

Impact of fiscal deficits financing on Economic Growth in Nigeria: An approach of time series Econometric Model**Ihezie Ugochukwu Remigius¹, Ochuba Chinedu Daniel², Umeh Anthony Chinedu³**¹Department of Social Science (Economic Unit), Federal Polytechnic Nekede Owerri, Nigeria²School of Business Education, Federal College of Education (Technical) Umunze, Nigeria³Department of Economics, Enugu State University of Science and Technology, NigeriaCorresponding Author: **Umeh Anthony Chinedu****Abstract**

This study examined the impact of fiscal deficits financing on economic growth in Nigeria. The study sought to: (i) verify the impact of external borrowing financing on the economic growth in Nigeria; (ii) investigate the impact of internal borrowing financing on the economic growth in Nigeria and (iii) evaluate the impact of external reserves financing on the economic growth in Nigeria. The Expost-facto research method was the research design. The methods of data analysis were Augmented Dickey-Fuller Unit Root test statistic, Johansen Co-integration test, error-correction mechanism, Breuch-Godfrey Serial correlation LM Test, Ramsey Reset and Durbin-watson test. The following are the major findings of the study: (i) External borrowing finance (EXBF) has negative insignificant impact on real GDP (RGDP) (t – statistics $(-1.2594) < t_{0.05} (1.684)$); (ii)

Internal borrowing finance (INBF) has positive significant impact on real GDP (RGDP) (t – statistics $(3.9085) > t_{0.05} (1.684)$) and (iii) External reserve (EXRV) has negative significant impact on real GDP (RGDP) on real GDP (RGDP) (t – statistics $(-2.6994) > t_{0.05} (1.684)$). The study recommends the following (1) The Federal Government should not implement fiscal deficit finance that do not exceeds the international bench mark of 3 percent of GDP in order to run-out from prolong debt service payment and sustainable debt burden. (2) The Federal Government should ensure judicious use of borrowed fund and should invest such funds on project that can generate good return in the future. Deficit financing should be targeted on the productive sector of the economy.

Keywords: Fiscal policy, Fiscal deficits finance and Economic Growth**1. Background of the Study**

Deficit as a means of financing was introduced in Nigeria after Nigeria-Biafra civil war. It was strengthened by the price volatility in the crude oil market and further aggravated by the current financial and economic challenges. Since independence, over 85% of Nigerian budgets were on deficits (Momodu & Monogbe, 2017) ^[12]. Statistics has showed the Nigeria has financed fiscal deficits for thirty-eight (38) years judging from 1980 to 2019 and it was only in 1995 and 1996 that government of Nigeria has applied surplus budget policy (CBN, 2018) ^[7].

The effect of fiscal deficits financing on economic growth has gone through extensive study over the past decades and still remains important till date. World Bank (2000) reported countries that achieved noticeable economic growth were those that have attained significant decline in their debts. However, this view has been extended to assert that it is not growth per say, but the structure of growth that matters (Oluwafadekemi and Ogundipe, 2018) ^[22].

The advent of fiscal deficit financing is caused by failure of market forces (forces of demand and supply) to stabilize the economy and cause cyclical fluctuations of 1930s. Fiscal deficit Financing was adopted as an important method of promoting economic growth and development by John Maynard Keynes. In Keynesian framework, it has been advocated that the use of deficit financing to solve the issue of stagflation in the developed countries when there are cyclical fluctuations. The post Keynesian economic framework also opined that deficit financing could be used to solve of the economic challenges of underdeveloped countries especially the economic issue of unemployment, inflationary pressure, low investment, deficit balance of payment, reduced economic growth. Keynesian school is promoters of expansion in government expenditures even above current income, particularly during depressions. Government intervention is necessary when the government is unable to match her tax revenue with her public expenditure. The school of thought opined that incremental change in government expenditure help to stimulate demand, increase domestic production, make the private sector better-off and then result to economic growth. The school of thought maintained that the major cause of economic downturn is insufficient government spending which later results to inadequate aggregate demand such as the global economic downturn of 1930 and most recently global financial and economic meltdown of 2008. So, government deficit financing always results to increase in demand for productive output and decrease the level of unemployment (Anyanwu and Oaikhenan, 1995 ^[4], Ogboru, 2006 ^[19], Iya, Aminu & Gabdo, 2014) ^[10].

The term deficit financing referred to means generating funds to finance the deficit expenditure instead of the use of generated revenue. Government deficit financing bridges the gap between government revenue and public expenditure by means of domestic borrowing from the public by the sale of bonds or by external borrowing from international financial institutions or use money from national external reserves or by printing new money. Every developing country like Nigeria requires finances to achieve higher economic growth since the private sector shy away from spending much resource in some certain capital goods and channel the responsibility government. Most times both the income tax and non-income tax revenues fail to generate sufficient resources to attain the demanding capital expenditure. In such a situation, public borrowings and printing new currency notes are last resort to finance required capital expenditure. Despite the huge quantum of loan borrowed by the federal government to ensure economic development and growth in Nigeria, can we emphatically say that deficit financing has stimulated Nigerian economic growth?

2. Statement of the Problem

The idea of fiscal deficit financing can be good macroeconomic policy for economic growth in underdeveloped countries. Fiscal deficit financing is the issue of concern. Nigeria has consistently recorded budget deficits from 1980 to 2018, with rare cases of budget surplus occurring only in the years 1995 and 1996 (CBN, 2018) ^[7]. Statistics show that Nigeria's debt profile is currently on the rise. Her total debt stock increased by 10.2%, from ₦7.54 trillion as at December 31st 2012 to ₦8.32 trillion in September 2013.

Unfortunately, at the time this review, fiscal deficits finance for the budgetary process in Nigeria has failed to achieve these objectives: legislative accountability, effective allocation of resources, equitable income distribution and macroeconomic stabilization of the economy. The resultant effect is mass poverty, the elimination of the middle class, centralize wealth in the sides of privileged few who have access to the apparatus of state power, a large army of unemployed youths, poor infrastructural development and infrastructural decay, the rising spate of insurgency and militancy threatening the corporate existence of Nigerian State. Nigeria is called failed state because above stated economic lapses. Sustainable fiscal deficits finance in Nigeria has become a way of legalizing corruption. Statistics shows that the African government has used several budget deficit financing strategies, but she has not been able to harness the benefits of budget deficit financing (UNDP Report, 2014) ^[27]. Thus, her human capital development is still low with an HDI of about 0.466 on the average, infrastructural development is still low as most of her intermediate inputs are imported and above all, poverty rate is still very high with about 54% incidence level (UNDP Report, 2014) ^[27].

In Nigeria, there are number of problems confronting the Nigerian economy ranging from imbalance of payment, declining growth and heavy debt burden which mount to \$18billion owed to Paris Club (Debt Management Office, 2006) ^[9]. The public borrowing in Nigeria has exceeded the international bench mark of 3 percent of GDP. This is worrisome situation especially when it the borrowed money cannot promote economic activities (Anyanwu, 1997) ^[3]. Therefore, it is in the light of this that this study will

examine the impact of fiscal deficits financing on economic growth in Nigeria. The study sought to:

1. investigate the impact of external borrowing financing on the economic growth in Nigeria.
2. identify the impact of internal borrowing financing on the economic growth in Nigeria.
3. evaluate the impact of external reserves financing on the economic growth in Nigeria.

2.1 Concept of Fiscal Deficits Financing

Fiscal deficits financing implies government use of public loans made by governments, minting of new money by monetary authority and use of money from external reserve to make up for supplementary expenditures that is not covered by current revenues.

Iya, Aminu, and Gadbo, (2014) ^[10] described this fiscal deficit as a state of position where current expenditure exceeds expected revenue. Nwanna and Umeh (2019) ^[16] defined fiscal deficits financing in terms of loan financing to fund budget deficits. Fiscal deficit refers to the excess of the public's spending over its revenue (World Bank, 2005). Fischer and Esterly (1990 cited in Nwanna and Umeh (2019) ^[16] identify four means of financing the deficit: a. Printing money (ways and means) b. External borrowing c. the use of foreign reserves d. Domestic borrowing.

2.2 Concept of Economic Growth

Economic growth can be defined as change in the amount of real output and income in an economy overtime. An economy grows because it obtains increased goods and services, obtained increase resources and use the resource more efficiently (Nzotta, 2014) ^[18]. According to him, growth occurs when a country experience advances in technology and technical knowledge which leads to increases in productivity and output. Growth is also advocated with rising living standard of the population overtime and increase in the wealth of the citizens.

2.3 Theoretical Literature

2.3.1 Ricardian equivalence Theory of budget deficit and fiscal policy

Ricardian equivalence is an economic theory that argues that attempts to stimulate an economy by increasing debt-financed government spending are doomed to failure because demand remains unchanged. The underlying idea is that no matter how a government chooses to increase spending, whether through borrowing more or taxing less, the outcome is the same and demand remains unchanged. The theory argues that consumers will save any money they receive in order to pay for the future tax increases they expect to be levied in order to pay off the debt. This theory was developed by David Ricardo in the early 19th century and later was elaborated upon by Harvard professor Robert Barro. For this reason, Ricardian equivalence is also known as the Barro-Ricardo equivalence proposition,

Understanding Ricardian Equivalence theory, the Ricardian equivalence argues that an individual or family's rate of consumption is determined by the lifetime present value of their after-tax income. The recipients of a government windfall perceive it as such. It's a bonus, not a long-term increase in income. They will resist spending it because they know it's unlikely to recur, and will even be clawed back in the form of higher taxes in the future.

In summary, (1) Ricardian equivalence maintains that government spending to stimulate the economy is not effective (the government, cannot stimulate consumer spending), (2) That is, individuals who get extra money will save it in order to pay for the future tax increases they know must follow and (3) This theory has been widely discounted by economists who subscribe to the theories of Keynesian economics. In any case, the theory espoused by Ricardo contradicts the widely accepted theories of Keynesian economics, which argued that the government can stabilize the economy by stimulating demand or suppressing it. Arguments against the Ricardian Equivalence theory, some economists argue that Ricardo's theory is based upon unrealistic assumptions. For instance, it assumes that people will save in anticipation of a hypothetical future tax increase. It also assumes that they will not find it necessary to use the windfall. It even assumes that the capital markets, the economy in general, and even individual incomes all will remain static for the foreseeable future.

2.4 Empirical Literature

The link between fiscal deficits financing and economic growth has attracted the attention of the researchers and scholars. The empirical review of literature was written as follows:

Monogbe and Okah, (2017) ^[13] investigate the effect of deficit financing on development of the Nigerian economy between the periods 1981 to 2015 using error correction model and granger causality test. Study report that Federal government external debt exhibits a significant P-value of 0.0173 with a positive coefficient of 0.000031 suggesting that 1% increase in government external debt is capable of stimulating economic development in Nigeria to the tune of 0.00003. The report of the causality test also validates the report in the error correction model and thus suggest that external debt significantly contribute to the development of the Nigeria economy while domestic debt and deficit budget does not seem to granger cause economic development in Nigeria. On this premises, study conclude that deficit financing is a vital stimulus in promoting economic development in Nigeria if adequately channel for the original purpose for which it was meant for. Furthermore, study thus validates the Keynesian postulation of the existence of positive relationship between deficit financing and economic development.

Monogbe, Dornubari and Emah, (2015) ^[14] examine how the government manage her deficit through borrowing from external sources, domestic debt or increase in the total money supply and how it affects economic performance in the Nigeria context over a period of 1981 to 2014. Descriptive statistic, OLS, series of diagnostics test, granger causality test, ECM, finally and impulse response were used in the study. Findings reveal that deficit financing through borrowing from foreign country has a contagious implicating effect but significant association to economic performance in the Nigeria context. This is evident by the result of the F statistic of the granger causality test and the ECM which established the fact that external debt does not granger cause economic growth. However, the result of the OLS reveals that increase in total money supply will influence economic growth; this is to the tune of 1% increase in total money supply to the economy will lead to about 18.4% increase the real gross domestic product all

thing been equal. This will in turn reduce interest rate and trigger investments opportunities.

Nwanna and Umeh (2019) ^[16] examined the effect of deficit finance on Nigeria economic growth using secondary data from 1981-2016. The study used secondary data from CBN statistical bulletin on various issues. Augmented Dickey Fuller (ADF) unit root test, Johanson Co-integration test and normality test were employed for the analysis. The research findings revealed that deficit financing through External debt borrowing has a significant negative effect on Nigeria's economic growth. Also, Domestic debt has a positive significant effect on Nigeria's economic growth, while Debt service has no significant effect on Nigeria's economic growth. The study therefore, recommends that Government should set up monitoring teams that will make sure that the budget is well and carefully implemented and as well as loan borrowed in other to reduce corruption, linkages and wastages, the team will do this by holding everyone accountable for every kobo of government money spent.

Paiko, (2012) ^[26] examines the impact of government expenditures on private investment and also how the financing of budget deficit has not only affected the performance of private investment but also how it crowds out private investment in Nigeria. Secondary data from CBN statistical bulletin and Bureau of statistics bulletin were used Econometric models were used in calculating the relative impact of deficit financing on private investment in Nigeria. The authors applied the OLS techniques, Augmented Dickey Fuller technique, error correction model and Johansen cointegration test. The findings revealed a negative relationship between deficit financing and investment in the period under review i.e., deficit financing in Nigeria crowds out private investment. The paper recommends that government should redirect it fiscal policy that would favor the private investor by discouraging high government expenditure and maintaining low fiscal deficit. Also, to avoid crowding out effect, it is recommended that deficit be financed through the capital market.

Nwanne, (2014) ^[17] investigated the implications of budget deficit financing on economic stability in Nigeria between 1970 and 2013 using the econometric tool of OLS. The author adopted external source of deficit financing, non-banking public source of deficit financing, exchange rate as independent variables, ways and means source of deficit financing, banking system source of deficit financing and interest rates as independent variables. Economic growth was proxy with gross domestic products. The study revealed that external source of deficit financing, non-banking public source of deficit financing and exchange rate has significant and positive relationship with gross domestic product. On the other hand, ways and means source of deficit financing, banking system source of deficit financing and interest rates have negative implications on gross domestic product.

Nwaeze, (2017) ^[15] examines empirically the relationship between fiscal deficits, financing options and macroeconomic stability in Nigeria from 1970 to 2016. The study employed descriptive statistics, unit root test, cointegration and VAR estimation methods to analyze the data. The results of the variance decomposition reveal that Interest rate (INTR), overall fiscal deficits (OFDE) and the size of fiscal deficits financed by domestic borrowing (DBFD) are the main shocks causing the variation in inflation (INFL), while overall fiscal deficits (OFDE), the

size of fiscal deficits financed by external borrowing (EBFD) and the size of fiscal deficits financed by domestic borrowing (DBFD) are the main shocks causing the variation in exchange rate (EXCR) in Nigeria. The study concludes that fiscal deficits have significant negative impact on macroeconomic stability vis-a-viz inflation and exchange rates in Nigeria.

Onuorah and Ogbonna (2013) [23] investigated effect of deficit financing on economic growth in Nigeria using data contained in the Annual Report and Statement of Account and Statistical Bulletin of the Central Bank of Nigeria (CBN) for the period 1981 – 2012. The paper applied descriptive statistics, OLS econometric method, diagnostic test, ADF unit root test and Johansen Co-integration test, as well as Pair-wise Granger causality test as techniques of analysis. The results revealed that the variables were stationary at first difference - 1(1). The variables were jointly co-integrated at 5% level. This implied that deficit financing was statistically significant and positively related to economic growth in Nigeria. This meant that both domestic debt and external debt liability contributed effectively to the liquidation of our debt stock within the sampled period. Based on the regression result, it is clear that the country's domestic debt and foreign debt constituted a veritable instrument of finance in Nigeria. The study therefore concluded that a long-run equilibrium connection occurred between the dependent and independent variables. This means that deficit financing exerted substantial influence on the growth cum debt management and debt services in Nigeria.

Ojong, Owuiz and Effiong (2013) [20] examined effect of budget financing on economic development in Nigeria. Annual time series secondary in nature spanning over the period 1980 – 2008 were sourced from the CBN Statistical Bulletin. Six research hypotheses developed to assess the relationship between budget deficit financing, unemployment, inflation rate, balance of payment, government financing, government revenue, which formed the explanatory variables, while GDP was used as dependent variable. OLS econometric method was used to estimate equations specified for the study. The results proved as follows that: (i) there existed a significant connection budget deficit financing and economic growth, (ii) an inverse relationship occurred between GDP and unemployment, (iii) a direct relationship showed between GDP and inflation rate, (iv) a significant relationship was observed between GDP and government expenditure, (v) an inverse relationship occurred between GDP and government revenue.

Onwe, (2014) [24] sought to investigate the implications of fiscal deficit financing on economic stability in Nigeria between 1970-2013. The study adopted regression analysis. The study revealed that External Source of Deficit Financing (EXF), Non-banking Public Source of Deficit Financing (NBPF) and Exchange Rate has significant and positive implications on Economic Stability proxy for Gross Domestic Product (GDP), while Ways and Means Source of Deficit Financing (WM), Banking System Source of Deficit Financing (BSF) and Interest Rate (INTR) has negative implications on economic stability in Nigeria. The implication is that government deficit financing through External Source of Deficit Financing (EXF) and Non-banking Public Source of Deficit Financing (NBPF) will maintain economic stability while government deficit

financing through Banking System Source of Deficit Financing (BSF) and Ways and Means Source of Deficit Financing (WM) will reduce economic growth thereby causing instability in the economy.

2.5 Gap in Literature

To the best of our knowledge, there are limited studies on the impact of fiscal deficits financing on economic growth in Nigeria covering 38 years number of observations ranging from 1980 to 2018. Scholars have paid less attention on area of the research interest taking cognizant of 38 years number of observations.

To the best of our knowledge, there is no clear consensus till date in the literature as to whether fiscal deficits financing stimulates economic growth or hinders economic growth in Nigeria as empirical result varies from region to region, country to country. This study will bridge the gap by providing clear explanation as regards to cause-effect relationship between fiscal deficits financing and economic growth in Nigeria.

The study covered literature gaps by extending existing variables in fiscal deficits financing. The study extended variables up to six explanatory variables by incorporating internal borrowing finance (INBF), external borrowing finance (EXBF), external reserve (EXRV), way and means finance (WAMS), banking system finance (BSF) and non-banking public finance (NONBF).

The study covered literature gaps by carried out pre-diagnostic test such as Augmented Dickey-Fuller Unit Root test statistic and Johansen co-integration test. In addition, carried out second order test like Breuch-Godfrey Serial Correlation Langrage Multiplier Test for serial correlation to affirm the result of first order test (error correction model) and ensure that the regression is BLUE (Best linear unbiased Estimator).

3. Methodology

This study made use of ex-post-facto research design which enables us to measure the effect or relationship between dependence variable and explanatory variables using time-series secondary data. To empirically examine the impact of fiscal deficits finance on the economic growth in Nigeria, the researcher subjected the data collected to Augmented Dickey-Fuller Unit Root test statistic, Johansen Co-integration test, error-correction mechanism, Ramsey Reset and Breuch-Godfrey Serial Correlation LM test. These variables consist of real GDP (RGDP), internal borrowing finance (INBF), external borrowing finance (EXBF), external reserve (EXRV), way and means finance (WAMS), banking system finance (BSF) and non-banking public finance (NONBF) for the period of 1980 to 2018 as defined in our model specification. All the variables were sourced from Central Bank of Nigeria's (CBN) statistical bulletin for various years.

3.1 Theoretical Framework

The study adopts the work of Keynesian framework. In a simple Keynesian framework, the desired aggregate demand relationship in the goods market in the Keynesian framework is expressed as follows:

$$Y = C + I + G + (X - M) \dots\dots\dots (1)$$

3.2 Model Specification

This study specifically adopts the model of Nwana and Umeh (2019) [16]; Akinmulegun, (2014) [2], Bazza, Mandara and Ibrahim, (2018) [5]; Onwe, (2014) [24] to study of the impact of fiscal deficits financing on Economic growth. Thus, the model is represented in a functional form as shown below:

$$RGDP=f (INBF, EXBF, EXRV, WAMS, BSF, NONBF) \dots (2)$$

Where RGDP is real GDP, INBF is internal borrowing finance, EXBF is external borrowing finance, EXRV is external reserve, WAMS is way and means finance, BSF is banking system finance and NONBF is non-banking public finance.

In a linear function, it is represented as follows:

$$RGDP = \beta_0 - \beta_1 INBF - \beta_2 EXBF + \beta_3 EXRV + \beta_4 WAMS + \beta_5 BSF + \beta_6 NONBF + Ut \dots (3)$$

Where: β_0 = Constant term, β_1 to β_6 = Regression coefficient and Ut = Error Term.

To reduce the outliers among the variables, all variables will be expressed in logarithmic form.

$$HGDP = \beta_0 - \beta_1 \text{LogINBF} - \beta_2 \text{LogEXBF} + \beta_3 \text{LogEXRV} + \beta_4 \text{LogWAMS} + \beta_5 \text{LogBSF} + \beta_6 \text{LogNONBF} + Ut \dots (4)$$

Where: β_0 = Constant term, β_1 to β_6 = Regression coefficient and Ut = Error Term.

This study is anchored on the Aminu, & Aminu, (2015) in the study who re-examine the causal relationship between energy consumption and economic growth using Nigeria’s data Thus, the model is represented in a functional form of the model was shown below:

4. Results and Discussion

The ADF test is used to test whether the variables are non-stationary (unit root). If the results indicate that all series are stationary in the first difference or all series are generated by 1(1) and 1(1) process, condition of stationarity is established or confirmed (Gujarati, 2004). The unit root was carried out to avoid non-sense regression and violation of ordinary least square assumption.

Table 1: Results of Stationarity (unit root) test

Variables	ADF- Statistics	Critical Value	Philliph-Perron Statistics	Critical Value	Remark
RGDP	-4.360548	1% level = -3.615588 5% level = -2.943427 10% level = -2.610263	-4.360548	1% level = -3.621054 5% level = -2.943427 10% level = -2.610263	1(1)
INBF	-6.115310	1% level = -3.615588 5% level = -2.943427 10% level = -2.610263	-6.121776	1% level = -3.621054 5% level = -2.943427 10% level = -2.610263	1(1)
EXBF	-4.903364	1% level = -3.615588 5% level = -2.943427 10% level = -2.610263	-7.889466	1% level = -3.621054 5% level = -2.943427 10% level = -2.610263	1(1)
EXRV	-9.423757	1% level = -3.615588 5% level = -2.943427 10% level = -2.610263	-13.71125	1% level = -3.621054 5% level = -2.943427 10% level = -2.610263	1(1)
WAMS	-6.200465	1% level = -3.615588 5% level = -2.943427 10% level = -2.610263	15.40458	1% level = -3.621054 5% level = -2.943427 10% level = -2.610263	1(1)
BSF	-12.14466	1% level = -3.615588 5% level = -2.943427 10% level = -2.610263	12.09779	1% level = -3.621054 5% level = -2.943427 10% level = -2.610263	1(1)
NONBF	-11.27921	1% level = -3.615588 5% level = -2.943427 10% level = -2.610263	12.96959	1% level = -3.621054 5% level = -2.943427 10% level = -2.610263	1(1)

Source: Author’s computation

The real GDP (RGDP), internal borrowing finance (INBF), external borrowing finance (EXBF), external reserve (EXRV), way and means finance (WAMS), banking system finance (BSF) and non-banking public finance (NONBF) were stationary at first difference. It is now referable to use Error Correction regression Model to estimate the parameters.

4.1 Johansen Co-integration Test Results

Since all the variables were integrated of order 1 (1), we turned to determine the existence of long run equilibrium relationship between the variables. Separate co-integration tests were carried out on real GDP (RGDP), internal borrowing finance (INBF), external borrowing finance

(EXBF), external reserve (EXRV), way and means finance (WAMS), banking system finance (BSF) and non-banking public finance (NONBF). Non-stationary time-series can be co-integrated if there are linear combinations of them that are stationary, that is, the combination does not have a stochastic trend. In other words, if two or more I(1) variables are cointegrated, they must obey an equilibrium relationship in the long-run, although they may diverge substantially from that equilibrium in the short run. The co-integration tests are based on the Johansen and Juselius (1989) test.

Ho = There is no co-integration (no long run relationship among Variable)

Table 2: Co-integration Test Results

Date: 01/28/20 Time: 15:36				
Sample (adjusted): 1982 2018				
Included observations: 37 after adjustments				
Trend assumption: No deterministic trend				
Series: RGDP INBF EXBF WAMS BSF NBSF EXRV				
Lags interval (in first differences): 1 to 1				
Unrestricted Cointegration Rank Test (Trace)				
Hypothesized		Trace	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.989715	351.3131	111.7805	0.0000
At most 1 *	0.894016	181.9610	83.93712	0.0000
At most 2 *	0.658411	98.91563	60.06141	0.0000
At most 3 *	0.615474	59.17218	40.17493	0.0002
At most 4	0.408559	23.80963	24.27596	0.0572
At most 5	0.087919	4.377445	12.32090	0.6563
At most 6	0.025940	0.972456	4.129906	0.3757
Trace test indicates 4 cointegrating eqn(s) at the 0.05 level				
* Denotes rejection of the hypothesis at the 0.05 level				
**MacKinnon-Haug-Michelis (1999) p-values				

Source: E-view Results

The co-integration results in Table 2 for the model (RGDP, INBF, EXBF, EXRV, WAMS, BSF, NONBF) reveals that both trace test and the Max-eigenvalue test indicates 4 co-integrating equation(s) at the 5 percent level of significance. Thus, there is a long-run relationship among the variables

(RGDP, INBF, EXBF, EXRV, WAMS, BSF and NONBF). We therefore reject the null hypothesis of no co-integration amongst the variables and accept the alternative hypothesis.

Data Analysis

Table 3: Empirical Results of the Error Correction Model (ECM)

Dependent Variable: D(RGDP,1)				
Method: Least Squares				
Date: 01/28/20 Time: 16:43				
Sample (adjusted): 1981 2018				
Included observations: 38 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	8785.214	17531.87	0.501100	0.6200
D(INBF,1)	0.441316	0.112910	3.908564	0.0004
D(EXBF,1)	-0.026888	0.021349	-1.259450	0.0943
D(WAMS,1)	0.032188	0.147875	0.217668	0.8292
D(BSF,1)	0.410638	0.109054	3.765766	0.0004
D(NBSF,1)	0.045473	0.089266	0.509410	0.6142
D(EXRV,1)	-0.026627	0.009864	-2.699492	0.0113
ECM-1	-0.324081	0.148872	-2.176907	0.0375
R-squared	0.863615	Mean dependent var		14169.31
Adjusted R-squared	0.715125	S.D. dependent var		119449.1
S.E. of regression	105823.8	Akaike info criterion		26.16160
Sum squared resid	3.36E+11	Schwarz criterion		26.50636
Log likelihood	-489.0704	Hannan-Quinn criter.		26.28426
F-statistic	5.448750	Durbin-Watson stat		1.801701
Prob(F-statistic)	0.004193			

Source: E-view Results

The error correction model was carried out to examine parameters estimates. In testing this hypothesis, internal borrowing finance (INBF), external borrowing finance (EXBF), external reserve (EXRV), way and means finance (WAMS), banking system finance (BSF) and non-banking public finance (NONBF) were regressed against real GDP (RGDP). The result of the regression analysis represents the model for the impact of fiscal deficits finance on economic growth in Nigeria. The empirical result shows that the coefficient of internal borrowing finance (INBF) has positive significant impact on real GDP (RGDP) because

observed values of t – statistics (3.9085) was greater than its critical value (1.684). The empirical result shows that the coefficient of external borrowing finance (EXBF) has negative insignificant impact on real GDP (RGDP) because observed values of t – statistics (-1.2594) was less than its critical value (1.684). The empirical result shows that the coefficient of way and means finance (WAMS) has positive insignificant impact on real GDP (RGDP) because observed values of t – statistics (0.217668) was less than its critical value (1.684). The banking system finance (BSF) has positive significant impact on real GDP (RGDP) because

their observed values of t – statistics (3.7657) was greater than its critical value (1.684). The non-banking public finance (NONBF) has positive insignificant impact on real GDP (RGDP) because their observed value of t-statistics (0.509410) was less than its critical value (1.684). The external reserve (EXRV) has negative significant impact on real GDP (RGDP) because their observed values of t – statistics (-2.699492) was greater than its critical value (1.684). The result of the F – statistical test shows that the overall regression of the variables was statistically significance. This is because observed values of the F –

statistics (4.44875) was greater than its critical value (3.830). Again, our empirical result shows that the R-squared (R^2) is 0.8636. The ECM statistics was (-2.176907). The ECMt-1 result indicates that 32% numbers of errors have been corrected from short run adjustment to the long run. In other words, ECM statistics shows that the model has 32 percent degree of adjustment from short-run to long-run equilibrium.

4.2 Econometric /Second Order Test The null hypothesis; there is Autocorrelation.

Table 4: Result of Breuch-Godfrey Serial Correlation LM Test

Breusch-Godfrey Serial Correlation LM Test:			
F-statistic	34.30083	Prob. F (1,29)	0.0000
Obs*R-squared	20.02308	Prob. Chi-Square (1)	0.0000
Test Equation:			
Dependent Variable: RESID			
Method: Least Squares			
Date: 01/28/20 Time: 17:43			
Sample: 1981 2018			
Included observations: 38			
Presample missing value lagged residuals set to zero.			

Source: E-view Results

The Breuch-Godfrey Serial correlation LM Test was used to identify whether the model suffers from autocorrelation problem. The autocorrelation problem violates of ordinary least square assumption that says there is no correlation among error terms of different observation. Breuch-Godfrey Serial correlation LM Test is a statistic that ensures that the assumption of ordinary least square was not violated. The null hypothesis; there is autocorrelation problem. The result of Breuch-Godfrey Serial correlation LM Test (34.30083)

and it P-value was (0.0000). Because Breuch-Godfrey Serial correlation LM Test (34.30083) was greater than its P-value was (0.0000), we conclude that the model is free from Autocorrelation problem. This denotes that prediction base of the Ordinary Least Square estimates were efficient and unbiased.

4.2.1 Result of Ramsey Reset Test

Table 5: The null hypothesis; there is Specification Error

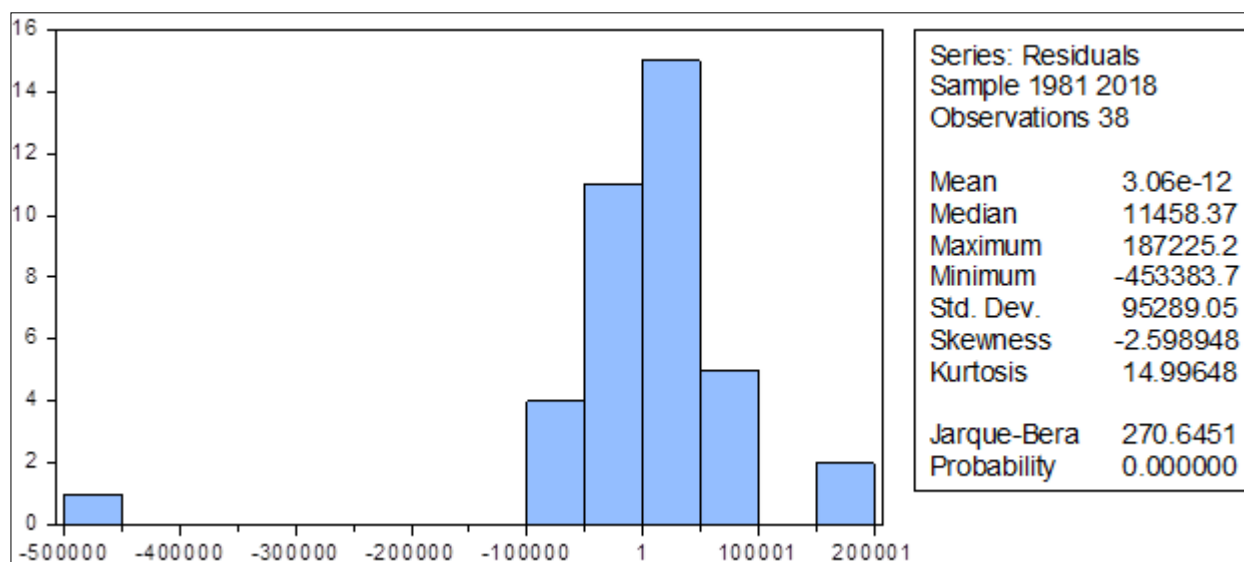
Ramsey RESET Test			
Equation: UNTITLED			
Specification: D(RGDP,1) C D(INBF,1) D(EXBF,1) D(WAMS,1) D(BSF,1) D(NBSF,1) D(EXRV,1) ECM-1			
Omitted Variables: Squares of fitted values			
	Value	df	Probability
t-statistic	2.632516	29	0.0134
F-statistic	6.930139	(1, 29)	0.0134
Likelihood ratio	8.142664	1	0.0043
F-test summary:			
	Sum of Sq.	df	Mean Squares
Test SSR	6.48E+10	1	6.48E+10
Restricted SSR	3.36E+11	30	1.12E+10
Unrestricted SSR	2.71E+11	29	9.35E+09
LR test summary:			
	Value	df	
Restricted LogL	-489.0704	30	
Unrestricted LogL	-484.9991	29	

Source: E-view Results

This second order test checks whether the model of the study suffers model specification error. The null hypothesis; there is model specification error. The Ramsey reset test showed that there was no specification error because its F-statistics (6.930139) is greater than Probability value (0.0000). It means that model include core variables in the model, does not include superfluous variables, the functional form of the model was very well chosen, there is no error of measurement in the regressand and regressor.

4.2.2 Histogram Normality Test

Normality test is done to check if the residuals of the error term have a normal distribution. Normality test is conducted using Jacques-Bera (JB) test. In testing for normality, approach used by Paavola (2006) for testing normality using Jacques-Bera test was adopted.



Sources: E-view 9.0 Version

Fig 1: Presents Normality test for each of the Distribution

Jarque-Bera (JB) test is statistics that compute both skewness and Kurtosis. Skewness shows the degree symmetry (normal distribution). The normal measurement is zero/0. Kurtosis is a statistic that compute degree of peakedness. The normal measurement is three/3. A distribution is skewed if one of its tails is longer than the other. A skewed distribution can be positive or negative. Positive skewed distribution means that it has a long tail in the positive direction. Negative skewed distribution means that it has a long tail in the negative direction.

The null hypothesis is that there is no skewness and Kurtosis in the model. We reject the null hypothesis because the Jarqua-Bera statistics (270.6451) is greater than probability value (0.000). We reject null hypothesis and accept the alternative that there is no skewness and Kurtosis in the model. The skewness is normal because the value was -2.598948. The model of the study produced positive skewed distribution meaning that it has a long tail in the positive direction. The kurtosis was 14.99648 meaning that the degree of peakedness was high that normal value of three (3). This implies that the standardized residuals from the estimated model in the regression framework is normally distributed, which is consistent with the OLS assumption.

4.3 Test of Hypotheses

The results for the various hypotheses testing are presented in the section.

4.3.1 Test of Hypothesis one

H₀₁ External borrowing financing has no significant impact on the economic growth in Nigeria.

In testing this hypothesis, external borrowing finance (EXBF) was regressed against real GDP. The empirical result shows that the coefficient of external borrowing finance (EXBF) has negative insignificant impact on real GDP (RGDP) because observed values of t – statistics (-1.2594) was less than its critical value (1.684). The empirical finding reveals that external borrowing finance has negative insignificant impact on the economic growth in Nigeria.

4.3.2 Test of Hypothesis two

H₀₂ Internal borrowing financing have no significant impact on the economic growth in Nigeria.

In testing this hypothesis, internal borrowing finance (INBF) was regressed against real GDP (RGDP). The empirical result shows that the coefficient of internal borrowing finance (INBF) has positive significant impact on real GDP (RGDP) because observed values of t – statistics (3.9085) was greater than its critical value (1.684). The empirical finding reveals that internal borrowing finance (INBF) has positive significant impact on the economic growth in Nigeria.

4.3.3 Test of Hypothesis Three

H₀₃ External reserves financing have no significant impact on the economic growth in Nigeria.

In testing this hypothesis, external reserve finance (EXRV) was regressed against real GDP (RGDP). The external reserve (EXRV) has negative significant impact on real GDP (RGDP) because their observed values of t – statistics (-2.699492) was greater than its critical value (1.684). The empirical finding reveals that external reserve finance (EXRV) has negative significant impact on the economic growth in Nigeria.

5. Summary of the Findings, Conclusion And Recommendations

5.1 Summary of Findings

The following are the major findings of the study:

1. External borrowing finance (EXBF) has negative insignificant impact on real GDP (RGDP) (t – statistics (-1.2594) < $t_{0.05}$ (1.684). External borrowing finance (EXBF) has 2 percent negative insignificant impact on real GDP (RGDP) in Nigeria. A percent change in external borrowing finance (EXBF) results to 2 percent decrease in real GDP (RGDP) in Nigeria.
2. Internal borrowing finance (INBF) has positive significant impact on real GDP (RGDP) (t – statistics (3.9085) > $t_{0.05}$ (1.684). Internal borrowing finance (INBF) has 44 percent positive significant impact on

real GDP (RGDP) in Nigeria. A percent change in internal borrowing finance (INBF) results to 44 percent increase in real GDP (RGDP) in Nigeria.

3. External reserve (EXRV) has negative significant impact on real GDP (RGDP) on real GDP (RGDP) (t -statistics $(-2.6994) > t_{0.05} (1.684)$). External reserve (EXRV) has 2 percent positive insignificant impact on real GDP (RGDP) in Nigeria. A percent change in external reserve (EXRV) results to 2 percent decrease in real GDP (RGDP) in Nigeria.

5.2 Conclusion

This study concludes that the fiscal deficits finance has positive significant impact on economic growth in Nigeria. This study was in line postulation of John Maynard Keynes and post Keynesian analysis that government intervention through fiscal deficits finance helps to increase aggregate demand thereby tackle the problem of inflationary-unemployment, low investment, deficit balance of payment, reduced economic growth. The study pointed out banking system deficits finance, domestic borrowing finance and use of external reserves as most significant sources of fiscal deficits. Therefore, the study infers a significant relationship between deficit finance and economic growth in Nigeria. However, suffice to say that the various means of financing budget deficit such as external debt, domestic debt etc. have to be properly managed in order to achieve economic development of the nation in the long run.

5.3 Recommendations of the Study

Based on the findings of this study, the following recommendations were made.

1. The Federal Government should not implement fiscal deficit finance that do not exceeds the international bench mark of 3 percent of GDP in order to run-out from prolong debt service payment and sustainable debt burden.
2. The Federal Government should ensure judicious use of borrowed fund and should invest such funds on project that can generate good return in the future. Deficit financing in Nigeria should be focused on the productive sector of the economy.
3. Government should setup strong monitoring teams that will make sure that the budget is well and carefully implemented. The monitoring team should also ensure that the loan borrowed is directed to the project it is planned for in order to reduce wastage.

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