

## BUDGET DEFICIT FINANCING AND ECONOMIC DEVELOPMENT IN NIGERIA (1999-2019)

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KEY WORDS	A B S T R A C T
Budget, Budget deficit and economic development.	<i>This study examined budget deficit financing and economic development in Nigeria for the period 1999-2019. The study adapted the expo-facto research design and made use of secondary data which were sourced from the Central Bank Nigeria statistical Bulletin. The study disaggregated budget deficit financing in domestic debt and external debt while total capital expenditure (TCE) and Human development index were proxies for economic development. The data were analysed using multiple regression. The results from the analysis revealed that domestic has a statistically significant effect on total capital expenditure and human development index, external debt showed insignificant effect on total capital expenditure and human development index. Also that there is a long run relationship existing among variables. The study concluded that the various means of financing budget deficit such as external and domestic debt should be managed and effectively utilized. Thus recommend that the basic indices of development such are health, education and infrastructure should place above all to fast track economic development. Also, an optimum level of external debt as a mechanism of monitory drive to economic development.</i>

### Introduction

Government is an agent of the people and to serve the people it represents requires revenue to provide social and infrastructural facilities but in the process of discharging this enormous responsibility the revenue and/or spending requirements of the government may sometimes exceed its availability, hence the recourse to deficit financing to fill the gap expenditure needs and available revenue. Government, military or civilian believes that one way of solving social and economic problems is by increasing spending (Monogbe, Dornubari and Emah 2015).

Indian commission (2002) deficit financing simply refer to the direct addition to gross national expenditure through budget deficit, whether the deficit is on revenue or capital account. The rationale behind this move lies in the government spending over the revenue it receives in the form of taxes, earning on state enterprises, loans from the public, deposits, and other miscellaneous sources.

The government may cover the deficit either by running down its accumulated cash balances or by borrowing from the banking system (the central bank). Thus, deficit financing involves withdrawal with past accumulated cash balance by the government, borrowing from the central bank, issuing new currencies by the government through the central bank.

Nigeria's budget deficit experience is dated back to the post-independence era, and until now, a large proportion of Nigeria's budget runs in deficit. Okoro (2013) states that deficit financing largely depends on the need to expand the economy, the government's inability to undertake a capital project that expands the economy brings about a deficit. This ignites the need for government to finance these projects either through internal borrowing, external borrowing, or implementation of a monetary instrument to increase the flow of funds in the economy. However, this is a repelling effect on the economic performance of any country whom the state of its economic activities are financed through the prolonged debt from external loans because it frustrates sole investors due to the high-interest rate. Deficit financing can be seen as the practice of seeking to stimulate a nation's economy by increasing government expenditures beyond revenue sources (Central Bank of Nigeria, 2012). A budget deficit is a phenomenon that emanated due to the imbalance in the budget of a country. The imbalance could either be a surplus or a deficit. This phenomenon has become a recurring experience for many economies of the world, in which Nigeria is not an exception. The culture, however, became seemingly entrenched over time in Nigeria from 1970, the country ran into fiscal deficits and sustained a public sector spending boom. The fiscal deficits era of 1970 was justified because it was largely for post-civil war reconstruction. Couple with a huge inflow from crude oil revenue, Nigeria embarked on wasteful spending, the misappropriation, mismanagement, embezzlement, and corruption of the oil boom of the periods led to the return of deficit financing in 1980. From 1982, the continuing decline in oil export earnings in 1983 once again led to the resumption of fiscal deficits which were financed through heavy borrowing both external to internal sources after reducing the nation's reserves, such as the "Abacha era that the price per barrel of crude oil fall to \$7. To mitigate the phenomenal trends, there is a need for an adequate public expenditure program and management of budget within a particular period when this is in and out of recession and when various arms of government and other public and private sectors of the economics are experiencing several financial constraints.

Under the fiscal system of Nigeria, the various levels of government engage in fiscal management, preparing and implement annual budgets for the provision of services in their respective areas of jurisdiction (Anyanwu, 2003). The main objective of deficit management over the year is that promoting accelerated economic development as a base for achieving higher per capital income and social welfare.

In Nigeria, budget deficits generally come with a high level of debt as governments struggle to bring in enough money to cover expenditures (Osaku & Achinihu, 2014). It attracts investment in government bonds and other forms of denominated debt. A condition that had led governments to use funds from previously generated surpluses or borrow money from the public to fund a new public works program as well as reducing much spending

However, as long as governments spend more than they receive, they are operating under a budget deficit. Monogbe, Dornubari & Emah (2015) reported that the consequence of such is that the more government runs a deficit, the more it must borrow to stimulate the economy, this situation has resulted in external debt, domestic debt, higher interest and payment, crowding out effect and short term economic development. Prolong deficit financing have an overall negative impact on the economy by crowding out private investment (Isah 2012), and the mismatch of internal and external debts has led to the failure of deficit financing in stimulating economic development (Onuorah & Ogunmuyiwa, 2011). Consequently, Onwe (2014) opines that the use of deficit financing for the pursuit of fiscal policies often leads to increased danger in the economy. Having considered all of these abnormalities, here comes the question of the extent to which deficit financing modes affect growth still lingers.

It is for this reason that the work is inspired to investigate budget deficit financing and its effects on economic development in Nigeria between the periods of 1999 to 2019. The time period incorporated is essential in order to give the time frame and happening within the periods.

### **Purpose of the Study**

- 1). Examine the effect of external debt on total capital expenditures in Nigeria.
- 2). Examine the effect of domestic debt on human development index.

### **Scope of the Study**

The Nigeria government have been running huge deficits since the post-civil war era. The deficits as a percentage of total capital expenditure have continued to be on the increase and one immediate result is the escalating public debt. Budget deficits now persist as a re-current decimal.

The study area of this work centred on budget deficit financing and economic development in Nigeria covering the period of 1999 to 2019. Other period not specifically mentioned is outside the boarder of this study.

### **Conceptual Review**

Practice in which a government spends more money than it receives as revenues, the difference being made up by borrowing or minting new funds. Utomi (2014) describes deficit generally in terms of loan financing and drawing down of cash balances. It connotes the difference between the budget receipts and budget expenditures financed by withdrawal of cash balance and borrowing from public.

For a variety of reasons, ranging from a desire to accelerate capital spending to a policy of economic stabilization, government may choose to raise some of their resources by borrowing rather than by taxation. Fiscal deficit simply refers to the excess of the public spending over its revenue (World Bank, 2005). Thigan (2002) opines that deficit financing is used to mean any public expenditure that is in excess of current revenues. The term deficit financing is used to denote the direct addition to gross national expenditure through budget deficit whether the deficits are of the revenue of capital account.

CBN (2013) defines deficit financing as a practice in which government spends more than it receives as revenue and the difference been up by borrowing more money into the economy than it takes out by taxation with the expectation that increased business activities will bring enough addition revenue to cover the shortfall. Deficit financing, however, may also from government inefficiency, reflecting widespread tax evasion or wasteful spending.

### **Economic growth and Deficit Financing**

Economic growth is defined as a quantitative sustained increase in the country's per capita output or income accompanied by expansion in it labour force, consumption, capita and volume of trade Thingan (2008). Aigbokhan (2001) states that economic growth means an increase in the average rate of output produced per person usually measured on a per annum basic. It is also the rate of change in national output or income in a given period. Economic growth is the increase of per capital gross domestic product (GDP) or other measure of aggregate income. It is measured as the rate of change in the real GDP. Ndekwu (2003) opines that economic growth is an increase in output. Economic growth refers only to the quantity of goods and services produced. Ullah (2013) notes that whenever there is increase in real GDP of a country it will boosts up the overall output and we called it economic growth. Godwin (2014) defines economic growth as an increase in real gross domestic product (GDP) that is gross domestic product adjusted for inflation. The growth can either be positive or negative. Negative growth can be referred to by saying that the economic is shrinking. This is characterized with economic recession and economic depression. The economic growth helps the nation to bring unemployment at low level and also helpful in public service delivery.

### **External Debt and Economic Development**

External debt may be defined as debt owed to non-residents repayable in terms of foreign currency, food or service (World Bank, 2004). The portion of a country's debt that was borrowed from foreign lenders including commercial banks, government or international financial institutions. These loans including interest, is usually be paid in the currency in which the loan was made. In order to earn the needed currency, the borrowing country may sell and export goods to the lender's country. Nigeria's external debts are basically from multilateral agencies, Paris club of creditors, London club of creditors, promissory note holders, Bilateral and private

sector creditors and other sources Goher (2011). Nigeria current debt includes that of China tagged development loans.

### **Domestic Debt and Economic Development**

Domestic debts are debts instrument issues by the federal government and denominated in local currency. State and local government can also issue debt instrument, but debt instrument currently in issue consists of Nigeria treasury bills, federal government development stocks and treasury bonds. Out of this treasury bills and development stocks are marketable and negotiable, while treasury bonds; ways and means advances are not marketable but held solely by the central bank of Nigeria. Adefu et al (2010). Odozi (2006) opines that domestic debt as the gross liability of government, and properly considered should include federal, state and local government transfer obligations to the citizens and corporate firms within the country. Consequently, the central bank of Nigeria (CBN) as banker and financial adviser to the federal government is charged with the sole responsibility for managing the domestic public debt.

### **Debt Services and Financing Deficits**

Debt servicing is the ability of a debtor's nation to continue to repay the principal sum and interest elements of an outstanding loan as at when due. Debt service is the cash that is required to cover the repayment of interest and principal on a debt for a particular period. The ability to service debt as at when due is a factor when an individual, corporate body's and nation needs to raise addition capital to finance the proposed project.

The inherent nature of such a policy lies in the government spending in excess of revenue it receives in the form of taxes, earning of the state enterprises, loans from the public deposits and funds and other miscellaneous sources. Fischer and Esterly (1990) cited in Adafu et al., (2010) identify four ways of financing the budget deficit; printing money, external borrowing, the use of foreign reserves and, domestic borrowing etc. The most efficient methods of financing the budget deficit includes; monetary financing and debt financing. CBN (2010) agrees that economic growth is the increase in the amount of goods and service produced in an economy over time. It is conventionally measured as the percent rate of increase in Real Gross Domestic Product (RGDP).

### **Theoretical Review**

- **Traditional Keynes theory**

The Keynesian economist purpose a positive relationship between deficits financing and economic development. In the Keynesian model, it was argues that an increase in government spending stimulates the domestic economic activity, increases aggregate demand, increases saving and private investment at any given level of interest rate and hence crowds-in private investment. The Keynesians provide a counter argument to the crowds-out effect by making credence to the

expansionary fiscal policy. They argue that usually deficit financing result in an increase in domestic production, which makes private investors more optimistic about the future course of the economy resulting in them investing more. This is the known as the “crowding-in” effect. The theory suggest that active government policy could be effective in managing the economy, deficit spending is appropriate when a nation’s economy suffers from recession or when recovery is long-delayed and unemployment is persistently high and the suppression of inflation in born times by either increasing taxes or cutting back on government outlays. The theory exert that governments should solve problems in the short run rather than working for market forces to do it in the long run, because in the long run, we are all dead.

- **The Neo-classical View;**

The component of revenue deficit is deficits financing which implies a reduction in government saving or an increase in government dis-saving. In neo-classical perspective, thus will have a detrimental effect on growth if the reduction in government saving is not fully offset by rise in private saving, thereby resulting in a fall in the overall saving rate. This apart from putting pressure on the interest rate, will adversely affect growth. The neo-classical economist assumes that market clear so that full employment of resources is attained. In this paradigm fiscal deficits raise lifetime consumption by shifting taxes to the future generation. If economic resources are fully employed, increased consumption necessarily implies decreased saving in a closed economy. In an open economy, real interest rates and investment may remain unaffected, but the fall in national saving is financed by higher extend borrowing accompanied by an appreciation of the domestic currency and falls in exports.

- **The Dual GDP Theory**

The theory is proposed on the condition that state thus, to achieve a reasonable level of development in an economy, investment is a key player. However, such investment cannot be successively achieved huge domestic saving meaning that for a country to achieve a sustainable level of development, investment and huge domestic saving is regained. However, in attaining comprehensive development, thus domestic savings and investment is not sufficient enough hence there is need to borrow fund from abroad. This implies that the combination of domestic, investment and foreign borrowed fund is a function of economic development opined in the theory.

- **The Ricardian Equivalent Perspective**

In the perspective of Ricardian, fiscal deficit are viewed as neutral in terms of their impact on growth. The financing of budgets by deficit amounts only to postponement of taxes. The deficit in any current period is exactly equal to the present value of future taxation that i.e required to pay off the increment to debt resulting from the deficit. In other words, government spending must be paid for,



whether now or later and the present value of spending must be equal to the present value of tax and non-tax revenues. Fiscal deficits are useful device for smothering the impact of revenue shocks or for meeting the requirement of lumpy expenditures, the financing of which through taxes may be spread over period of time. The theory requires the assumption that individuals in the economy are futuristic, they have discount rate that are equal to government on the spending and they have extremely long span of times for evacuating the present value of future taxes.

### **Empirical Review**

In an attempt to examine the nexus between budget deficit financing and how it has contributed to economic development in Nigeria, Monogbe, DornuBari and Emah (2015) empirically investigated the effect of deficit financing and economic development in Nigeria between the period 1981 to 2014 using series of estimating tools which include parsimonious error correction mechanism, dickey fuller unit root test, impulse response, variance decomposition among others. Finding reveals that total money supply in the economy and external debt is positive and significantly influences economic development in Nigeria thereby canvassing support for the Keynesian school. Hence, study recommends that appropriate measure should be design to ensure effective usage of borrowed fund.

Eze and Nwambeke (2015) carried out a study on the budget deficit financing and effect of unemployment rate in Nigeria using time series data spanning a period from 1970 to 2013. Five variables were used in the process of research as proxy for deficit financing the output of the vector error correction model reveals that deficit financing through external source has a positive and significant influence in stabilizing the Nigeria economy and hence could help in reducing the level of unemployment rate in the Nigeria economy.

Onuorah and Ogbonna (2014), studied deficit financing and the development of Nigeria economy using quite a number of tools which include descriptive statistic, ordinary least square, dickey fuller unit root test and so on. All variable used in the process of research are all stationary at  $i(1)$  and has long run relationship. The result of the ordinary least square (OLS) shows that domestic debt and external debt are positively and significantly related to economic development in Nigeria. They recommend that government should control the level of deficits to ensure that it is within a reasonable leverage.

Ufomi, (2014), investigated the effect of external debt on the development of the Nigeria economy using a time series data and series of estimating tools which include Johanson co-integration test, unit root test among others. External debt stocks and external debt servicing proxy for external burden while real gross domestic product was proxy as economic development indicator. Finding reveal long run insignificant relationship and a bi-directional relationship between increased debt and economic development in Nigeria.

Fredric and Izuchukwu (2013) investigated the crowding out effect of budget deficit on private investment in Nigeria using times series data, granger causality test and ordinary least square model. Five different variable were used in the process of research, finding reveals that application of deficit as a means of financing government excess to financed revenue shortfall vehemently affecting the development and survival of the private sector, hence, they advise that money creation could be a substitute borrowing in financing government deficit in Nigeria. Benjamin and Olampekun (2013), investigated the relationship between fiscal deficit and debt in Nigeria using an error correction approach, granger causality in estimating the flow while time series data is sourced from the CBN statistically bulletin covering a period from 1970 to 2011. All variable used in the research work were stationary at I(1) except the inflation rate that become stationary at I(10). Joahnsn co-integration test show a long run association between the variable used in the research. The result of the granger causality test reveals a bi-directional flow between fiscal balance, public debt as well as its domestic component while causality only runs from external debt to fiscal deficit. The result shows domestic debt has greater influence on fiscal deficit and foreign debt and hereby recommend that government should ensure appropriate debt mix in ensuring economic development in Nigeria.

Osuji and Ozurumba (2013) investigated the impact of external debt financing on economic development in Nigeria using stationary test, co-integration test and vector error correction model. The study shows that London loan club debt financing possessed positive impact on economic growth while Paris loan club and promissory note were inversely related to economic development in Nigeria. They recommended that debt services should be prioritizes as a call to encourage survival of small and macroeconomics (SMES) in Nigeria. Edame and Okoi (2015) examine the impact of fiscal deficit on economic growth in Nigeria spanning through the era of the military regime and democratic regime using chow test. It was found that there is a significant difference between the impacts of fiscal deficits on economic growth in the two regimes. The study recommended that fiscal deficit be sustained and prioritizes on capital expenditure when needs arises.

### **Research Design**

According to Aham (2000:40) research design is the development of strategies for finding out something. A research design encompasses the methodology and procedures employed to conduct scientific research. The researchers employed an expo-facto research design (quantitative) as the data been used are time series. The data for the study is collected from the CBN Statistical bulletin covering 1999-2019.

### **Method of Data Analysis**

#### **Model Specification**



This study adopted a multiple linear regression method which is in use by many authors because it emphasis on specifying more than two different variables for estimation.

The functional form of the model is stated below:

$$TCE = f(DD + ED) \quad (1)$$

$$HDI = f(ED + DD) \quad (2)$$

The econometric form of the equation is expressed below:

$$TCE_t = \alpha_0 + \beta_1 ED_t + \beta_2 DD_t + e_{t1} \quad (3)$$

$$HDI_t = \delta_0 + \varphi_1 ED + \varphi_1 DD_t + u_t \quad (4)$$

#### Where:

TCE = Total Capital Expenditure proxy Economic Development

HDI = Human Development Index proxy Economic Development

DD = Domestic Debt

ED = External Debt

$\alpha_0$  &  $\delta_0$  = intercepts

$\beta_1$  &  $\varphi_1$  = regression coefficients

$e_1 + \mu_1$  = stochastic error term

#### Apriori Expectation

Economic Theory A'priori Expectation:  $TCE > 0$ ,  $GDPR > 0$ ,  $DD > 0$  and  $ED > 0$

#### Limitation of the study

The study made use of data between 1999-2019. Hence the accuracy of this research work has been hindered by some factors as authenticity of data. Although the source of the data used is assumed authentic enough but the low database of the country gives room for alterations of data in different parastatals of the country to suit selfish aims so the result may not be completely accurate.

#### Data and Source

The table below presents the raw data used for analysis in the study, which was gotten from central Bank of Nigeria (CBN) statistical bulletin volume 39, 2019.

**Table 1: Log Output of Variables**

Years	TCE	HDI	DD	ED
1999	6.2107	0.52	6.6781	7.8545
2000	5.4783	0.67	6.8005	8.0383
2001	6.0838	0.64	6.9246	8.0635
2002	5.7726	0.62	7.0613	8.2771
2003	5.4876	0.57	7.1927	8.4070
2004	5.8615	0.443	7.2228	8.4950
2005	5.5758	0.463	7.3303	7.8992
2006	5.4799	0.465	7.4692	6.1125

2007	5.3739	0.475	7.6823	6.0843
2008	5.2553	0.479	7.7495	6.2601
2009	5.1207	0.485	8.0796	6.3809
2010	4.9651	0.49	8.4233	6.5365
2011	4.7808	0.484	8.6346	6.7989
2012	4.5546	0.494	8.7853	6.9343
2013	4.2618	0.512	8.8705	7.2351
2014	3.8461	0.519	8.9751	7.3973
2015	3.1216	0.524	9.0867	7.6552
2016	0.0000	0.527	9.3109	8.1545
2017	0.0000	0.53	9.4406	8.6635
2018	0.0000	0.53	9.4552	8.9566
2019	0.0000	0.54	9.5661	9.1075

**Source:** Author's Computation, 2021

## Results and Discussion

### Unit Root

The study began with the test of unit root to determine the stationarity of all the employed variables using Augmented Dickey Fuller (ADF) unit root test. The tests were conducted to avoid spurious regression. The results of the test are presented in Table 3.

**Table 3: Summary of ADF test results**

Variables	At Second diff. t-Statistics	5% Critical Value	Remarks
HDI	-7.434234	-3.040391	Stationary
TCE	-6.844060	-3.040391	Stationary
DD	-5.196465	-3.040391	Stationary
ED	-4.811076	-3.040391	Stationary

**Source:** Eview 9 output, 2021

The study used Augmented Dickey-Fuller test to check for stationarity of the variables in the table 3. The decision rule is that the ADF test statistic value must be greater than the Mackinnon critical value at 5% (in absolute value). From the table above HDI, TCE, DD and ED were integrated of order two I(2), that is stationary at second difference . With this order of integration we further move to test for co-integration analysis.

### Co-Integration Test

Cointegration means that there is a relationship among the variables. Cointegration test is done on the residual of the model. Since the unit root test shows that none of the variable is stationary at level I(0) but stationary at second difference 1(2), we would carry out the cointegration test. The essence is to show that although all the variables are stationary, whether the variables have a long term

relationship or equilibrium among them. That is, the variables are cointegrated and will not produce a spurious regression. The result is summarized in the table 4 below for Trace and Maximum Eigenvalue cointegration rank test respectively.

**Table 4: Equation (2) Test of Johansen Cointegration Analysis**

Date: 06/19/21 Time: 13:02

Sample (adjusted): 2002 2019

Included observations: 18 after adjustments

Trend assumption: Linear deterministic trend

Series: HDI DD ED

Lags interval (in first differences): 1 to 2

Unrestricted Cointegration Rank Test (Trace)

Hypothesize d		Trace	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.907610	69.75030	29.79707	0.0000
At most 1 *	0.593254	26.87906	15.49471	0.0007
At most 2 *	0.447728	10.68687	3.841466	0.0011

Trace test indicates 3 cointegrating eqn(s) at the 0.05 level

\* denotes rejection of the hypothesis at the 0.05 level

\*\*MacKinnon-Haug-Michelis (1999) p-values

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Hypothesize d		Max-Eigen	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.907610	42.87125	21.13162	0.0000
At most 1 *	0.593254	16.19219	14.26460	0.0245
At most 2 *	0.447728	10.68687	3.841466	0.0011

Max-eigenvalue test indicates 3 cointegrating eqn(s) at the 0.05 level

\* denotes rejection of the hypothesis at the 0.05 level

\*\*MacKinnon-Haug-Michelis (1999) p-values

Unrestricted Cointegrating Coefficients (normalized by b'S11\*b=I):

HDI	DD	ED
-32.36130	-2.692774	1.497208
29.49564	0.374045	0.008082
31.36758	0.615861	-2.782161

Unrestricted Adjustment Coefficients (alpha):

D(HDI)	-0.004075	-0.022687	-0.006580
D(DD)	0.016642	-0.037355	0.038358
D(ED)	-0.261607	0.033649	0.080642

1 Cointegrating  
Equation(s):

Log  
likelihood 75.96638

Normalized cointegrating coefficients (standard error in parentheses)

HDI	DD	ED
1.000000	0.083210 (0.00541)	-0.046265 (0.00596)

Adjustment coefficients (standard error in parentheses)

D(HDI)	0.131863 (0.31807)
D(DD)	-0.538554 (0.77035)
D(ED)	8.465938 (1.56543)

2 Cointegrating  
Equation(s):

Log  
likelihood 84.06248

Normalized cointegrating coefficients (standard error in parentheses)

HDI	DD	ED
1.000000	0.000000	0.008642 (0.01999)
0.000000	1.000000	-0.659868 (0.25430)

Adjustment coefficients (standard error in parentheses)

D(HDI)	-0.537318 (0.29415)	0.002486 (0.01826)
D(DD)	-1.640366 (0.90493)	-0.058785 (0.05619)
D(ED)	9.458430 (2.06622)	0.717034 (0.12829)

**Source:** Eview 9 output, 2021

**Table 5: Equation (1) Test of Johansen Cointegration Analysis**

Date: 06/19/21 Time: 13:00

Sample (adjusted): 2003 2019

Included observations: 17 after adjustments

Trend assumption: Linear deterministic trend

Series: TCE DD ED

Lags interval (in first differences): 1 to 3

**Unrestricted Cointegration Rank Test (Trace)**

Hypothesize d		Trace	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.919610	59.43970	29.79707	0.0000
At most 1 *	0.484222	16.58491	15.49471	0.0341
At most 2 *	0.269119	5.329585	3.841466	0.0210

Trace test indicates 3 cointegratingeqn(s) at the 0.05 level

\* denotes rejection of the hypothesis at the 0.05 level

\*\*MacKinnon-Haug-Michelis (1999) p-values

**Unrestricted Cointegration Rank Test (Maximum Eigenvalue)**

Hypothesize d		Max-Eigen	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.919610	42.85479	21.13162	0.0000
At most 1	0.484222	11.25533	14.26460	0.1419
At most 2 *	0.269119	5.329585	3.841466	0.0210

Max-eigenvalue test indicates 1 cointegratingeqn(s) at the 0.05 level

\* denotes rejection of the hypothesis at the 0.05 level

\*\*MacKinnon-Haug-Michelis (1999) p-values

Unrestricted Cointegrating Coefficients (normalized by  $b'S_{11}^{-1}b=I$ ):

TCE	DD	ED
4.377377	9.554750	8.939429
-0.923488	-3.802634	-1.279763
5.033040	3.188500	0.252920

Unrestricted Adjustment Coefficients (alpha):

D(TCE)	0.047397	0.444549	-0.098122
D(DD)	-0.027920	-0.020847	0.014459
D(ED)	-0.260400	-0.134611	-0.122124

1 Cointegrating Equation(s):      Log likelihood      30.87849

Normalized cointegrating coefficients (standard error in parentheses)

TCE	DD	ED
1.000000	2.182757 (0.15798)	2.042189 (0.18182)

Adjustment coefficients (standard error in parentheses)

D(TCE)	0.207476 (1.19091)
D(DD)	-0.122218 (0.07460)
D(ED)	-1.139869 (0.56162)

2 Cointegrating Equation(s):      Log likelihood      36.50615

Normalized cointegrating coefficients (standard error in parentheses)

TCE	DD	ED
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1.000000	0.000000	2.782657 (1.33073)
0.000000	1.000000	-0.339235 (0.60684)

Adjustment coefficients (standard error in parentheses)

D(TCE)	-0.203060 (0.90674)	-1.237590 (2.08429)
D(DD)	-0.102966 (0.06605)	-0.187500 (0.15183)
D(ED)	-1.015557 (0.51867)	-1.976180 (1.19225)

**Source:**Eview 9 output, 2021

The equation 1 & 2 above indicates that trace test have 3 cointegrating variables in the model while Maximum Eigenvalue indicated only 1 cointegrating variables in equation (1) and 3 co-integrating series in equations (2). Both the trace statistics and Eigen value statistics reveal that there is a long run relationship between the TCE, HDI, DD and ED.

That is, the linear combination of these variables cancels out the stochastic trend in the series. This will prevent the generation of spurious regression results. Hence, the implication of this result is a long run relationship between economic development and other variables used in the model.

### **Table 6: Regression Result Equation (2)**

Dependent Variable: HDI

Method: Least Squares

Date: 06/19/21 Time: 13:22

Sample (adjusted): 2000 2019

Included observations: 20 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.498411	0.133543	3.732228	0.0022
DD	-0.032335	0.010568	-3.059792	0.0085
ED	0.036500	0.012473	2.926417	0.0110
D(HDI)	0.627633	0.195803	3.205433	0.0064
D(DD)	0.074172	0.133237	0.556690	0.5865
D(ED)	0.033241	0.022683	1.465498	0.1649
R-squared	0.677650	Mean dependent var	0.523000	

Adjusted R-squared	0.562525	S.D. dependent var	0.060679
S.E. of regression	0.040134	Akaike info criterion	3.349862
Sum squared resid	0.022550	Schwarz criterion	3.051143
Log likelihood	39.49862	Hannan-Quinn criter.	3.291549
F-statistic	5.886220	Durbin-Watson stat	1.541895
Prob(F-statistic)	0.003921		

**Source:** Eview 9 output, 2021

From the result of the Ordinary Least Square, it was observed that domestic debts have a negative impact on economic development while external debts have a positive impact on economic development growth in Nigeria. This implies that a unit increase in domestic debts will lead to a decrease in economic development. On the other hand, increases in external debts will lead to an increase in economic development. From the regression analysis, the result show that domestic debts did not conform to the a priori expectation of the study, where as external debts conform to the study a priori postulation. The F-test conducted in the study shows that the model has a goodness of fit and is statistically different from zero. In other words, there is a significant impact between the dependent and independent variables in the model. The findings of the study also show that domestic debts and external debt are statistically significant in explaining the economic development of Nigeria. Both  $R^2$  and adjusted  $R^2$  show that the explanatory power of the variables is very high. The standard errors show that all the explanatory variables were all low. The low values of the standard errors in the result show that some level of confidence can be placed on the estimates. The Durbin-Watson stat was 1.5, and a little lower than the traditional benchmark of 2.0 in the model and the F-statistic = 5.886220,  $p = 0.003921$  was significant at 5 percent confidence level in the model.

### Summary of Findings

The study investigates the effect of deficit financing on Nigeria's economic development. It adopts a time series data spanning 1999 to 2019 on variable for the study using ordinary-least square (OLS) technique method. The estimation which started with ADF test reveals that all the variables were stationary and have a long term relationship among the variable in the model.

In light of the test being carried out, the following are the findings of the study.

1. The result of the Augmented Dickey Fuller test (ADF) indicates that the data shows stationary as well as the cointegration of variable using the Johansen approach and was discovered that the variable are stationary and have a long term relationship among the variable in the model.

2. Domestic debt (DD) has a statistically significant in explaining the Nigeria economic of Nigeria.
3. External Debt in statistically insignificant in exptari the Nigeria's economic development.
4. Finally, the study shows that there is a long run relationship exists among the variables, both  $R^2$  and adjusted (R2 show that the explanatory power of the variable is very high, while standard errors show variables were all low. The low values of the standard errors in the result show that some level of confidence can be placed on the estimates.

### **Conclusion**

In conclusion, the study which was aimed at studying the effect of budget deficit finance on economic development, found that deficit finance has a significant positive effect on the economic development. Therefore, the study infers a significant relationship between budget defiance and economic development. However, concluded that the various means of financing budget deficit such as external debt, domestic debt etc, have to be properly managed, that effective utilization of domestic debt will drive toward a sustainable economic development in Nigeria, that external drive toward supporting the human development in three basic dimension: health life, access to knowledge and a decent standard of living.

### **Recommendations**

The study therefore recommend as follows:

1. That government through debt management agency should setup monitoring team that will make sure the budget is well carefully implemented and as well as loan borrowed in other to drive economic development.
2. Government should maintain an optimum level of external debt as a mechanism of monitory drive to economic development.
3. That, the basic indices of development are health, education and infrastructure should be focused, to fast track human development index.

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