobs, investments, new initiatives and fund diversification schemes in a given country that is blessed with oil deposits. Oil rents are the difference between the value of crude oil production at world prices and total costs of production. Output is the quantity of commodities and services produced in a given time period, by a firm, industry or country; whether consumed or used for further production. The concept of national output is essential in economic development and macroeconomics.

Solow (1956) saw output growth (economic growth) as a term used to indicate the increase of per capita gross domestic product (GDP) or other measures of aggregate income. Case, Fair and Oster (2009) describe economic growth as an increase in the total output produced in an economy at a given time. World Bank (1993) defines output growth as a more rapid output and productivity growth in agriculture and manufactured exports supported by

higher rates of domestic savings, investment and expansion in physical and human capital. This paper therefore, describes output growth as an increase in the production of goods and services in an economy. Increases in capital goods, labour force, technology, and human capital can contribute to economic growth. Economic growth is commonly measured in terms of the increase in aggregated market value of additional goods and services produced, using estimates such as GDP. Output growth can lead to an increase in income, employment and investment.

Charfeddine, Klein and Walther (2018) examine whether the time difference affects the impact of oil price changes on GDP growth in the United States. The study replicated empirical findings of prominent studies and found that the proposed oil price measures have a dissipating effect with recent data up to 2016. Second, the study further re-investigated the issue and provided evidence that oil price decreases affect the GDP growth in the US, when taking into consideration mixed data sampling technique. The study was able to capture the oil price movements using various non-linear measures such as Hamilton (1995; 2003) and Lee, Ni and Ratti (1995). However, the focus of the study was on USA, a developed country with less dependence on the oil sector. Their results therefore might not reflect the situations in oil producing countries of Africa.

Olomola, (2006) investigates the effect of oil rents on economic growth in oil exporting African countries using a panel data regression analysis from the period 1970-2000. The study used data from 47 oil exporting countries and revealed that there is evidence of resource curse in these oil exporting countries. The limitation in the study is that using regression analysis would mean that the responses of output to oil price shocks remain unexplained. Musa (2005) analyses the impact of oil price shocks on economic growth in Nigeria (1970-2011) using cointegration and SVAR model. Impulse response functions (IRFs) and variance decomposition from the SVAR model indicated that oil price shocks

response to real GDP a long run impact on growth in the country. Nevertheless, none of the studies reviewed in this paper has focused on the current oil price shocks in relation to Nigeria's oil revenue caused and triggered by the novel coronavirus pandemic that has ravaged the world economy, and this study has filled the gap.

Oludaru (2008) investigates the relationship between crude oil sector and economic performance in Nigeria. Applying the OLS technique, the study found that crude oil consumption and export contributed to the improvement of the country's economy. The study has recommended for increased participation of the private sector. However, the study has not evaluated the impact of crude oil revenue on aggregate output growth, which is a different but holistic measure of national growth from sectoral output growth gauged by crude oil consumption. Akinlo (2012) assesses the oil sector in Nigeria's economic development using a multivariate VAR model over the period 1960–2009. It was a model of oil sector against four other sectors (manufacturing, agriculture, trade and services, and building and construction). The five sub-sectors were found to be co-integrated and the oil sector had the capacity to cause the other sectors to grow. However, oil had adverse effect on manufacturing sector owing to Dutch disease syndrome. From the foregoing, the various studies reviewed in this paper did not incorporate crude oil revenue and aggregate output growth in their analyses, and this study has filled the gap.

Theoretical Basis

i. **The Expectation Theory:** This theory postulates that oil discovery, its exploitation and production is expected to improve living standards and quality of life of the citizens of countries with oil deposits. The oil revenues and windfalls are expected to power the economies of these countries in terms of infrastructure, job creation, income, investment, growth of domestic output and development (Aryeeteh and Asmah, 2011). However, the oil economy comes with it the challenge of diversification and Dutch

disease as the productive sectors are likely to be abandoned for the oil sector.

ii. The Peak Oil Theory: This theory was propounded by Hubberts (1956, 1962) who stated that at some point oil production will decline and prices will rise, with a dramatic effect on the global economy as a worldwide depression will follow the peak in oil production as high prices drag down the whole world's economy. This implies that peak oil is a problem that needs to be addressed since the world economy is heavily dependent on chip oil. Unless viable alternative to oil emerges, and more investments are made in alternative energy sources, the problem will persist since crude oil is a non-renewable resource. The weakness of this theory is that it cannot be used to determine when the peak will occur as it does little to predict the future. In any case, oil production will peak and therefore action needs to be taken now in order to prepare for rising oil prices globally. Rising oil prices however, does not imply utilisation of the oil wealth to transform other sectors of oil producing countries.

Tverberg (2012) offers an alternative theory to the peak oil theory. He argues that there is problem in relying on substitution, supply and demand principle that higher prices of oil destroy its demand, and that greater efficiency and increased production of oil at higher prices will save the day. He said this is wrong. He also disagreed with the notion that oil production will rise and at some point, reach a plateau and begin to decline, because of geological depletion. Alternatively, Tverberg observes that an adequate supply of cheap \$20 or \$30 per barrel of oil is no longer available as most of the 'easy to extract' oil is gone. The cost of extracting oil keeps rising, but the ability of oil importing economies to pay for this oil does not. There are no good low-cost substitutes for oil, so substitution is very limited. He further stated that the big oil importing economies are already finding themselves in poor financial condition, as higher oil prices lead to cut backs in discretionary spending and layoffs in discretionary industries. For

example, the government of the United States is caught up in this, as layoffs led to more need for stimulus funds and for payments to unemployed workers, at the same time that tax revenue is reduced. This means that there could be a temporary drop in oil prices as recession worsens, but eventually demand rises again, oil prices rise again, and the pattern of layoffs and increased financial problem of governments occurs again.

iii. The Dependency Theory: According to Ashley (2013), dependency theory is used to explain the failure of non-industrialised countries to develop economically despite investments from industrial countries. The central argument of this theory is that the world economic system is highly unequal in its distribution of power and resources, and places more nations in a dependent position in relation to the industrial powers. Today poor countries have taken enormous loans from wealthy countries in order to stay afloat. Paying off the compound interest and debt servicing obligations prevent them from investing resources into their own economies, thereby placing them in a position of permanent dependency. This unfortunate circumstance is deepened or worsened by certain groups in developing countries, including landlords, entrepreneurs, top military brass, politicians, merchants, traditional and royal elements, etc, who enjoy high incomes, social status and political power. They constitute a small elite ruling class and work to perpetuate the international capitalist system of inequality (Todaro & Smith, 2003).

The international dependency theory is a neo-classical dependence model and a dualistic development thesis that the world is made up of dual societies of rich nations and poor countries, and in developing countries, pockets of wealth within broad areas of poverty (Gushibet, 2012). The concept of dualism embraces four key elements:

- i. Different sets of conditions of which some are 'superior' and others are 'inferior' can co-exist in a given space;
- ii. This coexistence is chronic and not merely transitional;

- iii. The degree of superiority or inferiority does not show any signs of diminishing, but have an inherent tendency to increase; and
- iv. The interrelations between the superior and inferior elements are such that the existence of the superior elements does not pull up the inferior ones.

These theories have captured the challenges of oil producing countries including Nigeria and it has shown that no country will come to pull us up, until we choose the path of discipline and prudent use of oil revenues. All the theories have their place and relevance, and the study is more inclined to the expectation theory because it prepares us towards a prudent use of oil revenue in order to escape resource curse, Dutch disease, and diversification problem.

Methods and Materials

The methods and materials described the methodology of the study which included unit root test, data sources, model specification and the technique of data analysis gauged by *a priori* expectation based on economic theory.

Unit Root Test

Time series data are often characterised by unit root problem. According to Granger and Newbold (1974), most time series variables are non-stationary and using them in a model without stationarity test might lead to spurious regression. The unit root test evaluates the behaviour of series over time. In other words, the test can be used to evaluate the stability or predictability of time series. If a series has unit root, it means the series is unstable or unpredictable and therefore may not be valid for prediction or forecasting. The test is also used to determine how series respond to shocks, and most importantly, it is carried out to determine the efficiency of a series in making forecast and or policy. That is, it determines whether or not the result from a series can be used in making proficient policy. The unit root test used in this study is the

Augmented Dickey-Fuller (ADF) test because it takes care of possible auto-correlation in the error term by adding the lagged difference terms. Model for this test is as stated below:

$$\Delta Y_t = \beta_t + \beta Y_{t-1} + \sum_{i=1}^{p-1} \alpha_i \Delta Y_{t-i} + \mu_t, t=1, \dots, T \text{-----(1)}$$

Where; Y_t is the endogenous variable; Δ is the first difference operator, β_t is a deterministic term which may consist of the constant or drift and the trend; β and α are coefficients of Y_{t-1} and ΔY_{t-i} respectively; p is the number of lags and the difference terms, ΔY_{t-i} is added to eliminate serial correlation in the residual term μ_t .

Data sources and variables

Data were sourced from official statistics and government reports obtained from secondary sources such as the Central bank of Nigeria, the National Bureau of Statistics, the World Bank and the International Monetary Fund. Internet materials were also utilised for relevant information. The variables of study included output growth (GDP), crude oil revenue, net foreign assets, oil prices, agricultural output, and manufacturing output.

Model specification and technique of analysis

The study employed the Error Correction Model (ECM) approach to estimate and analyse the impact of crude oil revenue on output growth in Nigeria. The model specification is thus expressed and specified in the hypothetical form:

$$Y = \alpha_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 \dots \dots \dots \beta_n X_n + \mu \text{----- (2)}$$

Using the variables chosen in this study, the model becomes:

$$GDP = \alpha_0 + \beta_1 COR + \beta_2 COP + \beta_3 NFA + \beta_4 AGO + \beta_5 MAO + \mu \text{---- (3)}$$

Where; GDP = Output growth (Economic Growth)

COR = Crude oil revenue

NFA = Net foreign assets

COP = Crude oil prices in international market

AGO = Agricultural sector output

MFO = Manufacturing sector output

GDP is the dependent variable; COR, COP, NFA, AGO and MFO are the independent variables of the study.

α = intercept constant

$\beta_1, \beta_2, \beta_3$ = coefficients of independent variables

μ = stochastic variable (disturbance term or error term)

However, if equation 3 is regressed in its nominal form, spurious outcome may likely be reported. Since some of the variables were in billions of naira and prices of crude oil are smaller figures, there is the need to apply logarithms on equation (3) to smoothen the data sets by using log on each variable to convert them to a uniform denominator for reliable result. Thus:

$$\text{LogGDP} = \alpha_0 + \beta_1 \text{LogCOR} + \beta_2 \text{LogCOP} + \beta_3 \text{LogNFA} + \beta_4 \text{LogAGO} + \beta_5 \text{LogMAO} + \mu \text{-----} \quad (4)$$

Further, equation 4 is re-specified into Error Correction Model (ECM) for estimation and analysis:

$$\text{DLog(GDP)} = \alpha_0 + \beta_1 \text{DLog(COR)} + \beta_2 \text{DLog(COP)} + \beta_3 \text{DLog(NFA)} + \beta_4 \text{DLog(AGO)} + \beta_5 \text{DLog(MAO)} + \text{ECT}(-1) + \mu \text{-----} \quad (5)$$

Hypothesis

The paper is based on the understated hypothesis:

H₀: Crude oil revenue does not have significant impact on output growth in Nigeria

H₁: Crude oil revenue does have a significant impact on output growth in Nigeria

The hypothesis was tested with t-test and gauged by the probability value (p-value). The coefficient of determination R² was utilised as a measure of the goodness of fit and the hypothesis was tested with t-test statistic of significance since the sample size is below 30 observations.

A Priori Expectation

The decline in price of crude oil as reviewed in this paper is expected to reduce Nigeria's oil revenue in the period under review. This is based on the positive relationship that exists between price and revenue if other factors are held constant. This proposition is in consonance with economic theory that revenue is a function of price and quantity. That is; $R = PQ$, where R = revenue, P = Price, and Q = quantity. It means that, all things being equal, a decrease in the price of crude oil will invariably translate into a reduction in oil revenue when quantity of crude oil is held constant. Therefore, the coefficients of total export trade, net foreign assets and oil prices ($\beta_1, \beta_2, \beta_3$) are expected to be negative since Nigeria largely depends on oil revenue to fund the economy.

Results and Discussion

Descriptive Statistics

Prior to the econometric analysis of the results, the study conducts descriptive and correlation analysis of the series and the results is presented on Table 1.

Table 1: Descriptive Statistics and Correlation Matrix

Descriptive Statistics						
	GDP	COR	COP	NFA	AGO	MFO
Mean	10.67643	7.999079	4.037172	8.514590	9.281423	8.330398
Std. Dev.	1.045793	0.674006	0.514203	0.784290	0.969511	0.935679
Maximum	11.90749	9.148678	4.695468	9.560293	10.83838	9.745195
Minimum	8.670944	7.020191	3.016515	7.060476	7.149132	6.651572
Correlation Matrix						
GDP	1					
COR	0.644641	1				
COP	0.645180	0.347882	1			
NFA	0.687804	0.664281	0.622026	1		
AGO	0.585404	0.664281	0.602615	0.581093	1	
MFO	0.483761	0.603207	0.551537	0.535546	0.776486	1

Table 1 shows the results of descriptive statistics and correlation matrix for all the variables of the study. The results of the standard deviations in the descriptive statistics indicate that

GDP is the most volatile variable given that the value of its standard deviation is greater than one. The results also show that the difference between the maximum and minimum values of the log of the variables is not wide apart implying the absence of the problem of outliers in the series. The results of the correlation matrix show a mild strong correlation among the variables. This is however expected given the interconnectivity that exists among the variables of study. Further, the unit root test was conducted to check for the stationary properties of the series and the results are presented in Table 2.

Table 2: Results of Unit Root

	ADF in Levels			ADF in First Difference		
	Test statistic	5% CV	10% CV	Test statistic	5% CV	10% CV
GDP	-3.6002**	-3.0299	-2.6552	-2.7089*	-3.0404	-2.6606
COR	-2.2001	-3.0299	-2.6552	-6.8471**	-3.0404	-2.6606
COP	-1.7067	-3.0299	-2.6552	-3.4617**	-3.0404	-2.6606
NFA	-1.3896	-3.0299	-2.6552	-2.6714*	-3.0404	-2.6606
AGO	-2.1017	-3.0299	-2.6552	-3.0107*	-3.0404	-2.6606
MFO	-1.1695	-3.0299	-2.6552	-3.3183**	-3.0404	-2.6606
Resid						

*Note: ** and * indicate significance at 5% and 10% level of significance respectively. CV stands for critical values*

The results of the unit root tests in Table 2 show that only GDP was integrated at level, while all the other variables failed the test at that level. Turning to the first difference, the results show that all the variables are of I(1), at most 10% level of significance. This therefore supports the application of the Error Correction (EC) approach as against the OLS method as shown in Table 3.

Table 3: Results of the Error Correction Test

Dependent Variable: D(GDP)				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(COR)	0.078771	0.028786	2.736401	0.0181
D(COP)	0.164098	0.090625	1.810738	0.0953
D(NFA)	-0.162908	0.107693	-1.512706	0.1562
D(AGO)	0.154096	0.118197	1.303716	0.2168

D(MFO)	0.419430	0.165572	2.533212	0.0263
ECT(-1)	-0.635185	0.311740	-2.037550	0.0643
C	0.090373	0.039017	2.316233	0.0390
Adjusted R-squared	0.600366	S.D. dependent var		0.118725
F-statistic	5.506878	Durbin-Watson stat		1.012484
Prob (F-statistic)	0.005973			

Results in Table 3 shows that all the variables except NFA have positive effects on GDP in Nigeria. A 1% increase in COR, COP, AGO and MFO leads to a rise in GDP by 0.09%, 0.16%, 0.15% and 0.42%. respectively. Evidently, the results show that the effects of COR and MFO are statistically significant at 5% while the positive effect of COP is statistically significant at 10% level, while the positive effect of AGO is statistically insignificant. On the other hand, the results show that the effect of NFA on GDP is negative and statistically insignificant at both 5% and 10% levels of significance. Regarding the error correction term, the results show that the coefficient of the ECT is negatively signed and statistically significant at 10% level of significance. This suggests that, about 63.52% of the disequilibrium that occurs in the short-run will be corrected annually. In effect, the speed of adjustment can be said to be high which reflects the flexible business circle that characterises oil dependent economy. That is, periods of low economic activities are quickly followed by periods of economic boom.

The adjusted R-squared value of 0.60 indicates that about 60% of the changes in GDP is explained by the independent variables incorporated in the model. Similarly, the high value of the F-statistic and the associated probability value of 0.00597 which is less than both 0.05 and 0.10 level of significance suggest that the overall effect of the independent variables on GDP is statistically significant contrary to the *a priori* expectation of the paper.

Conclusion

It is established in this study that sufficient, steady and sustainable revenue generation would facilitate public expenditure for the provision of public goods, infrastructures and welfare services to

the citizens, and for the smooth operation and the ease of doing business for the private sector. This will in turn accelerate the rate of growth and development by stimulating domestic economic activity, and in influencing the level of income, employment and output growth in the country. This requires prudent utilisation and application of government revenue and publicly incurred debts for rapid growth and transformation.

Based on the findings of this study, the following recommendations and implementation strategy have become necessary: Government should maintain a debt-bank deposit ratio of not more than 30 percent and resort to increased use of tax revenue to finance its projects since tax revenue collection is far from the optimum level in Nigeria. This could be achieved by improving its revenue sources and efficient pursuit of tax reforms. Government should employ wider reforms that promote investment in treasury bonds and encourage institutional investors. Government should improve national consciousness on tax obligations and regulations among citizens for enhanced compliance. There is the need for government to strengthen anti-corruption laws and institutions in the country. The major recommendations and implementation strategies which are predicated on the major findings of the study have included the following:

1. Federal and State Governments should prioritise their investment expenditures more to the provision of enduring infrastructures such as efficient road networks, stable power and other public goods that will contribute to the ease of doing business for the private sector to thrive and expand Nigeria's net foreign assets, agricultural output and manufacturing output in the country. This will reduce dependence on oil revenue which is susceptible to price shocks

Implementation Strategy One:

The Federal Government through the Office of the Secretary to the Government of the Federation to communicate the policy choice

on the provision of massive infrastructure to the States and strengthen the mechanism for compliance, monitoring and implementation not later than 1st Quarter 2024.

Implementation Strategy Two:

The Federal and State Governments to prioritise their investment expenditures more to infrastructural provision and ensure effective implementation beginning by 1st Quarter 2024

2. Federal Government of Nigeria should decentralise ownership and control of the Solid Minerals Sector to the States who are on site of mineral deposits in order to facilitate exploration and efficient exploitation of solid minerals for increased revenue generation to finance government expenditure and implement efficient budget deficits at national and sub-national levels in the country.

Implementation Strategy One:

The President of Nigeria to seek and present a constitutional amendment to the National Assembly for the removal and transfer of solid minerals from the Exclusive List to the states not later than 1st Quarter 2023

Implementation Strategy Two:

The Attorney-General of the Federation and Minister of Justice in collaboration with the Secretary to the Government of the Federation to ensure the Gazetting of the amended section of the constitution not later than 2nd Quarter, 2023

Implementation Strategy Three:

The Secretary to the Government of the Federation to direct all state governments to develop mining blueprints peculiar to each state and begin payment of royalties to the Federal Government of Nigeria based on an agreed percentage not later than 3rd Quarter 2023

Implementation Strategy Four:

Each state government to commence exploration and exploitation of solid minerals based on the mining blueprints and pay an agreed percentage as royalties to the Federal Government of Nigeria beginning by 1st Quarter 2024

3. Federal, State and Local Governments should curb or eradicate corruption in the three tiers of government for public debt to have positive impact on growth; such that investment undertakings and efficient allocation of resources including borrowed funds to finance fiscal deficits would be ensured.

Implementation Strategy One:

Federal Government of Nigeria to initiate an Executive Bill to the National Assembly for passage into law an anti-corruption bill based on the principle of 'Death by Hanging' for any person or group of persons caught and proved guilty of corruption and corrupt practices in Nigeria not later than 1st Quarter 2023.

Implementation Strategy Two:

The National Assembly to ensure speedy passage of the anti-corruption Law not later than 3rd Quarter 2023.

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