Accounting for Borrowing and Economic Performance in Nigeria

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Abstract

Accounting for public borrowing and economic performance has been under constant investigation. This study examined the impact of public borrowing on economic performance of Nigeria between 1981 to 2021. The study adopted purposive sampling technique and analyzed using robust ordinary least square (ROLS). The independent variables are, Federal government domestic debt (FDD), Federal government foreign debt (FGFD), cost of servicing debt (CSD), Federal government total expenditure (FGTE) is proxy for dependent variable while, Federal government retain revenue (FGRR) is proxy for control variable. The study reveals that that of FGRR, CSD, FGFD and FGDD have positive and significant influence on the federal government total expenditure. The study was theoretically anchored on Dual Gap Analysis Theory, Adam Smith Theory on Debt and The Ricardo Theory of Public Debt. The study then concludes that Nigeria's total expenditure has risen astronomically through domestic debt, foreign debt, government retained earnings and debt servicing. The study then recommends very strong internal control should be enforced over utilization of borrowed fund, domestically or externally, as well as investigation of the internal control process of borrowing in Nigeria. Again, debt should be reduced so as to reduce the cost burden of servicing it as debt overhang is imminent in Nigeria. The study recommends the investigation of the internal control process of borrowing in Nigeria for further study.

Introduction

Universally, regional, national and sub-national governments plan their expenditures on annual or short term and long term basis. This budgetary exercise gives a clear direction of the source of revenue and how they will be spent according to the government priority. This is usually done within internal control restrictions, if it is not violated and sabotaged by the leaders. Nowadays, in most climes, there budget deficit which is usually financed by borrowing (debts) which can be sourced from domestic and foreign creditors. It is usually the inability of government to raise ample revenue that leads to borrowing to meet up with

expected accelerated economic growth, development, improved welfare and standard of living of the citizens (Essien, Agboegbulem, Mba and Onumonu 2016). However, when the government has weak and inadequate institutional internal control system, the management of the fund will be marred by corruption and there may be a debt overhang. When it is judiciously used, it will generate further wealth for the citizens and as such confirms borrowing not to be a harmful finance action (Chinanuife, Eze, and Nwodo 2018).

Nigeria like many other countries has incurred debt since 1970s after the civil war to festac 1977 through to lately when there was drastic drop in the price of oil in the world stage. Okoduwa (1997) posits that the purpose of government borrowing may include the need to address emergencies such as war and depression; financing of capital and recurrent expenditures and generally for public service delivery. These borrowings are initiated using some instruments such as ; General Obligation Bonds (Non self-supporting GO Bonds, Self-supporting GO Bonds), Appropriation Bonds, Full Faith and Credit Obligations, Revenue Obligations and bonds, Urban Renewal Bonds, Private Activity Bonds, Short Term Debt, Refunding Bonds, Zero Coupon, Capital Appreciation, and Deferred interest Bonds and Variable Rate Bonds. The foreign creditor bodies are International Monetary Fund, World Bank and African Development Bank and private creditors (the London club or Paris club).

It's likely that the appropriateness of public borrowing depends on the purpose for which the fund will be used and the conditions the funds are subjected to (Akhanolu, Babajide, Akinjare, Oladeji & Osuma, 2018). When a debt is incurred for the purpose of infrastructural development, such as building of refineries, factories and power stations, it becomes reproductive. In other words, countries that have challenges with substantial revenue generation usually borrow in other to meet the capital and recurrent expenditure (Lartey, Musah, Okyere & Yusif, 2018). However, borrowing to finance regular government expenses, wars and other natural disasters may be referred to as a deadweight debt (Senibi et al. 2016).

Evidently, Nigeria's rising national borrowing has left every citizen worried as noticed by Rafindadi and Musa (2019) whom observed that in 1987 there was an unprecedented rise in Nigerian public borrowing by 96.9% to N137.58 billion and up to N6.188 trillion in 2004. In 2005, Paris Club reduced the debt profile by 59% between 2004 and 2006 to N2.533 billion and N451.5 billion respectively. According to the Debt Management Office (DMO) as cited in Urama, Ekeocha, and Iloh (2018) Nigeria's debt stock profile (both domestic and foreign loan) stood at NGN22.7 trillion as at March 2017. Urama et al. (2018) also noted that the 2018 Fiscal Sustainability Analysis for the Federation (federal, states and FCT) as reported by the DMO show that the ratio of total public debt-to-gross domestic product remained below its threshold of 19.8% throughout 2017. The report had it that for the country to remain in the proposed country-specific threshold of 25% borrowing limit, the total domestic and external borrowing for the 2018 fiscal year should not go beyond USD6.25 billion or NGN1,906.37 billion. Current developments in the country may prove real, the fears of DMO as both state governments and the federal government are angling to procure more debts in the face of dwindling revenues.

The concern is the puzzle thrown up by the discrepancy between the growth pace (GDP) and the frequency and volume of borrowing. There has also been fraudulent diversion, misappropriation, embezzlement, oil theft by national officers running into trillions of dollar lately. The study looks at the national borrowing and its impact on the economy from the perspective of the internal control effectiveness and efficiency. Perhaps, the borrowed funds

are not adequately applied by designated officers and consequently being siphoned and leaving the nation worst off even though borrowing limit is alleged to be within.

Several studies as Aiyedogbon (2022), omodero (2020), sola (2016) and Blake (2015), argues that public debt is a catalyst for economic growth. Based on this, the main objective of this study is to determine the effect of national borrowing on the economic performance of Nigeria. Specifically to analyse the effect of domestic debt, foreign debt, cost of servicing debt and federal government retained revenue on economic performance of Nigeria. While we recognize that several studies have been carried out in the field of public debt and economic growth, majority of the studies used Gross Domestic Products (GDP) as a proxy for growth. To the best of our knowledge, there is updated scanty study that has used public expenditure as a proxy for growth. This is the gap in knowledge which this study seeks to address.

Literature Review

Rafindadi and Musa (2019) examined the impact of debt management strategies on the Nigeria's public debt profile. Specifically, the study evaluates the impact of debt refinancing, and measure the impacts of debt forgiveness and debt conversion scheme on the public debt profile of Nigeria. To ensure robust result is achieved, time series data from World Development Index (WDI), Central Bank of Nigeria (CBN) and Debt Management office were used. The study applied the ARDL econometric methodology in order to investigate the long-run and the short run dynamics of total debt profile of the country on debt refinancing (DRF) debt forgiveness (DF) and Debt Conversion Scheme (DCV). The findings of the study reveal that debt refinancing has negative impact on total debt profile in Nigeria. In addition to that, debt forgiveness was detected to have significant negative impact on the debt profile of the country. While, Debt Conversion on its part was found to be having significant effect on the Nigeria's debt profile. The implications of these findings is that whenever, the debt profile of the country is not streamlined with the tenets of economic development and fiscal policies of the country, then it is obvious that any persistent and sustained rise in exchange rate, devaluation and or fall in the country's external reserve will add to existing economic hardship of the country, particularly when greeted by a fall in the international market prices of petroleum. These developments can overheat the economy, retard internal plans for economic expansion and cause significant derelictions of already attained economic growth. The researchers thereby, recommend that government should strengthen debt refinancing in order to reduce debt profile of the country, seek for debt forgiveness and provide more instruments for debt conversion with a view to drastically reduce the Nigeria's national debt profile following its observed long run effect to the country's economic wellbeing.

Picarelli, Vanlaer and Marneffe (2019) examine impact of public debt on public investment in the European Union (EU) between the period 1995 and 2015. Twenty-six (26) EU countries were examined, using panel data for the period under review. Their findings reveal that 1% increase in public debt in the EU countries brings about a reduction of 3% in public investment. The findings further reveal that the negative effect of debt on investment is relatively smaller in the Eurozone than in the entire European Union.

However, Chinanuiffe, Eze and Nwodo (2018), argue that Nigeria borrows to finance future projects, thereby shifting the debt burden to future generation. When debt burden is shifted to future date, taxpayers in effect will be required to give substantial part of their future earning for debt servicing and repayment. Another implication they stressed was the ratio of public debt to Gross Domestic Product (GDP). According to them, when the ratio is high, it means the interest element of the debt will take a large share of the country's budget, thereby

leading to budget deficit. Thus, the cost of servicing debt in Nigeria has remain so high to the extent that the whole economy is affected. They concluded that public debt has negative and statistically significant impact on public investment in Nigeria.
Kehinde, Olanike, Oni and Achukwu (2015) asserted that public debt in developing countries is occasioned by the desire to develop human capital, institutional and infrastructural capacity. These activities in most cases lead to high government expenditures, insufficient revenue generation and higher debt burden. They noted that foreign debt is used to create a sustained economic growth which would not have been possible with domestic resources. The aim of public debt is to assist recipient countries develop, sustain and increase their rate of streams of income. For the purpose of debt to be achieved they argue, the debt has to be well managed and the funds channeled to where it would be judiciously and effectively utilized.

Akhanolu *et al.* (2018) investigated the effect of public debt on economic growth in Nigeria using data spanning from 1982 to 2017 and two-stage least square regression tool. First, the study revealed that external debt negatively impacted on the economy while the internal debt had a positive impact. Other findings showed that GDP, total savings and capital expenditure had a significant relationship with the internal debt.

Eneida (2018) studied the relationship between public debt and economic growth in Albania under the post-dictatorship era. The study employed a simple percentage method and use of graph to express and compare the percentage increase in economic growth and public debt in Albania. The data used for the study covered a period from 1990 to 2015. The study made bare that the diminution in economic growth overlapped with the periods which the public debt was briskly escalating.
Ncanywa and Masoga (2018) focused their study on South Africa using autoregressive distributive lag, Granger Causality, impulse response function and variance decomposition in order to achieve the study objective. The study via co-integration test established the existence of a long term link among the variables and the public debt was found to be having a negative relationship with investment.

Lartey et al. (2018) used 50 African countries to examine the effect of public debt on economic growth. The study employed a panel data spanning from 1980 to 2015 and both the Ordinary Least Square (OLS) technique and the generalized method of moment (GMM) estimation technique were used for the data analysis. The findings provided evidence that public debt and economic growth had a non-linear relationship. The study further revealed that inflation and government consumption expenditure had momentous undesirable correlation with economic growth while capital formation, population growth and openness of trade were having substantial favorable relationship with economic growth

Àkos and Istvàn (2019) explained in the context of poor countries, servicing of high public debts depletes the revenue of the indebted country to such an extent that the ability to return to growth paths is dim, even if the country implement strong reform programmes.

Panagiotis (2018) empirically investigated the nexus between public debt and the determinants of economic growth such as private and government consumptions, investment, trade openness and population growth in Greece through the applications of unit root tests and auto-regressive distributed lag (ARDL) model. The unit root tests indicated mixed integration of order zero and order one among the variables. These results of the ARDL model revealed a long-run relationship trade openness had positive effects on economic

growth; while government debt and population growth has a negative impact on growth. The study also addresses the break effects issue between government debt and economic growth. The results indicated that the nexus between debt and growth depends on debt breaks. Particularly, at debt levels before 2000, the effect on economic growth diminished rapidly and the growth impacts become negative

Eke and akujiobi (2020) empirically investigated the effect of public debt on economic growth in Nigeria, covering the period 1981-2018. Employing a co-integration approach, the study revealed prominent among others that a significant short-run relationship exists between Nigeria's public debt and economic growth. Also, the study further showed that whereas both the domestic debt and the external debt variables were statistically significant, only the latter failed the a priori expectation test and thus, exerts a negative contribution to economic growth in Nigeria. The study concluded that most of the external borrowings in Nigeria end up being misappropriated. Hence, the recommendation is that there should be proper ways of monitoring public borrowings with special emphasis on all external debts contracted with a view to ensuring that misappropriation is drastically reduced, if not eradicated.

Theoretical review

This study adopts Dual gap analysis theory, Adam Smith theory on debt and The Ricardo Theory of Public Debt to explain the relationship of the dependent and independent variables

Dual Gap Analysis Theory

Chenery and Strout (1966) propounded and established a dual gap theory which holds that the required level of economic growth can only be attained by emergent economies, by filling the gap between domestic saving and investment needs through foreign resources. According to the economists, if domestic saving lacks the potential or becomes insufficient to match with investment needs in the country, there should be room for foreign resources to flow in order to meet such investment opportunities which lead to economic growth. Following the postulation of Chenery and Strout (1966), economic growth is a function of investment and that such investment requires domestic savings, but where such local saving is not neck to neck with the investment needs, the country has the right to obtain funds externally to fill the gap.

This theory is pertinent to this study in that the economic managers of Nigeria usually have the discrepancies in the form of deficit in budgetary execution. This makes her managers to repeatedly reach out for external loans and advances to cushion the effect of the shortfall.

Adam Smith Theory on Debt

Adam smith (1976) posited a theory wherein it was argued that debt rather than diminish the earning of citizens and trading capital of the merchants, it increases income and revenues. It was further re echoed that the borrower (government) might use it as either a “capital” or as a “stock reserve” for immediate consumption. If the government utilizes it as a capital, by employing it in the acquisition of capital maintenance of productive labour, through which profit is maximized, then it will add value. The government can in the both instances restore the capital and pay the interest without encroaching on any other sources of revenue. Accordingly, it would lead to economic growth manifestation. However, if the government uses it as stock reserve for being an immediate consumption, the government acts the part of a prodigal, thereby dissipating resource in the maintenance of idle borrowed funds which is destined for the support of the industrious citizens. The end .point is further accumulation of debt and its overhang. The follow-up to this theory is that Government of the world take

external debt to pay off external debts thereby not distorting current income and expenditure (budgetary provisions).

This theory supports this study in that it shows and explains how Nigeria can raise funds from external source to service already existing debts in order not to distort the smooth running and management of the economy.

The Ricardo Theory of Public Debt

This theory was propounded by David Ricardo in 1819 on public borrowing. David Ricardo came up with the theory of public debts by affirming that the ordinary and extraordinary spending of government were mainly payments made to sustain unproductive labourers. Therefore, any saving from the government incidentals would be incorporated in the income if not to the capital providers. In the letter written by Ricardo to McCulloch in 1816, it was hypothesized that public outlay is an uneconomical undertaking the state embarks on. According to Precious (2015) Ricardo's theory of public debt was then based on the fact that government acquisition of debt emanated from the wasteful nature of public expenditure rather than being an attempt by the government to finance public expenditure relevant for economic growth. The theory suggests that in public expenditure financing, concentration should be more on obtaining the resources from the abundant possessions of the public through taxes and levies. The reason is that whether the fund to sustain the economy is realized through tax or loans, it does not matter to an economy. Therefore, when nations acquire a loan, it is unclear whether the loan would be used effectively or fruitlessly. The wrong application of such loans affects the economy negatively while if it is properly utilized, the economy will be boosted (Okoye, Modebe & Evbuomwan, 2013).

This theory is pertinent to this study as it will help in the assessment of the public debt influence on the living standard of people in Nigeria and to establish whether public loans have been effectively or fruitlessly utilized to improve the standard of living in the country or not.

3. Methodology

The study is delivered using secondary data drawn from Central Bank of Nigeria Statistical bulletin, 2022 and the Debt Management Office. The population were sampled using purposive sampling technique. The data were classified and analyzed using Robust ordinary least square (ROLS). The independent variables are, Federal government domestic debt (FDD), Federal government foreign debt (FGFD), cost of servicing debt (CSD), Federal government total expenditure (FGTE) is proxy for dependent variable while, Federal government retain revenue (FGRR) is proxy for control variable.

The a-priori expectation of this study is that a positive relationship should exist between federal government total expenditure and foreign debt, federal government domestic debt and federal government retain revenue. However, cost of servicing debt expected to have a negative relationship.

Model Specification

The model is implicitly specified as:

$$FGTE = f(FGDD + FGFD + CSD + FGRR + \mu t)$$

Explicitly it was specified as:

$$FGTE = ao + b_1FGDD + b_2FGFD + b_3CSD + FGRR + \mu t$$

Where:

FGTE = Federal Government Total Expenditure

FGDD = Federal Government Domestic Debt

FGFD = Federal Government Foreign Debt.

CSD = Cost of servicing debt

FGRR = Federal Government Retained Revenue

μt is the stochastic error term, a1, b_1-b_4 are the coefficients

PRESENTATION AND ANALYSIS OF RESULTS

Table 1: Descriptive Statistics

stats	fgte	fgrr	csd	fgfd	fgdd
mean	2524.189	1367.922	853.1217	2303.925	3698.78
max	13044	5084.86	8509.95	15855.23	23700.8
min	9.6	5.8	1.01	2.33	11.19
se(mean)	514.1014	240.2893	295.8447	545.9485	862.5166
skewness	1.495822	.8880738	3.093236	2.354786	1.829954
kurtosis	4.575235	2.438283	11.85366	8.362213	5.910335
p50	1018	716.8	155.42	648.81	1016.97
Shapiro	4.630	4.072	6.363	5.478	5.180
Prob>z	0.0000	0.0000	0.0002	0.0000	0.0000
N |	41	41	41	41	41

Statistically, the mean expenditure stood at N2524.19T, while the max and min stood at N13044 and N9.6 apiece. The median is N1018 and prob>z is 0.0000 to affirm its normality.

Table2: Correlation Matrix

	fgte	fgrr	csd	fgfd	fgdd
fgte |	1.0000				
fgrr |	0.6580	1.0000			
csd |	0.8592	0.2684	1.0000		
fgfd |	0.8140	0.2001	0.8638	1.0000	

fgdd | 0.9772 0.5586 0.8843 0.8492 1.0000

The above results shows that there exist a positive and strong association between FGTE and all independent variables in the study. This means that increased federal government expenditure is strongly associated with increased fgrr, csd, fgfd and fgdd. Moreso, when there is a perceived lack of internal control.

Table 3: Variance inflation factor

Variable	VIF	1/VIF
Fgdd	14.27	0.070092
Csd	7.09	0.140962
fgfd	6.03	0.165872
fgrr	2.92	0.342047
Mean VIF	7.58	

Table 4: Robust regression

fgte	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
fgrr	.4723684	.0112161	42.12	0.000	.4495985	.4951383
csd	.221986	.0170566	13.01	0.000	.1873593	.2566126
fgfd	.0365505	.0070729	5.17	0.000	.0221918	.0509092
fgdd	.4245471	.0073193	58.00	0.000	.409688	.4394061
_cons	-13.09525	15.30391	-0.86	0.398	-44.16383	17.97334

Number of obs = 41

F(4, 36) = 543.78

Prob > F = 0.0000

Residual | 7057174.68 36 196032.63

R-squared = 0.9837

Adj R-squared = 0.9819

Findings, Conclusion and Recommendation

In the table above, it's observed from the robust OLS pooled regression that the adjusted R-squared value of 0.9819 shows that about 98% of the systematic variations in the dependent variable over the period of interest was jointly explained by the independent variables. This implies that dependent variable in Nigeria cannot be 100 percent explained by all the variables used in this study. The unexplained part of the dependent variable can be attributed

to exclusion of very important independent that can explain the dependent variable but are outside the scope of this study. The F-statistic value of 543.78.5 and its associated P-value of 0.000 showed that the OLS Pooled regression model on the overall is statistically significant at 5% level. This means that the regression model is valid and can be used for statistical inference. The table above also shows a mean VIF value of 7.58 which is less than the benchmark value of 10, this indicates the absence of multicolinearity, and this means no independent was dropped from the model. Also from the table above, it can be observed that the OLS results had heteroscedasticity problem 20.60(0.00)*] that was significant and that was corrected using robust regression.
It's also evident that all the independent variables of fgrr .4723684(0.000), csd .221986 (0.000), fgfd (.0365505(0.000) fgdd .4245471(.0073193(0.000) have positive and significant influence on the federal government total expenditure.

The study concludes that Nigeria's total expenditure has risen astronomically through domestic debt, foreign debt, government retained earnings and debt servicing. This expenditure has not translated into appreciable infrastructural and economic growth as poverty and unemployment is still pervasive in the country. This is sure to have resulted from the lapses or lack of internal control of the borrowed funds leading to repeated borrowing, wide fraud and theft of monies and mismanagement of the balance.

The study recommends that very strong internal control should be enforced over utilization of borrowed fund, domestically or externally. Again, debt should be reduced so as to reduce the cost burden of servicing it as debt overhang is imminent in Nigeria.

The study recommends the investigation of the internal control process of borrowing in Nigeria for further study.

References

Rafindadi, A.A & Musa, A. (2019). An empirical analysis of the impact of public debt management strategies on Nigeria's debt profile. *International Journal of Economics and Financial Issue. 9*(2):125-137

Alagba Ochuko S. and Eferakeya Idowu (2019) Effect of public debt on economic growth in Nigeria: An empirical analysis 1981 – 2018. *International Journal of Business and Economic Development, 7*(2), 10-17

Picarelli, M.O; Vanlaer, W & Marneffe, W. (2019). Does Public debt produce a crowding out effect for public investment in the EU? European Stability Mechanism

Chinanuife, E., Eze, P. and Nwodo, O., (2018). Public debt spiral and domestic investment in Nigeria. *American Journal of Economic Studies 4* (1): 153-161

Kehinde, Olanike, Oni & Achukwi (2015). Public debt and private investment in Nigeria. *America Journal of Economic 5 (5): 501-507.*

Akhanolu, I. A.; Babajide, A. A.; Akinjare, V.; Oladeji, T. & Osuma, G. (2018). The effect of public debt on economic growth in Nigeria: An empirical investigation. *International Business Management, 12*(6), 436-441.

Eneida, P.C. (2018). The relationship between public debt and economic Growth in Albania and Other countries. *Academic Journal of Interdisciplinary Studies, 7*(3), 95-102. DOI: 10.2478/ajis-2018-0061.

Ncanywa, T. & Masoga, M.M. (2018). Can public debt stimulate public Investment and economic Growth in South Africa? *Cogent Economics & Finance, 6*, 1-13. https://doi.org/10.1080/23322039.2018.1516483

Panagiotis, P. (2018). The effect of government debt and other determinants on economic growth: The Greek experience. *Economies, 6*(10): 1-19.

Precious, L. N. (2015). Effects of public debt on economic growth in Swaziland. *International Journal of Business and Commerce*, 5(1), 1-24.

Chenery, H.B. & Strout, A.M. (1966). Foreign Assistance and Economic Development. *American Economic Review, 56*(4), 679-733.

Okoye, L. U., Modebe, N. J., Erin, O. A., & Evbuomwan, G. O. (2013). Effect of external debt on economic Growth: Evidence from Nigeria. *Sustainable Economic Growth, Education Excellence, and Innovation Management through Vision 2020*, 4046-4058.

Eke, C.K.and Akujiobi, N.E.(2021). Public Debt and Economic Growth in Nigeria: An Empirical Investigation. *International Journal of Development and Management Review,16*(1), 178-192