An Empirical Analysis of the Effects of Internal and External Debts Profile On Nigerian Economic Growth

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Abstract: The rationale for this Research work is to establish the relationship between economic growth, external debt and internal debt in Nigeria. Debt has become inevitable phenomenon in Nigeria, despite its oil wealth. This paper therefore is set to investigate the empirical analysis of the impact of external debt and internal debt on economic growth in Nigeria between 1986-2013 through the application of Ordinary least square method to establish a simple relationship between the variables under study. Granger causality test of causation between GDP, external debt and domestic debt, chow break point, the results of Causality test suggest that there is a bi-directional causation between external debt and GDP while no causation existed between domestic debt and GDP as well no causation existed between external debt and domestic debt. Also the chow break point test revealed that there are no breaks at specified breakpoints in the variables. The results of OLS also revealed that external debt possessed a negative impact on economic growth while internal debt has impacted positively on economic growth (GDP). A major policy implication of this result is that concerted effort be made by policy makers to manage the debt effectively by channelling them to productive activities (real sector) so as to increase the level of output in Nigeria, hence achieving the desire level of growth.

Keywords: Internal debt, external debt, GDP, OLS

I. Introduction

1.1 Background of the study.

The origin of the gloomy Nigerian debt situation can be traced back to the late 1970s when there was the need to finance the widening deficit gap created by profligate spending. This marked the beginning of the end of the oil boom era which was characterized by falling foreign exchange earnings and rising fiscal deficits and external borrowing. Nigeria’s foreign debt skyrocketed from $9 billion in 1980 to $36 billion in 1990. These debt obligations accumulated and crystallized into what is today known as the Paris Club debts, promissory notes and par bonds. The Paris Club debt component, which was a mere $5.39 billion in 1983, graduated to $21.6 billion in 1999. Simbowale, etal (.2004)

One major obstacle for Nigeria’s economic development over the last two decades has been its crippling debt overhang. In April 2006, Nigeria ordered a final debt repayment to rich lending nations, completing Africa’s biggest debt relief deal. This and other debt restructuring agreements in the last few years have reduced Nigeria’s external debt to only 6% of its GDP. But the interest in Nigeria’s debt has not dissipated since the Paris Club deal. On the contrary, now that the whole process has been completed, analysts (both international and local) are enabled to assess fully its possibilities. Some analysts have said that the successful completion of this deal would help redeem Nigeria’s reputation in international financial circles, and prevent a repeat debt crisis. Others believe that, because of Nigeria’s oil dependence, the country could face the same pattern of debt accumulation and mismanagement that heralded calls for debt relief in the first place. The current scenario of low debt levels and high oil prices (and revenues) means that Nigeria’s financial position is quite similar to what it was in the 1970s. Hence, determining the policy steps that should have been taken in the past could shape opinion about how to manage the country’s new borrowing to avoid a debt crisis similar to the one from which it has just emerged. Every economy requires an amount of capital to generate production and sustain development: capital, being a factor of production is particularly important but relatively scarce, and the dearth of capital is much more prevalent in developing countries which Nigeria happen to be among

1.2 statement of the problem

According to Debt Management Office (DMO, 2006), Nigeria spent over $32 billion for debt services between 1985 and 2001. Apparently, greater revenue of the country was devoted in servicing her debt thus playing down investment capital and economic growth in the country.

Moreover, after the huge debt relief that Nigeria receive from Paris club which save more than $23 billion in its account, the country’s debt profile is still on the rise geometrically and continuously. Even though
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there are few researches that was carried out in this area which cover limited period of time and mostly uses primary data with few that uses secondary data, there was a huge differences and wide gaps between the results and findings. It’s against this backdrop and gaps that this study intends to investigate using ordinary least square(OLS) the degree or extent to which internal and external debt affect economic growth in Nigeria using data from 1986 to 2013.

1.3 Objectives of the Study.
The main objective of this research is to determine the effect of internal and external debt on Nigerian economic growth from 1986 to 2013, while the specific objectives are to:

i. Establish a causal relationship between internal debts, external debt economic growth of Nigeria.
ii. Find out the effect of external debt on the Nigerian economic growth.
iii. Verify the effect of internal debt on the Nigerian Economy.
iv. Investigate a causal relationship between internal debt and external debt of the country.
v. Compare the impact of internal and external debt on Nigerian economic growth.

1.4 Research Question
The questions which this research intends to answer are as follows:

i. Is there any causal relationship between internal debt, external debt profile and economic growth of Nigeria?
ii. What are the effects of internal debt on Nigerian economic growth?
iii. What are the effects of external debt on Nigerian economic growth?
iv. Is there any causal relationship between external debt and internal debt in Nigeria?
v. Is there any econometrical comparism between internal and external debt effect on economic growth of Nigeria?

1.5 Research Hypotheses
The following hypotheses are formulated and will be tested in the course of the study.

H0: Internal and external debt does not significantly affect Nigerian Economic growth.
H1: Internal and External debt significantly affects Nigerian Economic growth.

1.6 Scope and limitation of the study
This study ‘an empirical analysis of the effect of internal and external debt on Nigerian economic growth’ covers the period of 1986 to 2013 which made up of 27 observations. The research entails the general debt profile of the whole Nigeria as a country which comprises of federal, state and local government areas with the use of its internal and external debt figures as variables. Another major limitation of this study is the fact that existing studies on domestic and external debt analysis in Nigeria are still scanty.

However, the empirical investigation on the effect of internal and external debt is limited or restricted to the period of 1986 to 2013. This hindrance or restriction is as a result of unavailability of some data, problems encountered during such data collection, method use in the data collection, and the techniques use in the analyzing of the detail that has been used in the study. Another limitation of this study is the fact that there was problem of missing data. Actually this research work is meant to have started from 1970, but because of unavailability of data, the study had to come down to 1986.

1.7 Significance of the study.
This study is focused on providing alternative measures to tackling external and internal debt management problems. It will also serve as a tool in revamping government policies towards loan procurement and debt servicing in Nigeria. It will also expose the extent to which internal and external debt impacted or affect Nigerian debt profile from 1986 to 2013.

II. Literature Review
Nigeria, like most other less developed countries (LDCs) has been classified by the World Bank among the severely indebted low income countries since 1992. The nation inability to meet all it debt service payment constitute one of the serious obstacles to the inflow of external resources into the economy. The accumulation of debt service arrears which is being compounded with penalty known as interest has not permitted reduction in the debt stock, despite the fact that government has been servicing it
external debt annually. Hence in this section efforts have been made to review relevant literature, theories and concept on the internal and external debt in order to ascertain its relevance or impact to the Nigerian economic growth situation.

According to Likita (2000), Government borrows in order to close the resource gap between savings and investment. The absence of adequate savings creates a difference between the actual level of required domestic savings for investment and actual investment. The low savings can be seen as a constraint to investment because the mechanism where savings translate itself into investment will not exist; therefore conscious effort must be made by the government to eliminate such gap.

Adam Smith (1776) attributes external debt to three influences: first, the desire of the government official to spend, second, the Unpopularity of increasing taxes, and thirdly, the willingness of capitalist to lend. In this way he sees the government debt as a company of commercial or capitalist society. Adam Smith said that increasing deficits would in the long run probably ruin the great nation. That government borrowing encourages wastes during peace and leads to reckless waging of war. Debt results in higher taxes and inflation which rewards spending-tariffs and pushes savers. It weakens the productive capacity of people and eventually destroys even the wealthy nations.

Karlmax (1883), opine that external debt results in the exploitation of labour which creates a class of laziness, and it results in the central banks who granted special privileges in return for lending to state. It encourages higher taxation and tax collectors in order to pay the national debt.

2.1 History of Nigeria’s debt crisis

The phenomenon of external debt by Nigeria dates back to the colonial period precisely in 1958 when the sum of US$28 million was contracted for railway construction (Adepoju et al, 2007). Between 1958 and 1977, debts contracted were the concessional debts from bilateral and multilateral sources with longer repayment periods and lower interest rates constituting about 78.5 per cent of the total debt stock (Adepoju et al, 2007). AFRODAD (2007) noted that Nigeria’s external debts have been increasing over time because of a proportional shortage of foreign exchange to meet her developmental needs. The fall in oil prices in the late 1970s had a devastating effect on government expenses. It therefore became necessary for government to borrow in 1978 for balance of payment support and project financing. As a result of this, government promulgated Decree No 30 of 1978 which limited the external loans the Federal Government could raise to 5 billion Naira. In the same year government made the first “jumbo loan” of US$1 billion from the International Capital Market. This increased the nation’s debt profile to US$2.2 billion (AFRODAD, 2007).

Given this, Nigeria’s external debts skyrocketed from the million-dollar category to that of billion dollars. Nigeria’s external debt stock increased 16 to US$13.1 billion in 1982 (CBN, 2003). Two factors led to this sharp increase: one, the entrance of state governments into external loan obligation and two, there was a substantial decline in the share of loans from bilateral and multilateral creditors and a consequent increase in borrowing from private sources at stiffer rates. Nigeria’s inability to settle her import bills resulted in the accumulation of trade arrears amounting to US$9.8 billion between 1983 and 1988. Debt was eventually refinanced. In 1990, Nigeria’s external debt rose again to US$33.1 billion (CBN, 2003).

Dr. Ngozi Okonjo-Iweala considered the payment economically unsustainable, Semenitari, (2005). She therefore negotiated with the club. The $18 billion debt cancellation for Nigeria in 2005 by The Paris Club and subsequent settlement of some outstanding debts reduced the total external debt of the country substantially.

2.2 Theoretical review

This section reviews the past theories by scholars on the relationship between internal, external and economic growth. Most studies of debt profile in Africa appear to have focused on regions, especially the Sub-Saharan, which tended to give little attention to the peculiarity of individual countries. Furthermore, most studies dwell on country groupings based on certain characteristics (e.g. oil-exporting countries) or inter country comparison. But this study will dwell on Nigeria as a case study.

2.3 Concept of internal debt

Internal Debts are debts that originate from within a country. They are usually contracted through debt instruments such as treasury bills, treasury certificates and treasury bonds. Others are development stocks, FGN bonds and Promissory notes. Briefly, we will elucidate herein on the theoretical framework surrounding domestic debts and total debt growth in Nigeria.
2.4 Performance of internal debt in Nigeria
Within period under review domestic debt grew astronomically averaging 114.98 percent of bank deposits. In 1994, debt as percentage of bank deposits was 250 percent and reduced progressively to 74.94 percent in 2005 and was as low as 7.62 percent of bank deposits in 2008. In terms of tenor, the domestic debt was highly short tenured until recently. For instance in 1994, treasury bills accounted for 42 percent of domestic debt, treasury bond accounted for 48 percent, treasury certificate accounted for 9.16 per cent and development stock accounted for 8.22 percent of domestic debt and this was the trend until 2007. In 2002, treasury bill accounted for 62.93 percent, treasury bond accounted for 36.93 percent and development stock which is the long term instrument accounted for a mere 0.14 per cent of domestic debt. The implication of this is that the debt was used to finance recurrent expenditure which was not growth inducing. But this situation reversed in 2007 as the contribution of treasury bills to domestic debt fell to 26.50 percent, treasury bond accounted for 18.80 percent and federal government bonds which is the long term instrument accounted for 54.67 percent of the domestic debt.

2.5 Reason for rising internal debt profile in Nigeria
Theoretically, there are three reasons often advanced for government domestic debt (Alison et al. 2003). The first is for budget deficit financing, the second is for implementing monetary policy and the third, is to develop the financial sector (supplying tradable financial instrument so as to deepen the financial markets). In Nigeria, several factors have been advanced to explain the changing domestic debt profile between the 1960s and now (Rapu, 2003). The major factors include: high budget deficits, low output growth, large expenditure growth, high inflation rate and narrow revenue base witnessed since the 1980s. The fiscal operation of the federal government resulted in large deficit averaging 1.93 per cent of GDP between 1994 and 2008. From an average deficit of 1.56 per cent of GDP for the period 1994-1997, it increased on average to 3.35 per cent in 1999-2003 and then reduced to 0.86 per cent of GDP in 2004-2008.

2.6 Effect of internal debt in Nigeria
i. Large internal domestic debt tends to crowd out private investment. The process of crowding out arises from the fact that once the government borrows from the domestic market, a shortage of loanable funds arise forcing interest rates up which is the situation, as can be seen from table 2. Between 1994 and 2003, a period of large deficit financing, interest rate was an average of 23.05 percent but between 2004 and 2008, a period of low deficit financing and lower debt ratio, interest on the average reduced to 19.23 percent.
ii. High rate of poverty: The welfare implication of domestic debt is the unemployment rate increase due to the closure of industries and decline in government finance on social service, infrastructure service since most part of government revenue are used to service the debt. The resultant effect of all these is the rate of poverty continue to rise in the country, Olakole R.A (1991).
iii. Internal debt may aid government development program if the government sells bonds and development stocks to members of the public to finance its capital expenditure thereby pulling out funds out of personal and corporate income which is effectively utilize in infrastructural projects which by a multiplier effect facilitate generation of a multiple of that income leading to economic growth.
iv. For instance in 1996 a period of high debt ratio, the poverty line was 65.6 percent whereas in 2004, a period of reducing debt ratio, the poverty line reduced to 54.4 percent, though it further increased to 63 percent in 2009 (NBOS, 2009) which indicate poverty increase.

2.7 Concept of external debt
External debt is a conscious and careful planned schedule of loans acquired either for development purpose or to support the balance of payment. It corporate estimate foreign earnings, sources of finance, the projected returns from the investments and the repayment schedule. External debt management also entails the assessment of the countries capacity to service existing debt and whether further loans could be contracted.

2.8 Effect and problem of external debt in Nigeria
Composition of Nigeria’s external debt stock. The origin of Nigeria’s external debt dates back to 1958, when a sum of US$28 million was contracted for railway construction. Between 1958 and 1977, the resort to foreign debt was minimal, as debts contracted during the period were the concessional debts from bilateral and multilateral sources with longer repayment periods and lower interest rates. From 1978, following the collapse of oil prices, which exerted considerable pressure on government finances, Nigeria was unable to shift gears in the face of changing economic fortunes and adopted a policy of deficit financing. Nigeria’s external debt stock has been heavily skewed by the Paris Club of creditors, to which the country owes 80% of its external debt.
Hameedetal, (2008) opined that too much of external debt could dampen growth by hampering investment and productivity growth because of the fact that when greater percentages of reserves (foreign currency) are consumed in meeting debt service, exchange rates fall and credit worthiness erodes; causing reduction in access to external financial resources. Were (2001) noted that Sub Sahara Africa countries were plagued by their heavy external debt burden. He argued that the debt crisis, compounded by massive poverty and structural weaknesses of most of the economies of these countries made the attainment of rapid and sustainable growth and development difficult. It then became widely accepted that the heavily-indebted countries require debt relief initiatives beyond mere rescheduling to have a turn-around in their economic performance and fight against poverty.

2.9 The debt management office (DMO)

The Debt Management office commenced operations on October 4 2000. Prior to the establishment of the office, debt management in Nigeria was characterized by several major shortcomings, particularly the diffusion of debt management responsibilities across numerous agencies, leading to inefficiencies and coordination problems. During that era, debt management functions were split among as many as seven different government departments and agencies. In the Ministry of Finance alone, four departments were involved in external debt management. Its role and function include:

i. Advise the Government on: Terms and Conditions of Loans, Restructuring and Refinancing.
ii. Maintain a complete and accurate database of all FGN Borrowings (Domestic and External) including contingent liabilities (guarantees).
iii. Prepare and submit to the Government annually, a forecast of debt service and borrowing capacity.
iv. Efficient management of Nigeria's Domestic and External Debt Stock including the financial and currency risks.
v. Manage relationships with local and international creditors and investors Issue and manage FGN securities issued publicly. Publish Debt Data
vi. Service External Debts taken and guaranteed by the Federal Government.

2.10 Method or way of repayment of debt.

The methods used in repayment of public debt are as follows:

i. Debt Rescheduling: This involves the Rearrangement of terms of debt like the adjustment of interest rate grade period, principal repayment and maturity, importantly, the strategy does not cause any reduction in the stock debts rather it facilitates management of debt by providing relief. For instance, Nigeria negotiated services of rescheduling arrangements with the Paris Club of Creditors between 1986 and 1991 to which more than half of the external debt is owed.

ii. Debt Equity Conversion: The Nigerian government is currently applying debt equity swap, i.e. converting foreign debts into equity in local companies. Under this system, there are some advantages that could be obtained in one hand and loss encountered on the other hand. It makes the economic environment attractive for foreign investments.

iii. Ban on External Borrowing: This is just a temporary measure to stop the government from further borrowing, i.e. putting a ban on borrowing for a particular period of time.

iv. Debt Repudiation: This involves disowning the debt completely. Many Economists had advocated this. According to Fidel Castro, there is no sense in a developing country like Nigeria paying back debts owing, especially foreign debts, because through colonization African countries had more than paid for debts. However, there is possibility of sanction from the International Monetary Fund (IMF) and the World Bank.

v. Debt Forgiveness: This arise when the creditor nation decides to forget or write off the debt. Paris Club has taken this option in favour of some debtors in the past. Recently, the club agreed to write off $30 billion being owed by Nigeria.

vi. Collateralization: under this arrangement, the yield of a bond collateralised within a specified period is expected to offset or pay off a collateralised amount referred to as the zero coupon option.

vii. Debt swap: this is a loan that could be paid for by other means like crude oil swap, gas, food product etc

viii. Debt servicing: this is paying the interest on the loan

ix. Debt settlement: this is paying up of the debt entirely like the one Nigeria did in 2005

2.11 Concept of GDP

Gross domestic product (GDP) has been used as a proxy for economic growth in this research work. Hence, there is need to understand the term in a more comprehensive way. The gross domestic product (gdp) is the broadest and most often used measure of economic activity. It refers to the market value of all final good and service produced within a country in a given period of time usually a year.
Jhingan (2002) defines economic growth as a process where by the real per capita income of a country increases over a period of time. Hogendorn (1992) conceives it as the totality of the underlying structural, institutional and qualitative changes that expand the country’s capacities. According to him, economic development is measured in four ways using four indicators. This includes Gross National Product (GNP), Per Capita Income and Welfare. For an economic development to occur there must be an increase in real national income which is possible through increased investment. Also there must be changes in the standard of living of the people. Standard of living is determined using per capita income, because per capita income measures standard of living and vice versa. Moreso, economic welfare indicates the level of economic development attained by a country.

2.12 Empirical Review

Even though an empirical studies on the effect of internal and external debt on Economic growth is very scanty, the study intend to widen our reviews from the Nigerian perspectives and also abroad.

Aminu et al (2013), asserted that domestic debts if properly manage can lead to high growth level. A major policy implication of this result is that concerted effort be made by policy makers to manage debts effectively by channelling them to productive activities (real sector), so as to increase the level of output in Nigeria. Another policy implication of the study is that most developing countries contract debt for selfish reasons rather than for the promotion of economic growth through investment in capital formation and other social overhead capital. The paper also recommends that government should rely more on domestic debt in stimulating growth rather than external debt. The last is yet to be heard on this discuss. The above studies only served as reference material for future and further works in the area of domestic debt management in Nigeria.

Adofu and Abula (2010) investigated the relationship between domestic debts and economic growth in Nigeria for the period 1986 to 2005. Outcome of their study revealed that domestic debt has affected the growth of the economy negatively. In the light of this finding, the study recommends that government’s domestic borrowing should be discouraged and that an increment in her revenue base via tax reforms need be encouraged. Onyeiwu (2012) examined the relationship between domestic debt and economic growth in Nigeria. Result of this study found that domestic debt holding of government is far above a healthy threshold of 35 per cent of bank deposit. This portends a crowding out effect on private investments. The study affirmed that the level of debt has negative effect on economic growth in Nigeria. The study recommended that government should maintain a debt - bank deposit ratio below 35 per cent, increase its usage of tax revenue to finance developmental projects and to divest itself of all projects the private sector can handle while providing enabling environment for private sector investors and most importantly improved infrastructural facilities.

Aminu and Anono (2012) conducted a study on external debt relationship in Nigeria and found that external debt impacted positively on the growth of the economy within the period under review. And that external debt does not cause GDP, but the flow of causation runs from GDP to external debt.

Both domestic and external loans have desirable advantages if properly managed. It has the capability of achieving desirable impact in the growth and progress of a developing economy if investment of loans in productive activity is strictly made to service and repay loan principal. It is also a way of forced saving when private or public loans are judiciously managed.

III. Research Methodology

3.1 Introduction

The relationships of economic theory which can be measured with one or another econometric technique are causal, that is they are relationship in which some variables are causes of the variation in other variables. Therefore, this study adopts econometric method of analysis in determining the impact of internal and external debt on economic growth and development in Nigeria and also whether estimation of the parameters has theoretical meaningful and statistically significant.

3.2 Sources of Data

Annual time series data on internal and external debt as well as gross domestic product(GDP)from 1986 to 2013 will be source specifically from central bank of Nigeria’s statistical bulletins (2014), national bureau of statistic (NBS)And debt management office (DMO).

3.3 Method of Data Collection

The study adopted Secondary annual time series data on internal and external debt and gross domestic product (GDP).

3.4 Method of Data Analysis

The research work will make use of econometric procedure in estimating the relationship between the variables. the ordinary least square(OLS) technique will be employed in obtaining the coefficient of the equation. In
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other to achieve the objectives of the study, multiple regression method of data analysis technique was adopted. A gross domestic product (GDP), which is used as a proxy for economic growth was regressed against internal debt (IB) and External debt (EB) stock. The F-test was used to test the overall significance of the explanatory variables taken together, while the t-test was used to test for the significance of each explanatory variable or components of internal and external debt contribution to the level of economic growth in Nigeria. The coefficient of determinations (R2) and adjusted (R2) was used to test for goodness of fit of the study. Justification for the selection of these methods is that the data is time series data which exhibit a random walk.

3.5 Model specifications
In this model, internal debt (IB) and external debt (EB) are to be used as dependent variables while gross domestic product (GDP) is to be used as independent variable as specified below:

\[ Y = \alpha + \beta_1X_1 + \beta_2X_2 + \mu \] ...................................... (1)
\[ GDP = \alpha + \beta_1IB + \beta_2EB + \mu \] ...................................... (2)

Where: GDP = Gross domestic product
ID = Internal debts
ED = External debts
\( \alpha = \) Constant
\( \mu = \) Error term
\( \alpha, \beta_1, \beta_2 = \) parameters

3.6 Economic apriori expectation
This refers to the sign and size of the parameters in economic relationships. The economic apriori test shall be conducted to enable us examine the magnitude and size of the parameters estimate. This evaluation is guided by economic theory to ascertain if the parameter estimate conforms to expectation. It’s expected that;

\( \alpha > 0 \),
\( \beta_1 > 0 \),
\( \beta_2 > 0 \).

Hence, economic apriori expectations are; \( \alpha > 0 \), \( \beta_1 > 0 \) and \( \beta_2 > 0 \).

IV. Data Presentation And Analysis

4.1 Data analysis and presentation: Table 1

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ID</td>
<td>11.33747</td>
<td>0.233362</td>
<td>48.58317</td>
<td>0.0000</td>
</tr>
<tr>
<td>ED</td>
<td>-0.828897</td>
<td>0.331962</td>
<td>-2.496963</td>
<td>0.0195</td>
</tr>
<tr>
<td>C</td>
<td>-1272.364</td>
<td>724.0120</td>
<td>-1.757380</td>
<td>0.0911</td>
</tr>
</tbody>
</table>

R-squared 0.989521 Mean dependent var 15702.80
Adjusted R-squared 0.988683 S.D. dependent var 22929.29
S.E. of regression 2439.299 Akaike info criterion 18.53777
Sum squared resid 1.49E+08 Schwarz criterion 18.68050
Log likelihood -256.5287 Hannan-Quinn criterion 18.58140
F-statistic 1180.347 Durbin-Watson stat 2.352565
Prob(F-statistic) 0.000000

Source: Author’s computation from Eviews 8.0

Table 1 above contains regression results for the relationship between internal debt, external debt and economic growth (gdp). The results indicate that the coefficient of internal debt, external debt and constant are statistically
significant. Precisely, the coefficient of internal debt and external debt are found to be statistically significant at 5% level as indicated by their probability values 0.0000 and 0.0195 respectively. Also the constant is found to be statistically significant at 10% as indicated by its probability value of 0.0911. Precisely, the coefficient of internal debt is found to be (11.33747). This implies that 1% increase in internal debt would increase the GDP by 11.33747%. The coefficient of external debt is precisely found to be (-0.828897). This implies that 1% increase in external debt would decrease GDP by 0.828897%.

The F-statistics, which is used to measure the joint influence of the parameters is found to be statistically significant at 5% level as indicated by the corresponding probability value 0.000000. The R-squared value, which is used to test the model fitness is found to be 0.989521. This implies that 98.9521% total variation in economic growth (GDP) is explained by the regression equation while the remaining 1.0479% is captured by the error term. This indicates that the model is fit and can be used for policy making. Also, the Durbin-Watson statistics value (2.352565) is found to be greater than 2; this implies that there is no autocorrelation in the model. Furthermore, the Durbin-Watson statistics value (2.352565) is found to be greater than R-squared value (0.989521) which implies that the model is non-spurious and meaningful.

4.2 Heteroskedasticity test: Table 2

- Null hypothesis: there is no heteroskedasticity (homoscedasticity).
- Alt hypothesis: there is heteroskedasticity.

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>F-statistic</td>
<td>0.965264</td>
<td>0.3946</td>
</tr>
<tr>
<td>Obs*R-squared</td>
<td>2.007193</td>
<td>0.3666</td>
</tr>
<tr>
<td>Scaled explained SS</td>
<td>9.954766</td>
<td>0.0069</td>
</tr>
</tbody>
</table>

Source: Author’s computation from Eviews 8.0

As can be seen in the above table, the probability value of observe R-squared is 36.66%. Therefore, since the probability value (0.3666) is greater than 5%, hence we accept the null hypothesis that there is no heteroskedasticity. This implies that our model is homoskedastic which is desirable.

Figure 1: GDP

Source: Author’s computation from Eviews 8.0
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Figure 2: Internal Debt

Source: Author’s computation from Eviews 8.0

Figure 3: External Debt

Source: Author’s computation from Eviews 8.0

4.3 Serial Auto correlation LM test: Table 3

- Null hypothesis: no serial auto correlation.
- Alt hypothesis: there is serial auto correlation.

Breusch-Godfrey Serial Correlation LM Test:

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>F-statistic</td>
<td>0.471847</td>
<td>0.6298</td>
</tr>
<tr>
<td>Obs*R-squared</td>
<td>1.103565</td>
<td>0.5759</td>
</tr>
</tbody>
</table>

Source: Author’s computation from Eviews 8.0

From the table above, it can be seen that probability value of the observe R-squared is 57.59%. Therefore, the probability value of (0.5759) is greater than 5%. Hence we accept the null hypothesis which
states that there is no serial auto correlation. This implies that there is no serial auto correlation in our model. hence our model is meaningful.

4.4 Multicollinearity Test (VIF): Table 4

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient Variance</th>
<th>Uncentered VIF</th>
<th>Centered VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>ID</td>
<td>0.054458</td>
<td>1.651227</td>
<td>1.001515</td>
</tr>
<tr>
<td>ED</td>
<td>0.110199</td>
<td>1.877186</td>
<td>1.001515</td>
</tr>
<tr>
<td>C</td>
<td>524193.4</td>
<td>2.466718</td>
<td>NA</td>
</tr>
</tbody>
</table>

Source: Author’s computation from Eviews 8.0

From the variance inflation factor (VIF) result above, it can be observed that values of the centered VIF of both internal debt and external debt are less than 10. i.e. (1.001515 < 10).this implies that there is no multicollinearity between the explanatory variables.

4.5 Unit Root Test: Table 5:

<table>
<thead>
<tr>
<th>t-Statistic</th>
<th>Prob.*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Augmented Dickey-Fuller test statistic</td>
<td>-4.701053</td>
</tr>
<tr>
<td>Test critical values: 1% level</td>
<td>-3.752946</td>
</tr>
<tr>
<td>5% level</td>
<td>-2.998064</td>
</tr>
<tr>
<td>10% level</td>
<td>-2.638752</td>
</tr>
</tbody>
</table>


Source: Author’s computation from Eviews 8.0

from the table above, it can be seen that the null hypothesis that gdp has a unit root is rejected as indicated by the probability value of 0.0012. Therefore, the gdp is stationary at 1% significant level with second difference d(2) which is indicated by ADF results at all levels less than the critical values in negative direction. The ADF value for GDP is -4.701053 and the critical values are -3.752946, -2.998064 and -2.63875 at 1, 5, and 10 per cent respectively.

<table>
<thead>
<tr>
<th>t-Statistic</th>
<th>Prob.*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Augmented Dickey-Fuller test statistic</td>
<td>-4.546603</td>
</tr>
<tr>
<td>Test critical values: 1% level</td>
<td>-3.724070</td>
</tr>
<tr>
<td>5% level</td>
<td>-2.986225</td>
</tr>
<tr>
<td>10% level</td>
<td>-2.632604</td>
</tr>
</tbody>
</table>

Source: Author’s computation from Eviews 8.0

from the table above, it can be seen that the null hypothesis that internal debt (ID) has a unit root is rejected with the given probability value of 0.0014. therefore, the internal debt (ID) is stationary at 1% significant level
with second difference $d(2)$ which is indicated by ADF results at all levels less than the critical values in negative direction. The ADF value for GDP is -4.546603 and the critical values are -3.724070, -2.986225 and -2.632604 at 1, 5, and 10 per cent respectively.

<table>
<thead>
<tr>
<th>Table 7:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Null Hypothesis: D(ED,2) has a unit root</td>
</tr>
<tr>
<td>Exogenous: Constant</td>
</tr>
<tr>
<td>Lag Length: 1 (Automatic - based on SIC, maxlag=6)</td>
</tr>
<tr>
<td>t-Statistic</td>
</tr>
<tr>
<td>Augmented Dickey-Fuller test statistic</td>
</tr>
<tr>
<td>Test critical values:</td>
</tr>
<tr>
<td>1% level</td>
</tr>
<tr>
<td>5% level</td>
</tr>
<tr>
<td>10% level</td>
</tr>
</tbody>
</table>

from the table above, it can be seen that the null hypothesis that external debt (ED) has a unit root is rejected with the given probability value of 0.0003. therefore, the external debt (ED) is stationary at 1% significant level with second difference $d(2)$ which is indicated by ADF results at all levels less than the critical values in negative direction. The ADF value for GDP is -5.187710 and the critical values are -3.737853, -2.991878 and -2.635542 at 1, 5, and 10 per cent respectively.

4.6 Chow Break Point: Table 8

<table>
<thead>
<tr>
<th>Chow Breakpoint Test: 2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Null Hypothesis: No breaks at specified breakpoints</td>
</tr>
<tr>
<td>Varying regressors: All equation variables</td>
</tr>
<tr>
<td>Equation Sample: 1986 2013</td>
</tr>
</tbody>
</table>

| Source: Author’s computation from Eviews 8.0 |

Chow break point is use to test the stability among the time series variables. From the table 3 above, the null hypothesis that there is no break point is accepted at 24.15% as indicated by the probability value of 0.2415. hence the time series data is found to be stable and free from break point.

4.7 Correlation Test: Table 9

<table>
<thead>
<tr>
<th>GDP</th>
<th>ID</th>
<th>ED</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP</td>
<td>1.000000</td>
<td>0.993432</td>
</tr>
<tr>
<td>ID</td>
<td>0.993432</td>
<td>1.000000</td>
</tr>
<tr>
<td>ED</td>
<td>-0.012450</td>
<td>0.038889</td>
</tr>
</tbody>
</table>

Table 5 above contains correlation coefficients. The results of correlation revealed that internal debt is 99.34% per cent related to GDP as indicated by its value 0.993432, while external debt is negatively related to GDP as indicated by its value -0.012450. This indicates that GDP is more correlated to internal debt than external debt. The result further revealed that the correlation between external debt and internal debt is low as indicated by its correlation value 0.038889 which shows that external debt and domestic debt are 38.889% per cent correlated.
V. Summary, Conclusion And Recommendation

5.1 Conclusion

The main objective of this study is to specifically examine the impact of internal debt and External Debt on economic growth in Nigeria from 1986-2013. Ordinary least square (ols) method was used to establish a simple relationship between the variables under study. The results revealed that external debt possessed negative impact on the economic performance of Nigeria while internal debt possessed positive impact on economic growth through encouraging productivity and output level and on evolution of total factor productivity. A good performance of an economy in terms of per capita growth may therefore be attributed to the level of internal debt and not on the level of external debt in the country.

Therefore external Debt is seen as inimical and insignificant to the economic progress of a country. The paper found that internal debts if properly manage can lead to high growth level. A major policy implication of this result is that concerted effort should be made by policy makers to manage the debt effectively by channelling them to productive activities (real sector) so as to increase the level of output in Nigeria, hence achieving the desire level of growth. Another policy implication of the study is that most developing countries contract debt for selfish reasons rather than for the promotion of economic growth through investment in capital formation and other social overhead capital. For debt to promote growth in Nigeria and other highly indebted countries of west Africa, fiscal discipline and high sense of responsibility in handling public funds should be the Watchword of these countries’ leaders. External debt can only be reduced to the barest minimum by increasing output level (GDP) and must be properly managed to achieve the desire objectives.

5.2 Recommendation

Based on the findings of this study, Nigeria can only avoid future debt management problems if only it take the following recommendations:

i. Government should rely more on internal debt in stimulating growth rather than external debt because there is positive relationship between internal debt and gdp.

ii. Government should formulate policies aimed at encouraging internal savings vis-à-vis domestic investment so that domestic saving can go along way in stimulating growth.

iii. The need for borrowing is due to gap between internal savings and investment; therefore, bridging the gap can be a likely solution to Nigeria’s debt accumulation since Nigeria has debt accumulation problem as indicated by the study.

iv. Foreign borrowing by private and public organizations should be adequately monitored by the government debt agency like Debt Management Office (DMO) and all the external loans contracted should be reported to the agency so that an up to date record of the volume of debt can be kept.

v. Transparency and accountability should be high on the agenda of modern debt management practices.

vi. The principal vulnerability of Nigeria is to an open ended burden of higher interest payment. The use of superior method to negotiate for fixed interest payment and varying amortization schemes is necessary. Nigeria should seek multi-year rescheduling rather than year by year basis and that would reduce the tax burden.

vii. The composition of the internal and external debt should be regularly checked in order to forestall problems associated with the bunching of debt service obligations this would help in reducing the negative relationship between external debt and gdp as indicated by the research work.

viii. Loans contracted should be invested in profitable ventures with high multiplier effect, which will generate a reasonable amount of money for debt repayment, servicing and also not to crowd out investors which is one of the Nigerian debt accumulation problem.

References


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