

EXTERNAL DEBT SERVICES AND ECONOMIC GROWTH IN NIGERIA

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Abstract

The study examined the impact of external debt services on economic growth in Nigeria. The specific objectives of this study were to: examine the impact of external debt stock on economic growth in Nigeria; assess the impact of external debt servicing on economic growth in Nigeria and investigate the extent to which external debt interest has impacted on economic growth in Nigeria. It was discovered that debt is synonymous to underdevelopment, poverty, unemployment which has led to low living standard of the people and Nigeria's huge debt stock has prevented it from embarking on higher domestic investment which would lead to higher growth and development which is a major problem to Nigeria. The findings shows that Nigeria's economic growth has been adversely but significantly affected by rising external debt servicing and the study recommended that external debt should be effectively utilize for sustainable development and diversification of Nigeria's economy will reduce the rate of external debt. The study adopted the *ex-post facto* research design being of secondary nature and was used to test the hypotheses which was used to estimate and to test the impact of external debt services on economic growth in Nigeria.

Keywords – External Debt, Economic, Growth, Underdevelopment, Nigeria, Economy.

INTRODUCTION

1.1 Background to the Study

Over the years, in an economy where domestic savings are low, combined with a high current account payment deficit, the government has played a role in stimulating economic growth. This also provides a rationale for the government to borrow the funds needed to raise domestic savings. Low capital accumulation and a lack of resources to meet increasing public expenditure are characterized by many world economies (Aluko & Arowolo, 2018). Most governments are forced to resort to domestic and international borrowing to plug budget deficits and fund growth as public spending continues to increase and budget deficits widen (Saheed, Sani, & Idakwoji, 2015). Internally, for fear of fuelling inflation, governments can collect funds through taxes, coinage, or internal debt, the least favoured currency. Studies have consistently shown a negative relationship

between debt and economic growth, McBride (2017) noted. It has been suggested that there is a threshold for the government to raise funds to finance public expenditure. The most common means of raising domestic debt are treasury bills and government bonds. Higher domestic borrowing will increase interest rates and push the private sector out, slowing down growth and thus requiring external borrowing (Miller & Foster, 2017; Checherita & Rother, 2019). A nation's debt structure impacts individual citizens, government institutions, private sector organizations such as banks and eventually, the entire economy. In this context, the debt structure is the size of both domestic and foreign debt. External debt involves the undertaking of external monetary debt, including the undertaking of government guarantees to non-residents in other currencies, usually the US dollar, adjusted for external commitments. External currency debt consists of secured corporate and public debt, medium and long-term (over one year) debt, such as bilateral and multilateral debt, industrial loans and loans. It also involves institutional lenders' short-term debt (less than one year), private non-guaranteed debt, IMF debt, and foreign currency debt obligations (Khattak, 2018). The choice of a means of funding in the face of public deficits is motivated by cost and risk, and various goals such as low inflation, stable exchange rates, low interest rates, favourable yield curves, adequate foreign reserve coverage, and activity of the domestic market (Beaugrand, Loko, & Mlachila, 2012).

In the modern world, external borrowing has become indispensable, according to Nelasco (2017), because it complements domestic savings and helps countries to conduct productive activities. External borrowing is desirable and can provide the requisite financing for rapid economic growth, as it is channelled into raising the productive capacity of the economy and encouraging economic growth and development. Nelasco (2017) adds that heavy investment in infrastructure such as highways, rail lines, irrigation canals and power stations that force the government to undertake external borrowing is needed in the capital growth and industrialization process. Speedy industrialisation requires heavy imports from abroad of capital goods such as equipment and machinery and technical know-how. To make up the balance of payments deficit created by heavy imports, governments have to borrow heavily from other countries. But it poses a danger to the economic growth and stability of the country when external debt is unsustainable (Gebru, 2015). High external debt does not, however, necessarily imply sluggish economic growth; rather, it is the inability of the nation to meet its debt obligations. As such, to expand their tax base and better service their debts, countries need to use debt productively and create employment. Traditionally,

by calculating external indicators such as debt-to - GDP ratios and macro-economic indicators such as GDP, inflation, exchange rates, interest rates, foreign reserves, trade balances and levels of investment, external debt effects are evaluated (Shabbir, 2019).

Two wide reasons for countries to resort to external borrowing, however, have been identified; and the first is to promote higher demand or to finance temporary balance of payment deficits. The second explanation is defined as systemic reasons for the lack or circumvention of severe budget constraints of long-term domestic credit (Adesola, 2019). The persistent need for government borrowing to finance the budget deficit has contributed to the rise of external debt, which is influencing the economy's inflation trend (Olayede, 2012). Inflation is a global issue which, because of its undesirable consequences, constantly affects all economies, whether current or emerging. Keynesian theories suggest that when demand exceeds the economy 's capacity, inflation occurs (Asmaw, 2019). International borrowing is gradually monetized when the government borrows to close its budget deficits and thereby affects inflation. High interest rates are more likely to occur in a nation with a high level of debt, contributing to monetary policies that reduce such rates. In the short term, the impact of such an expansionary policy will decrease interest rates but lead to higher interest rates, with inflation staying higher or unchanged over the long term (Choong, 2010).

Government debt-to-GDP ratios will, according to Ogunmuyiwa (2018), depress economic growth and have immediate effects on inflation and national solvency. Although both developed and emerging economies have a consistent and substantially similar relationship between public debt and growth, the relationship between public debt and inflation remains uncertain. In advanced economies, Reinhart and Rogoff (2018) established no structural relationship between inflation and high debt. Though; higher debt levels are associated with high inflation in emerging economies. 'Safe' debt-to -GDP ratios can be as low as 15 percent, depending on the default and inflation history of the country (Reinhart, Rogoff, & Savastano, 2013; Patillo, Poirson, & Ricci, 2018). The resulting effect of high levels of debt generates a high debt burden and, especially in developing countries, puts debt servicing at risk for economic stability (Sulaiman & Azeez, 2018).

In recent times, especially in the run-up to the debt forgiveness period, the issue of Nigeria's external debt has become important due to its burden and the amount needed to meet those debts, as well as its potential effect on the various economic operating sectors, particularly the banking

sector and the economy's growth (Pattillo, Ibrahim, David, Sunday, Safdari & Mehrizi, 2011). The external debt of Nigeria can be traced back to the pre-independence period (1958), when the World Bank borrowed some 28 million US dollars for railway construction. According to the Debt Management Office (2018), this volume of debt was considered to be small until 1978, when the International Capital Market raised the first loan, widely known as the Jumbo Loan, to more than \$1.0 billion. Between 1958 and 1977, the need for debt was very low. However, due to the fall in oil prices, which contributed to a rise in external debt, the need for debt emerged in 1978. Decreasing oil prices had a negative effect on the revenue of the government. Therefore, the modification of the balance of payment issues and the financing of projects necessitated borrowing. The Debt Management Office (DMO) report, however, states that the debt stock of the country has steadily increased since 1977, from \$0.763 billion in 1977 to \$5.09 billion in 1978 and \$8.65 billion in 1980, an increase of more than 73.96 percent. This was subsequently raised to \$35.94 billion in 2004. However, thanks to debt relief in 2006, Nigeria was better balanced in terms of debt; an era in which a large part of its debt was offset, although this did not last for too long as debt figures soon started to show an upward trend. When state governments were allowed to enter into contract agreements on foreign loans, borrowing increased further. In order to revamp the economy and make the country more capable of meeting its debt, Nigeria had to follow the Structural Adjustment Program (SAP) sponsored by the World Bank / International Monetary Fund (IMF) in 1986 (Ayadi & Ayadi, 2018).

Following Nigeria's apparent debt overhang, Obasanjo led the government to intensive debt revocation in 2003-2007, leading to a reduction in foreign debt of up to USD 3.4 billion in 2007 (Adedoyin, Babalola, Otekunri & Adeoti, 2016) and N438.89 billion if converted into local currency (CBN Statistical Bulletin, 2018). Following the end of President Obasanjo's term, subsequent governments rapidly resumed borrowing to such an extent that the debt profile of Nigeria (including Multilateral, Bilateral, Euro Bond, Diaspora Bond, and others) began to rise again from N438.89 trillion in 2007; N523.25 trillion in 2008; N590.44 trillion in 2009; N689.84 trillion in 2010; N896.85 trillion in 2011; N1,026.90 trillion in 2012; N1,387.33 Billion in 2013; N1,631.50 Billion in 2014; N2,111.51 Billion in 2015; N3,478.91 Billion in 2016; N5,787.51 Billion in 2017 to N7,759.20 Billion in 2018 (CBN, 2018).

Owing to the persistent budget deficit, the unfavourable balance of payments and, most importantly, the imminent need for industrialization, external debt remains one of the major challenges facing low-income countries, such as Nigeria. Soludo (2018) argued that the two major issues that led to the acquisition of foreign loans are the negative rising rate of inflation and exchange rate depreciation. They have no alternative but to turn to the International Financial Institutions and bilateral loans as low-income nations face this obstacle. Debt servicing becomes the order of the day when such loans are received by a nation and, if not well managed, economic development will initially be far-reaching in the process. The settlement of unsustainable foreign debts that hinder the growth of the most heavily indebted poor countries (HIPCs) has resulted, according to Udeh (2018), in a series of initiatives ranging from debt restructuring to full revocation. Bakare (2017) argued that it is not a matter of concern to borrow abroad to support economic growth and development, but the issue is the misappropriation of such borrowed funds, resulting in an economic crisis in turn.

Although the high debt profile does not necessarily indicate slow economic development, it is the failure of a nation to channel these borrowed funds into productive economic areas in order to achieve economic growth and meet its debt service obligations (Adesola, 2019). That this is a major issue facing the Nigerian economy is no exaggeration. The Nigerian economy's inability to meet its debt service requirements effectively put the country under a heavy debt service burden. The resulting impact of this burden of debt service creates additional problems for the country, in particular the growing fiscal deficit.

In all sectors of the economy, the debt burden has led to a general decrease in production and productivity and to the deterioration of various macro-economic variables such as consumption, expenditure, etc. (Iweala, 2011). Furthermore, the continued increase in the foreign and domestic debts of Nigeria, the sharp decline in crude oil rates, the diminishing exchange rate of the naira to the dollar, and high interest rate charges have all aggravated the debt and debt servicing issues of Nigeria. It is against this backdrop that this paper aims to examine the effect of external debt on the economic growth of Nigeria.

1.2 Statement of the Problem

In developing countries, like Nigeria, hardly any nation is entirely debt-free and the external debt crisis has become one of the most serious problems. Debt has invariably become synonymous with

underdevelopment, poverty, unemployment, and all this has led to low living standards. In particular, African countries and Nigeria's large government debt stocks have prevented countries from embarking on a higher volume of domestic investment that would lead to higher growth and development.

It is troubling to note that, despite the 2005 relief package, the World Bank rated Nigeria as the world's 87th most indebted country and 139th in terms of GDP per capita purchasing power parity and debt-service ratio (debt-to-export ratio) of 1.10 percent against the 20 percent foreign threshold (World Bank, 2019). Nigeria is the largest borrower nation in sub-Saharan Africa, according to Omotoye, Sharma, Ngassam and Eseonu (2017). The debt profile of Nigeria has followed an upward trend over the years as opposed to other sub-Saharan nations (Ayadi & Ayadi, 2018). The steady increase in the amount of debt service payments poses a danger to the Nigerian economy's growth. For instance, \$3,781 billion was used in 2011, \$4,918 billion in 2012 and \$8,520 billion in 2018 to service debts. In 2014 and 2018, a total of \$5,500 billion and \$8,499 billion was paid out as debt service, while in the 2016 budget, N1.46 billion was budgeted for debt service (Oseni, 2019). As a result, some unfavourable circumstances may be developed, such as weak growth in GDP, crowding out private investment, etc. (Iweala, 2018). In comparison to expectations that capital released from Paris and the London Club, as well as additional external debt, would add value to the economy by creating employment, promoting quality health care, growing capacity utilization, infrastructure growth, reducing inflation rates, increasing export revenues, reducing foreign exchange risk, all of these phenomena.

A developing country like Nigeria's inability to sustain adequate domestic capital to bridge its budget deficits requires its continued dependency on external sector financing, which is usually characterized by very strict conditions for lending, unfavourable fluctuations in foreign exchange and trends of repudiation causing debt overhangs.

Therefore, the issue remains and revolves around the scenario of whether the nation's external debt stock could have contributed significantly to Nigeria's economic growth; whether the quantity of external debt services in aggregate terms and also to the various creditors could have led to an increase in the nation's GDP; and whether the external debt stock and its conditions of operation could have led to an increase in the nation's GDP.

In order to fill the gap created by previous studies, which were narrow in reach and did little to align the impact of the aggregate and different sources of external debt and their services on economic growth, exchange rates and inflation, the solution to this problem is crucial.

The economy is still not well diversified, so the balance of payments will still be negative, and the temptation, if that happens, is to borrow to cover the deficit. The problem with the discovery of oil is Nigeria's drift into a single market. Around 95 percent of foreign exchange earnings and 80 percent of discretionary revenues are generated by the oil industry. This persuaded the need for an empirical analysis of the impact of external debt on the economic growth rate (as measured by GDP growth) in Nigeria to launch this report.

1.4 Objectives of the Study

The broad objective of this study is to examine the impact of external debts on economic growth in Nigeria. The specific objectives are to:

- i. Assess the impact of external debt servicing on economic growth in Nigeria.
- ii. Investigate the extent to which external debt interest has impacted on economic growth in Nigeria.

1.5 Research Hypotheses

In order to realize the objectives of the study the following hypotheses are raised and will be tested:

H01: External debt servicing has no significant impact on economic growth in Nigeria.

H02: External debt interest has no significant impact on economic growth in Nigeria.

LITERATURE REVIEW

2.1 Conceptual Framework

2.1.1 External Debt

Debt that may be domestic or external is created by the act of borrowing. By the act of borrowing, debt is created. It is the capital or assets used in an organization that the shareholders don't contribute and does not belong to them in any way. This is an obligation expressed by a formal counterpart, financial or otherwise (Salau & Ogbayelu, 2017). Debt is characterized as a resource or liquid asset that is used in an organization without being contributed by the owner and does not belong to the organization in any other way, according to Bamidele and Joseph (2018). The Central Bank of Nigeria (2018) defined debt as a proportion of liabilities with different tenures, incurred in the past by government activities and scheduled to be fully repaid in the future by the government. National debt, also referred to as public debt, is the cumulative total of the financial

commitments of the government arising from borrowing from its citizens, from foreign governments, or from international institutions such as the International Bank for Reconstruction and Development.

Debt is an indebtedness or accrued borrowing contractual obligation. Joshua (2015) said it was possible to classify a debt as private or public. Private debt refers to the financial obligations levied on individual enterprises and non-governmental organisations, while public debt can be considered to be financial obligations or liabilities incurred by the government in order to fund domestic investment by borrowing from within the economy and beyond the territorial boundaries of the country. In order to boost economic growth and ensure fiscal viability, Itsede (2019) argued that government borrowing is regarded as public debt and that government borrowing is used as a way of raising available resources. He went on to say that it is possible to carry out this act of borrowing internally or externally.

Debt was conceptualized by the National Account Scheme (2018) as all commitments requiring the debtor to pay or pay interest or principal to the creditor at a future date. As a consequence, all debt assets are liabilities, but certain liabilities are not debt, such as bonds, equity and financial derivatives. Debt can, in terms of the balance sheet, be considered a subset of liabilities. Liabilities are obligations which provide the units holding the corresponding financial claims with economic advantages. The criteria for determining responsibility as debt is that the debtor owes the creditor future payments of interest and/or principal (International Monetary Fund, 2017). Generally, when, for different reasons, a nation or person borrows from a variety of sources and is unable to pay the loan when it is due for payment, the borrowed sums constitute debt. For the individual it becomes private debt, while for the nation it becomes public debt.

External debt is classified as foreign currency, food or service debt attributable to non-residents, according to the World Bank (2014). The financial obligation which binds one party (debtor country) to another (creditor country) is external debt. It usually applies to unpaid debt that is payable in currencies other than the debtor nation's currency.

External debt was defined by Yerima and Tahir (2020) as part of the debt of a country borrowed from foreign lenders, including commercial banks, governments or international financial institutions. Ogbeifuna (2017) suggests that, as a result of the disparity between national savings and expenditure, foreign debt emerges. The debt piles up as the deficit widens, and this makes the nation have to borrow growing amounts to stay afloat.

External debt is defined as money borrowed from foreign lenders by a country for the purpose of this study. Interest on this debt must be paid in the currency in which the loan was made (Zaki, 2015). Thus, in order to obtain the currency, the borrowing country will conceivably need to sell its goods to the country of the lender. This means that the debt is typically purchased by a government from foreign governments or banks or from international institutions such as the International Monetary Fund and the World Bank.

There have been many individual attempts on the part of some economists and financial experts to determine the content of these debts, as well as some attempts by some international organizations. The total external debt is the amount of current actual, not potential, debts based on the inhabitants in a certain economy, in any time for non-inhabitants, which requires returning the payments from the part of the debtor in order to pay the interest and the original amount at a certain point, or temporal point in the future (International Monetary Fund, 2013).

In general, the Organisation of African Unity describes external debt over a period of time as a set of due financial obligations. This means that the central government or public body, guaranteed by the central government, or contracted by the private sector has contracted the obligations (Al-Mahdi, 2019). Researchers have embraced a definition of external debt in order to address the above-mentioned difficulties, which considers it as amounts borrowed by the national economy where the duration of the loan exceeds one or more years and the amounts are payable to the borrower through a payment in foreign currency or by the sale to the borrower of goods and services (Saleh, 2013).

The World Bank (2019) defines total external debt as 'debt attributable to foreign currency, goods or services repayable by non-residents. It is the amount of long-term public, publicly guaranteed and private non-guaranteed debt and includes all debts with an initial maturity of one year or less and interest on long-term debt arrears (World Bank, 2019).

This study defines external debt as follows: money borrowed from foreign lenders by a country, including commercial banks, governments or international financial institutions, normally payable in the currency in which the loan was made, including interest.

2.1.2 External Debt Servicing

In general, debt servicing refers to the compelling need and duty on a borrower to pay the interest on a loan when and when due and also to effect redemption of the principal sum as it comes due

and if a nation has the potential to redeem these obligations, there will be no accumulation of arrears and thus no cases of "debt overhang" that cripples economic growth. It tests the extent to which the nation is able to maintain a sustainable debt stock that could make its conditions of service convenient in order to free up money for the growth of the vital sectors of the economy and to accentuate the well-being of its people (Karagol, 2017; and Ogunmuyiwa, 2018). As adopted by Desta (2015) and Adesola (2019), both the aggregated and disaggregated debt services to creditors have been designed to test their relationship with economic growth.

Abubakar (2019) has a broader viewpoint on debt servicing, as he claims that debt servicing entails interest servicing, redemption of unpaid loans, refinancing and debt rescheduling. The key essence of repayment is to postpone repayment in order to ease the squeeze of medium-term foreign exchange liquidity faced by debtors, while debt rescheduling is intended to prevent payment of maturing loans in order to enable some steps to be taken to expand the productive capacity of the nation.

Interest payment and principal repayment constitute a drain on the borrowing country's resources and the greater the debt stock, the greater the effect of debt servicing obligations that generate a strain on the resources of the nation. The pressure of debt servicing is calculated using some variables. Debt servicing tests the ability of a country to repay debt and its creditworthiness as a percentage of export receipts. The international threshold notes that when a country's debt servicing reaches 20% of its export earnings, its debt becomes unsustainable; debt servicing as a percentage of foreign exchange earnings is another important indicator of a country's indebtedness as it calculates the ratio of debt service to foreign exchange earnings; As this ratio goes up, the burden increases. Nagassan (2018) noted that the higher the debt service ratio, the lower the GDP would be, creating constraints on African nations' external debt servicing ability.

The DMO performs an annual debt sustainability analysis in cooperation with CBN, NPC (National Planning Commission), the Federation's budget office and the National Bureau of Statistics in an effort to retain debt servicing capability at a tolerable rate. A 2010 estimate, for example, showed that Nigeria spent N958.62bn (\$6.39bn) on debt servicing between 2008 and 2009, while the federal government's borrowing cap for the country was set at N1.06tn in 2017, consisting of N639bn from domestic sources and N426bn from international sources (Amaefule, 2017).

2.2 Empirical Reviews

The motive behind external debt is to boost economic growth and any country's development, but as a result of potential high debt stocks, debt interest rates, and debt service payments, it poses a serious threat to the economy. Economic and financial researchers have also attempted to analyse the impact on the economies of debtor nations of external debt burdens and have come up with distinct views. There are several empirical studies on external debt and the relationship between economic growth in both developed and developing countries.

External debt interest was also found to have a significant but negative impact on economic growth in Nigeria within the period of study. This showed that borrowings made over the years has been mainly for consumption; and this could be attributed to the fact that bulk of such funds are been channelled to meeting recurrent (such as wages and salaries or consumption) expenditure needs of the country at the expense of productive investments that could stimulate economic growth. In line with this result, available statistics from NBS (2020) further showed that more than half of the revenues earned between 2017 and first half of 2020 went into debt servicing. NBS (2020) figures showed 54.05 percent and 96.96 percent of revenues earned in 2019 and first half of 2020 respectively went into debt servicing which significantly reduced the country's economic growth. The result indicates that the burden of external debt interest has had a detrimental impact on the revenue of the country and the capital income of the country needed for enhanced economic growth. The findings from this study agrees with Safdari and Mehrizi (2017) whose study showed that rising interest in foreign debt had a negative but significant effect on GDP.

RESEARCH METHODOLOGY

3.1 Research Design

Hypothesis test was conducted to determine the level of significance of the impact of debt servicing on Nigeria's Economic growth. This study followed the form of *ex post-facto* research. *Ex-post-facto* analysis is a systematic empirical study in which the researcher does not in any way track or influence independent variables because the study situation already occurs or has taken place. The purpose of the *ex-post facto* research design of the researcher is to identify aspects of the problem that are vital to a thorough analysis. Furthermore, the researcher has the potential to provide a clear view of the problem from other applicable sources with the *ex-post-facto* study design and to limit the scope of study on these significant issues. In this scenario, when carrying out the study, the researcher adopts a technique that leads to accurate or almost comprehensive information.

3.2 Method of Data Collection

The data used in this research work consists secondary source data related to the study. Statistics from the Central Bank of Nigeria (CBN), journals, magazines, newspapers, the National Bureau of Statistics (NBS), the Internet and other similar publications provide the written sources from which such data can be collected. The research was limited to the 1986-2019 periods.

4.0 FINDINGS

DATA PRESENTATION AND ANALYSIS

4.1 Data Presentation

This section presents the data for the study, analyses and discusses the results, in line with the objectives and method of study.

Table 4.1: Data Presentation

Year	EST (₦' Billion)	EDS (₦' Billion)	(₦' EDI (%))	GDP Constant Basic Prices - Annual (₦' Billion)
1986	41.45	2502	2.64	202.44
1987	100.79	3574.6	2.59	249.44
1988	133.96	81407	2.51	320.33
1989	240.39	15577.7	2.32	419.20
1990	298.61	30855.8	2.4	499.68
1991	328.45	35334.3	2.56	596.04
1992	544.26	41327.9	1.86	909.80
1993	633.14	38266.4	1.82	1,259.07
1994	648.81	34722.8	2.18	1,762.81
1995	716.87	122446	1.67	2,895.20
1996	617.32	147048	1.67	3,779.13
1997	595.93	134685	3.86	4,111.64
1998	633.02	107395	3.76	4,588.99
1999	2,577.37	162054	3.9	5,307.36
2000	3,097.38	175204	3.8	6,897.48
2001	3,176.29	238146	1.98	8,134.14

2002	3,932.88	141389	2.25	11,332.25
2003	4,478.33	233943	1.45	13,301.56
2004	4,890.27	798850	1.2	17,321.30
2005	2,695.07	986550	1.54	22,269.98
2006	451.46	865540	4.7	28,662.47
2007	438.89	128600	3.8	32,995.38
2008	523.25	55190	2.8	39,157.88
2009	590.44	3587.4	3.2	44,285.56
2010	689.84	4643.3	4.9	54,612.26
2011	896.85	3272.7	3.8	62,980.40
2012	1,026.90	30455.9	1.9	71,713.94
2013	1,387.33	34953.1	2.2	80,092.56
2014	1,631.50	44249.6	1.4	89,043.62
2015	2,111.51	40333.2	1.2	94,144.96
2016	3,478.91	67245.5	1.6	101,489.49
2017	5,787.51	70609.4	4.7	113,711.63
2018	7,759.20	82729.4	6.8	127,736.83
2019	9,022.42	86861.4	1.8	144,210.49

Sources: CBN statistical Bulletin (2019); World Bank (2020)

4.2 Results and Analysis

4.2.6 Statistical Test of Hypotheses

The level of significance for the study was 5percent (for the two-tailed test); as such the two hypotheses formulated in this study were tested using the Wald F-statistic test and as well its associated p-values.

The Decision Rule: The decision rule for accepting or rejecting the null hypothesis was that the hypothesis must be based on the Probability Value (PV). If the PV is less than 5% or 0.05 (that is, $PV < 0.05$), it implied that the variable in question is statistically significant at 5% level; otherwise, it is not significant at that level.

Table 4.7: ARDL Regression Result

Dependent Variable: DLOG(GDP)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
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DLOG(EST)	-0.03489	0.029446	-1.18469	0.2515
DLOG(EST(-1))	-0.07807	0.032567	-2.39703	0.0276
DLOG(EST(-2))	-0.09847	0.032619	-3.01869	0.0074
DLOG(EDS)	-0.02396	0.118581	-2.28948	0.0136
DLOG(EDS(-1))	-0.01638	0.115991	-2.02474	0.0191
DLOG(EDS(-2))	-0.01322	0.113035	-2.01442	0.0238
DLOG(EDS(-3))	-0.03296	0.113433	-2.4538	0.0246
D(EDI)	-0.02277	0.135213	-2.64654	0.0261
D(EDI(-3))	0.12675	0.359237	-2.35283	0.0333
ECT(-1)*	-0.08134	0.005181	-15.7031	0.0000
R-squared	0.6738	Akaike info criterion	-2.268939	
Adjusted R-squared	0.5701	Schwarz criterion	-1.895286	
F-statistic	4.35074	Hannan-Quinn criter.	-2.149404	
Prob(F-statistic)	0.00657	Durbin-Watson stat	1.814174	

Source: Authors Computation, 2022 (Eviews-10)

The size of the error correction term (ECT) indicates the speed of adjustment of any disequilibrium towards a long run equilibrium state since the deviation from long run equilibrium is corrected gradually through a series of partial short-run adjustments. The Error Correction Term (ECT) parameter is negative, less than unity and significant at 5% level as expected. The ECT which restores the system back to equilibrium (if there is any form of disequilibrium in the system) validates that there exists a long run equilibrium relationship among the variables. The value of the ECT is 8.134%, meaning that the system corrects (or adjusts to) equilibrium in the following year at speed of 8.134% which is quite very low. This implies that the adjustment process to equilibrium is slow because the lower the ECT value, the slower the adjustment process to equilibrium. The low speed of convergence reflects the inefficient utilization of borrowed funds over the years.

To show the explanatory power of the model and the reliability of the estimates, the coefficient of determination (R-square) was used. It indicates how the model was reasonably fit in prediction. It showed that 67.38 percent changes in GDP were collectively due to EDS, EST and EDI, while 32.62 percent unaccounted variations were captured by the error term.

The F-statistic which is used to examine the overall significance of regression model equally showed that the results are significant. This was captured by the F-statistic value of 4.35074 and its associated probability value of 0.00657 that is found to be significant at 5% level.

The model also indicated that there is no autocorrelation among the variables as indicated by Durbin Watson (DW) statistic of 1.814174 (which fell within the acceptable range of 1.5 and 2.4). This showed that the estimates were unbiased and can be relied upon for policy decisions.

Test of Hypothesis One

H0₁: External debt servicing has no significant impact on economic growth in Nigeria

Table 4.9: Wald Test Results on External Debt Servicing and Economic Growth in Nigeria

Test Statistic	Value	Df	Probability
F-statistic	5.525511	(4, 18)	0.00955
Chi-square	7.188437	4	0.00411

Source: Researchers Computation, 2022 (E-views 10)

The Wald-test in Table 4.9, indicated that the calculated F-statistic value for the relationship between external debt servicing and economic growth in Nigeria was found to be 5.525511 and its probability value was 0.00955. Since the probability value is less than 0.05 or 5percent level of significance (and fell in the rejection region), the second null hypothesis (**H0₂**) was rejected The study concludes that external debt servicing has a significant impact on economic growth in Nigeria.

Test of Hypothesis Two

H0₂: External debt interest has no significant impact on economic growth in Nigeria

Table 4.10: Wald Test Results on External debt interest and Economic Growth in Nigeria

Test Statistic	Value	Df	Probability
F-statistic	5.282247	(2, 18)	0.005691
Chi-square	9.141499	4	0.001147

Source: Researchers Computation, 2022 (E-views 10)

The Wald-test in Table 4.10, the indicated that the F-value for the relationship between external debt interest and economic growth in Nigeria was found to be 5.282247 with an associated probability value of 0.005691. Since the probability value is less than 0.05 or 5percent level of significance, the second null hypothesis (**H0₂**) was rejected. The study thus concludes that external debt interest has a significant impact on economic growth in Nigeria.

CONCLUSION

External debts are necessary to meet shortfall internal resources, and stimulate the economy. However, it must be properly utilized to avoid serious consequences. Borrowing is not the most important issue but the use to which the fund is deployed. One needs to recognize the fact that external debt only helps to exploit the potential of a country; it does not enhance it. They only guide therefore is that return on spending should exceed marginal cost of borrowing on the assumption that debt are paid.

The reviews from this study have however shown that Nigeria as a country has not actually benefited from the dividends accrued to external borrowing which supposedly is to bridge the saving-investment gap which in turn has the potential to induce economic growth. The study showed that, over the period under review, the effect of external debt on economic growth over the years has been poor, contributing minimally and insignificantly to Nigeria's Gross Domestic Product. Specifically, external debt servicing and external debt interest has shown to have an insignificant impact on economic growth in Nigeria. Debt service negates economic growth through reduction in amount of available capital. High external debt interests have led to the devaluation of the national currency, increase in job losses, and the weakness of the productive sectors of the economy that are supposed to spur economic growth. All of these resulted in economic recession witnessed in the economy of Nigeria. Generally, the study has shown that external debt has significant but negative impact on economic growth in Nigeria. This suggests that the economy will continue to slump if the level of consistent borrowing is not checked and the money borrowed is not channelled away from consumption; and the adequate investment made in the productive sector. A reduction in debt service and interest would lead to an increase in investment for any given level of future indebtedness.

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