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## Funding Options for Government Budget in a Resource Rich Country

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### Abstract

This study investigates various funding options for Nigeria's annual budget deficit, utilizing quarterly data spanning the period from 2011q1 to 2021q4. To achieve the study's objective, the Vector Error Correction model was employed, establishing the existence of a long-run relationship among the series. Findings indicate that tax revenue exhibits a higher rate of re-adjustment to equilibrium in the short run compared to other funding options, suggesting its greater effectiveness. This is followed by external borrowing and domestic borrowing. However, the Granger causality test reveals that tax revenue does not Granger-cause economic growth in Nigeria, implying inefficiency in Nigeria's tax revenue. This situation might necessitate broadening the tax base in the economy and improving overall government fiscal operations to narrow the persisting deficit in the budget.

**Keywords:** *Budget deficit, funding option, resource rich country, Nigeria.*

**JEL Classification:** C32, G20, G21, G53

**Cite as:** Ogiji, P., Umeokwobi, R., Yusuf, D. S. (2023). Funding options for government budget deficit in a resource rich country. *Applied Journal of Economics, Management, and Social Sciences*, 4(1), 9-22

### 1. Introduction

This paper explores Nigeria's budget deficit and the various ways it is funded. A budget deficit occurs when a country spends more than it generates in revenue, often leading the government to spend beyond its tax income, surpluses from public enterprises, loans, and borrowing from the central bank through ways and means of advances. Deficit financing, advocated as a means to stimulate economic growth, particularly after a depression ([Keynes, 1936](#)), hinges on addressing revenue shortfalls that accompany fiscal deficits. This prompts the consideration of funding

alternatives, spanning both external and domestic sources, encompassing strategies like mobilizing domestic savings through financial instruments, creating new currencies without interest payments, imposing taxes, and resorting to external debt financing.

However, a country's choice of a financing option is heavily influenced by economic indicators such as revenue base, inflation, exchange rate dynamics, debt sustainability, and trade balance. Nigeria, reliant mainly on its oil sector for revenue, faces unique fiscal policy challenges due to the

enclave nature of its petroleum industry. The country's economy is highly susceptible to the volatility of global oil markets, as evidenced by the 2015–2016 recession and the COVID-19 pandemic, exacerbating fiscal challenges due to its heavy reliance on crude oil prices. Despite being resource-rich, Nigeria struggles to translate its wealth into sustainable long-term growth, with over 50 percent of total export revenue derived from oil. The nation's role as both an oil exporter and a major importer of refined petroleum products adds complexity to its fiscal landscape. The increased subsidy on petroleum consumption and the pressure on exchange rates due to refined petroleum product imports contribute to the nation's fiscal vulnerability.

The fiscal deficit as a percentage of GDP has been on the rise, reaching 4.1% in 2022 (CBN, 2022), posing risks of crowding out private investors, exchange rate pressure, and inflation. Nigeria grapples with low revenue and a high debt servicing ratio, underscoring concerns regarding debt sustainability. In this context, determining an appropriate funding option for the budget deficit becomes critical, especially considering the inflationary impact of deficit financing in developing economies. This study aims to investigate the best financing option amidst Nigeria's rising deficit, exacerbated by recessions in 2015/2016 and the COVID-19-induced recession, across five sections: introduction, literature review, stylized facts, methodology and analysis, and conclusion.

## 2. Literature Review

### 2.1 Theoretical Underpinnings

The Ricardian Equivalent Theory, initially proposed by David Ricardo in the 19th century, forms the theoretical basis for this study and remains influential in modern economic thought, largely due to the contributions of Barro (1974). While certain Keynesian perspectives suggest that a deficit-financed tax cut can positively impact disposable income, consequently boosting aggregate demand, the Ricardian Equivalence Theory argues that whether government spending is financed through current taxes or future taxes, the effects on the economy remain equivalent.

This theory delves into the intergenerational transfer of deficit effects, comprising two components: generational deficit transfer and non-transfer. Scholars, including Bernheim (1987), have explored these components, highlighting their relevance in policymaking. The choice between these components depends on the specific policy issue at hand. For instance, when addressing short-term issues like stimulating aggregate demand within a Keynesian framework, a short-term model is recommended. Conversely, policies concerning medium to long-term capital

accumulation warrant examination of intergenerational concerns (Bernheim 1987). This distinction in approach aligns with the timeframe and objectives of the study. Barro (1974), mathematically estimated the Ricardian Equivalence Theory as:

$$B_t = \frac{1}{1+r_t}(T_{t+1} - G_t + 1) \dots \dots \dots (1)$$

Where  $B_t$  is stated to be deficit finance of the government,  $T_t$  as tax finance,  $G_t$  as government spending.

The assumptions of the Ricardian Equivalence Theory as stipulated by Barro are:

The relevance of government finance patterns to changes in government spending within the economy is a significant area of exploration. Furthermore, the impact of increased government spending due to either augmented tax finance or increased deficit finance is a key consideration. Moreover, the necessity for government debt to match the present value of the government's primary surplus is a pivotal aspect in fiscal analysis.

### 2.2 Empirical Literature

Several studies have investigated the impact of an increasing fiscal deficit on macroeconomic performance in both emerging and industrialized nations. To elucidate the intricacies of this relationship, additional inquiries into the policy implications of the subject were necessary. This exploration takes into account country-specific economic characteristics, including resource revenue dependency, reserve horizon, and development needs. Consequently, the literature in this study is categorized into three strands.

The first strand delves into studies examining the correlation between fiscal deficit and economic growth, while the second strand explores different sources of deficit financing and their implications on the economy. The third strand encapsulates literature addressing issues related to deficit financing in resource-rich countries. Although fiscal deficit serves developmental goals, its impact on the economy is significantly influenced by how the deficit is allocated. The proliferation of deficits without a proportional revenue base has led to high debt-to-GDP ratios in many developing economies.

Consistent with Keynesian theory, numerous authors (Luljeta and Balaj, 2021; Onwioduokit and Inan, 2018; Abdullah, Azaz, and Siddiqua, 2018; Kryeziu and Hoxha, 2021; Osborn, Bose, and Haque, 2007; Adam and Bevan, 2005; Eze, Richard, and Ogiji, 2016; Okoye and Akenbor, 2010; Osuji and Ozurumba, 2013; Okoro, 2013; Ojong and Hycenth, 2013) have established a positive relationship between fiscal deficit and economic growth. This relationship is attributed to the positive impact on economic growth when the fiscal deficit is channeled into the productive sectors of

the economy. For example, using the deficit to finance capital expenditures attracts investment, fostering economic development and expanding the revenue base.

In alignment with this perspective, [Taiwo and Agbatogun \(2011\)](#) affirm that the capital expenditure component of deficit spending plays a crucial role in economic growth in Nigeria. As a result, multiple authors emphasize the significance of deficit financing in influencing the economic growth trajectory of a country. This is underscored by the success stories of industrialized economies, where substantial growth and progress have been achieved despite running large deficits.

On the contrary, a negative relationship between fiscal deficit and economic growth has been identified in several studies ([Vincent, Ioraver, & Wilson, 2012](#); [Wosowei, 2013](#); [Nkrumah, Okoh, and Owasu, 2016](#); [Todorova, 2019](#); [Anusic, 1993](#); [Vit, 2004](#); [Fatima, Ahmed, & Rehman, 2012](#); [Vincent and Clem, 2013](#); [Aero and Ogundipe, 2018](#)). This may be applicable to the Nigerian economy, where a substantial portion of deficit spending is allocated to recurrent expenditure, potentially leading to inflationary pressures. To support this perspective, [Donald and Shuanglin \(1993\)](#) investigated the differential effects of various expenditure categories on economic growth across 58 countries. Their findings indicated that government expenditures on education and defense have a positive impact, while welfare expenditure has an insignificant negative effect on economic growth. Consequently, the high recurrent spending in the Nigerian economy poses a threat to realizing its developmental aspirations.

Fiscal deficits are commonly financed through external and domestic means. External deficit financing is often linked to exchange rate pressures and inflation, as external debts are repaid in foreign currencies, depleting foreign reserves. For an import-dependent economy like Nigeria's, this may exacerbate exchange rate pressures, leading to inflation. Additionally, external debt can impede economic growth due to disincentive effects and decreased investment ([Onakoya and Ogunade, 2017](#); [Catherine, Helene, and Luca, 2002](#); [Ajayi and Oke, 2012](#); [Bolante, Fapetu, and Olufemi, 2015](#); [Poly and Niaz, 2014](#); [Forga, Mbella, & Ngangnchi, 2014](#)). However, [Olusegun et al. \(2018\)](#) observed that external debt positively influences economic growth if the deficit is directed towards productive sectors, a result supported by studies from [Obademi \(2013\)](#), [Tajudeen \(2012\)](#), [Sulaiman, and Azeez \(2012\)](#).

Domestic financing, involving bond issuance, loans, and tax proceeds, presents its own challenges. The major obstacle to economic growth through bond issuance is the crowding out of private investors, as confirmed by

various authors highlighting the detrimental effects on output and employment in the Nigerian economy ([Adeboye, 2003](#); [Christensen, 2004](#); [Adofu and Abula, 2010](#)). Regarding the applicability of taxes as a funding source, [Laffer \(2004\)](#) suggests that lowering tax rates positively impacts output and employment, incentivizing increased state activities.

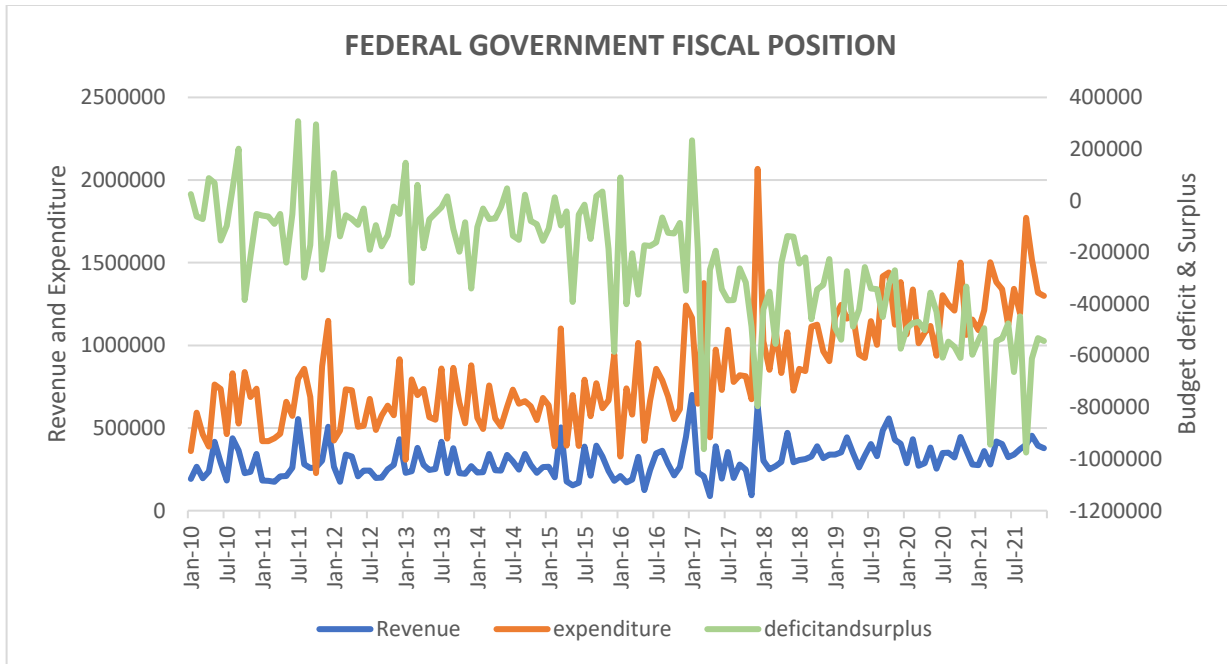
The choice of an appropriate financing option holds paramount significance for resource-rich countries, especially in the context of policy formulation, given the inherent volatility of resource prices that introduces uncertainty into fiscal planning. In the case of a monocultural economy like Nigeria, heavily reliant on oil as a primary source of foreign exchange, the volatility of oil prices directly affects exchange rate management and external debt servicing. Institutional responses to the specific fiscal challenges faced by oil-exporting countries, as highlighted by [Sturm, Gurtner, and Alegre \(2009\)](#), involve conservative oil price assumptions in budgeting, the establishment of oil stabilization funds, savings funds, and adherence to fiscal rules.

The literature identifies several channels through which resource abundance can adversely impact growth, encompassing the Dutch Disease channel, weak institutional frameworks, rent-seeking behavior, a reduction in saving and investment, and the commodity volatility channel ([Eregba et al., 2020](#)). Consequently, studies on deficit financing in nations abundant in natural resources yield contradictory findings. For instance, [Bensal, Dachraoui, and Sebri \(2018\)](#) and [Bulte, Damania, and Deacon \(2005\)](#) assert that resource abundance encourages growth, while [Robinson et al. \(2017\)](#) and [Badeep et al. \(2017\)](#) find a negative relationship attributable to resource price volatility.

There is a lack of consensus in the available literature concerning deficit funding, with varied opinions prevailing in resource-rich nations, especially in Africa, where many are grappling with ongoing oil price shocks. This has significantly impacted the effectiveness of budgetary planning and implementation, a circumstance not unique to the Nigerian economy. Despite its abundant resource base, the Nigerian economy has not efficiently harnessed its advantages. To fortify the case for policy decisions, it is imperative to objectively explore and harness the optimal financing choice, given the relatively sparse literature on this topic concerning the Nigerian economy.

### 2.3 Stylized Facts

To depict the trend in Nigeria's Fiscal Position, Figure 1 below presents the revenue, expenditure, and fiscal deficit of the Nigerian economy from 2010 to 2021.



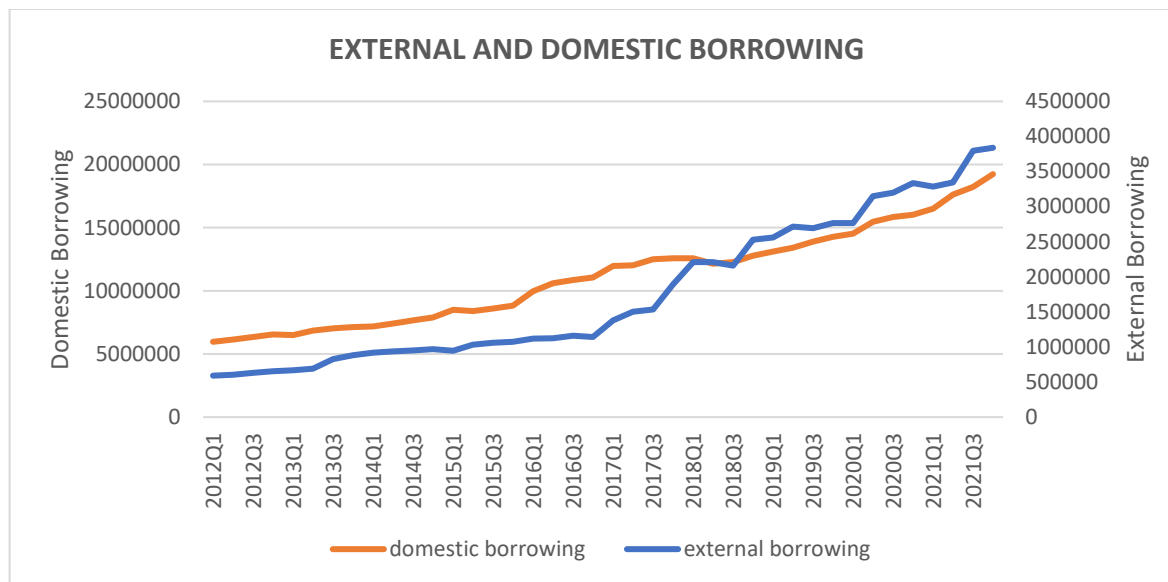
**Figure 1:** Government Revenue, Expenditure and Deficit

**Source:** Authors' compilation

As observed, government expenditure consistently surpassed revenue throughout the review period, indicating that the Nigerian economy incurred deficits to finance its expenditures. This trend is notably evident in the expanding deficit depicted in the accompanying figure. Notably, from 2016 onward, government expenditure consistently outpaced revenue. This surge in expenditure without a corresponding increase in revenue can be attributed to the 2015/2016 recession, triggered by the collapse in crude oil prices. Nigeria experienced a substantial rise in spending amid a decline in oil prices, a critical revenue source for the country, leading to an escalation in fiscal deficits.

In December 2019, the outbreak of the COVID-19 pandemic prompted a lockdown to curb the virus's spread, further thrusting the Nigerian economy into a recession. Consequently, the country faced two recessions within six years. This economic downturn is mirrored in the widening gap between revenue and expenditure, as well as the escalating trend in deficits evident between 2019 and 2021. These economic challenges underscore the complexities and vulnerabilities faced by the Nigerian economy, exacerbated by external shocks such as the oil price collapse and the global pandemic.

Using quarterly data from 2012 to 2021, figure 2 below depicts the trend of domestic and external borrowings for the Nigerian economy.



**Figure 2:** External and Domestic Borrowing

**Source:** Authors' Compilation

As depicted in Figure 2, both external and domestic borrowings have exhibited a consistent upward trajectory. This surge can be attributed to the heightened deficit aimed at achieving developmental objectives. Notably, the trend in domestic borrowing surpassed that of external borrowing, indicating that, during the specified period, domestic borrowing was the predominant means to finance Nigeria's deficit. Specifically, between Q3 2015 and Q1 2018, domestic borrowings experienced an upward surge, driven by the economic recession during that period. A similar trend occurred in 2020, with domestic borrowings rising further due to the impact of the COVID-19 pandemic, leading to lockdowns and economic disruptions.

Moreover, the Nigerian economy has demonstrated an increased reliance on external borrowing. The trend in external debt, particularly between 2016 and 2021, highlights the aftermath of the two recessions experienced within a span of six years. This sustained increase in external debt reflects the economic challenges faced by the country during these periods, emphasizing the necessity for external financing to offset deficits and support developmental initiatives. The figure underscores the intricate dynamics of Nigeria's borrowing patterns in response to economic conditions and external shocks.

### 3. Methodology

#### 3.1 Data and Method

Quarterly data for the study was obtained from the Central Bank of Nigeria (CBN) statistical bulletin and the National Bureau of Statistics (NBS). The variables considered in the model encompass budget deficit and surplus, total domestic

debt, external debt, tax, and GDP, covering the period from Q1 2011 to Q2 2021. This time frame was selected based on the availability of recent and relevant data. According to Statistics Solutions (2022), researchers recommend a minimum of 10 observations per independent variable in a model, and with three independent variables in our study, the 30 observations within the selected scope are deemed sufficient to meet the study's objectives.

The Vector Autoregression (VAR) model, proposed by Sims (1980) for macroeconomic variables, was initially considered. However, both the Unit Root test and Johansen Cointegration test revealed cointegration among the variables. Consequently, the restricted VAR model, known as the Vector Error Correction Model (VECM), was estimated. This choice was influenced by the stationarity of the variables at order (1) and the Johansen cointegration test indicating at least two cointegrating equations in the long run. The VECM introduces an error correction term to align the long-run behavior of endogenous variables with their cointegrating relationship.

Building on the VECM results, the study also employed the Granger Causality test to provide additional insights into the nature of the relationships among the variables. Additionally, tests for heteroskedasticity, autocorrelation, and normality were conducted to ensure the robustness and reliability of the model. These comprehensive diagnostic measures contribute to the overall validity and credibility of the findings in the study.

### 3.2 Model Specification

This study adopts the Ricardian Equivalence Theory in order to build a sample model that can be used to investigate the funding options for the government budget deficit.

$$B_t = \frac{1}{1+r_t}(T_{t+1} - G_t + 1) \dots\dots\dots (2)$$

Where;

B<sub>t</sub>= Budget Deficit

T<sub>t</sub>= Taxation finance

G<sub>t</sub>= Government spending

From equation (2), the LHS of the equation could be substituted into taxation, external borrowing, and domestic borrowing.

$$\frac{1}{1+r_t}(T_{t+1} - G_t + 1) = Tax + Db + EB \dots\dots\dots (3)$$

Equation (3) could be substituted into equation (2), and the model can be specified as:

$$B_t = Tax + Db + Eb \dots\dots\dots (4)$$

Equation (4) can be described as the functional relationship of the funding option model. Mathematically, the model is expressed as:

$$B_t = a_0 + a_1Tax + a_2Db + a_3EB \dots\dots\dots (5)$$

Equation (5) can be further expressed as a vector autoregressive model, and this would be estimated as:

$$Y_t = b_{10} - b_{12}x_t - b_{13}a_t - b_{14}d_t + \gamma_{11}y_{t-i} + \gamma_{12}x_{t-i} + \gamma_{13}a_{t-i} + \gamma_{15}d_{t-i} + \emptyset ECM_{1T-1} + U_t \quad (6)$$

$$X_t = b_{10} - b_{12}Y_t - b_{13}a_t - b_{14}d_t + \gamma_{11}y_{t-i} + \gamma_{12}x_{t-i} + \gamma_{13}a_{t-i} + \gamma_{15}d_{t-i} + \emptyset ECM_{1T-1} + U_t \quad (7)$$

$$a_t = b_{10} - b_{12}x_t - b_{13}y_t - b_{14}d_t + \gamma_{11}y_{t-i} + \gamma_{12}x_{t-i} + \gamma_{13}a_{t-i} + \gamma_{15}d_{t-i} + \emptyset ECM_{1T-1} + U_t \quad (8)$$

$$d_t = b_{10} - b_{12}x_t - b_{13}a_t - b_{14}y_t + \gamma_{11}y_{t-i} + \gamma_{12}x_{t-i} + \gamma_{13}a_{t-i} + \gamma_{15}d_{t-i} + \emptyset ECM_{1T-1} + U_t \quad (9)$$

Where  $y_t$  = budget deficit and surplus,  $x_t$  = External borrowing,  $a_t$  = Tax revenue,  $d_t$  = Total domestic borrowing.

### 4. Analysis and Results

The analysis and result would report the pre-estimation test, estimation, and post-estimation test. The pre-estimation test would be unit root test, lag-length criteria, and cointegration test, and the analysis using var, would center on the impulse response of the variables and granger causality among the variables.

#### 4.1 Unit root test

The ADF unit root test results in table 1 show that deficit and surplus, external debt, tax, total domestic debt are stationary at first level, hence, integrated of order I(1). This is so because the calculated values are greater than their critical values. Therefore, the null hypothesis of prevalence of unit root in the series is accepted. Similarly, in order to estimate the VAR model, the Lag-length Criteria was estimated to determine the appropriate lag-length to be used in the model, see Table 2:

Table 1: The Augmented Dickey Fuller (ADF) method was employed to conduct the unit root test as shown below.

Calculate values		Critical Values		
Variables	Level	First diff	5%	Order of integration
DAS		-9.59	-2.93	I(1)
ED		-6.64	-2.93	I(1)
TAX		-6.64	-2.94	I(1)
TDD		-4.64	-2.93	I(1)

Lag-length criteria:

Table 2: Lag-length Table

Lag	Logl	Lr	Fpe	A/c	sc	Hq
0	-1545.83	NA	3.86E+29	79.47823	79.64885	79.53945
1	-1404.27	246.81	6.21E+26	73.03962	73.89273*	73.34571*
2	-1387.9	25.1909	6.27E+26	73.02044	74.55604	73.5714
3	-1372.22	20.91078	6.85E+26	73.03669	75.25478	73.83252
4	-1344.34	31.45463*	4.30e+26*	72.42745*	75.32802	73.46815
5	-1335.87	7.812887	8.19E+26	72.81391	76.39697	74.09948

From the result, the AIC criterion, which has 4 lags is selected. This was chosen because three criteria (LR, FPE and AIC) selected 4 lags, while two criteria (SC and HQ) selected 1 lag.

#### 4.2 Cointegration test

The Johansen Cointegration test is adopted to investigate the level of cointegration and the long run relationship among the variables.

Table 3: Johansen Cointegration Table

Hypothesized	Trace			
No. of CE(s)	Eigenvalue	Statistics	0.05 Critical Value	Prob**
None*	0.598908	66.59108	47.85613	0.0004
At most 1*	0.377892	30.96208	29.79707	0.0366
At most 2	0.266015	12.45108	15.49471	0.1365
At most 3	0.009941	0.389652	3.841465	0.5325

The Johansen Cointegration test in Table 3 indicates that there are two cointegrating equations in the model. This implies the existence of a long-run relationship among the variables.

Table 4: Johansen Normalized Cointegration Table

DAS	ED	TAX	TDD
1.000000	0.048981	-0.29112	-7.82E-05
	(0.032)	(0.48857)	(8.00E-05)

The Johansen Normalized Cointegration table is interpreted inversely. Thus, External borrowing has negative impact on Nigerian Budget in the long run, which implies a unit change in external borrowing would bring about a 4 percent decrease in Nigerian budget. On the other hand, a unit change in the tax revenue would bring about a 29 percent increase in the Nigerian budget. Similarly, total domestic debt also has a positive impact on Nigerian budget, although the impact is minimal compared to tax revenue.

#### 4.4 VAR Impulse Response

The VAR impulse response shows the behavior of a variable to a shock from another variable in the model of study, figure 1, 2 and 3 depicts some shocks and response of other variables in the funding option model.

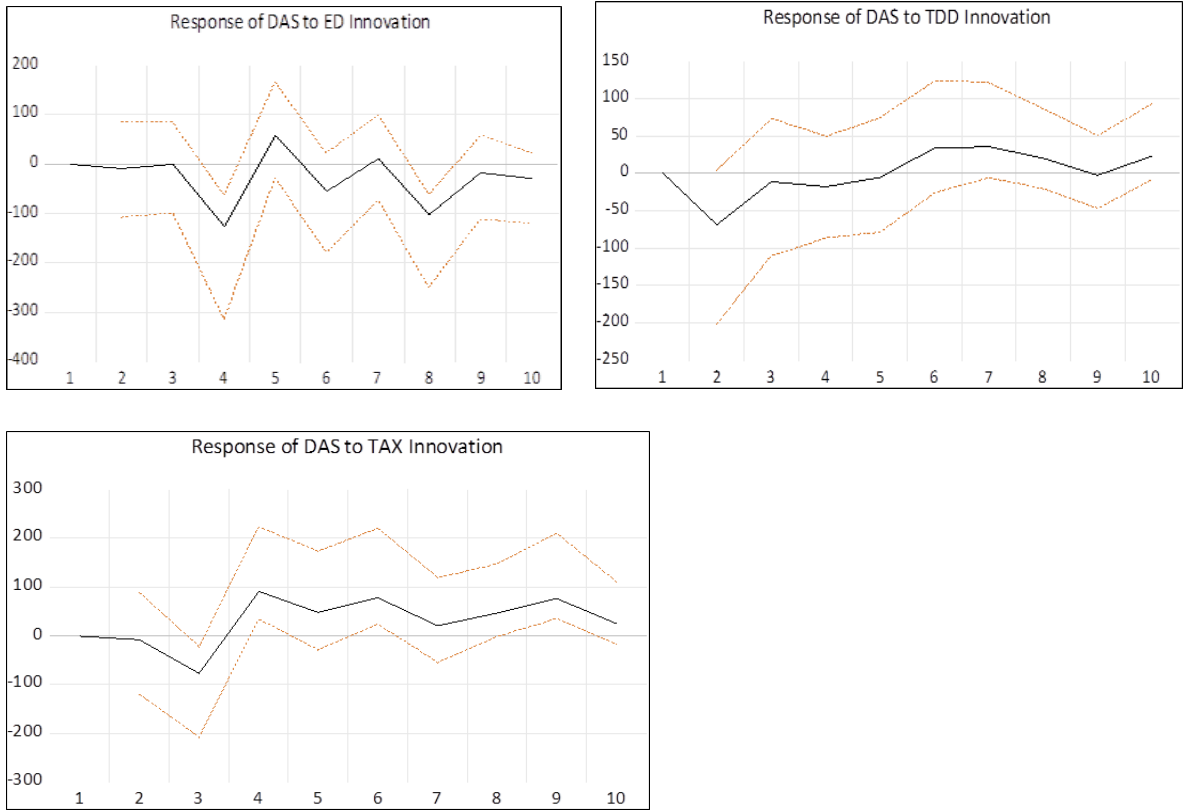


Figure3: Impulse and response

Analysis of figure 3 shows that shock from external borrowing has a negative impact on Nigeria's annual budget, which could culminate in a deficit. Though an increase was observed in the short run, the long run shock would result to a deficit in the Nigerian budget.

The analysis also showed that shock from domestic borrowing seems to have a better effect and is less volatile than external borrowing. This is because in the short run, domestic borrowing tends to have a negative impact on the budget, however, in the long run, a positive impact could be realized.

Finally, Figure 3 reveals that shock from tax has a better response than other funding option in the model.

From the last period of the short run to long run, the response of Nigeria's budget to tax revenue has been positive. This shows that tax revenue is more effective compared to other funding options in the model.

**4.5 Granger Causality Test**

Since the Vector Error Correction model has proven the effectiveness of tax as a better funding option to Nigeria's budget, the Granger Causality test would be used to indicate the direction of causality between tax and GDP to determine its efficiency.

Table 6: Granger Causality Table

Null Hypothesis	obs	F-statistics	Probs
Tax does not granger cause gdp	34	0.661952	0.582647
Gdp does not granger cause tax		0.537501	0.660613

Based on the probability value, which is greater than the 0.05 percent level of significance, tax does not granger cause GDP, thus, the null hypothesis would be accepted. Therefore, tax as a funding option is effective but not efficient, in view of its potential impact on disposable income.

**Post Estimation Test**

Table 7: Autocorrelation Table

Lag	Lre <sup>+</sup> stat	df	prob.	Rao. F-stat	df2	prob.3
1	8.32	16	0.94	0.49	(16, 55.6)	0.94
2	18.59	16	0.29	1.20	( 16, 55.6)	0.29
3	22.21	16	0.13	1.48	(16, 55.6)	0.14

Table 7 presents the result of autocorrelation test between different lags of the model. The outcome suggests that there is no autocorrelation in the model as the probability values are all greater than 0.05.

Table 8: Heteroskedasticity Table

Joint test		
Chi-square	df	prob.
301.94	280	0.18

The joint test of heteroscedasticity in table 8 shows that the variables are free from heteroscedasticity because the probability value is greater than 0.05, this means that the model is homoscedastic.

Table 9: Normality Table

Component	Jarque-berra	df	prob.
1	4.18	2	0.12
2	5.91	2	0.05
3	1.33	2	0.51
4	0.88	2	0.64
Joint	12.31	8	0.14

The Jarque Berra statistics in table 9 reveal that the model is normally distributed because all probability values and the joint probability are greater than 0.05.

To answer the objective of this study, which is to investigate the appropriate financing option. Using the var analysis we found the various response of DAS to ED, TDD, and TAX innovations. The granger causality test showed the various causality variables in the model. The post estimation test showed the stability of the model. This were all used to achieve the objective of the paper.

## 5. Conclusion and Policy Implication

### 5.1 Conclusion

The study set out to investigate funding options for government deficit in a resource rich country like Nigeria. To carry out the analysis, three funding options (external

borrowing, domestic borrowing, and tax) were utilized in order to determine the best option for budget deficit financing in Nigeria. The impulse response of the VECM was employed to explore the response of Nigeria's budget to shocks to the selected financing options. Result revealed that tax revenue is a more effective option for deficit financing. To deepen the analysis, the Granger Causality test was further utilized to ascertain the efficiency of tax revenue in financing deficit. This was achieved by investigating the direction of causality between tax revenue and GDP. Findings showed that tax revenue is not efficient in deficit financing as it does not granger cause economic growth. This could be as a result of the poor tax system in Nigeria.

### 5.2 Policy Implications

Tax being an effective financing option, the Nigerian government should dwell more on utilizing tax to finance its

deficit. However, since the issue of inefficiency arises because of the inability of tax to influence growth due to the underutilization of government expenditure, the Nigeria government should adopt effective fiscal federalism, as the benefits cannot be over emphasized.

The Federal Government should work towards improving the tax system by ensuring good, effective, and efficient tax administration. This can be achieved through investment in ICT tools to boost collection efficiency, thus, addressing the issue of corruption, increasing tax awareness, simplifying tax laws and enhancing independence of tax authorities.

The federal government should broaden the tax base by striving to diversify the economy, and by offering tax haven to investors. In addition to diversification of the economy, the tax base can also be broadened by putting a searchlight on the entertainment industry, which is fast developing, and embarking on training of tax officers in order to improve efficiency in the system.

## 5.2 Limitations and Future Directions

In terms of limitations, one potential area to consider is the availability and accuracy of data on government deficit funding options in Nigeria. Additionally, it would be interesting to explore the potential impact of external factors, such as global economic conditions, on these funding options. As for future directions, it could be valuable to investigate the effectiveness of different fiscal policies in managing government deficits in resource-rich countries like Nigeria.

## REFERENCES

- Adofu, I., & Abula, M. (2010). Domestic debt and Nigerian economy. *Current Research. Journal of Economic Theory*, 2 (1), pp. 22-26.
- Adeboye, F. O. (2003). The Relationship between Budget Deficit and Economic Growth in Nigeria. *Nigerian. Journal of Economics Development Matters*, 4 (6), pp.103-112.
- Ajayi, L. B., & Oke, M. O. (2012) "Effect of External Debt on Economic Growth and Development of Nigeria." *International Journal of Business and Social Science* 3(12), pp. 297-304
- Abdullah, S. M., Azad, A. & Siddiqua, S. (2018). Budget deficit and growth: in search of ceiling for Bangladesh. *Business and Economic Horizons*, 14(4), pp. 743– 765.
- Adam, C., & Bevan, D. (2005) "Fiscal Deficits and Growth in Developing Countries". *Journal of Public Economics*, 89(4), pp. 571-597.
- Alexeev, M., & Conrad, R. (2009). The Elusive Curse of Oil. *The review of Economics and Statistics*, 91(3), pp. 586 - 598
- Aero, O., & Ogundipe, A.A. (2018). Fiscal Deficit and Economic Growth in Nigeria: Ascertaining a Feasible Threshold. *International Journal of Economics and Financial Issues*, 8(3), pp. 296-306.
- Bhari, A. A., Lau, W. Y., Aslam, M., & Yip, T. M. (2020). The Nexus Fiscal Deficit and Economic Growth in Malaysia. *Journal of South Asian Studies*, 25(1), pp. 79-94.
- Bernheim, B. D. (1987), *Ricardian Equivalence: an Evaluation of Theory and Evidence*. NBER Working Paper, National Bureau of Economic Research.
- Babatunde, O. A., & Olayinka, O. A. (2017). External Debt and Nigerian Economic Growth Connection: Evidence from Autoregressive Distributed Lag Approach. *Journal of Economics and Development Studies*, 5(1), pp. 66-78.
- Boboye, A. L., & Ojo, M. O. (2012). Effect of External Debt on Economic Growth and Development of Nigeria. *International Journal of Business and Social Science*, 3(12), pp. 297-304.
- Brunnschweiler, C. N., & Bulte, E. H. (2006). The Resource Curse Revisited and Revised: A Tale of Paradoxes and Red Herrings, Center of Economic Research at ETH Zurich, Working Paper No. 06/61, Centre of Economic Research.
- Bulte, E. H., Damania, R., & Deacon, R. T. (2005). Resource Intensity, Institutions, and Development. *World Development*, 33 (7), pp. 1029–1044.
- Bolanle, A., Fapetu, O., & Olufemi, A. A. (2015). External Debt or Foreign Direct Investment: Which has greater significant economic impact on Nigeria? *European Scientific Journal*, 1(19), pp. 185 – 195.
- Badeeb, R. A., Lean, H. H., & Clark, J. (2017). The Evolution of the Natural Resource Curse Thesis: a critical literature survey. *Resource Policy, Elsevier*, 51(C), pp. 123–134.
- Barro, R. (1974) Are Government Bonds Net Wealth? *Journal of Political Economy*, 82, 1095-1117. <https://doi.org/10.1086/260266>.
- Ben-Salha, O., Dachraoui, H., & Sebri, M. (2018). Natural Resource Rents and Economic Growth in the Top Resource-abundant Countries: A PMG Estimation. *Resource Policy, Elsevier*, 74(C).
- Christensen, J. (2004). Domestic debt market in Sub-Sahara Africa. IMF Working Paper No. 0646.
- Corden, W. M. (1984). Booming Sector and Dutch Disease Economics: Survey and Consolidation. *Oxford Economic Paper*, 36 (3), pp. 359–380.
- Chinaemerem, O. C., & Ozurumba, B. (2013). Impact of External Debt Financing on Economic Development in Nigeria, *Research Journal of Finance and Accounting*, 4(4), pp. 92 -98.
- Catherine, P., Helene, P., & Luca, R. (2002). External Debt and Growth. *Review of Economics and*

- Institutions*, 2(3).  
Central Bank of Nigeria (2022). CBN Statistical Bulletin
- Dash, R. J., & Sharma, C. (2008). Government Expenditure and Economic Growth: Evidence from India. *The UIUP Journal of Public Finance*, 3, pp. 60 -69.
- Donald NB, Shuanglin L, 1993. The Differential Effects on Economic Growth of Government Expenditures on Education, Welfare, and Defense. *Journal of Economic Development*, 18(1), pp. 175-185.
- Davis, G., & Tilton, J. (2005). The Resource Curse. *Natural Resources Forum* 29, pp. 233–242.
- Eze, R.O., & Ogiji, F.O (2016). Impact of Deficit Financing on Economic Stability in Nigeria. *Journal of Applied Finance & Banking*, 6(1), pp.1-7.
- Eregha, P.B, Mesagan E.P., Perekunah B.E., Ekundayo, P.M. (2020). Oil Resources, Deficit Financing and Per Capital GDP Growth in Selected Oil – Rich African Nations, Resources Policy, Elsevier, 66.
- Fatima, G., Ahmed, M., & Rehman, W. U. (2012). Consequential Effects of Budget Deficit on Economic Growth of Pakistan. *International Journal of Business and Social Science*, 3(7), pp. 203-208.
- Forgha, N. G., Mbella, M. E., & Ngangnchi, F. H. (2014): “External Debt, Domestic Investment and Economic Growth in Cameroon” A system Estimation Approach. *Journal of Economics Bibliography*, 1(1), pp. 3-16.
- Luljeta, G., and Balaj, D. (2021). Assessment of Fiscal Deficit on Economic Growth in Transition Countries of South-Eastern Europe. *Journal of Liberty and International Affairs*, 7(3), pp. 102-107.
- Hassan, Z., & Lampur, K. (2018). Deficit Financing in Developing Countries: Application and Consequences. International Center for education in Islamic Finance INCEIF, Malaysia.
- IMF (2012). Fiscal Frameworks for Resource-rich Developing Countries, IMF Staff Discussion Note
- Keynes, J. M. (1936). The General Theory of Employment, Interest, and Money.
- Kryeziu, N., & Hoxha, E. (2021). Fiscal Deficit and its Effects on Economic Growth: empirical evidence Nexhat. *International Journal of Finance & Banking Studies*, 10(1), pp. 62–70.
- Nkrumah, K. O., Orkoh, E., & Owusu, A. M. (2016). Exploring the Budget Deficit- Economic growth Nexus: New Evidence from Ghana. *Journal for the Advancement of Developing Economies*, 5(1), 30–43.
- Onwioduokit, E. A., & Inan, U. S. (2018). Budget Deficit and Economic Growth in Liberia: Empirical Investigation. *American Journal of Humanities and Social Sciences Research*, 2(6), pp. 68–78.
- Ossowski, H., & Halland, R. (2016), Fiscal Management in Resource-Rich Countries: Essentials for Economists, Public Finance Professionals, and Policy Makers, World Bank Group.
- Osborn, D., Bose, N., & Haque, M. (2007) “Public Expenditure and Economic Growth: A Disaggregated Analysis for Developing Countries”. Manchester School, 75, pp. 533-556.
- Okoro, A. S. (2013). Deficit Financing and Trade Balance in Nigeria. *International Journal of Accounting Research*, 2(1), (2013), pp. 49-54.
- Obademi, O. E. (2013). External debt and Nigeria’s Economic Growth Nexus: Matters Arising. *Journal of Poverty, Investment and Development*, 1, pp. 22-28.
- Okoye, E. I., & Akenbor, A. S. (2010). An Empirical Investigation of the Impact of Deficit Financing on Socio-Economic Activities in Nigeria. *Journal of Management Sciences*, 10(1), pp. 95-106.
- Ojong, C. M., & Hycent, O. O. (2013). Effect of Budget Deficit Financing on the Development of the Nigerian Economy. *European Journal of Business and Management*, 5(3), pp. 61-84.
- Onakoya, A. B., & Ogunade, A. O. (2017). External debt and Nigerian economic growth connection: Evidence from autoregressive distributed lag approach. *Journal of Economics and Development Studies*, 5(1), pp. 66-78.
- Olusegun, E. A., Olufemi, S. A., & Olubunmi, E. O. (2020). The Impact of External Debt on Economic Growth in Nigeria. *International Journal of Scientific and Research Publications*, 10(4), pp. 716 – 721.
- Pattillo, C, Poirson, H., & Ricci, L. (2002). External debt and economic growth, IMF Working paper, Washinton DC, 29 July. <https://doi.org/10.5089/9781451849073.001>.
- Poly, F., & Niaz, M. C. (2014). Impact of foreign debt on growth in Bangladesh: An Econometrics Analysis. *International Journal of Developing & Emerging Economics*, 2(4), pp. 1-24.
- Robinson, J. A., Torvik, R., & Verdier, T. (2017). *The Political Economy of Public Income Volatility: With an Application to the Resource Curse*, *Journal of Public Economics*. Elsevier, 145(C), pp. 243-252
- Sachs, J., & Warner, A. M. (1995). Natural Resource Abundance and Economic Growth, “NBER Working Papers 5398, National Bureau of Economic Research, Inc.
- Sulaiman, L. A., & Azeez, B. A. (2012). Effect of external debt on economic growth of Nigeria. *Journal of Economics and Sustainable Development*, 3(8), pp. 71-79.
- Sturm, M., Gurtner, F., & Alegre, J. G. (2009). Fiscal Policy Challenges in Oil Exporting Countries. European Central Bank, 104.

- Sims, C. (1980). Macroeconomics and Reality. *Econometrica*, 48(1), pp.1-48.
- Statistics solutions (2022). Complete Dissertation. *Expert Guidance Every Step of the way*
- Taiwo Adewale Muritala, 2012. Empirical Analysis on Impact of External Debt on Economic Growth in Nigeria, "Acta Universitatis Danubius. OEconomica, Danubius University of Galati, 8(6), pp. 123 – 137, December.
- Tajudeen, E. (2012.) External borrowing and economic growth in Nigeria. *Journal of Management and Social Sciences*, 1(1), pp. 1 – 9.
- Tung, L. T. (2018). The Effect of Fiscal Deficit on Economic Growth in an Emerging Economy: Evidence from Vietnam. *Journal of International Studies*, 11(3), pp. 191-203.
- Taiwo, A. S., & Agbatogun, K. K. (2011). Government Expenditure in Nigeria: A Sine Que Non for Economic Growth and Development. *Journal of Research in National Development*, 9(2), pp. 155-162.
- Titus, O. A., Chidi, T. O., Tochukwu, O. R., & Babatunde, O. O. (2016). Domestic Debt and Economic Growth in Nigeria: Data Based Evidence. *Greener Journal of Economics and Accountancy*. 5 (1), pp. 1-12.
- Vincent, N. E., Ioraver, N. T., & Wilson, E. (2012). Economic Growth and Fiscal Deficits: Empirical Evidence from Nigeria. *Economic and Finance Review*, 2(6), pp. 85-96.
- Vincent, N. E., & Clem, I. N. (2013), Fiscal deficits and private investment: Econometric evidence from Nigeria. *International Journal of Innovative Research in Management*, 3(2), pp. 1-18.
- Wosowei, E. (2013). Fiscal Deficits and Macroeconomic Aggregates in Nigeria. *Kuwait Chapter of Arabian Journal of Business and Management Review*, 2(9), pp. 72– 82.