

Deficit Financing (DF) and Sustainable Growth (Sg) In a Small Open Economy

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ABSTRACT: *This study investigated deficit financing (DF) and growth inside a small modern economy with specific focus on Nigeria from 1986–2020. The explanatory variable, deficit financing gauged domestic borrowings (DOB), foreign borrowings (FOB), Foreign exchange reserve (FXR), external debt servicing (XDS), exchange rate (EXR). The explained variable, sustainable growth was measured by real Gross Domestic Product (RGDP). It applied the fully modified least square (FMOLS) in testing the research hypotheses. The study found that DOB has a depressing but considerable effect on sustainable growth. Meanwhile, FOB and FXR have an affirmative and a considerable outcome on sustainable growth. However, XDS) has a depressing and inconsequential effect on sustainable growth. More so, EXR being the control variable reported a depressing but considerable effect on both DF and growth. Hence, the research opines that DF is and still remains the surest way for enhancing Nigerian economy provided the cost of servicing loan is relatively low. As such, policy makers must ensure that borrowed funds by state owned and local government enterprises should be well accounted. Again, central government must maintain most advantageous echelon of foreign debt (FD) as surest way of achieving high sustainable growth. Lastly, the federal governments in Nigeria should ensure that all efforts towards reducing her foreign reserve should be abhorred.*

Keywords: Foreign Borrowings; Domestic Borrowings; Deficit Financing; Foreign Exchange Reserve; External Debt Servicing, Sustainable Growth

INTRODUCTION

One of the central goals of policy makers and regulators in every modern economy is ensuring an economy devoid of fiscal imbalances by bridging her funding (saving-investment) and foreign exchange gap. To bridge these aforementioned gaps, the policy makers and regulators source funds internally. They may decide to seek for other means and sources of financing like external borrowings, monetary instrument implementation, minting of money, outsourcing funds from her foreign reserve, and the like (Onwioduokit, & Inam, 2018). A case in point is the Nigerian government. This is because, Nigeria is a mono-economy, hence, during crude oil crunch the government must have to borrow since her savings is not enough to meet her investment needs is meager comparably (Ehiedu and Toria 2022).

DF encourages sustainable growth by mounting government expenditures outside income supply. Backed with huge wealth from oil; this result to extravagant spending on the part of the Nigerian government, mismanagement of the oil boom of the early 1970's led to the return of DF in 1980.

Nwanna and Umeh (2019) noted that, this made the federal government to seek for foreign assistance. Contrarily to the viewpoints highlighted above, Okah, Chukwu, and Ananwude (2019) submitted that, the persistent recurrence of DF may not guarantee the achievement of macroeconomic objectives, which may in turn affect desired investment and thereby narrowing sustainable growth. Thus, the idea of borrowing abroad generates its source from fiscal policy. He added that in borrowing as a means of DF, one must understand the relevant macro-economic variable which is fiscal policy. Investors expectation, decision and confidence on whether to invest or not are based on macroeconomic indices. It is regarded that macro-economic variables are basic fundamentals or preconditions which must be achieved for investment to take place.

Importantly, DF in any economy has its implication. It's usually affirmative or depressing as argued by various schools of thoughts e.g. the Classicalism and the Keynesians. The belief in this philosophy in post-depression years sprouted fiscal policy (FP) measures to achieve full employment, which is the ultimate goal of macroeconomic policy which will establishes a new face in economic reasoning and policies (Nwaeke&Korgbeelo, 2016).

Debt crisis is a ripple effect of excessive accumulation of large debt which becomes a difficult task if not impossible and in turn degenerated into imbalances in the local and internal political economy. Against this macroeconomic background, this study investigated public DF and sustainable growth inside a small modern economy with specific focus on Nigeria

STATEMENT OF THE PROBLEM

Notwithstanding series of attention placed on the subject matter (being public deficit financing and sustainable growth) by policy makers, financial majors, and development economists, the construct still remain though perturbing yet an interesting. From a general viewpoint, scholars in the likes of Onwioduokit and Inam (2018) have assumed that the current state of the Nigerian economy is linked to DF and mismanagement of both external and internal debt on the part of the government. This has been fueled by the high rate of corruption inherent in the economic system since military regime till date. On the other hand, the inability of the CBN to develop an efficient foreign reserve management strategy coupled with government corrupt practices, unnecessary spending, and

mono-economy have posed lots of fiscal and economic instabilities in the country. Examples of such instabilities includes: exchange and inflation rate volatility, inadequate foreign inflows, high unemployment rate, poor productive capacity (low GDP growth rate), and the likes. The current dwindling oil price has also adversely affects the Nigerian foreign reserves has also caused a lots of tension in oil market.

Various propositions and theories raised by Economist such as Adam Smith, John Maynard Keynes, David Ricardo are conflicting. This has led to mixed findings which have made the construct to be more confusing than suppose.

From the empirical point of view, there are divergent of views as to the effect of DF on economic growth in that while some are of the view that DF induce sustainable growth (see the studies of Onwioduokit & Inam, 2018; Solawon & Adekunle, 2018) others reported that DF leads to debt overhang and inhibits sustainable growth (see the studies of Tung, 2018; Hussain & Haque, 2017). Again, Ehiedu and Toria (2022), Ehiedu, Odita and Kifordu (2020), Nwakobi, Echekoba, and Ananwude (2018); Ifeanyi and Umeh (2019) believe that it does not either induce growth or retard sustainable growth. This again has made the construct gain more scholarly attention. A major reason for the conflicting result may be traced to various estimation techniques alongside various variables used by different scholars.

Based on the foregoing issues, the question is, can we conveniently say that, the huge quantum of loan borrowed by the federal government to ensure sustainable growth in Nigeria has stimulated Nigerian sustainable growth from 1986 till date? Better still, to what extent has DF affected sustainable growth of Nigeria? These questions still lingers in the heart of many.

CONCEPTUAL REVIEW

Deficit Financing and Public Debt (DF & PD)

Whenever PD & DF are mentioned, sustainable growth retardation comes to the mind of a layman. The term DF according to Onwioduokit, and Inam (2018) as the net rise of money in circulation where such an increase results from a conscious governmental policy designed to encourage economic activities which would otherwise not have taken place.

Nwanna and Umeh (2019) described DF as the conscious attempt to correct budget deficit through either internal or external sources, or both. He added that, it may as well involve a direct addition to gross national expenditure through budget deficits whether the deficits are on the revenue or capital account. The essence 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 then miscellaneous sources with a view to ascertain the deficit or surplus.

Based on the foregoing, DF accounts for how funding gaps are been funded. Most these outstanding ways and means of funding these gaps are stated below:

1. Borrowings: When government commences any project and that her retained revenue is not sufficiently enough in sponsoring the project, there are three major ways of financing such project which are taxes, borrowing and monetization. Meanwhile, the commonest source of DF is borrowing explained thus:

Internal Sources: The government may decide to source for necessary funds, the treasury or finance ministry must borrow either from internal source through the sales of Central Government Securities (CGS) such as treasury bonds through a tender system. This is the preferred government method of raising funds, not adding to net foreign debt, because the government is not borrowing from overseas. Nonetheless, when FGS Is sold, it competes with the other sectors for domestic savings, creating “crowding out effect”.

External Sources: In augmenting for domestic borrowings government source income from international financial markets. When using this method, government sells new GS to overseas buyers, and receives foreign funds. This method of DF raises foreign debt when interest is paid on the securities. Under a floating exchange rate such borrowing has no effect on the domestic money supply. However, exchange rates and domestic interest rates are exaggerated; further, it adds directly to foreign debt (Monogbe, 2016). Government admires this method of raising funds, as it does not add to net foreign debt, because the government is not borrowing from overseas.

2. Minting of Money (Ways and Means): This implies printing of new currency (high-powered money) by the apex bank. This means of financing is inflationary if it is near full employment; demand inflation occurs rapidly, as there is too much money chasing a limited supply of goods.

From the foregoing, while Borrowings (be it external or internal) are considered as a better source without increase in money supply which is regarded as the main cause of inflation, Ways and Means welcomes inflationary trends due to more money supply.

3. Use of Foreign Exchange Reserve (FER): These are reserve assets and cash with central bank of Nigeria (CBN). According to Chukwu, and Ananwude (2019), the amassing of FER has not only reinforced percentage of investment /GDP, but the share of exports and trade in GDP. The percentage of trade/GDP is confidently linked to the accumulation of FER, and depressingly associated with percentage in domestic prices.

4. Sustainable Growth (measured by real Gross Domestic Product RGDP). Persistent growth is transformation in amount of actual productivity and earnings in economy overtime. (Nzotta, 2014). By definition, RGDP is the market or money worth for all country productivity adjusted for inflation rate.

Theoretical Underpinning

Undoubtedly, there exist endless controversies among theorists on the subject matter. First, proponents of the Keynesian theory are of the strong assertion that DF is sustainable growth inducing. J.M. Keynes, noted that central government can efficiently reverse economic downturns by borrowing money and returning the money to private sector through various spending. Further, Keynes

believes that active government intervention through DF remains most feasible tool countries use to achieve sustainable growth. Meanwhile, the neo-classical economists argued the debt financing is growth retarding. Debt financing points to financial recklessness on borrowing country. Again, rate of servicing such loan may disrupt economic stability in that funds meant for developmental purposes, (Ehiedu & Toria, 2022). Monogbe (2016) added to this construct by disputing previous suppositions of authors that these theories do not give a true picture of the economic setting.

Empirical Studies

It is no doubt that there exist myriads of studies in and outside Nigeria. Recently, Okah, Chukwu, and Ananwude (2019) examined DF and sustainable growth from 1987 to 2017. Deficit financing proxies considered include external borrowings and domestic borrowings. Vector Autoregressive Estimated the model. The analysis performed revealed that DF has affirmative but inconsequential effect on sustainable growth. The findings require government to broaden her income support.

Olatunde and Temitope (2017) established fiscal deficit and sectoral productivity (1981-2015). He introduced building and construction, industrial, wholesale and retail trade, agriculture, and service sectors. The result showed that fiscal deficit has a depressing outcome on the entire sectors in the short-run. However, fiscal deficit had affirmative outcome on industrial and fiscal sectors in the long-run.

Hussain and Haque (2017) studied DF and sustainable growth in Bangladesh. The study revealed an affirmative and considerable association among central government debt and sustainable growth rate, supporting the Keynesian theory, while VECM findings for World Bank data points fiscal deficit had placid outcome on sustainable growth rate at the 5% level. However, the researchers did not include external debt servicing in their model.

Research Design (RD)

The ex-post facto RD was adjudged from the fact that the variables under investigation have occurred in retrospect and such may not difficult for us to manipulate its outcome. Also, this research design enables one variable hypothesized influence another and that it does not use random assignment.

Since the present study was domiciled in Nigeria, Nigeria then becomes the study population. Meanwhile, the study covered of all economic variables that are associated with public deficit financing and economic growth.

Data Collection Method

Data used to run the regression was sourced from both the CBN Statistical Bulletin 2020 edition and World Bank Data Bank (2020). These two bodies were chosen considering the fact that data gotten from there are viewed with high degree of acceptance. More so, we also consulted the published works of scholars, CBN Bullion, internet sources, textbooks, and magazine. These were also geared towards ensuring that this work is robust, up-to-date, and comprehensive. Variables sourced include domestic debt, foreign debt, broad money supply, RGDP over a 30 years study period (1989 to 2020) and was apt as it captures adequately the periods with which the Nigerian government relied heavily on foreign debt to finance its trade imbalances.

Data Analysis Techniques and Model Specification

The model was adopted from the model of Ehiedu, (2022), Ifeanyi and Umeh (2019). Their model read thus:

$$RGDP = f (DOB, FOB, XDS)-----(1)$$

Where:

RGDP = Real Gross Domestic Product; DOB = Domestic Borrowings; FOB = Foreign Borrowings; FDS= Foreign debt service

However, they did not include Foreign Exchange Reserve and exchange rate in their model. Hence, our model is stated below thus:

$$RGDP = f (DOB, FOB, FXR, XDS, EXR)-----(2)$$

RGDP = Real Gross Domestic Product; DOB = Domestic Borrowings; FOB = Foreign Borrowings; FXR = Foreign Exchange Reserve; XDS = External Debt Servicing; EXR= Exchange rate

$$RGDP = \beta_0 + \beta_1DOB + \beta_2FOB + \beta_3FXR + \beta_4XDS + \beta_5EXR + \epsilon_t-----(3)$$

Where:

β_0 = Constant Value; β_1 - β_5 = Parameter estimates

The information below specifies are these variables are operationalized:

Results and Discussions

Descriptive Statistics

The descriptive statistics accounts for the mean, minimum, maximum value, standard deviation value, skewedness, Kurtosis, Jarque-Bera test alongside its p-value.

Table 1: Summary of Nigeria Descriptive Statistics (All figures except exchange rate are graduated in billions)

	RGDP	DOB	FOB	FDS	FXR	EXR
Mean	38404.46	3544.393	2163.241	1980.00	21.15770	95.98714
Median	31709.45	1329.680	716.8700	143.000	10.65000	97.02000
Maximum	74694.00	16023.89	12706.00	9430.00	53.60000	358.8000
Minimum	15237.99	28.44000	41.45000	252.00	0.930000	0.550000
Std. Dev.	20262.25	4497.421	2690.933	2300.00	18.64761	100.5847
Observations	35	35	35	35	35	35

Source: Econometric Views Version 9.0 (2021)

The descriptive result in table 1 above reported 35 observations. This means that the study covered 35 years (1986-2020). Further, the result evidenced that RGDP, domestic debt, foreign borrowings, foreign reserve, and exchange rate reported maximum values of 74694.00, 16023.89, 12706.00, 9430.00, 53.60000, and 358.8000 billion. Meanwhile, they reported minimum values of 15237.99, 28.44000, 41.45000, 252.00, 0.930000, and 0.550000 respectively.

In terms of degree if volatility, all the study variables except RGDP, foreign reserve, and exchange rate were highly volatile. This is because only RGDP, foreign reserve, and exchange rate reported a low standard deviation value. Again, both of their JarqueBera p-values are lower than 5% level. Hence, prior to running the regression, we logged all the study variables, all the study variables became normally distributed (see figure 1 below)

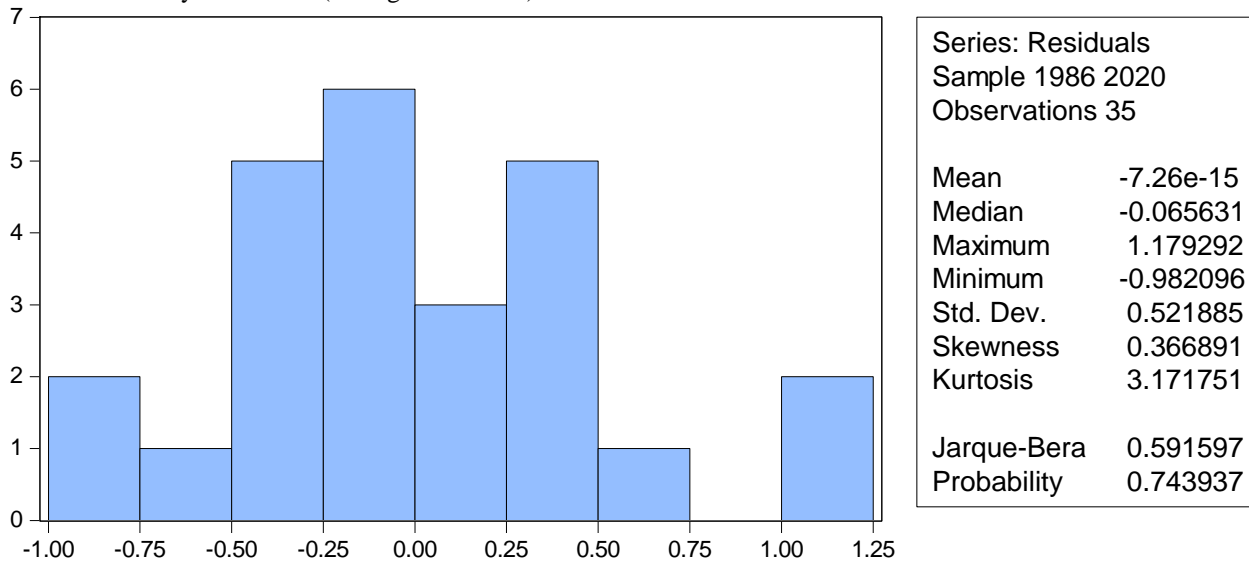


Fig 1: Jarque-Bera Valuee

Source: Econometric Views Version 9.0 (2021)

Unit Root Test

To determine whether the study variables are stationary or not, we first subjected the model to Philip-Perron test. The result is presented in table 4 below:

Table 2: Summary of PP Unit Root Test-Nigeria

AT LEVELS					
Target Variables	ADJ.T. Statistics	PP Critical Value @ 5%	P-value	Order of Integration	Decision
Real Gross Domestic Product	-0.371414	-2.951125	0.9031	1(0)	Non-Stationary
Domestic Borrowings	--2.384389	-2.951125	0.1535	1(0)	Non-Stationary
Foreign Borrowings	1.366690	-2.951125	0.9985	1(0)	Non-Stationary
External Debt Servicing	-1.181297	-2.951125	0.6711	1(0)	Non-Stationary
Foreign Exchange Reserve	-0.948469	-2.957110	0.7592	1(0)	Non-Stationary
Exchange Rate	-1.283936	-2.951125	0.6256	1(0)	Non-Stationary
AT FIRST DIFFERENCE					

Target Variables	ADJ.T. Statistics	PP Critical Value @ 5%	Test Value	P-value	Order of Integration	Decision
Real Gross Domestic Product	-5.941341	-2.954021		0.0000	1(1)	Stationary
Domestic Borrowings	-4.246729	-2.954021		0.0021	1(1)	Stationary
Foreign Borrowings	-4.241790	-2.954021		0.0022	1(1)	Stationary
External Debt Servicing	-9.118954	-2.954021		0.0000	1(1)	Stationary
Foreign Exchange Reserve	-6.493316	-2.963972		0.0000	1(1)	Stationary
Exchange Rate	-6.167689	-2.954021		0.0000	1(1)	Stationary

Source: Researcher's Compilation from Econometric Views Output 9.0 (2021)

The Philip-Perron test in table 3 above clearly revealed that all the study variables did not attain stationarity at their natural level but when subjected further they became stationary at their first differencing. This is because at first differencing, their Adj. t-statistic values (-5.941341, -4.246729, -4.241790, -9.118954, -6.493316, and -6.167689) respectively were higher than their PP critical values at 5% significant level (-2.954021, -2.954021, -2.954021, -2.963972, and -2.954021). Again, all their p-values (0.0000, 0.0021, 0.0022, 0.0000, 0.0000, and 0.0000) respectively were lower than 5% significant level. Hence, accepted the alternative hypothesis which states that there is no unit root in the series.

Cointegration Test

Having established that all the study variables attained stationarity at their first differencing, we moved on to test for long run relationship using Johanson Cointegration test. The alternative hypothesis is that there is cointegration in the series. Both results are therefore presented below:

Table 3: Johansen Co integration Result-Nigeria

Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.926611	206.1164	103.8473	0.0000
At most 1 *	0.760325	119.9209	76.97277	0.0000
At most 2 *	0.706194	72.78132	54.07904	0.0005
At most 3	0.393458	32.36171	35.19275	0.0979
At most 4	0.306911	15.86233	20.26184	0.1809
At most 5	0.107814	3.764650	9.164546	0.4483

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)

Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.926611	86.19555	40.95680	0.0000
At most 1 *	0.760325	47.13956	34.80587	0.0011
At most 2 *	0.706194	40.41961	28.58808	0.0010
At most 3	0.393458	16.49939	22.29962	0.2642
At most 4	0.306911	12.09768	15.89210	0.1804
At most 5	0.107814	3.764650	9.164546	0.4483

Max-eigenvalue 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

Source: E-views 9.0 Extracts

Table 3 above shows that both the trace test and Max-eigen value test indicates 3 co-integrating equations. Hence, the null hypothesis (Ho) is rejected in favour of the alternative hypotheses. This implies that a long-run equilibrium association exists among the variables.

Vector Correction Model (VECM) Estimates

This section accounted for Vector Error Correction Model (VECM) estimates for both country and cross country level VECM results. The result is briefly discussed below:

Table 4: VECM Estimates

Dependent Variable: D(LOG(RGDP))

	Coefficient	Std. Error	t-Statistic	Prob.
ECT(-1)	-0.207774	0.076536	-2.714732	0.0124
RGDP(-1)	0.423974	0.166235	2.550456	0.0179
DOB(-1)	0.355069	0.164681	2.156103	0.0434
FOB(-1)	0.806703	0.257548	3.132240	0.0052
FDS(-1)	-0.045230	0.043158	-1.048025	0.3055
XRS(-1)	0.884269	0.225369	3.923649	0.0008
EXR(-1)	0.711405	0.259091	2.745776	0.0125
C	0.099991	0.054774	1.825510	0.0809
R-squared	0.574825	Mean dependent var		0.176416
Adjusted R-squared	0.545424	S.D. dependent var		0.116314
S.E. of regression	0.086619	Akaike info criterion		-1.836954
Sum squared resid	0.172567	Schwarz criterion		-1.466892
Log likelihood	36.47278	Hannan-Quinn criter.		-1.716323
F-statistic	4.442197	Durbin-Watson stat		2.186939
Prob(F-statistic)	0.002983			

Source: Econometric Views version 9.0 (2021)

The results from the ECM equation in Table 4 above suggests that past values domestic borrowings (DOB(-1)), foreign borrowings (FOB(-1)), and foreign debt Servicing (FDS(-1)) exerted an affirmative high statistical significant effect on past values of sustainable growth. Meanwhile, exchange reserve (EXR (-1)) mediated negatively between past values of DF and sustainable growth. More so, past foreign debt service denoted by FDS exerted depressing and inconsequential effect on past values of sustainable growth proxy (RGDP(-1))

Given the coefficient of determination as 0.574825 which is 57.48% supported by low value of adjusted R² as 54.54% presumes that the explanatory variables jointly accounted for 57.48% variation in the explained variable, while the remaining 42.52% are caused by the error term. This was reaffirmed by the adjusted R-squared value estimated at 54.54%. The F-Probability statistic also confirms that all the regressors are statistically considerable on the overall. Again, the Durbin Watson Statistics estimated at 2.186939 clearly revealed that the model is not serially correlated since its value is within the accepted region of acceptance.

Lastly, the VECM estimate in table 5 above reported a negative error correction term value of -0.207774 and was statistically significant at 5% level. This suggests that the previous years were accurate at an adjustment rate of 20.78%. Hence, there is convergence of the study variables to long run relationship equilibrium relationship. On this premise, it submits coefficients are significantly differently from zero signposting that DF on the overall has high statistical significant effect on sustainable growth on the short run.

Regression Result-Hypotheses Testing

Having ascertained that the model is rightly signed as reported by the VECM estimate above, the fully modified least square (FMLS) was adopted to test the research hypotheses formulated earlier. The regression results are presented below:

Table 5: Fully Modified Least Squares (FMLS)-Nigeria

Method: Fully Modified Least Squares (FMOLS)	
Date: 10/10/21	Time: 15:17
Sample (adjusted): 1987	2020
Included observations: 32 after adjustments	

No cointegrating equation deterministics				
Long-run covariance estimate (Bartlett kernel, Newey-West fixed bandwidth = 4.0000)				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
DOB	-2.304615	0.673418	-3.422263	0.0020
FOB	1.218523	0.505779	2.409203	0.0231
FDS	-0.405758	0.643078	-0.630962	0.5334
XRS	3.366955	0.943624	3.56811	0.0014
EXR	-3.221187	0.897873	-3.587575	0.0013
R-squared	0.592752	Mean dependent var		11.64157
Adjusted R-squared	0.532418	S.D. dependent var		3.238620
S.E. of regression	2.214566	Sum squared resid		132.4162
Long-run variance	5.955276			
Wald Test:				
Test Statistic	Value	Df	Probability	
F-statistic	196.6771	(4, 27)	0.0000	
Chi-square	786.7083	4	0.0000	

Source: Econometric Views version 9.0 (2021)

The Fully Modified Least Squares (FMOLS) in table 6 reported an R-squared value of 0.5927. This implies that study variables jointly accounted for at least 59.27% changes in RGDP. The r-square value stated above was further re-enforced by the adjusted r-square value of 0.532418. Furthermore, the F-statistics of the Wald test estimated at 196.6771 is statistically considerable implying all that the study variables considered in this study are highly statistically significant. Meanwhile, on individual bases, all the DF proxies except broad money supply exerted positive effect on economic growth.

Sequel to the above exposition, the hypotheses formulated in the earlier chapter of this study are therefore tested below:

Table 6: Summary of Test of Research Hypotheses

Variables	P-Value	Decision Rule	Conclusion
DOB	0.0020	Reject H ₀₁ if tis p-values is <5%, otherwise accept H ₀₁ if its p-value is >5%	Reject H ₀₁
FOB	0.0231	Reject H ₀₂ if tis p-values is <5%, otherwise accept H ₀₂ if its p-value is >5%	Reject H ₀₂
FDS	0.5334	Reject H ₀₃ if tis p-values is <5%, otherwise accept H ₀₃ if its p-value is >5%	Accept H ₀₃
XRS	0.0014	Reject H ₀₄ if tis p-values is <5%, otherwise accept H ₀₄ if its p-value is >5%	Reject H ₀₄
EXR	0.0013	Reject H ₀₅ if tis p-values is <5%, otherwise accept H ₀₅ if its p-value is >5%	Reject H ₀₅

Source: Econometric Views Version 9.0 (2021)

Discussion of Result

This section covered both the discussions of the regression results and the policy implications of each of the findings. Particularly, the research examined whether deficit financing affect the sustainable growth. In view of this, the study was discussed both on the country level and cross country level. Each of the regression results are discussed below:

Domestic Borrowings and Real Gross Domestic Products (RGDP)

The FMOLS result revealed that domestic debt had negative significant effect on economic growth in Nigeria. It reported a negative coefficient value -2.304615) and an estimated p-value (0.0020) is lesser than 5% level. This implies that a unit rise in federal government domestic debt will decrease economic growth of Nigeria countries by -2.304615. This implies that domestic debt debars economic growth in Nigeria. The justification for this is that as the stock of public (domestic) debt increases, investors may be worried that the government will finance its debt service obligations using distorted economic policies like inflation rate. This is the position of this study. Hence, this finding is therefore critical to sustainable growth of the economy. To further validate theories as well as the result is in tandem with the findings of Nwanna and Umeh (2019), Ifeanyi and Umeh (2019) but contradicts the findings of Solawon and Adekunle (2018); Sulimand&Azeez (2012).

Foreign Borrowings (FOB) and Real Gross Domestic Products (RGDP)

FOB and RGDP revealed that external debt had a optimistic coefficient of 1.218523 suggesting that a unit percent rise in federal government external debt will increase sustainable growth in Nigeria by 1.218523. In terms of statistical significant, it passed the

test of significant very well. P-value estimated at 0.0231 is less than 5%. The implication of the positive significant result is that external borrowings and by extension foreign debt is not a bad macroeconomic policy per se and that if an economy must grow, bridge her savings-investment gaps, foreign exchange gaps such economy must opt for external borrowings and by extension external debt. This further revealed that if countries of the world use borrowed loans for developmental purposes, the end result is improved economic growth.

Furthermore, the above findings laid claim that foreign borrowings do not at all the time dampen economic growth. At lower debt levels, additional foreign borrowings could stimulate growth to the extent the additional capital financed by this new borrowing enhances the country's productive capacity. By extension, as a country's access to loan drops, how propensity to save will drop and as a result, the growth process will be truncated.

The Keynesians believed that active management interference in market place through deficit financing was the only method for ensuring growth and stability by ensuring efficiency in resources allocation, regulation of markets, stabilization of the economy and harmonization of social conflicts. This is the stand of this study.

To further validate theories with the findings of Solawon and Adekunle (2018); who reported that external debt is absolutely and considerably related to sustainable growth. However, the result contradicts the findings of Nwanna and Umeh (2019), Ifeanyi and Umeh (2019), Ehiedu, Victor Chukwunweike, Onuorah A.C. and Chigbo Nkeiruka Chiyere (2022) who reported that external debt is negative and significantly related to economic growth.

Foreign Debt Service (XDS) and Sustainable Growth (SG)

This research reported that XDS payment has an antithetical effect on SG. The justification is that a higher XDS payment leads to debt overhang which agrees with research a priori expectation. However, it failed the test of statistical inference since its p-value estimated at is lower than 5% significant level. This agrees with the findings of Nwanna and Umeh (2019), Ifeanyi and Umeh (2019) who reported that XDS was depressing but considerably linked to SG but deviated from the findings of Adekunle (2018) who reported that XDS was absolutely and considerably linked to sustainable growth.

Foreign Exchange Reserve (FER) and Sustainable Growth

The FER & SG result revealed that foreign reserve reported an affirmative coefficient value of 3.366955 and a p-value of 0.0014. Hence, FER had an affirmative considerable outcome on sustainable growth. Again, if the central government make more effort to increase in FER in supplementing federal government expenditure in Nigeria. It agrees with the a priori expectation and the dual-growth theory of an affirmative link between FER & SG. This contradicts the findings of Hussain and Haque (2017).

Lastly, exchange rate mediated negatively between DF and sustainable growth. Thus, a higher exchange rate has the capacity to deter foreign borrowings, foreign reserve, and increase foreign debt service payments which in turn deter sustainable growth.

Conclusion and Recommendations

This study was concerned with DF and sustainable growth (1986–2020). The explanatory variable is DF measured by domestic borrowings, foreign borrowings, foreign debt servicing, and Foreign exchange reserve while the explained variable was sustainable growth measured by RGDP. To test the magnitude of the long relationship among variables on a country level, the fully modified least square (FOLM & SG) was adopted. The research concludes that DF is and still remains the surest way for improving sustainable growth provided the financial implication of servicing loan is relatively low.

Recommendations

In line with research findings, the following recommends were made:

1. Decision architects to guarantee borrowed funds by state owned and local government enterprises are well accounted for since at the moment domestic debt inhibits growth of Nigeria.
2. Central government should maintain optimum level of foreign debt as surest way of achieving sustainable growth.
3. The federal governments in Nigeria should ensure that all efforts towards reducing her foreign reserve should be abhorred.
4. Nigeria monetary authorities must put in place strict measure to curb the illicit activities of the black market in attempting to increase the flow of foreign currency.

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