

DEFICIT FINANCING AND ECONOMIC RECOVERY IN NIGERIA

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ABSTRACT

The study looked at how deficit funding affected Nigeria's economic recovery. The study employed secondary data from the CBN statistical bulletin on a variety of topics that were pertinent for the time period under consideration (1981-2019). The analysis used the Johanson Co-integration test, the normalcy test, and the Augmented Dickey Fuller (ADF) unit root test. The results of the study showed that borrowing money from abroad to finance deficits significantly helped Nigeria's economy recover. Also Domestic debt significantly contributes to Nigeria's economic recovery. Therefore, the study suggests that the government set up monitoring teams to ensure that the budget is implemented carefully and well as well as loans borrowed in order to reduce corruption, links, and wastages. The team will accomplish this by making sure that everyone pays their fair share of taxes. We suggested, among other things, that the government work to diversify its sources of income and exhibit a high degree of transparency in both its monetary and fiscal processes. As one of the mechanisms for economic growth, the government should keep its foreign debt at an ideal level. All external debts should also be used effectively for the intended purpose in order to encourage economic growth.

Keywords: Deficit financing, Domestic debt, External debt, Real gross domestic product, Economic recovery.

1. INTRODUCTION

1.1. Background of the Study

The infrastructure and capital resources necessary to achieve the economic objectives of the government of any economy, however, have been scarce. This has required government interventions in the economy by making available the

huge capital expenditures required for large-scale production in industries and the provision of other infrastructure. Government interventions were made possible by the oil boom of the early 1970s, when Nigeria earned unprecedented amounts of foreign exchange through the export of crude oil. As a result, government spending and bureaucracy have both increased quickly. However, the resulting oil oversupply resulted in a sharp fall in government revenue. The government was compelled to look for alternative sources of funding in order to lessen the rise in spending brought on by the oil boom. Then, governments turned to running fiscal deficits. Large deficits are a characteristic of the majority of emerging nations, including Nigeria. Inflation, devaluation, degradation of the gross domestic product, and fiscal adjustment are the economic repercussions of such a deficit, and they form a significant part of the economic agenda. High government expenditure is frequently blamed for deficits, which are brought on when spending increases surpass revenue. Budget deficits, which occur frequently in Nigeria's public sector finance, occur when current expenses exceed predicted current income. The government will need to borrow money if spending exceeds tax revenue. It will use the current currency if it borrows by offering public assets, such as national cash certificates, to the non-bank private sector (non-bank businesses and the general public). In Nigeria, however, the opposite is actually true in practice. Can it be categorically stated that deficit financing has accelerated Nigeria's economic recovery despite the significant amount of debt the federal government borrowed to secure the country's economic development and growth? Numerous studies have been conducted on this subject, and the process has produced a variety of findings. The Nigerian economy is thought to be significantly impacted by deficit financing, according to some scholars, while others disagree. Due to the inconsistencies in their conclusions, the study was undertaken to close the knowledge gap about the effects of deficit funding on economic recovery. This paper aims to provide an empirical justification of the impact of deficit financing on Nigeria's economic recovery (1981-2019).

2. RELATED LITERATURE REVIEW

2.1. Conceptual framework

2.1.1. Deficit Financing

Deficit financing has become a crucial method for funding government spending. Deficit financing is the practice of boosting public spending above sources of

income in an effort to promote a country's economy (CBN, 2012). As a result, finance provided by a country, corporation, or government to make up for an income shortfall can be referred to as deficit financing. For the purpose of stimulating the economy, the government or an organisation may engage in deficit financing. The government may use deficit financing to make up the budget deficit when spending tends to exceed revenue. According to CBN (2013), deficit financing is the process by which the government borrows more money from the economy than it takes in through taxes in order to make up the difference between what it spends and what it earns, with the hope that the increase in revenue from business activities will be sufficient to cover the deficit. However, instead than being the result of a deliberate countercyclical policy, government inefficiency, reflecting widespread tax evasion or inefficient spending, can also be the cause of deficit financing. Such a strategy essentially involves the government spending more than it brings in through taxes, profits from state-owned businesses, loans from banks and public money, and other revenue streams.

2.1.2. External Debt

External debt is the portion of a nation's debt that has been obtained from overseas lenders such as commercial banks, governments, or international financial institutions. These loans are often repaid in the currency used to make them, including any interest. The borrowing nation can sell and export goods to the lending nation in order to obtain the required money. External debt is any debt owed to non-residents that must be repaid with foreign currency, goods, or services (World Bank, 2004).

2.1.3. Economic Recovery/growth

Economic growth, according to the International Monetary Fund (2009) and CBN (2010), is the rise in the volume of products and services generated in an economy over time. It is often calculated as the rate of growth in real gross domestic product (RGDP). Real income and production levels in an economy can alter over time, and this is what is referred to as economic growth. An economy expands as a result of acquiring more commodities and services, resources, and effectively utilising those resources.

Economic recovery in this phase of the business cycle, the economy begins to recover from the negative growth rate. Demands start to pick up due to lower prices and consequently supply starts to react as well. The economy develops a positive attitude towards investment and employment, therefore, production

begins to increase. According to Nzotta (2014), growth occurs when a country experiences technological advancements and technical knowledge that lead to increased productivity and production. Growth is also supported by the rising wealth of the populace and the rising standard of living of the population over time. Economic production, often known as growth, is the ongoing process through which the economy's productive capacity is raised over time in order to boost levels of national production and income. One may argue that capital accumulation, population expansion and ensuing labour force increase, and technical advancement are the three main drivers of economic growth.

2.2. Theoretical Framework

There are numerous ideas that attempt to explain how deficit finance affects global economic recovery. The Ricardian equivalent perspective was deemed pertinent for this study's objectives: The analogous view to that of Ricardian Fiscal deficits are viewed as neutral in terms of their influence on growth by Ricardien. Budget deficit financing is merely a tax delay. The present value of future taxes required to pay off the additional debt brought on by the deficit is exactly equal to the deficit for the current period. In other words, public expenditures must be covered, whether now or in the future, and their present value must match that of both tax and non-tax receipts. The funding of fiscal deficits through taxes can be spread out across time, which is a valuable tool to mitigate the effects of revenue crises or to fulfil sporadic spending demands. Ricardian equivalence necessitates making the assumptions of long-term thinking, equal-to-government-spending-discount rates, and extraordinarily lengthy time horizons for calculating the present value of future taxes.

2.3. Empirical Framework

There have been numerous research done to look into the effects of deficit financing on economic growth and recovery.

Nwankpa looked at the impact of public sector budget deficit finance on economic growth in Nigeria (2022). In the analysis, costs and risks related to each funding option from 2003 to 2018 were considered. After reviewing relevant theories and numerous literatures, the empirical analysis was finished. The study employed regression analysis with other variables as the explanatory variables and the real GDP's log-linear growth as the dependent variable (Bank credit to government- BCG, Non-bank public credit - NBP, ways and means - WM, and external deficit financing - EXDF). The results showed that budget funding made

possible by bank credit and non-bank public is positively connected with the growth rate of the Nigerian economy. Additionally, it showed how financing through means and methods had a negative correlation with growth in real GDP. The coefficient of EXDF was not statistically significant even though there was a negative correlation between the results for external financing and the growth rate of the Nigerian economy. The government was instructed to consider the risks associated with borrowing from external sources as well as the short-, medium-, and long-term impacts of a potential default on debt servicing.

Ihegboro *et al.* (2021) examined the effect of deficit financing on the recovery and growth of the Nigerian economy between the years 1981 and 2015 using an error correction model and the Granger causality test. The analysis found that the federal government's external debt has an important P-value of 0.0173 and a favourable coefficient of 0.000031, implying that a 1% increase in the debt might hasten Nigeria's economic recovery and advancement by 0.00003. The causality test's findings concur with the data in the error correction model, arguing that although domestic debt and a deficit budget don't seem to be directly linked to economic growth in Nigeria, they do have a sizable impact on it. Accordingly, the study draws the conclusion that deficit money, when used effectively for the main objective for which it was designed, is a crucial motivator for promoting economic development in Nigeria. The study also backs up Keynesian theory, which holds that there is a causal relationship between financial deficits and economic recovery. Given this, the study advises Nigerian economic leaders to coordinate the use of borrowed funds and make sure they are used wisely in order to increase the nation's capital and production dominance, as doing so will aid in hastening Nigeria's realisation of achieving a sustainable level of economic development.

Aladejare (2022) carried out research to examine the deficit financing components, inflation, and capital formation in Nigeria: evidence from a direct and indirect analysis. The study revealed that deficit financing components had an indirect effect on inflation and capital formation in Nigeria from 1970 to 2017 in contrast to the direct effects suggested in empirical studies. It was also found that inflation has had a detrimental effect on capital formation. In order to successfully control inflation and ensure growth in capital formation, more coordination between monetary and fiscal policy was advocated.

Using secondary data from 1981 to 2016, Nwant to and Umeh (2019) investigated the impact of deficit financing on Nigeria's economic growth. They demonstrated that borrowing to finance deficits through external debt has a considerable detrimental impact on Nigerian economic growth. Additionally,

while debt service does not significantly affect Nigerian economic growth, domestic debt has a considerable beneficial impact on it. John, Kenekwukwu and Amalachukwu (2019) examined the effect of deficit financing on Nigeria's economic growth from 1987 to 2017. Autoregressive vector estimates were used to estimate the model. The analysis carried out revealed that deficit financing has a positive but not significant effect on Nigeria's economic growth. Nwakobi et al. (2018) determined the effect of the budget deficit on selected macroeconomic variables in Nigeria by specifically assessing the effect of the budget deficit on gross domestic product, money supply and inflation.

The analysis's findings showed that the budget deficit in Nigeria had no appreciable impact on the country's GDP, money supply, or inflation. The results also indicated that there is only a weakly positive link between the budget deficit and GDP. This is consistent with the Keynesian hypothesis that the budget deficit and macroeconomic variables have a positive connection. Onwioduokit and Inam (2018) looked into the connection between Liberia's budget deficits and economic expansion. According to the analysis, there is a long-term connection between Liberia's budget deficit and economic growth. The budget deficit and Liberia's economic growth are also positively and significantly correlated. Ubi and Inyang (2018) performed a descriptive analysis of the budget deficit's effects on Nigeria's economic growth from 1980 to 2016. According to the report, Nigeria's budget deficit has only helped to increase per capita income, the country's economy, and the balance of payments, not to lower unemployment or inflation rates. Using the ARDL method, Bazza et al. (2018) assessed the effect of deficit financing on economic development in Nigeria between 1981 and 2016. The outcome of the ARDL regression estimation revealed that funding government deficits over time had significantly impacted output growth. Mododu and Monogbe (2017) used time series data from the years 1981 to 2015 to study the impact of the budget deficit on economic performance in Nigeria. The findings showed that the budget deficit considerably boosts economic output. The Keynesian postulation that there is a considerable correlation between the budget deficit and economic performance is supported by these empirical facts.

3. METHODOLOGY

3.1. Research Design

The study employed an expo-facto research design as the data been used are historical in nature. The data for the study is collected from the CBN statistical bulletin 2019 and Debt Management Office , Nigeria's Total Public Debt Stock.

This research also intended the period of study from 1981 to 2019.

3.2. Model Estimation Techniques

The analysis is conducted electronically with the use of E-Views, using econometric tools such as Ordinary Least Square (OLS) to estimate the parameters of our regression models combined with co-integration technique to confirm the long run relationship among the modeled variables, the Augmented Dickey Fuller (ADF) unit root test to hedge against spurious regression.

3.3. Model Specification

The model follows the ordinary linear regression model (OLRM) is stated as follows:

$$RGDP=f(DD, EXD) \quad (1)$$

In econometrics, equation 1 above is insufficient resulting from absence of error term. Hence, we express the above equation in a functional relationship using linear regression model by introducing constant and error term, hence we have;

$$RGDP = \beta_0 + \beta_1 DD + \beta_2 EXD + \mu \quad (2)$$

The variables under research were later normalized which will lead us to log form due to positive skewness of the employed data.

$$\text{LOG}(RGDP) = \beta_0 + \beta_1 \text{LOG}(DD) + \beta_2 \text{LOG}(EXD) + \mu \quad (3)$$

Where:

RGDP= Real Gross Domestic Product

DD = Domestic Debt

EXD= External Debt

β_0 = Constant

β_1, β_2 , = Estimation parameters

μ = Error term

4. DATA PRESENTATION AND ANALYSIS

4.1. Data Presentation of Study Variables

The table 4.1 below presents the raw data used for analysis in the study, which was gotten from CBN's statistical bulletin 2019 and Debt Management Office, Nigeria's Total Public Debt Stock.

Where:

RGDP=> Real Gross Domestic Product

DD => Domestic Debt

EXD=> External Debt

Table 4.1: Data Presentation of Study Variables

<i>Fiscal Year</i>	<i>RealGDP</i>	<i>Domestic Debt</i>	<i>External Debt</i>	<i>RGDP (LOG)</i>	<i>DD (LOG)</i>	<i>EXD (LOG)</i>
1981	15258	11.19	2.33	4.183497611	1.048830087	0.367355921
1982	14985.08	15.01	8.82	4.175659066	1.176380692	0.945468585
1983	13849.73	22.22	10.58	4.141441307	1.346744055	1.024485668
1984	13779.26	25.67	14.81	4.139225895	1.409425869	1.170555059
1985	14953.91	27.95	17.3	4.174754763	1.446381812	1.238046103
1986	15237.99	28.44	41.45	4.182927684	1.453929592	1.617524535
1987	15263.93	36.79	100.79	4.183666366	1.565729788	2.003417445
1988	16215.37	47.03	133.96	4.209926863	1.672374979	2.126975139
1989	17294.68	47.05	240.39	4.237912531	1.672559628	2.380916397
1990	19305.63	84.09	298.61	4.285683979	1.924744352	2.475104348
1991	19199.06	116.2	328.45	4.283279966	2.065206128	2.516469266
1992	19620.19	177.96	544.26	4.292703209	2.250322397	2.735806417
1993	19927.99	273.84	633.14	4.299463497	2.437496886	2.801499752
1994	19979.12	407.58	648.81	4.300576355	2.610212865	2.812117535
1995	20353.2	477.73	716.87	4.3086327	2.679182515	2.855440406
1996	21177.92	419.98	617.32	4.325883303	2.623228609	2.790510348
1997	21789.1	501.75	595.93	4.338239292	2.700487381	2.775195249
1998	22332.87	560.83	633.02	4.348944538	2.748831237	2.801417432
1999	22449.41	794.81	2577.37	4.351204932	2.900263323	3.411176769
2000	23688.28	898.25	3097.38	4.374533528	2.953397226	3.49099449
2001	25267.54	1,017	3176.29	4.402562962	3.007308142	3.501920147
2002	28957.71	1166	3,933	4.461764215	3.06669855	3.594710695
2003	31709.45	1329.68	4478.33	4.501188709	3.123747136	3.651116093
2004	35020.55	1370.33	4890.27	4.544322962	3.136825166	3.689332838
2005	37474.95	1525.91	2695.07	4.573741062	3.183528919	3.43057005
2006	39995.5	1753.26	451.46	4.60201113	3.243846325	2.654619277
2007	42922.41	2169.64	438.89	4.632684099	3.336387679	2.642355686
2008	46012.52	2320.31	523.25	4.662876019	3.365546012	2.718709237
2009	49856.1	3228.03	590.44	4.697718303	3.508937562	2.771175772
2010	54612.26	4551.82	689.84	4.737290149	3.65818508	2.838748373
2011	57511.04	5622.84	896.85	4.759751221	3.749955726	2.952719812
2012	59929.89	6537.54	1026.9	4.777643481	3.815414359	3.011528154

2013	63218.72	7118.98	1373.58	4.800845698	3.852417773	3.137853959
2014	67152.79	7904.02	1631.52	4.827064061	3.897848031	3.212592402
2015	69023.93	8837	2111.53	4.838999683	3.946304855	3.324597256
2016	67931.24	11058.2	3478.92	4.832069542	4.04368444	3.541444442
2017	68490.98	12589.49	5787.51	4.83563338	4.100008137	3.762491754
2018	69799.94	12774.4	7759.23	4.843855049	4.106340511	3.889818625
2019	71387.83	14272.64	9022.42	4.853624181	4.154504312	3.95532304

Source: CBN statistical bulletin 2019 and Debt Management Office , Nigeria's Total Public Debt Stock . (Authors compilation)

4.2. Stationarity/Unit Root Tests

Unit root testing is done to make sure that the variables used in this study are stationary at the same unit before further analysis in order to prevent running an erroneous regression and to rectify the non-normality of data from the descriptive statistic. To do this, the variable values are adjusted to the same integer using the Augmented Dickey Fuller (ADF) test, and if necessary, a differencing test is conducted to guarantee that the data are stationary. The table below presents the test's findings.

Table 4.2: Results of Unit Roots Tests using Augmented Dickey Fuller (ADF)

<i>Variables</i>	<i>ADF Statistic</i>	<i>Critical Values</i>			<i>Order</i>	<i>Difference</i>
		<i>1%</i>	<i>5%</i>	<i>10%</i>		
RGDP(LOG)	-3.434088	-3.621023	-2.943427	-2.610263	1(1)	1st
DD(LOG)	-4.566144	-3.621023	-2.943427	-2.610263	1(1)	1st
EXD(LOG)	-4.724835	-3.621023	-2.943427	-2.610263	1(1)	1st

Source: Author's Extractions from E-views Output Generation

The amount of individual stationarities of the variables is determined using the p-value to interpret the Augmented Dickey-Fuller (ADF) unit root test result for individual stationarity. All of the variables exhibit an ADF P-value for the individual unit root test that is less than 0.05, indicating individual stationarity after first differencing.

The ADF's findings demonstrate that the variables are not stationary at their level but do become stationary after the first differentiation. As a result, the series are all intergraded in order of 1 (1), showing that they were all stationary at the beginning of differencing. This parameter results in the co-integration of the employed variables because the integration of all variables at the same

level is a need for co-integration. As a result, this supports the claim that our model is no longer spurious as previously stated in the ordinary least square. That is, the model is no longer spurious if the R2 value is less than the Durbin-Watson but is still spurious if the residual variable is stationary at second differencing. As a result, we go on to the long-term partnership test.

4.3. Co-Integration Test

Having tested the stationarity of each variable, the next step is to test for co-integration between the variables. The Johansen procedure is used to identify long run relationship among the variables. Co-integration of the dependent variable with the independent variables forms a dynamic basis through which forecast can be made.

Table 4.3: Co-integration Tests

Sample (adjusted): 1983 2019

Included observations: 37 after adjustments

Trend assumption: Linear deterministic trend

Series: RGDP DD EXD

Lags interval (in first differences): 1 to 1

Unrestricted Cointegration Rank Test (Trace)

<i>Hypothesized</i> <i>No. of CE(s)</i>	<i>Eigenvalue</i>	<i>Trace</i> <i>Statistic</i>	<i>0.05</i> <i>Critical Value</i>	<i>Prob.**</i>
None	0.200068	14.33118	29.79707	0.8215
At most 1	0.122246	6.071707	15.49471	0.6871
At most 2	0.033150	1.247333	3.841466	0.2641

Trace test indicates no cointegration 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)

<i>Hypothesized</i> <i>No. of CE(s)</i>	<i>Eigenvalue</i>	<i>Max-Eigen</i> <i>Statistic</i>	<i>0.05</i> <i>Critical Value</i>	<i>Prob.**</i>
None	0.200068	8.259475	21.13162	0.8871
At most 1	0.122246	4.824375	14.26460	0.7638
At most 2	0.033150	1.247333	3.841466	0.2641

Max-eigenvalue test indicates no cointegration 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 $b'S_{11}^{-1}b=I$):

4.4. Error Correction Model

Table 4.4 Error Correction Model

Vector Error Correction Estimates

Included observations: 37 after adjustments

Standard errors in () & t-statistics in []

<i>CointegratingEq:</i>	<i>CointEq1</i>		
RGDP(-1)	1.000000		
DD(-1)	-0.406676 (0.04350) [-9.34921]		
EXD(-1)	0.187669 (0.05117) [3.66735]		
C	-3.845415		
Error Correction: CointEq1	D(RGDP) -0.007103 (0.04261) [-0.16669]	D(DD) 0.323077 (0.16816) [1.92127]	D(EXD) -0.848608 (0.53265) [-1.59317]
D(RGDP(-1))	0.457041 (0.16063) [2.84535]	-0.361209 (0.63386) [-0.56986]	-0.458163 (2.00780) [-0.22819]
D(DD(-1))	-0.055194 (0.04176) [-1.32183]	0.245598 (0.16477) [1.49051]	-0.136457 (0.52194) [-0.26144]
D(EXD(-1))	-0.007966 (0.01360) [-0.58571]	-0.004709 (0.05367) [-0.08774]	0.361656 (0.17001) [2.12725]
C	0.015486 (0.00575) [2.69088]	0.067090 (0.02271) [2.95424]	0.066370 (0.07193) [0.92265]
R-squared	0.338302	0.173770	0.186291
Adj. R-squared	0.255590	0.070492	0.084577
Sum sq. resids	0.007661	0.119290	1.196906
S.E. equation	0.015472	0.061056	0.193399
F-statistic	4.090113	1.682538	1.831520
Log likelihood	104.4271	53.63586	10.97607
Akaike AIC	-5.374440	-2.628965	-0.323031

Schwarz SC	-5.156749	-2.411274	-0.105339
Mean dependent	0.018323	0.080490	0.081347
S.D. dependent	0.017933	0.063329	0.202136
Determinant resid covariance (dof adj.)		3.07E-08	
Determinant resid covariance		1.99E-08	
Log likelihood		170.5573	
Akaike information criterion		-8.246343	
Schwarz criterion		-7.462653	

Source: E-View Output generation
 VEC Residual Serial Correlation LM Tests
 Null Hypothesis: no serial correlation at lag order h
 Date: 07/05/21 Time: 14:49
 Sample: 1981 2019
 Included observations: 37

Lags	LM-Stat	Prob
1	8.376515	0.4967

Probs from chi-square with 9 df.

Source: E-View Output generation

Table 4.4 above present result of the Vector Error Correction Model (VECM) for RGDP, DD, and EXD to test for long run and short run shocks correction as a result of non cointegration of the data. The various coefficient values of the short run equilibrium is compared against the long run equilibrium to ascertain the level of bounce backs in addressing non long run cointegration issues of the model.

After differencing, the adjustment coefficient (Const) value of -3.845415 shows that, the previous period deviation from long run equilibrium is corrected in the short run at an adjustment speed of 3.845415. For RGDP coefficient, a unit change in RGDP is associated with -0.007103 unit decrease in RGDP in the short run *Ceteris Paribus* against the long run coefficient of 1.000000. For DD coefficient, a unit change in DD is associated with a 0.323077 unit increase in DD in the short run *Ceteris Paribus* against the long run coefficient of -0.406676. For EXD coefficient, a unit change in EXD is associated with a -0.848608 unit decrease in EXD in the short run *Ceteris Paribus* against the long run coefficient of 0.187669. A post estimation auto-correlation test is done using the LM test, which reveal a value 0.4967. This depicts that the set of data after correction for error in the model has no serial correlation that will impede that outcome of further VEC regression.

4.5. Ordinary Least Square output (log linear output regression)

Table 4.5: Regression output for model 3

Dependent Variable: D(RGDP)

Method: Least Squares (Gauss-Newton / Marquardt steps)

Sample (adjusted): 1983 2019

Included observations: 37 after adjustments

$D(RGDP) = C(1)*(RGDP(-1) - 0.406675659368*DD(-1) + 0.187668882806*EXD(-1) - 3.84541480402) + C(2)*D(RGDP(-1)) + C(3)*D(DD(-1)) + C(4)*D(EXD(-1)) + C(5)$

	<i>Coefficient</i>	<i>Std. Error</i>	<i>t-Statistic</i>	<i>Prob.</i>
C(1)	-0.007103	0.042613	-0.166686	0.8687
C(2)	0.457041	0.160627	2.845346	0.0077
C(3)	-0.055194	0.041756	-1.321829	0.1956
C(4)	-0.007966	0.013601	-0.585706	0.5622
C(5)	0.015486	0.005755	2.690875	0.0112
R-squared	0.338302	Mean dependent var		0.018323
Adjusted R-squared	0.255590	S.D. dependent var		0.017933
S.E. of regression	0.015472	Akaike info criterion		-5.374440
Sum squared resid	0.007661	Schwarz criterion		-5.156749
Log likelihood	104.4271	Hannan-Quinn criter.		-5.297694
F-statistic	4.090113	Durbin-Watson stat		1.908900
Prob(F-statistic)	0.008662			

Source: E-View Output generation

The Durbin Watson statistic for the supplied model is generated to verify that the set of data was devoid of serial auto-correlation (Table 4.5). The predicted Durbin Watson statistics for the given model is 1.908900. The data's Durbin Watson statistics are inside the standard deviation of 2, which excludes auto-correlation. The Durbin Watson statistics makes sure that the residuals from the previous and next sets of data do not interact in a way that leads to the auto-correlation issue. As a result, this model demonstrates a minimal risk of a potential autocorrelation issue, with a DW statistic of about 2.

For model fitness, the R^2 value is used to establish the level of overall fluctuation the study independent variables (DD & EXD) can collectively cause RGDP as the dependent variable to change. The R square value of approximately 0.338 shows that DD and EXD cause RGDP to fluctuate at approximately 33.8%; this means that 66.2% fluctuation of the Real Gross Domestic Product

is caused by other factors not considered in this study like; debt service, external reserves, aggregate savings, and private consumption expenditures. The R^2 adjusted value of approximately 0.255 revealed shows that, there will be a 0.083(0.338– 0.255) variation from the sampled result of R square if the other omitted factors are considered. This means that if debt service, external reserves, aggregate savings, and private consumption expenditures are considered, there will be either 8.3% increase or decrease in the level of fluctuation DD and EXD can cause RGDP to change. The Fisher statistic reveals a value of 4.090113 with a probability value of 0.008662 which prove that the overall model is statistically significant.

5. SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1. Summary of Findings

The study investigates the impact of deficit financing on Nigeria's economic recovery. For the study, a time-series of data with variables from 1981 to 2019 is used. This led us to run a co-integration test, which revealed there is no co-integrating equation in the model. The estimation that began with the ADF test showed that all the variables were stationary at initial difference. Due to the non-cointegration of the data, a test for long- and short-run shock correction using a vector error correction model (VECM) was conducted for RGDP, DD, and EXD. The results show that the data set after error correction in the model has no serial correlation that will obstruct the results of further VEC regression. To determine the degree of bounce backs in addressing non-long run cointegration difficulties of the model, the various short run coefficient values are evaluated against the long run equilibrium.

The study's main conclusions are as follows in light of the test that was conducted:

- The Augmented Dickey Fuller Test (ADF) result shows that after the first differencing at the order of 1, the data achieves stationary (1). While the model's non-Co-integration equation is revealed by the co-integration result.

Findings show that deficit financing through external debt (EXD) borrowing has a significantly favourable impact on Nigeria's economic recovery. Domestic debt (DD) has a significant good impact on the country's economic recovery.

5.2. Conclusion

The study, which examined the impact of deficit financing on Nigeria's economic recovery, came to the conclusion that deficit financing significantly aided the country's recovery.

As a result, the study concludes that there is a considerable connection between Nigeria's economic recovery and deficit financing. However, suffice it to say that in order to achieve long-term economic development of the country, it is necessary to effectively manage the various sources of financing the budget deficit, such as external debt, domestic debt, etc.

5.3. Recommendations

- In order to eliminate corruption and waste, the government should set up a monitoring committee that will ensure that the budget is rigorously implemented as well as any loans taken out.
- The government must halt unproductive loans, excessive spending, and an uncontrolled money supply by putting in place methods that aim to boost and sustain economic sector productivity.
- Before deciding on strategies for financing the deficit, the government and policymakers should thoroughly assess the current state of the economy.
- Among other things, the government should work to diversify its sources of income and exhibit a high degree of transparency in both its monetary and fiscal activities.
- As one of the mechanisms for economic growth, government should keep its external debt at an optimal level. Additionally, all external debt should be used properly for the intended purpose in order to support economic growth.

5.4. Contributions to Knowledge

The study has been able to provide a considerable contribution to knowledge, and the contributions are thought to be important. The following is a list of some of the study's intellectual contributions:

- By extending the time period captured to the year 2019, it addressed a knowledge gap (that is, the most recent available data at the time of the analysis).
- It also helps investors understand that the country's economy is strong even when the budget is in deficit; and, finally, it adds to the vast body of literary works.

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Declaration of conflict of interest

There exists no ethical issues bothering the study and sponsorship regarding funding and related issues of contradictions.

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