
The Effect of Foreign Debt on the Economic Growth of Nigeria

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Abstract

This study examined the effect of External Debt on the economic growth of Nigeria. Secondary data collected from world bank national data, central bank of Nigeria bulletin, Nigeria's debt management office annual report, Ministry of finance for a period of 23 years,(1995-2017), and ordinary least square statistical tool was used to test the relationship between Nigeria's external debt and its economic growth. The study found that there is a positive, but insignificant relationship between foreign debt stock (FDST) and Gross Domestic Product, a negative, and insignificant or weak relationship between foreign debt servicing (FDSR) and Gross Domestic Product (GDP), and a positive and significant relationship between Inflation Rate (INFR) and Gross Domestic Product (GDP).The study concluded that the aggregate of Nigeria's external debt does significantly affect its economic growth. The study recommends that acquisition of foreign debt should be exclusively on economic considerations

Keywords: *Foreign Debt Stock, Foreign Debt Servicing, Inflation Rate, Economic Growth, Gross Domestic Product (GDP)*

Introduction

In order to supplement domestic savings, developing countries experiencing capital scarcity will acquire foreign debt (Pattille et al, 2002). However, the rate at which they borrow abroad depends on the links between foreign and domestic savings, investment and economic growth. Based on this, a country should borrow abroad as long as the borrowed fund has a rate of return that is higher than the cost of borrowing. In this way, the borrowing country is increasing and expanding its output with the aid of foreign funds.

Generally speaking, African countries have adopted a development strategies that depend on foreign financing (Ajayi, & Oke, 2012). This strategy has led many countries in the region to pile up foreign debt to the point where it is viewed as unsustainable. Nigeria for example, towards the end of 2005 incurred close to \$40 billion debt with over \$30 billion of the amount owed to the Paris club alone.

The debt burden on less developed countries can be traced to the early 1980's after the oil price increase of the 1970's (Ezekiel & Mojekwu, 2011). It was the product of reactions by the international community to oil price shocks. For African countries one of the effects of the crisis has been an increasing debt burden, which is a major hindrance to growth and development. Foreign debt actually became a burden to African countries because the capital acquired produces a return that is lower than the rate of borrowing. Therefore, returns were not enough to meet maturing obligations and also hindering economic growth. The failure in most African economies can be attributed partly to increased outflow of resources to service

debt obligations and partly because the necessary macroeconomic adjustments have remained elusive for most of the countries in the continent.

Statement of Problem

Literature contained studies showing that by increasing foreign debt a country will be increasing and expanding its output. For instance (Pattillo et al, 2002), said it is expected that developing countries, facing scarcity of capital will acquire foreign debt to supplement domestic savings. Rostaw (1971), observed that having the right quantity and mixtures of savings, investment and foreign aid are necessary for the developing economics to proceed along an economic growth path which was followed by the advanced economies. On the basis of these, this study seeks to determine what effect foreign debt has on Nigerian economic growth, since Nigeria has a high foreign debt as compared to other African countries.

Objective of the Study

The main objective of this study is to examine the effect of foreign debt on the economic growth of Nigeria.

Sub-Objective

- i. To examine the effect of foreign debt stock on economic growth
- ii. To investigate the effect of foreign debt servicing on economic growth
- iii. To determine the effect of inflation on economic growth

Statement of Hypothesis

H₀₁: There is no significant effect of foreign debt on Gross Domestic Product

H_{a1}: There is a significant effect of foreign debt on Gross Domestic Product

H₀₂: There is a significant effect of foreign debt servicing on Gross Domestic Product

H_{a2}: There is a significant effect of foreign debt servicing on Gross Domestic Product

H₀₃: There is no significant effect of inflation rate on Gross Domestic Product

H_{a3}: There is a significant effect of inflation rate on Gross Domestic Product

Literature Review

Theoretical Framework

Foreign debt, in most developed literature, is considered one of the viable means of financing infrastructure developments in most economies especially third world and developing countries. This fate is expected as most developing countries usually face scarcity of capital and low national savings, and thus, the need to acquire funds from external sources to finance their infrastructural need. It is a result that these countries are said to be increasing capacity and expanding outputs with the aid of foreign savings. Many theories on debts as a developmental tool have been propounded while in the contrast other theories have also shown the negative effect of external debts. One of such theories in support of external debts accumulation is the dual-gap analysis/ model which is of the view that development is a function of investment level and that such investment requires domestic savings. The theory stated that most times, this domestic savings are not usually sufficient to ensure that development take place, thus, countries resort to obtaining funds from abroad to support the domestic savings.

Empirical Review

Many empirical studies have investigated the effect of external debt on economic growth and development, some end up finding a negative impact on economic growth while others do not find any significant relationship between economic growth and external debt. These studies

focused on empirical assessment of external debt on per capita GDP, Real GDP, GDP growth rate, and long-term consumption pattern and capital formation as a precursor for economic growth. As result of the mix findings of these studies, it is difficult to state equivocally that external debt has positive, negative or any significant impact on economic growth and development.

A review of the negative relation put the study of Pattillo (Pattillo, Ricci, Poirson, 2001), which shows that stock of debt is the reason for a slow growth. Audu (2004) examined the impact of external debt on economic growth and public investment in Nigeria from 1970-2002. Using the Co-integration test and Error Correction Method, the study found that debt servicing pressure in the country has a negative and significant effect on the growth process and past debt accumulation negatively affect public investment. Employing data from fifty-nine developing and twenty-four developed economies over a period of 1970 to 2002, Schclarek (2005) empirically show that external debt do not have significance in determining the economic performance of a country. However, a segment of his empirical study especially on relationship between external debts and economic growth in developing countries showed that higher growth rate is associated with a relatively lower external debts levels and this inverse relationship is propelled by bilateral debts rather multilateral debts. Mariono and Delano (2006), employed the standard neo-classical growth model to test the dynamics of external debts, investments and economic growth for Philippines for over a period of 3 years (2000 to 2003). Using this model, the study asserted that higher ratio of change in interest rate spread to change in debt-to-GDP lowers welfare (economic growth and development index) in the long run.

A study by Butts, which examined the effect of external debts (short-term only) and growth rate of GDP for 27 Latin-American countries for over a period of 33years (1970 – 2003), found that granger causality only existed in thirteen (13) countries. Also, Geiger (1990), conducted a study to check the effect of external debt on economic growth for the nine (9) South American countries over a period of 12years (1974 – 1986), and he found a statistically significant inverse relationship between the debt burden and economic growth. Furthermore, Cohen (1993), considered dataset of 81 developing countries with focus on a period of 1965-1987 and his study concluded there is a positive relationship between external debts and economic growth. In another closely related study, Hasan adopted cross-country regression analysis to examine causal effect of foreign aid and external debts on economic growth and investment level. The regression result showed that there is quite strong evidence of positive impact of aid both on the growth rate in GDP per capital and the investment rate not external debts.

Some previous studies in Nigeria on the relationship that existed between external debts and economic growth also have this mixed result. Iyoha (1999), investigate the impact of external debt on economic growth in sub-Saharan African countries estimating a small macro econometric model for the period 1970-2004. He found an inverse relationship between debt overhand, crowding out and investment, thereby concluding that external debt depresses investment through both a disincentive effect and a –crowding out effect, thus affecting economic growth. Adepoju et al (2007), analyzed the time series data for Nigeria over a period from 1962 to 2006. Exploring time to time behaviour of donor agencies as an outcome of various bilateral and multilateral arrangements, they concluded that accumulation of external debt hampered economic growth in Nigeria.

Hameed, et al. (2008), explored the dynamic effect of external debt servicing, capital stock

and labor force on the economic growth for Pakistan fir a period of 1970-2003. They found an adverse effect of external debt servicing on labor and capital productivity which ultimately hampers economic growth. Ali and Mshelia found among others, both positive and negative relations with GDP, using Nigerian debt data.

Smyth and Hsing (1995), have tried to test the federal government debts impact on economic growth and examine if an optimal debt ratio exists that will maximize the economic growth. The author calculated the optimal debt ratio (DEBT/GDPT), which represents the maximum real GDP growth rate (38.4%). The DEBT/GDP ratio corresponding to the maximum GDP growth rate is 38.4%.

Methodology

The ex-post factor research design is used to examine the relationship between variables on the study. Data were collected from World Bank National Account Data, Central Bank of Nigeria bulletin, National Bureau of Statistics, Debt management office Annual Report and Ministry of Finance, for a period of 23years (1995- 2013).

The proxies for foreign debt are External debt stock, external debt servicing and inflation rate, while Nigerian economic growth is measured by Gross Domestic Product. The data generated were analyzed using descriptive statistics and ordinary least square (OLS) regression, using the model specified below:

$$GDP = \beta_0 + \beta_1FDST + \beta_2FDSR + \beta_3IFR + Et$$

Where

GDP = Gross Domestic Product

FDST = Foreign Debt Stock

FDSR = Foreign Debt Servicing

IFR = Inflation Rate

β_0 = Constant

$\beta_1 - \beta_3$ = Parameters / Coefficient of variables

Et = Error Term

Result

Table 4.1: Foreign debt stock, service, inflation & GDP

Year	Foreign debt stock (%)	Foreign Debt Service (%)	Inflation Rate (%)	Gross Domestic Product (%)
1995	6.90	-2.08	113.08	.00
1996	-1.24	21.59	32.73	4.05
1997	-1.96	-36.47	10.1	2.89
1998	19.97	-5.93	5.67	2.49
1999	9.19	-19.51	17.05	.52
2000	15.40	73.02	35.23	5.52
2001	-8.13	36.09	2.32	6.67
2002	0.10	-41.49	31.90	14.60
2003	9.37	10.46	11.4	9.50
2004	13.19	4.84	3.16	10.40
2005	38.50	4.14	22.02	7.01
2006	-91.33	-84.81	17.34	6.73
2007	2.74	-5.94	4.77	7.73
2008	16.53	7.75	10.84	7.12
2009	17.55	9.49	11.32	8.35
2010	24.06	17.21	10.38	9.54

2011	19.94	41.43	9.51	5.31
2012	15.08	-19.07	9.27	4.21
2013	17.19	52.42	11.87	5.49
2014	12.45	13.32	12.66	6.22
2015	10.37	-4.52	9.00	2.79
2016	6.42	6.65	15.70	-1.58
2017	34.60	31.422	16.3	0.83

Source: World Bank (National Account Data) & Debt Mgt office

Table 4.2 Model Summary

Model	R	R-square	Adjusted square	R	Std. Error of the Estimate	Durbin-Watson
1	.977 ^a	.954	.946		7.64486	1.869

Table 4.3 Model Summary

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
				7.64486	1.869
(Constant)	7.703	2.149		3.584	.002
1 FDST	.004	.008	.025	.459	.653
1 FDSR	-.007	.018	-.022	-.402	.693
1 INFR	.996	0.55	.979	18.231	.000

a. Dependent Variable RGDP

Source: SPSS, Version 20

Hypothesis One

H₀: There is no significant effect of Foreign Debt Stock on Gross Domestic Product

H₁: There is a significant effect of Foreign Debt Stock on Gross Domestic Product.

The output in the multiple linear regressions in Table 4.3 above is used to show that the significant level (as calculated) for the t-statistic (of 0.459) for foreign debt stock (FDST) is a probability level of 0.653, which is higher than the a priori 0.05 significance level, implying that the null hypothesis is not rejected. Therefore, we accept the null hypothesis while its alternative is rejected; hence, there is a positive, but insignificant relationship between foreign debt stock (FDST) and Gross Domestic Product.

Hypothesis Two

H₀: There is no significant effect of Foreign Debt Servicing on Gross Domestic Product

H₁: There is a significant effect of Foreign Debt servicing on Gross Domestic Product.

Utilizing the multiple linear regression output in Table 4.3 above, it can be seen that the significant level (as calculated) for the t-statistic (of -0.402) for servicing of foreign debt (FDSR) is a probability level of 0.693, which is higher than the a priori 0.05 significant level, implying that the null hypothesis is not rejected. Therefore, we do not reject the null hypothesis, indicating that there is a negative, and insignificant or weak relationship between foreign debt servicing (FDSR) and Gross Domestic Product (GDP).

Hypothesis Three

H₀: There is no significant effect of Inflation Rate on Gross Domestic Product

H₁: There is a significant effect of Inflation Rate on Gross Domestic Product.

It is apparent from the regression results in Table 4.3 above, that the significant level (as calculated) for the t-statistic (of 18.231) for Inflation Rate (INFR) is a probability level of 0.000 which is lower than the a priori 0.05 significance level, implying that the null hypothesis is rejected. Therefore, we accept the alternate hypothesis while the null is rejected; hence, there is a positive and significant relationship between Inflation Rate (INFR) and Gross Domestic Product (GDP).

Table 4.4 ANOVA

Model	Sum of Square	df	Mean Square	F	Sig.
1 Regression	19469.362	3	5489.787	111.043	.000 ^h
Residual	935.102	16	58.444		
Total	20404.464	19			

a. Dependent Variable: RGDP

b. Predictors: (Constant), INFR, FDSR, FDST

Finally, the F-Statistics from the ANOVA Table (4.4) above which shows the overall significance of model stands at an output of 111.043 coupled with a probability of 0.000, which is very low (in comparison with the significant threshold of 0.05), implies an overall significance among the independent variables on the dependent variable. This implies that the aggregate of Nigeria's foreign debt does significantly affect its economic growth.

Conclusion

Certain connotations can be deduced from the findings of the study. For instance, the fact that politics instigates acquisition of foreign debts is an indication of how highly politics is entrenched above economic considerations in governments economic choices and policies. This is also buttressed by the finding that despite the cost-benefit imbalance, the foreign debt portfolio continued to soar. Given that the negative effect of foreign debt far exceeds the benefit, it is apparent that external debt is injurious to the economy. In furtherance, such debt were poorly negotiated or inappropriately utilized such that it became more a burden than blessing to the company.

Speculation prevails in spheres of uncertainty, therefore, the capacity of inflations to spur economic activities shows that there is systemic uncertainty as regards the ability of firms and other economic participant to make profit given the prevailing circumstance, hence engage in economic activities when they are assured of price increase and rising profit.

Recommendations

Sequel to the findings and conclusions made, the following recommendations are suggested:

1. Outstanding external debt should be renegotiated with foreign creditors.
2. The acquisition of foreign debt should be exclusively on economic considerations.
3. Structures that instill confidence in private economic participants should be established.
4. The volume of external debt should be gradually scaled down.

References

- Adesola, W.A. (2009). Debt servicing and Economic Growth in Nigeria: An Empirical Investigation. *Global Journal of Social Sciences*, 8(2), 1-11.
- Abrego, L., Ross, D.C. (2001). Debt Relief under HIPC Initiative: Context and Outlook for Debt Sustainability and Resource Flows, United Nations University/ WIDER

- Discussion Paper, September.
- Ademola A. (1977). Sustainability of Nigeria's Debt Paper presented at a Seminar on the Debt Problem and the Nigerian Economy: Resolution Options, Organized by the CBN at Abuja, Nigeria, Oct. 28-29.
- Adepoju, A. A., Salau, A.S., & Obayelu, A.E., (2007). The Effects of External Debt Management on Sustainable Economic Growth and Development: Lessons from Nigeria, MPRA. Paper No. 2147.
- Ajayi, LB. & Oke, M.O. (2012). Effect of external debt on economic growth and development of Nigeria. *International Journal of Business and Social Science*, 3(2), 297-304.
- Ajayi, S. I. (1991). Macroeconomic Approach to Foreign debt The Case of Nigeria. AERC research paper 8, Nairobi. Africa Economic Research Consortium.
- Ali, B.M and Mshelia, S.I.(2007). Impact of external debt services on Nigeria's Economy, *Global journal of social sciences*, 6, (2),111-118.
- Ariyo, A. (1997). Paper Presented at a Seminar on the Debt Problem and the Nigeria Economy: Resolution Options, Organized by CBN. Abuja, Nigeria Oct. 28-2.
- Audu, I. (2004). The Impact of External Debt on Economic Growth and Public Investment: The Case of Nigeria, African Institute for Economic Development and Planning (IDEP), Dakar.
- Butts, H. (2009). Short Term External Debt and Economic Growth—Granger Causality: Evidence from Latin America and the Caribbean. *The Review of Black Political Economy*. 36(2) 93-111.
- Central Bank of Nigeria (CBN) (2015) Annual reports and financial statement of accounts. Abuja, Nigeria. Google Scholar
- Cohen, D. (1993). Low Investment and Large LCD Debt in the 1980s. *The American Economic Review*, 83(3), 32-46.
- Debt Management Office (DMO) (2016) Nigeria Annual Reports and Statement of Accounts <http://www.dmo.gov.ng>. Accessed 13 April 2018.
- Ezike, O.J., Mojekwu C.A. (2012). Foreign direct investment and economic growth in Nigeria: an analysis of the endogenous effects. *Current Research Journal of Economic Theory*, 4(3), 53-66.
- Geiger, J.M. (1990). Nigeria's External Debt: Causes and Implications. Ibadan: National Centre for Economic Management and Administration.
- Hameed, A., Ashraf, H. & Chandhary, M. A. (2008). External Debt and its Impact on Economic Business Growth in Pakistan, *International Research Journal of Finance and Economics*, ISSN 1450-2827,, issue 20:132 - 140.
- Hansen, H. & Tart, F.(2000). Aid and Growth Regressions. Centre for Research in Economic Development and International Trade, University of Nottingham.00/7
- Hernandez, E. C (1974), Issues in design of Growth Exercises. IM? Working Paper WP/88/65,, IMF,, Washington D.C..
- Hector,C,B.(2009).Short Term External Debt and Economic Growth—Granger Causality: Evidence from Latin America and the Caribbean. *The Review of Black Political Economy*,36(2),93-111
- Hutcheson, T. L (1996). "Foreign debt and Debt Relief",. Paper presented at CBN Seminar on Understanding Nigeria's Economic Policy for Finance Correspondents,, November.
- IMF/World Staffs (2004). Debt Sustainability in Low Income Countries- Proposal for an Operational Framework and Policy implications, Feb. 3
- Iyoha, M. A, (1999). External Debt and Economic growth in Sub-Saharan African Countries. AERC Research Paper 90. African Economic Research Consortium, Nairobi.
- King, B. B (1968). Notes on Mechanics of Growth and Debt. World Bank Staff Occasional

- Papers 6, World Bank, Washington D.C
- Klein T.M. (1994). "Foreign Debt Management, An Introduction". World Bank Technical Papers, No. 245, the World Bank, Washington, D.C June.
- Mariano A. T. and Delano D. (2006). The impact of foreign direct investment on economic growth: case of post communism transition economies. *Problems and Perspectives in Management*, 12(1), 17-24.
- Mc Donald, D. C (1982). Debt Capacity and Developing Country Borrowing: A Survey of the literature, IMF Staff Paper, 29 (4)
- Nwankwo, A. (2004). "Diagnostic of Nigeria's Debt Problem". Paper presented at the Stakeholders' Forum on Debt Management for the 36 States of the Federation, Organized by Debt Management Office, Aug. 30-31.
- Ojo, E. I. (1997). *Annals of Government and Public Sector Accounting*. Nimo: Rex Charles and Patrick Publishers.
- Omoruyi Sam (2005). Debt Burden (Sustainability) Indicators. Paper Presented at Regional Course on Debt Recording and Statistical Analysis, Organized by WAIFEM, July 18-29, Lagos.
- Patifilo, C., Poirson, H. & Ricci, L. (2002). External debt and growth (Working Paper 02/69). Washington D.C. International Monetary Fund.
- Rostow, W.W. (1971). *Stages of Economic Development* (New York. Cambridge).
- Sachs, J. (2000). The Charade of Debt Sustainability, *Financial Times*, September 26.
- Solomon, R. (1977). A Perspective on the Debt of Developing Countries. *Brookings Paper on Economic Activity*.
- Schclarek, A. (2005). Debt and Economic Growth in Developing and Industrial Countries. Lund University Working Paper.
- Smyth, D. and Hsing, Y. (1995). In search of an optimal debt ratio for economic growth. *Contemporary Economic Policy*, 13:51–59.
- Uzun, A., Kabadayi, B., Karakoyi, C., & Emsen, O.S (2012). The Impact of External Debt on Economic Growth in Transitional Economies. *Chinese Business Review*, 2(5)
- World Bank (1989) *Dealing with the Debt Crisis; "The Foreign debt Difficulties of Low-Income Africa World Bank Development Report*.