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Debt Burden and Economic Stability in Nigeria

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Abstract: The study investigated the nexus between debt burden and economic stability in Nigeria between the periods 1981 to 2020. The study developed a model where external debt, domestic debt, external debt servicing cost and domestic debt servicing cost are measure of debt burden while gross domestic product is used as a measure of economic stability. The study scope covers the period 1981 to 2020 where auto regressive distributed lag mechanism was used. We found that Foreign loan stock significantly contributed to economic stability in Nigeria in an inverse manner, Domestic debt stock does not seem to significantly contribute to economic stability in Nigeria, External debt servicing cost does not seem to significantly promote economic stability in Nigeria. Domestic debt servicing cost does not seem to significantly contribute to economic stability in Nigeria. Since result provided us with an evidence to assert that external debt has negatively contributed to economic stability in Nigeria which could be as a result of moral hazard, we recommended that external borrowing should be monitored to avoid diversion and should also be invested on productive capital investment across the nation which is capable of yielding profitable investment returns. By doing this, it significant effect will be positive on economic stability.

Key words: Debt Burden, Co-integration Economic Stability.

Introduction

A debt burden is a huge quantity of cash that one country or employer owes to every other and which they discover very tough to repay. The World Bank (2020) emphasized that nations, in particular resource-scarce economies, borrow to enhance capital formation and investments, which are frequently deterred via the lack of home savings. The dual- hole evaluation indicates that debt is regularly inevitable due to the fact overseas change profits and financial savings vital to finance home investments are no longer typically adequate, in particular in creating countries. However, negative administration of countrywide debt may want to purpose monetary misery and financial disaster in the debtor us of a due to debt servicing. As such, Ogunlana (1995) opined that the proper mixture of home financial savings and debt used to be crucial to reaching sustainable monetary growth. The query is: At what factor is country

wide debt a burden? To reply this question, the Price Waterhouse Cooper (PWC) (2020); Csaba and Gabriella (2017) and Ogunlana (1995) nation that rising debt overhang (total debt-to-GDP ratio), debt service-to-government income ratio, and non-permanent exterior debt-to-foreign reserves ratio over a lengthy length are pointers to country wide debt burden and financial instability. If borrowed dollars are now not invested in economically achievable projects, compensation of the essential sum and agreed activity turns into difficult. Like most unindustrialized nations, Nigeria has suffered from countless monetary upheavals bobbing up from inadequate funds, fall down of neighborhood industries, everyday fiscal deficit, low exports, steady stability of fee deficit due to rising imports, etc. This state of affairs has led to widening of savings-investments hole and accumulation of debt that requires a giant share of authorities income and drawdown on overseas reserves to carrier (Onyele & Amp, Nwokoacha, 2016). A cautious investigation of this phenomenon the use of annual time collection facts for Nigeria shows that rising country wide debt over a lengthy length triggers financial instability due to insufficient authorities' revenue, overseas reserves and home profits to cowl the debt carrier cost.

The problem before the study is that, with the amount of funds borrowed in an economy that is rich in human and natural resources, and a promising market potential; no meaningful development has been recorded as larger percentage of the citizens still wallow in abject poverty, bad road network nationwide, dilapidated hospital infrastructure, high level of unemployment, high inflation rate, poor electricity system, huge cost of governance and so on (Isah (2017) & Akinmulegun (2016).) To this end, one begins to wonder if the national borrowing is a thing of value to the populace.

Scholars have reported that quite a number of financial misallocations had made government borrowed fund to derail from its target thereby triggering debt servicing cost. Prominent among these misallocations include Injecting of borrowed funds on investment that is misplaced and not capable of generating a decent rate of returns to help pay the debt interest payment Osuka & Achinihu (2017), Onuorah & Ogbonna (2017) and Monogbe, Dornubari & Emah (2017). An example of such investment prominent in Nigeria is injecting of fund in white elephant project which at the end of the day will be abandoned due to change in government regime and political differences. Such uncompleted project remains redundant and unable to contribute to economic development of the nation and this also contribute to accumulated national debt stock.

Literature Review

Debt Burden

Debt burden additionally recognized as authorities debt, sovereign debt, public debt or deficit financing is the mixture quantity of money that authorities owes both to their residents and/or nearby economic corporations (domestic debt) or overseas economic establishments (external debt). On the different hand, debt burden is the monetary disaster or misery bobbing up from debt compensation due to consistent pastime fee from authorities' income and overseas reserves. The use of authorities' income to finance activity repayments on public debt immediately hinders the disposable earnings and home financial savings in the indebted (Balago, 2014).

Therefore, the goal of this learn about is to look at the impact of debt burden on financial balance in Nigeria. While the particular goals of the find out about are:

- i. To study the impact of overseas mortgage on gross home product in Nigeria.
- ii. To confirm the impact of home debt on gross home product in Nigeria.
- iii. o decide the impact of Government expenditure, overseas direct funding on gross home product in Nigeria.

Theoretical Framework

Overhang Debt Theory:

The theory explained that economic performance of a country will be spontaneously affected due to the inability of a country to service her debt for a long period of time, which may likely becomes a burden on the future generation and hence block other avenue of borrowing externally. In this case, the country is only left with the option of combating with internal borrowing which brings about high level of competition between private investors and the government hence crowd out private investor due to high governmental demand for loan resulting to skyrocket interest rate, (Claessens, 1996).

Debt overhang occurs when the lump sum of a country's debt exceed her capacity to repay in the future. This theory argues that inability of a country to service or repay her debt promptly has a ripple effect on the present generation as well as the future generation. The present generation may experience low level of money flow in the economy which will bring about low level of investment, high level of unemployment, low level of output which will downsize economic development and finally debars opportunity of further borrowing from abroad. Hence, the inability of the present generation to service the borrowed fund may be transfer to the future generation as a debt burden.

Crowding Out Theory

The theory is an economics theory which emphasis that increase in government borrowing will in the long run affect other investors in the system thereby leading to their inability to generate funds from finance houses due to high cost of borrowing which the government can afford but could not be afforded by them. They further explained that in the long these investors will be forced to leave the business arena of the country. The theory argued that rising public sector spending drives down or even eliminates private sector spending.

The crowding out effect occurs when public sector spending reduces private sector expenditure. Malaysia is one of the country experiencing crowding out effect. The country's government focused on making investments in a number of companies which reduces private sector involvement in the economy.

One of the most common forms of crowding out takes place when a large government, such as that of the U.S., increases its borrowing and sets in motion a chain of events that results in the curtailing of private sector spending. In the developed countries, investment is the key and in doing this, funds are needed. The sources of these funds are sacrosanct as excessive collection of funds from the indigenous bank could hinder other private investors from earning funds from same source, therefore private investors could be crowd-out of the investment terrain.

Empirical Review

In another related study, Abdulkadir & Abdulazeez (2020) using an explorative technique analyzed the importance of public debt management and it effect on debt profile in Nigeria. The study was a historical study where a time series data was considered on a platform of descriptive design. The study employed the auto regressive distributed lag considering the mixed nature of stationarity identified from the study result. The study analyzed the Nigeria debt management strategy over the years and how its management strategy has effect on her debt profile. Debt management strategy was measured with debt refinancing, debt forgiveness and debt conversion. Findings provided us with an evidence to assert that debt refinancing has left the country in a downward state of economy while debt conversion positively affect debt profile in Nigeria. The study concluded that whenever public debt is not directed toward boosting economic performance, the debt profile will keep increasing in a worsen manner.

Ajayi & Edewusi (2020) empirically analyzed the extent to which public debt has contributed to economic output in Nigeria. An historical data that covers thirty-five years periods was used. The data set

was subjected to stationarity test, descriptive analyses, long run test and error correct model. Public debt was measured with local and international borrowing. It was reported from the result of the study that in the long run, international loan negatively influences economic output in Nigeria. The study emphasis that international loans have a way of putting out local investors off operation due to high level of imported technology thereby resulting into unhealthy competition. However, local debt seems to have positively contributed to the witness growth in the nation. Therefore, the study arrived at a conclusion that both in the long run and short run, international loans inflict negative impact on the Nigerian economy. Hence, it should be avoided completely.

Karagol (2015), investigated both the short-run and long-run relationship between economic growth and external debt service for Turkey during 1956-1996. The study employed a standard production function model analyzed using multivariate co-integration techniques. The Vector Auto regression estimates showed that there exists one co-integration equation. It also reveals that debt service is negatively related to economic growth in the long-run. The causality test showed unidirectional causality between debt service and economic growth.

Makau (2017), empirically examines the relationship between Kenya's external indebtedness, debt service and economic growth between 1970 and 2003. The study employed the OLS estimation method, co-integration and error correction model (ECM) applying the following variables: GDP growth rate, savings, external debts, total debt service, interest rate, growth in labour force. The study found that there is a negative relationship between the GDP growth rate and external debt servicing; Savings to GDP ratio had a positive effect on GDP growth rate and there was a negative effect of external debt on the GDP growth rate.

Using multivariate vector auto regression approach and annual time series data spanning 1981- 2016, Akpansung (2018) analysed the dynamic interactions and impacts of domestic debts on private sector credit, prime lending rate, and real output in Nigeria. The study provided evidence that Government domestic debt exerted statistically insignificant positive impacts on both private sector credit and prime lending rate, and a statistically significant negative impact on real output in Nigeria during the study period.

Oladokun (2017) empirically examines the causal relationship between Public Expenditure and domestic Debt in Nigeria for the period spanning 1980 to 2012 using the ordinary least square estimation technique. The results of the study indicate that a causal relationship between public expenditure and domestic debt implying that government borrowed to finance their recurrent expenditure. They conclude that high level of corruption, misappropriation of public funds, and poor administration has impeded the growth of the public sector while inadequate investment has been to provide infrastructural facilities that can boost the revenue generating capacity of the country so the country can operate a balanced or surplus budget.

Abbas & Christensen (2017) investigated domestic debt of 93 low income and emerging market economies (including Nigeria) over 1975-2014. The study found that moderate levels of non- inflationary domestic debt had a positive impact on economic growth, improved monetary policy, broadened financial market development, strengthened domestic institutions and accountability, enhanced private savings and financial intermediation. It further found evidence that when domestic debt exceeds 35% of bank deposits it undermined growth, crowded out private investments and damage bank efficiency.

Methodology

Research Design

In other to achieve the objective of this study, the ex-post facto causal comparative research design will be used for this study. The rationale behind this choice of design is that it will enable us to understand

debt burden and its influence on economic stability in Nigeria. The population for this study comprises of all debt owed by the Nigerian government and its servicing cost at different strata. The study employs the convenient sampling techniques which is occasioned by the availability of data. For the purpose of this study, the study sampled national debt profile peculiar to the Nigerian context. Time series historical secondary data source is used in this study. This is due to the nature of the research topic and proposed objectives. The data will be subjected to various test to ensure the reliability of the data set and this historical data is not within the control of the researcher to alter. This data is sourced from the World Bank data base, Debt Management Office alongside the Central Bank of Nigeria Statistical Bulletin between the periods 1981 to 2020.

Model Specification

In line with the classical linear regression model assumption and the Keynesian postulation that government borrowing is capable of boosting economic growth, we formulate our model where gross domestic product is a function of foreign loan stock, domestic debt stock, foreign direct investment, government expenditure. The model is specified in its functional form accordingly,

$$GDP = f(FLS, DDS, FDI, GOX) \quad (1)$$

By introducing constant, coefficient and error term, we transformed the model into the econometrics form thus

$$GDP_t = \beta_0 + \beta_1 FLS_t + \beta_2 DDS_t + \beta_3 EDS_t + \beta_4 DSD_t \quad (2)$$

Where:

FLS = Foreign-Loan- Servicing Cost

DDS = Domestic-Debt-Servicing Cost

EDS = External debt stock

DSD = Domestic debt stock

GDP = Gross-Domestic-Product

Apriori expectation

On apriori, we expect inverse relationship to transpire between external and domestic debt servicing cost while domestic debt and external debt stock is expected to boost economic stability accordingly. This can be written mathematically as

$$B_1, B_2 > 0, B_3, B_4 < 0 \quad (3)$$

Result and Discussion

To start with, we subject our data set to stationarity test to avoid having spurious result. The result is presented in table 1 below.

Table 1: Presentation of Unit Root Test

Table 1: Unit root test							
VARIABLE	AT LEVELS			1ST DIFFERENCE			LEVEL OF INTEGRATION
	ADF-Test	1% C.V	5% C.V	ADF-Test	1% C.V	5% C.V	
DDS	-1.454	-3.527	-2.945	-4.453	-3.527	-2.945	I(1)
FLS	-1.554	-3.527	-2.945	-4.554	-3.527	-2.945	I(1)
DSD	-1.744	-3.521	-2.943	-10.957	-3.527	-2.945	I(1)

GDP	-4.105	-3.521	-2.943	-9.932	-3.527	-2.945	I(0)
EDS	-1.484	-3.527	-2.945	-1.921	-3.545	-2.954	I(1)

Source: Extraction from E-view 10.

From the unit root test result, foreign loan stock, domestic debt servicing cost, external debt servicing cost and domestic loan stock became stationary at first difference but gross domestic product was stationary at level. This permits us to carry out the ARDL bound test.

Table 2 Presentation of Bound Test Result

Test Stat.	Value	k
F-stat.	12.75425	4
Critical Value Bounds		
Significance	I0 Bound	I1 Bound
10%	2.2	3.09
5%	2.56	3.49
2.50%	2.88	4.37
1%	3.29	4.37

Source: Extraction from E-view 10.

From the bound test, it was discovered that K value of 4 is greater than bound 10 value of 2.56 at 5% level of significance. This connotes that a long run relationship exist among the employed variables.

Table 3 Presentation of ARDL Result

Short-Run ARDL Model analysis

Variables	Coeff.	Std-Error	t-Stat.	Prob.
FLS	-3.161250	1.111121	-2.845099	0.0078
DDS	-20.70415	11.98852	-1.726998	0.0941
EDS	0.102732	0.081788	1.256068	0.7444
DSD	0.001661	0.158975	0.010449	0.0998
CointEq(-1)*	-0.701454	0.149816	-4.682117	0.0001
R-squared	0.6877	Mean-dependent-var		0.367
Ad. R-squared	0.5886	S.D-dependent-var		17.8138
S.E. of regression	2.395	Akaike-info-criterion		8.68937
Sum-squared-resid	160.628	Schwarz-criterion		8.57223
Log-likelihood	-76.328	Hannan-Quinn-criter.		8.37789
Durbin-Watson-stat	1.9347			

Source: Extraction from E-view 10.

As expected, domestic debt servicing cost and external servicing cost does not significantly contribute to economic stability as identified from their respective insignificant P-value of 0.7444 and 0.0998 respectively. Meanwhile, significant relationship transpired between foreign loans but its influence on economic stability is negative. Finally, domestic debt does not seem to significantly contribute to economic stability. The result from this study support that of Ndubuisi (2018), Alawneh (2017), Botelho (2017), Lucky & Godday (2017), Elom-Obed, Odo, Elom, & Anoke (2017), Ezike & Mojekum (2017) whose study submitted that external debt has contributed to economic growth in Nigeria in a negative manner. The global statistic result provided us with an evidence of absent of auto correlation (DW,

1.9347) while the adjusted R² of 0.58860 shows that change in debt burden will bring about variation in economic stability to the tune of 58 percent.

Conclusion and Recommendations

Conclusion

Based on our findings, we conclude that

- i. Foreign loan stock significantly contributed to economic stability in Nigeria in an inverse manner.
- ii. Domestic debt stock does not seem to significantly contribute to economic stability in Nigeria.
- iii. External debt servicing cost does not seem to significantly promote economic stability in Nigeria.
- iv. Domestic debt servicing cost does not seem to significantly contribute to economic stability in Nigeria.

Recommendations

In the light of the above, the following recommendation is presented

- i. Since result provided us with an evidence to assert that external debt has negatively contributed to economic stability in Nigeria which could be as a result of moral hazard, we recommended that external borrowing should be monitored to avoid diversion and should also be invested on productive capital investment across the nation which is capable of yielding profitable investment returns. By doing this, it significant effect will be positive on economic stability.
- ii. Since both external and domestic debt stock servicing cost does not significantly contribute to economic stability, we recommend that managers of the Nigeria economy should consider favorable debt servicing cost negotiation with the creditors before acquisition of loan as continues increase in this servicing cost is capable of dis-stabilizing the economy in the long run.

References

1. Alawneh, A. (2017). The impact of public expenditure and public debt on taxes: A case study of Jordan. *Accounting and Finance Research*, 6(3), 10-23.
2. Abdulkadir, A., & Abdulazeez, M. (2020). An empirical analysis of the impact of public debt management strategies on Nigeria's debt profile. *International Journal of Economics and Financial Issues*, 2019, 9(2), 125-137.
3. Abbas, A., & Christensen, J. E. (2017). The role of domestic debt markets in economic growth: An empirical investigation for low-income countries and emerging markets. *IMF Working Papers IMF*, 07/127. Washington DC: International Monetary Fund. doi:10.1094/PDIS-91-4-0467B.
4. Ajayi, I., & Edewusi, B. (2020). Effect of public debt on economic growth of Nigeria: An empirical investigation. *International Journal of Business and Management Review*. 8(1), 18-38, January 2020.
5. Akinmulegun, S. O. (2017). Deficit financing and economic growth in Nigeria: a preliminary investigation (Master Thesis). Department of Banking and Finance, Adekunle Ajasin University, Akungba Akoko, Nigeria
6. Akpansung, A. (2018). Domestic public debts and economic growth nexus in Nigeria: Further Empirical Evidence from Causality and Structural Breaks Analyses. *Nile Journal of Business and Economics* 15(3), 39-58.
7. Botelho, N. M. R. (2017). How much debt is too much debt? An empirical analysis of EMU countries. (Master's Dissertation). ISCTE Business School, Instituto Universitario de Lisboa.

8. Balago, G.S., (2014). Nexus between bank credit and economic growth in Nigeria: Evidence from VEC model. *Open Access Library Journal*, 1(8): 1-12.
9. Claessens, A (1996). Directed credit programmes for agriculture and industry: Arguments from theory and fact, Annual World Bank conference on Development Economics, The World Bank
10. Ezike, J. E. & Mojekwu. J. N. (2017). The impact of external debt on macro-economic performance. *International Journal of Business and Management Tomorrow.*, 1 (2), 1-12.
11. Elom-Obed, O.F., Odo, S. I., Elom, O. O., & Anoke, C. I. (2017). Public debt and economic growth in Nigeria. *Asian Research Journal of Arts & Social Sciences*, 4(3), 1-16.
12. Isah, I. (2017). Deficit financing and its implication on private sector investment: The Nigerian experience. *Arabian Journal of Business and Management Review (OMAN Chapter)* 1(10).
13. International Monetary Fund. IMF 201
14. Karagöl (2015). The causality analysis of external debt service and GNP: The case of Turkey. *Central Bank Review* 85(5): 1106-17
15. Lucky, E. U., & Godday, O. O. (2017). The Nigeria debt structure and its effects on economic performance. *International Journal of Business and Management Review*, 5(10), 79-88.
16. Makau, J.K. (2017). External public debt servicing and economic growth in Kenya: 1970 -2003: An Empirical Analysis. *International Journal of Business and Social Science*, 6, 9(1), pp.50-68.
17. Monogbe, T.G., Dornubari, I.G. & Emah, D.S (2017). Deficit finance and the Nigerian economic performance (Empirical Investigation). *International Journal of Advanced Academic Research*. 1(3), 01-21.
18. Ndubuisi, P. (2018). Analysis of the impact of external debt on economic growth in an emerging economy: Evidence from Nigeria. *AFRREV*. 11 (4), S/NO 48, S
19. Oladokun, O. O. (2015). Causal relationship between public debts and public expenditure in Nigeria. *International Journal of Management and Applied Science*, 1(8), 68-79.
20. Osuka, B., & Achinihu, O. (2017). The impact of budget deficits on macro-economic variables in the Nigerian Economy (1981–2012). *International Journal for Innovation Education and Research*, 2(11), 164-183.
21. Onuorah, A. C. & Nkwazema, O. G. (2017). Deficit financing and the growth of Nigeria economy: *International Journal of Management Sciences and Business Research*, 3(2)