

Artificial Intelligence formulated this projection for compatibility purposes from the original article published at Global Journals. However, this technology is currently in beta. *Therefore, kindly ignore odd layouts, missed formulae, text, tables, or figures.*

CrossRef DOI of original article:

1	Implication of Fiscal Deficit Financing on External Debt
2	Sustainability in Nigeria
3	Olayide Olayinka Olaoye ¹ and Sunday O. Odumeru ²
4	¹ Ajayi Crowther University
5	Received: 1 January 1970 Accepted: 1 January 1970 Published: 1 January 1970
6	

7 Abstract

The accumulation of debt for developmental purpose has failed to yield the desirable 8 transformation. So, the study investigated the impact of fiscal deficit financing on external 9 debt sustainability in Nigeria. The dual gap theory formed the basis of the study. Using 10 annual time series data from 1981 to 2020 and the Autoregressive distributed lag technique, 11 the study found that lagged external debt, exchange rate and fiscal deficit significantly 12 impacts external debt servicing in Nigeria. Therefore, it was recommended that government 13 should use external loans productively; public policy should be geared towards export 14 promotion; and interest rate should be very low. 15

16

17 Index terms—fiscal balance, financing gap, sustainability, domestic resource gap, trade gap.

18 1 Introduction

iscal deficit is an important macroeconomic variable that gives signal about the level of vulnerability of the
economy. Fiscal deficit exists when the planned total expenditure of government exceed the planned total
revenue. Fiscal deficit is an indicator of the financial status of an economy. Therefore, the management of fiscal
deficit is a crucial element of fiscal policy (Chukwu, Otiwu & Okere, 2020).

In developing economies, fiscal deficit has followed haphazard trends. Table ??.1 presents a six period trend of 23 fiscal deficit in Brazil, Ghana, South Africa and Nigeria from 1991 to 2020. Table ??.1 shows that Brazil had an 24 25 average deficit budget of N1.33million from 1991 to 1995 and maintained a budget deficit up until 2020 although 26 it experienced fluctuations during this period. Ghana had an average budget deficit of N1.50million between 1991 and 1995. This kept increasing until 2001 where it had an average budget surplus of N0.19million. The budget 27 surplus declined to a deficit of N0.69million between 2006 and 2010 and continued decreasing up until 2020. 28 South Africa also had an average budget deficit of N0.81million between 1991 and 1995. This fluctuated over 29 the years and sharply dropped to N1.13 million between 2016 and 2020. Nigeria had an average budget surplus 30 of N0.20million between 1991 and 1995 and it fluctuated and declined sharply to an average budget deficit of 31 N0.25million from 2015 to 2020. Amongst these countries, Ghana had the highest average budget deficit of 32 N1.50million between 1990 and 1995 while Nigeria had an average surplus of N0.20million. As at 2020, South 33 Africa had the highest average budget deficit of N1.31million while Nigeria had the lowest deficit of N0.25million. 34 Goal 17 of the United Nations (UN, 2015) sustainable development goals (SDG) aims at partnership for the 35 36 goals. In order to attain SDG 17 it is expected that the value of fiscal deficit must be low and sustainable. Even 37 though Nigeria seems to be faring better than other developing countries in terms of fiscal deficit balance, fiscal 38 deficit in Nigeria has been fluctuating at alarmingly rates (Musa, 2021). Fiscal balance growth rate increased from 13.29% in 1981 to 22.56% in 1990. Fiscal balance growth rate became negative (-100.81%) in 1995, but 39 increased drastically to 2331.7% in 1996. Again, fiscal balance growth rate fell to 114.42% in 1997. Thereafter, 40 fiscal balance rose sharply to 2353.23% in 1998. In 2000, there was a decline (-71.75%) and thereafter, fiscal 41 balance growth rose to 82.69%. in 2009, fiscal balance growth plummeted to 1471.65% but fell drastically to 42 6.93% in 2010. As at 2020, fiscal balance growth stood at 20.88% and Nigeria has been consistently operating 43 deficit financing since 2015 till date [Central Bank of Nigeria (CBN), 2021]. 44

⁴⁵ 2 Period/ Country

46 1991

Besides, in Nigeria, recurrent expenditure forms the larger chunk of fiscal deficit -80 percent, while capital expenditure accounts for the remaining 20 percent (CBN, 2021). This condition seems to be at variance with the goal of achieving sustainable economic development.

Fiscal deficit could be financed locally or externally ??Greg & Okpoiarikpo, 2015) through taxation, borrowing 50 and monetization (Eke & Akujuobi, 2021). These sources of financing pose both short-run and long-run effects 51 on the economy (Momodu & Monogbe, 2017). In both developed and developing countries, several measures 52 have been taken in terms of policies to resolve fiscal imbalances (Amwe & Wuyah, 2015). However, many 53 policies and programmes of government have resulted in tax increase and persistent public borrowing in order 54 to meet budgetary demands (Momodu & Monogbe, 2017). One of such is the structural adjustment programme 55 (SAP), which was embraced by many African countries in the 1980s. Notwithstanding, these economies have not 56 experienced the desired level of economic transformation. 57

Borrowing could be from domestic or external sources (Adegboyo, Efuntade, & Efuntade, 2020). However, 58 in case of developing countries where domestic saving is relatively low, governments have opted for external 59 borrowing. Comparing the debt-to-GDP ratio in Nigeria with similar economies like Brazil (6.3%), India (9.5%), 60 and South Africa (15.7%), it would be noted that the debt burden in Nigeria has worsened in recent years. The 61 debt-to-GDP ratio increased from 16.3% in 2016 to 22.3% in 2020, while debt repayments-to-revenue reduced from 62 50.3% in 2016 to 83.0% in 2020 [Central Bank of Nigeria (CBN), 2021]. External debt burden incurred as a result 63 of deficit financing reduces the purchasing power of citizens. This is because external debt is serviced in foreign 64 currencies thereby increasing the units of local currencies that will exchange for a unit of foreign currencies; leading 65 66 to an unfavourable exchange rate condition. Thus, fiscal deficit creates imbalance in the current account which 67 triggers exchange rate appreciation and balance of payments disequilibrium. Hence, macroeconomic challenges 68 such as huge debt burden, high inflation rate, heavy import dependence, high unemployment rate are generated (Amwe & Wuyah, 2015). For example, fiscal deficit rose by 137% from ?2.36 trillion in 2017 to ?5.60 trillion in 69 2021 and debt service rose by 17% from N2,678.81 billion in 2020 to N3,124.38 billion in 2021 (CBN, 2021). 70

Considering the risk of borrowing and debt repayment in foreign currencies, the impelling goal should be to
 reduce debt burden. However, due to the alarming rate of widening of fiscal deficit and debt repayment obligation,
 the sustainability of the Nigerian economy in terms of external debt is questionable.

Therefore, this study aims at examining the level of influence of fiscal deficit on external debt in Nigeria. Specifically, the current study aims at: i. Ascertaining the strength of the relationship between fiscal deficit and external debt in Nigeria; ii. Determining the directional link between fiscal deficit and external debt in Nigeria; iii. Examining the impact of fiscal deficit on external debt sustainability in Nigeria.

Previous studies in this area are mainly focused on the relationship between fiscal deficit or external debt with 78 79 other macroeconomic variables such as real gross domestic product (GDP), private and public investment and economic development. For instance Akanmobi & Unachukwu (2021) explored the impact of budget deficit on 80 gross domestic product (GDP) growth in Nigeria; Musa (2021) examined the effect of deficit financing on GDP in 81 Nigeria; Eke & Akujuobi (2021) investigated the effect of public debt on economic growth in Nigeria; while Greg 82 and Okoiarikpo (2015) examined the impact of political considerations and institutional quality under different 83 administrative regimes on the growthperformance of fiscal deficit. This study stands out by examining the impact 84 of fiscal deficit on external debt sustainability and possible feedback effects from external debt to fiscal deficit. 85

The study covered forty-year period; from 1981 to 2020. The start year enabled robust study of the impact of relevant policy interventions on the Nigerian economy and the end year afforded the researcher an up-to-date investigation. Time series data obtained from the Central Bank of Nigeria Statistical Bulletin (2021) and the World Development Indicators (2021) was used. The study is divided into five sections. After this introductory section, Section Two contains the review of literature. Section three handles the theoretical framework and model specification, while section four presents the results and discussion of findings. Finally, section five concludes the study with policy recommendations.

93 **3 II.**

⁹⁴ 4 Review of Literature

Fiscal deficit occurs when public expenditure on goods and services exceeds public revenue from taxation and all other sources in a particular year (Akanmobi & Unachukwu, 2021). Fiscal deficit differs from public debt; which arises from the accumulation of fiscal deficits. Usually government borrows to finance the gap between public expenditure and public revenue. This may lead to serious economic issues like crowding-out effect, higher interest payments and huge debt burden (Boyce, 2020).

Fiscal deficit (budget deficit) implies that in a fiscal year, government plans to spend more funds than she intends to generate. On the other hand, budget surplus, which is a plan to generate more public revenue than expenditure within a fiscal year, seems to be more Volume XXII Issue VII Version I 36 () logical. Accumulated surpluses could be used during periods of economic recessions or war (Boyce, 2020). However, fiscal deficit is not necessarily an economic problem because government can use deficit financing as a technical tool to solve other macroeconomic problems within the economy. Fiscal deficit incurred as a result of consumption expenditures may
 be harmful to an economy, while fiscal deficit due to investment expenditures may be beneficial to an economy.
 For example, public capital expenditure on acquisition of infrastructure such as construction of roads, rail lines,
 building of dams for the generation of electricity and water supply will yield returns not only in the present.

Future generations will benefit from such investment expenditures if properly maintained. This leads to the concept of sustainability.

The concept of sustainability deals with the fact that current production and consumption activities should be 111 done in such a way that the resources will still be available for future generations. Fiscal deficit financing leads 112 to government decision to increase taxes, borrow or increase spending. These decisions have multiplier effects 113 in the economy, which may be undesirable to the citizens. In the short-term, these government decisions may 114 seem to be the way-out but the long-term effect may be detrimental to the economy. For example, increased 115 government spending aimed at stimulating output may prove sticky. Government capital spending in building 116 schools or health centres may necessitate further recurrent expenditure in the maintenance of such. Also, public 117 response to cyclical fluctuations, for instance increase in government spending on unemployment benefits during 118 economic contraction may continue after economic recovery if citizens are unwilling to take up paid jobs. Besides, 119 interest payment on debt due to continuous deficit financing may be burdensome. 120

Keynes ??1936) opined that increase in government spending stimulates aggregate demand and consequently spurs economic growth. Therefore, Keynes advocates for fiscal deficit financing. According to him, fiscal deficit financing will stimulate aggregate demand and domestic production; thereby crowding in investment and reducing unemployment. However, fiscal deficit can be harmful when spending is not directed towards productive activities which would lead to expansion in output (Adegboyo, Efuntade & Efuntade, 2020). So, deficit financing should be a short-run phenomenon.

On the other hand, Akanmobi and Unachukwu (2021) argued from the Ricardian perspective that fiscal deficit financing has no effect on economic growth. The authors are of the view that increases in government spending leads to decrease in public savings, which will in turn lead to increase in desired private savings. Hence, desired national savings and investment remains the same in a closed economy. In an open economy, if the desired private savings increases so much that there would be no need for external borrowing; fiscal deficit will also have no effect on the economy (Akanmobi & Unachukwu, 2021).

The neoclassical view is that increase in fiscal deficit will spur the overall consumption level in an economy; leading to a fall in national savings. This will give rise to a higher interest rate in a closed economy. Investment is adversely affected and economic activities reduce. In an open economy, increase in fiscal deficit will amount to increase in capital inflow; leading to exchange rate appreciation, reduction in net exports and crowding out of investment. Thus, fiscal deficit adversely impacts on the economy (Musa, 2021).

The dual-gap theory argues that the development of an economy depends on the level of investment; which in turn requires domestic savings. In a situation where domestic saving is insufficient to meet the investment needs in an economy, external borrowing will be necessary. Hence, the size of external debt will be equal to the domestic resource gap.

Many studies have examined the effect of fiscal deficit on economic growth but there is dearth of literature on the link between fiscal deficit and external debt. The empirical review therefore presents studies showing the effect of fiscal deficit on economic growth.

Akanmobi & Unachukwu (2021) estimated three models to examine the macroeconomic effects of fiscal deficit 145 in Nigeria. The study used the autoregressive distributed lag (ARDL) approach which revealed that fiscal deficit 146 147 significantly and positively impacted economic growth in Nigeria. Increase in government deficit spending does not harm economic growth. Also, interest rate significantly and positively influenced economic growth while 148 inflation significantly but negatively impacted economic growth in Nigeria. Similarly, Musa (2021) analyzed 149 dataset for the period 1980-2019 and found that fiscal deficit significantly and positively influenced economic 150 growth in Nigeria. In addition, inflation significantly but negatively impacted economic growth. Therefore, the 151 study concluded that fiscal deficit financing is ineffective in achieving sustainable growth. The rationale behind 152 this is that despite huge government spending over the years, economic growth has been very low and sluggish, 153 while inflation rate has been rising. The growth recorded in the Nigerian economy seems to be reflective of rising 154 prices (inflation). The poor outcome of fiscal deficit financing has been blamed on poor policy implementation, 155 wasteful spending, and high level of corruption among others. 156

Chukwu, Otiwu and Okere (2020) investigated the impact of fiscal deficit on macroeconomic variables in 157 Nigeria; from 1980 to 2012. Using two-stage least square technique, the study found that fiscal deficit negatively 158 and significantly impacted GDP growth rate, real private investment, inflation rate, real exchange rate but 159 positively and significantly impacted real interest rates. Thus, the study concluded that due to the negative 160 impact on economic growth, fiscal deficit should be reduced. Adegboyo, Efuntade, & Efuntade (2020) used 161 ARDL to examine the impact of fiscal deficit on economic growth in Nigeria for the period 1980 to 2018. The 162 study found that fiscal deficit and exchange rate significantly but negatively impacted economic growth. This 163 finding agrees with Chukwu, Otiwu and Okere (2020) but contradicts Akanmobi and Unachukwu (2021) and 164 Musa (2021). This result implies that the Nigerian economy deteriorates as more deficits are accumulated. This 165 position was maintained by Miftahu, Rosini, & Tunku (2017), who examined the effect of fiscal deficit on the 166

167 Nigerian economy. Using the VAR technique, the study found that fiscal deficit negatively impacted economic 168 growth rate.

Momodu & Monogbe (2017) investigated the factors responsible for public financing gap in Nigeria from 169 1983 to 2016. Using the Error Correction Mechanism (ECM), the study found that both public revenue and 170 public spending positively and significantly impacted budget deficit. This suggests that as public revenue and 171 public spending increase, budget deficit also increases, which contradicts the a priori expectation. Furthermore, 172 the study found that economic development positively and significantly influenced budget deficit. This implies 173 that increase in developmental projects widens public financing gap (fiscal deficit) in Nigeria. In another study, 174 Ibrahim (2017) investigated the effect of fiscal deficit on money demand using the ECM model. The study found 175 short-run and long-run positively significant relationship between money demand and fiscal deficit. Therefore, 176 the study suggested emphasis on the efficiency of public expenditure. 177

Wuyah & Amwe (2015) analyzed the impact of fiscal deficit on some selected macroeconomic variables in 178 Nigeria for the period 1970 to 2013. Using the Vector Auto-regression (VAR) technique, the study found that 179 fiscal deficit positively and significantly impacts inflation but negatively and significantly impacts money supply 180 and exchange rate. The study concluded that fiscal deficit is a major cause of macroeconomic instability in Nigeria. 181 Further still, Greg and Okoiarikpo (2015) compared the impact of fiscal deficit on economic growth during the 182 183 military and democratic regimes in Nigeria. The Chow test result revealed that fiscal deficit significantly impacted 184 economic growth during the military regime, while it had insignificant impact on economic growth during the 185 democratic regime. Interest rate had insignificant impact on economic growth during both regimes, while gross fixed capital formation significantly impacted economic growth during both regimes. 186

Osuka & Achinihu (2014) examined the impact of fiscal deficit on macroeconomic variables in Nigeria for the period 1981 to 2012. Granger causality result revealed unidirectional causality flowing from GDP to fiscal deficit. However, there was no causal relationship between fiscal deficit and interest rate, fiscal deficit and inflation and fiscal deficit and exchange rate. The study noted that fiscal deficit poses significant impact on macroeconomic performance in Nigeria by crowding in investment through reduction in interest rate. Hence, public spending should be directed towards capital goods in order to achieve desirable economic growth and development.

In summary, existing studies provide evidence to the fact that fiscal deficit significantly impacts the economy. However, there is need for further study to establish whether the impact is harmful or beneficial. Also, empirical studies have revealed the key role of fiscal deficit in causing macroeconomic instability, hence the need to ascertain the level of influence of fiscal deficit on the economy and map out the route to achieving sustainable economic development.

¹⁹⁸ 5 III. Theoretical Framework and Model Specification

variables influencing external debt which are not captured in the model.

EDT is a measure of public debt servicing in billion naira, FSD is captured by the overall surplus/deficit in billion naira, ISG is the difference between gross capital formation and saving; measured in billion naira, CAD is the difference between imports and exports; measured in billion naira. EXR is the rate at which a unit of the local currency exchanges for the dollar. EXR is measured as the local currency units per dollar. INT is the rates of return on investment set by the monetary authority. INT is measured as the difference between the lending rate and deposit rate.

To achieve the stated objectives, annual timeseries data from the period 1981 to 2020 was sourced from the 213 Central Bank of Nigeria (CBN) Statistical Bulletin (2021). The study expects a priori that the wider the fiscal 214 deficit, private financing gap and trade gap, the higher the external debt burden based on the dualgap theory. 215 FSD, ISG, CAD and EXR are expected to be positively related to external debt while INT is expected to be 216 negatively related to external debt. This is because the greater the value of foreign currency relative to the local 217 currency, the more the liability of external debt and the poorer the capacity for debt repayment. On the other 218 hand, the lower the interest rate, the greater the desire to accumulate more external debt. 219 IV. 220

²²¹ 6 Results and Discussion

The study started with descriptive statistics to know the characteristics of the variables. Table 4.1 presents the summary statistics for external debt (EDTdependent variable) and the independent variablescurrent account deficit/balance (CAD), fiscal deficit/ balance (FSD), exchange rate (EXR), real interest rate (INT), and investment-savings gap (ISG). The standard deviations of CAD, EDT, FSD, EXR, INT, and IS are greater than 1. This means that the level of variance in the data for current account deficit, external debt, fiscal deficit,

exchange rate, investment-savings gap, and real interest rate are high. The high variance indicates that the 227 means of current account deficit, external debt, fiscal deficit, exchange rate, investment-savings gap, and real 228 interest rate are not reliable representatives of their individual observations. From 1981 to 2019, the minimum 229 and maximum values for current account deficit, external debt, fiscal deficit, exchange rate, investment-savings 230 gap, and real interest rate were -7.22 and 21.97 percent of GDP, 1.26 and 59.82 percent of GDP, 0.61 and 306.92 231 naira per dollar, -5.99 and 0.85 percent of GDP, -65.86 and 18.18 percent, and -22.04 and 7.35 percent of GDP 232 respectively. Table 4.2 shows the results of correlation, which captured objective one. The correlation coefficients 233 of external debt (EDT) with fiscal deficit/balance (FSD), current account deficit/balance (CAD), exchange rate 234 (EXR), real interest rate (INT), and investment-savings gap (ISG) are negative. This implies that an inverse 235 relationship exists between external debt and the independent variables -Nigeria's fiscal balance, current account 236 balance, naira to dollar rate, real interest rate, and investment-savings gap. The correlation coefficients further 237 show the strength of the relationship. Fiscal deficit and exchange rate are moderately related to external debt, 238 while current account deficit, real interest rate and investment-saving gap are weakly related to external debt. 239 The study proceeded to examine the level of stationarity of the variables because most macroeconomic variables 240 have been found to be nonstationary at level (Engle & Granger, 1987). Table 4 Then the study proceeded 241 to ascertain the directional flow between the variables. Table 4.4 presents the result of the granger causality 242 243 test which captured objective two. Table 4.4 shows that fiscal deficit which is the key independent variable 244 is a significant predictor of changes in Nigeria's external debt as well as interest rate. The fact that there is no causality between FSD and the independent variables -ISG, EXR suggests that ISG and EXR have strong 245 exogeneity in the external debt model. To establish the existence of long-run relationship in the series, ARDL 246 Bounds test was used. If the F-statistic is greater than the critical value there is long-run relationship among 247 the variables. From Table 4.5, the F-statistic is greater than the critical values even at the 1% significance level 248 hence, the existence of longrun relationship. Table 4.6 presents the result of the ARDL test. The Durbin-Watson 249 statistic 1.932 is greater than the R 2 0.889 and less than 2. It shows that there is no false regression result and 250 absence of serial correlation respectively. The probability value of the F-statistic is less than (<) 0.01. This means 251 that all the predictor variables EDT(-1) FSD, CAD, INT, ISG, and EXR are jointly significant in explaining 252 variations in external debt in Nigeria. The R-squared value is 0.889. This implies that approximately 89% of the 253 changes in the dependent variable is explained or accounted for by EDT(-1) FSD, CAD, INT, ISG, and EXR. 254 Table 4.6 shows that external debt in the previous year positively and significantly impacted external debt in 255 the current year at the 1% significance level. This implies that 1% increase in external debt in the previous 256 year will lead to an approximately 0.76% rise in external debt in the current year. Exchange rate negatively 257 and significantly impacted external debt in Nigeria at the 10% significance level. This implies that 1% increase 258 in the naira to dollar rate will lead to an approximately 0.03% reduction in external debt. This tally with the 259 correlation result and also testifies to the fact that less importation and more exportation will reduce the trade 260 gap arising from exchange rate exposure and consequently reduce external debt. However, the causality test 261 result shows that exchange rate does not directly impact external debt. 262

Current account deficit/balance negatively but insignificantly impacted external debt. 1% increase in CAD will lead to an approximately 0.16% decrease in external debt. The data on CAD obtained from the CBN's statistical bulletin shows that the years of surplus exceeds the years of deficit and this is due to huge gains from oil trade. This result is best interpreted in terms of current account surplus and external debt. By implication, efforts to close deficits or increase surpluses in current account will reduce external debt in Nigeria.

FSD negatively and significantly impacted external debt at the 5% significance level. The result shows that 268 1% increase in FSD will lead to an approximately 3.04% decrease in external debt. The result further shows 269 that FSD is the key predictor variable. This result aligns with the correlation matrix and the granger causality. 270 Moreso, the standard deviation from the descriptive statistics which is 1.62 and is relatively not far from 1, 271 shows that FSD is fairly stable. The negative relationship between external debt and fiscal deficit suggests that 272 if excess expenditure is productively used, external debt burden will be significantly reduced. In addition, since 273 external debt variable entered the model with positive values, in absolute terms, it can be interpreted that 1% 274 reduction in FSD will reduce external debt in Nigeria by 3.04%. There was no significant impact between external 275 debt and INT but the coefficient was positive. This shows that real interest rate is positively associated with 276 external debt. This implies that as external debt increases, interest rate increases. This will further expand the 277 investment-saving gap because literature supports an inverse relationship between interest rate and investment. 278 Also, no significant impact existed between external debt and ISG, whose coefficient was negative. This shows 279 that an indirect relationship exists between external debt and investment. Therefore, external debt will impact 280 investment through the influence of interest rate. 281

²⁸² 7 V. Conclusion and Recommendations

Based on the dual gap theory, the study examined the impact of fiscal deficit, private financing gap, current account deficit and other control variables on external debt in Nigeria; from 1981 to 2020. Correlation analysis, granger causality test and ARDL results showed that fiscal deficit is a strong predictor of external debt in Nigeria. The study concludes that fiscal deficit, exchange rate, previous debt profile significantly impacts external debt servicing in Nigeria. Hence, government should ensure that excess expenditure leading to fiscal deficit should be efficiently used for productive and income generating public investments. Public policy should be directed

7 V. CONCLUSION AND RECOMMENDATIONS

289 towards export promotion in order to check the exposure to exchange rate fluctuations and devaluation effects

290 on import dependent economies like Nigeria. Finally, in order to close the investment-saving gap, interest rate

291 should be reduced.

Volume XXII Issue VII Version I 42 () $^{-1}\,$

i ED	Г	t,	0	1	ln	i FSD		t,	2	ln	i ISG	t,	3	ln	i CAD	t,		4
1	ln	i	t,	2	ln	i ISG	\mathbf{t}	3	ln	i CAD) t	4	ln	i EXR	t	5	ln	i IN
		FSD					,				,				,			

Figure 1: E

41

Variables	CAD	EDT	EXR	FSD	INT	IS
Mean	2.87	20.52	100.02	-2.34	0.35	-4.31
Median	2.12	12.10	100.80	-2.06	4.31	-2.85
Maximum	21.97	59.82	306.92	0.85	18.18	7.35
Minimum	-7.22	1.26	0.61	-5.99	-65.86	-22.04
Std. Dev	6.04	20.24	89.52	1.62	14.62	5.74
Skewness	1.03	0.67	0.76	-0.26	-2.63	-1.07
Kurtosis	4.27	1.96	3.02	2.49	12.23	4.52
Jarque-	9.49	4.69	3.71	0.87	183.66	11.20
Bera						
Probability	0.0087	0.96	0.16	0.65	0.00	0.0037
Sum	111.79	800.27	3900.76	-91.23	13.52	-168.07
Sum Sq. Dev	1388.53	15571.92	304542.6	99.25	8122.43	1252.16
Source: Author's C	Computation (202	2)				

Figure 2: Table 4 . 1 :

292

 $^{^1 \}mathrm{Year}$ 2022 © 2022 Global Journals

		2: Correlation	Matrix Result			
	EDT	FSD	CAD	EXR	INT	ISG
EDT	1.00					
FSD	-0.59	1.00				
CAD	-0.01	0.43	1.00			
EXR	-0.49	0.25	0.12	1.00		
INT	-0.09	0.05	0.20	0.38	1.00	
ISG	-0.06	-0.22	-0.62	-0.11	-0.08	1.00
Source: Author's	Computation (202	2)				

Figure 3: Table 4 .

43

Variable Level Test Statistics		Critical	Prob.	1	\mathbf{st}	Critical	Prob.	Integration
		Value @	Value	Diff.		Value	Value	Rank
		5%		Test		@~5%		
				Statis	5-			
				tics				
CAD	-3.18	-2.94	0.03^{**}	-		-	-	I(0)
EDT	-1.44	-2.94	0.55	-4.48		-2.94	0.00***	I(1)
EXR	1.40	-2.94	0.99	-4.27		-2.94	0.00***	I(1)
FSD	-2.99	-2.94	0.05^{**}	-		-	-	I(0)
INT	-7.25	-2.94	0.00***	-		-	-	I(0)
ISG	-4.58	-2.94	0.00***	-		-	-	I(0)
Note: ** and *** represent 50%	and 1%	significance	lovals rosp	octivo	1			

Note: ** and *** represent 5% and 1% significance levels respectively Source: Author's Computation (2022)

Figure 4: Table 4 . 3 :

44

40			
Volume XXII Issue VII Ver-			
sion I			
)			
(
Null Hypothesis	F-	Prob.	Remark
	Statistics	Value	
FSD to EDT	4.01	0.03^{**}	Unidirectional causal
EDT to FSD	1.14	0.33	flow from FSD to EDT
CAD to EDT	4.79	0.02^{**}	Unidirectional causal
EDT to CAD	0.11	0.90	flow from CAD to EDT
ISG to EDT	1.55	0.23	No causality
EDT to ISG	0.30	0.75	
INT to EDT	0.57	0.57	Unidirectional causal
EDT to INT	3.13	0.06^{*}	flow from EDT to INT

Figure 5: Table 4 . 4 :

 $\mathbf{4}$

 $\mathbf{4}$

Value	k
5.29	6
1(0) Bound	I(1) Bound
2.45	3.52
2.86	4.01
3.25	4.49
3.74	5.06
	Value 5.29 1(0) Bound 2.45 2.86 3.25 3.74

Figure 6: Table 4 .

46

Variable	Coefficient	Prob. Value
С	0.20	0.95
EDT(-1)	0.76	0.00***
EXR	-0.03	0.05^{**}
CAD	-0.16	0.61
FSD	-3.04	0.01^{***}
INT	0.15	0.32
ISG	-0.33	0.24
R-squared 0.89 Adjusted R-squared 0.87	F-statistics 41.68	Durbin-Watson
	Prob (F-statistics)	stat. 1.93
	0.00***	

Note: ** and *** represent 5% and 1% significance levels respectively Source: Author's Computation (2022)

Figure 7: Table 4 . 6 :

- 293 [Economics Research International. Hindawi], Economics Research International. Hindawi
- 294 [Akamobi and Unachukwu ()], O G Akamobi, I B Unachukwu. 2021.
- [Essien et al. ()] 'An Empirical Analysis of the Macroeconomic Impact of Public Debt in Nigeria'. S N Essien ,
 N T I Agboegbulen , M K Mba , O G Onumonu . CBN Journal of Applied Statistics 2016. 7 (1) p. .
- [Nassir and Wani ()] An evaluation of relationship between public debt and economic growth: A study of
 Afghanistan. Munich personal RePEc Archive, U H Nassir, H K Wani. 2016. 75538 p. .
- [Orebiyi and Ugochukwu ()] 'Budget and Budgetary Control in Nigeria: Procedures, Practices and Policy Issues'.
 J S Orebiyi , A I Ugochukwu . *Global Journal of Agricultural Sciences* 2005. 4 (1) p. .
- 301 [Boyce ()] 'Budget Deficit Definition'. P Boyce . *Boycewire.com* 2020.
- 302 [Ibrahim ()] Budget deficit-money demand nexus in Nigeria: A myth or reality? Munich Personal RePEc Archive
- 22, T Ibrahim . PR 20/191. 2017. 2020. International Monetary Fund. (Request for Purchase under the Rapid
 Financing Instrument)
- [Engle and Granger ()] 'Cointegration and Error Correction: Representation, Estimation and Testing'. R Engle
 , C Granger . *Econometrica* 1987. 35 p. .
- [Nimani ()] 'Consequences of fiscal deficit'. A Nimani . Journal of Economics and International Finance 2013. 5
 (3) p. .
- 309 [Aladejana et al. ()] 'Debt Burden and Infrastructural Development in Nigeria'. S A Aladejana , I A Okeowo , F
- A Oluwalana , Alabi , JA . International Journal Academic Research in Business and Social Sciences 2021.
 11 (1) p. .
- Muhammad et al. ()] 'Debt Overhang versus Crowding Out Effects: Understanding the Impact of External
 Debts on Capital Formation in Theory'. M A Muhammad, B B Nor Aznin, B H Sallahuddin. International
 Journal of Economics and Financial Issues 2016. 6 (1) p. .
- [Adetokunbo and Ebere ()] 'Determinants and Analysis of Domestic Debt in Nigeria: 1970'. A M Adetokunbo ,
 C E Ebere . Acta Universitatis Danibius CECONOMICA 2019. 2015. 15 (2) .
- [Ekor et al. ()] Does external debt impair economic growth in Nigeria? Munich Personal RePEc Archive, M Ekor
 T Orekoya, P Musa, O Damisah. 2021.
- [Ayuba and Khan ()] 'Domestic Debt and Economic Growth'. K I Ayuba , S Khan . An ARDL Bounds Test
 Approach. Economics and Business 2019. 33 p. .
- Igbodika et al. ()] 'Domestic debt and the performance of Nigerian economy (1987-2014): An empirical
 investigation'. M N Igbodika , I C Jessie , P W Andabai . European Journal of Research and Reflection
 in Management Sciences 2016. 4 (3) p. .
- [Ajayi and Edewusi ()] 'Effect of Public Debt on Economic Growth of Nigeria: An Empirical Investigation'. I E
 Ajayi , D G Edewusi . International Journal of Business and Management Review 2020. 8 (1) p. .
- [Gale and Samwick ()] Effects of Income Tax Changes on Economic Growth, W G Gale , A A Samwick . 2014.
 (Economic Studies at BROOKINGS)
- Precious ()] 'Effects of public debt on economic growth in Swaziland'. L N Precious . International Journal of
 Business and Commerce 2015. 5 (1) p. .
- [Aminu et al. ()] 'External Debt and Domestic Debt Impact on the Growth of the Nigerian Economy'. U Aminu
 , A H Ahmadu , M Salihu . International Journal of Educational Research 2013. 1 (2) p. .
- [Adegboyo et al. ()] 'Fiscal deficit and growth in Nigeria economy'. O S Adegboyo , O O Efuntade , A O Efuntade
 KIU Interdisciplinary Journal of Humanities and Social Sciences 2020. 1 (3) p. .
- [Greg and Okoiarikpo ()] 'Fiscal Deficits and Economic Growth in Nigeria: A Chow Test Approach'. E E Greg
 , B O Okoiarikpo . International Journal of Economics and Financial Issues 2015. 5 (3) p. .
- [Chukwu et al. ()] 'Impact of Budget Deficit on Nigeria's Macroeconomic Variables: 1980-2012'. L C Chukwu ,
 K Otiwu , P A Okere . International Journal of Science and Management Studies 2020. 3 (4) p. .
- [Wuyah and Amwe ()] 'Impact of Fiscal Deficits on Macroeconomic Variables in Nigeria'. Y T Wuyah , A D
 Amwe . European Journal of Business and Management 2015. 7 (34) .
- ³⁴⁰ [Olanrewaju et al. ()] 'Implications of External Debt on the Nigerian Economy: Analysis of the Dual Gap
 ³⁴¹ Theory'. M H Olanrewaju , S Abubakar , J Abu . Journal of Economics and Sustainable Development
 ³⁴² 2015. 6 (13) p. .
- Monogbe ()] 'Intergenerational Effect of External Debt on Performance of the Nigeria Economy'. T G Monogbe
 NG-Journal of Social Development 2016. 5 (2).
- [Iosuka ()] Achinihu Iosuka . The Impact of Budget Deficits on Macroeconomic Variables n the Nigerian Economy,
 2014. 1981 -2012. 2.
- 347 [KPMG (2021) National Budget ()] KPMG (2021) National Budget, 2021.

7 V. CONCLUSION AND RECOMMENDATIONS

- 348 [Macroeconomic Effects of Budget Deficit in Nigeria European Journal of Economic and Financial Research]
- 'Macroeconomic Effects of Budget Deficit in Nigeria'. European Journal of Economic and Financial Research
 4 (4) p. .
- [Peter ()] 'Nigeria's debt burden and development tangle'. A O Peter , Ferdinand , IO . Global Journal of
 Management and Business Research: B Economics and Commerce 2016. 16960 p. .
- [Urama et al. ()] 'Nigeria's Debt Burden: Implications for Human Development'. N E Urama, Q Ekeocha, E C
 Iloh . AfriHeritage Policy Brief 2018.
- [Price Water House Coopers (PWC, 2021)] Price Water House Coopers (PWC, 2021), Nigeria Economic Alert.
 (Assessing the 2021 FGN Budget)
- [Elom-Obed et al. ()] 'Public debt and economic growth in Nigeria'. O F Elom-Obed , S I Odo , O O Elom , C
 I Anoke . Asian Research Journal of Arts & Social Sciences 2017. 4 (3) p. .
- [Eke and Akujuobi ()] 'Public Debt and Economic Growth in Nigeria: An Empirical Investigation'. C K Eke , N
 E Akujuobi . International Journal of Development and Management Review 2021. 16 (1) p. .
- [Senibi et al. ()] Public Debt and External Reserve: The Nigerian Experience, V Senibi, E Oduntan, O Uzoma
 , E Senibi, O Akinde . 2016. 1981-2013.
- ³⁶³ [Isaac ()] 'Public debt, public investment and economic growth in Mexico'. S Isaac , Rosa , G . International
 ³⁶⁴ Journal of Financial Studies 2016. 4 (6) p. .
- [Momodu and Monogbe ()] 'Structural Factors and Budget Deficits in Nigeria'. A A Momodu , Monogbe .
 European Journal of Economics and Business 2017.
- ³⁶⁷ [Isibor et al. ()] 'The Effect of Public Debt on Economic Growth in Nigeria: An Empirical Investigation'. A A
 ³⁶⁸ Isibor , A A Babajide , V Akinjare , T Oladeji , G Osuma . International Business Management 2018. 12 (6)
 ³⁶⁹ p. .
- [Miftahu et al. ()] The Effects of Fiscal Deficits in Developing Countries: Implications on the Economic Growth of Nigeria, I Miftahu, B Rosini, S T A Tunku. 2017.
- [Efuntade et al. ()] 'The Impact of Debt Service in Stimulating Economic Growth in Nigeria: Mediating on
 its Role on Public Sector Financial Management'. A O Efuntade , N O Olaniyan , O O Efuntade . Acta
 Universities Danubius CECONOMICA 2021.
- 375[Abdulkarim and Saidatulakmal ()] 'The impact of government debt on economic growth in Nigeria'. Y Abdulka-376rim , M Saidatulakmal . 10.1080/23322039.2021.1946249. Cogent Economics & Finance 2021. 1946 249. 9 (1)377.
- Ileana ()] The impact of government debt on economic growth: An overview for Latin America, Alejandro , D J
 Ileana , RJ . 2017. 28 p. . Department of Economics, University of Perugia (IT), Working Paper
- [Abula and Ben ()] 'The impact of public debt on economic development of Nigeria'. M Abula , D M Ben . Asian
 Research Journal of Arts & Social Sciences 2016. 1 (1) p. .
- [Lucky and Godday ()] 'The Nigeria debt structure and its effects on economic performance'. E U Lucky , O O
 Godday . International Journal of Business and Management Review 2017. 5 (10) p. .
- Inna and Viktoriia ()] 'The relationship between external debt and economic growth: empirical evidence from
 Ukraine and other emerging economies'. S Inna , K Viktoriia . Investment Management and Financial
 Innovations 2018. 15 (1) p. .
- [Musa ()] 'Theoretical Review of the Impact of Fiscal Deficits on Economic Growth in Nigeria'. K B Musa .
 European Scientific Journal 2021. 17 (1) p. 310. (ESJ)