

**EFFECT OF EXTERNAL DEBT ON ECONOMIC GROWTH OF DEVELOPING COUNTRIES (NIGERIA PERSPECTIVE, 2001-2016)**

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**Abstract**

*The paper examined the nexus between external debt and economic growth on developing countries using Nigeria as a case study covering a period of 2001 – 2016. The study used time series data in order to capture external debt burden covering the period under review. The study employed ordinary least squares regression method to analyse the data obtained from the CBN statistical bulletin and World Bank. The study found that significant positive relationship existed between economic growth and external debts in Nigeria. Positive significant relationship exist between population access to water and external debts fund; availability of internet use and external debts fund; population accessible to electricity and external debts fund. The study recommended that external debt should be acquired and channeled to economic development only, and adequate and favourable repayment method be strictly followed to avoid negative effects.*

**Keywords:** nexus, external debt, economic growth, ordinary least square method

**Introduction**

In recent times, the attention of policy makers, researchers and other academia has been drawn to the fact that external debt and its associated burdens have not been giving the expected economic growth in Nigeria. The associated interest rate on external debt and other negative influences such as time-value- of money etc serve as cost to the management of external debt (Government) leading to reduction in value. This makes it more difficult for the Government to have full utilization of the fund to provide basic infrastructural facilities to the general public. Such a reduction of value in the amount of the borrowed fund seems to have increasing effect on the debtor country (Nigeria) during repayment since the value of what to repay appears higher than what is borrowed as a result of exchange rate.

Nigeria's external debt profile may be traced back to the colonial era even though the level may be very minimal, until 1978 when it rose to \$8.65 billion which was raised through internal capital market (ICM) (debt management office, DMO, 2004). Ever since then it has been on steady increase and rose to \$35.94 billion in 2004 but due to debt relief granted to her, the debt burden came down substantially. But this fortunate event did not last long for no sooner it was done than debt increase continued in Nigeria and in 2014 it stood at \$12.4 trillion (World Bank Report 2014). According to the same World Bank Report, Nigeria's external debt profile stand at \$2595511000 2017. This steady increase in external debt acquisition and its liquidation process by the government

directly and indirectly affects the economic growth of the nation. It is disheartening to know that despite the huge external debt Nigeria has acquired, pertinent facilities such as employment opportunities, securities, portable water, electricity and other social infrastructures are greatly lacking meant to improve economic growth, thereby retarding the rate of economic growth in the country. This assertion is in line with the views of (Aiyedogbon and Ohwojasa, 2012) and (Nwagu, 2014) who respectively opined that Nigeria still experience high rate of unemployment, poverty and low standard of living despite her high external debt profile thus corresponding with the adage that he who gives borrowing, goes sorrowing (Ogechi, 2018).

It is pertinent to recall that Nigeria's external debt or loan Act was enacted as back as 1962. This Act streamlined the conditions surrounding external loan management in Nigeria. It stipulated that every external debt obtained to foster economic growth of the nation must be channeled for that purpose to enable the country overcome some of her economic problems. It would be recalled also that a decree was issued in 1970 after the civil war authorizing federal commission to acquire external debt of not more than N1 billion (one billion naira) for purposes of rehabilitation of the country economic infrastructures. The situation is also aggravated by public deficit in capital inflows. Economic development is said to have occurred when total production increases more rapidly than population thereby increasing the country's ability to maintain a strong defence or pay for some other national projects (Uzoma, 2018). A rise in the ratio of debt servicing tends to lower the economic development since there is no equivalent increase in economic development to counter it. The inability of Nigeria to liquidate the borrowed fund at the stipulated period does not only result in shifting the burden of repayment to future generation, but also tends to discourage foreign investors from investing in Nigeria. This trend no doubt is one of the factors that retard economic development in Nigeria as these investors seem to have host confidence in our economy. This study seeks to suggest some of the ways Nigeria could come out of these economic predicaments restore her reputation to the developed countries and reposition herself on the path of economic viability. It is therefore, an apriori expectation of every Nigerian that external debt obtained irrespective of the period and circumstances would result in achieving this purpose but this belief appears to be an illusive venture in Nigeria due to mismanagement of such funds by the governments.

### **Literature Review**

#### **The Concept of Economic Development and External Debt:**

The term economic development is constantly evolving and so, there is no universally accepted definition of it. A common understanding from various submissions centres on adequate provision of infrastructural facilities, high rate of employment, absence of poverty and presence of other economic indices that show that economy is healthy. At this stage of booming economy citizens rejoice and appreciate the authorities (Government) for a well managed resources, but when the resources are poorly managed and negative consequences occur, citizens are left with no other option than complaint, blame and nagging the authorities. To avoid this ugly situation especially during economic recession, government usually engages herself with internal and external borrowing. External debt therefore depicts acquisition of capital (capital inflow) from

foreign countries through borrowing. The process could be for short or long term periods. The burden of repayment of such funds under short term basis falls less on future generations, but falls heavily on future generation under long term basis. The effect of external debt of Nigeria's economy has been a subject of controversy among academics (Uzoma, 2018). While (Hameed, Ashraf and Chanhary, 2008) argue that external debt is a catalyst to economic development, sighting Brazil, South Africa, Singapore, Indonesia and Taiwan as examples, (Eibadawi, Nduhi and Netungu, 2006) opined that external debt has negative impact on the economy because accumulation of it becomes a burden and would no longer stimulate the economic development. Apart from accumulation process of external debt, cost of servicing the debt has the capacity of reducing the available funds meant for economic development especially where the cost of repayment is higher than cost of borrowing the fund due to inflationary effects on exchange rate. Other factors which mitigate against economic development include: low saving propensity, unrealistic exchange rate, poor exchange debt management policies, financing long term projects with short term loans, decline in exchange earning and high import bills, diversion of borrowed fund for political interest instead of channeling it to economic development (Onuigbo, 2018). Nigeria should endeavour to practice efficient debt management strategy capable of resulting in debt service ratio between 20 – 25% of her Gross Domestic Product (GDP). Debts acquired for economic growth should be strictly utilized in line with economic development and not diverted to selfish political interests.

#### **The Concept of Debt Conversion:**

Debt conversion involves the sale of an external debt instrument for a participation in domestic enterprises (Uzoma, 2018). Through the debt conversion committee set up in July 1988 and strenuous efforts of the Nigerian governments to formalize her official debts Nigeria external debts which stood at \$32 billion in 2005/2006 was forgiven by the creditors. This has the implication of increasing Nigeria credit worthiness and enhancing economic development as money which would have been channeled into debt servicing will now be channeled into growth enhancing projects which will increase investment, employment and output (Adam, 2007). External debt services on the other hand reduce the chances of attaining the expected economic development height thereby retarding the rate of economic development in the country. Debt conversion therefore has the implication of enhancing the Debtor countries' credit worthiness which in turn can increase the countries' rate of both the local and foreign investors.

#### **Theoretical Review**

Several theories have been propounded in relation to external debt management but this study concentrates on: dependency theory, slow growth model and external debt theory.

#### **Slow Growth model and External Debt Theory**

This theory is propounded on a close economy which uses labour and capital as means of production. This implies that external debt on growth can be identified or felt by its effects on domestic savings which in turn leads to investment in a closed model. The overall effects of external debt on the slow growth model can be assessed by critical study of individual impacts of debt overhang and debt crowding theories on the slow

growth model (Onuigbo, 2018). In order to amortize the accumulated debts, government usually increases the tax rate on the private sector as a way of transferring resources. This practice is also associated with its own oppositions. The private usually frown at the increase in tax rate and may resort more in tax planning, tax avoidance and tax evasion.

### **The Dependency Theory**

According to Todaro, 2003 and Amin, 1976, dependency theory assumes that poor or undeveloped countries remain so because resources flow from them to the developed states. The theory states that the poverty of the undeveloped countries in periphery is not because they are not integrated or fully integrated into the world system as is often argued by the market economists, but because of how they are integrated into the system (Uzoma, 2018). The developed countries firmly believe that the poverty and dependency of the underdeveloped countries on developed ones is largely due to their domestic mishaps such as lack of close integration, diffusion of capital, low level of technology, bad leadership, poor institutional framework, corruption, mismanagement etc (Momoh and Hundeyin, 1999).

### **Empirical Review**

Some researchers have investigated the implications of external debt burden on economics of debtor countries and came up with diverse opinions. Thus, Suliman et al (2012) as contained in (Onuigbo, 2018) conducted a study on the effect of external debt on economic development of Nigeria covering a period of (1970 - 2010). Statistical tools employed in his analysis include: ordinary least squares, augmented dickey fuller test, Johnson co-integration test and error correction model. The study found that external debts have contributed positively to the economic growth of Nigeria. Suliman equally recommended strong maintenance of political and economic stability or else, external debt management may not be able to help economic growth.

Audu (2004) conducted a study impact of external debt on economic growth and public investment in Nigeria covering a period 2005 – 2015. The study employed Johnson co-integration test, vector error correction method and econometric techniques of estimation as statistical tools. They found that the burden of debt services adversely affects economic growth and investment in Nigeria.

Ayadi and Ayadi (2008) examined the impact of the huge external debt with its servicing requirements on economic growth of Nigeria and South Africa. The study employed neoclassical growth model which incorporates external debt, debt indicators and some macroeconomic variables and used, both ordinary least square (OLS) and generalized least square (GLS) techniques of estimation as statistical tools. The study found that external debt and its servicing requirements has negative effects on economic development of Nigeria and South Africa and recommended that measures should be put in place to minimize high cost of external and internal debt services.

### **Methodology**

The study used Ex-post-factor research design due to the fact that the study involves making use of quantitative data from external debt on Nigeria economy in relation to infrastructural development and growth rate covering a long period of time (16 years).

The work focused on impact of external debt on economic growth and development of Nigeria. The work sought to measure the relationship between external debt and infrastructural development indicators such as population access to portable water, internet and electricity consumption. In order to construct a model to test for impact of external debt and economic growth in Nigeria, the study adopts the work of Silvia et al (2018). Data on revenue generated through external debt were sourced from the official website of Central Bank of Nigeria and data on infrastructural indices were obtained from official website of the World Bank. The data obtained were analysed using multiple/simple regression analysis.

Model specification

Hypothesis I:  $y = a + bx + e$

Where  $y$  = population access to portable water;  $a$  = constant,  $b$  = coefficient of the regression equation;  $x$  = external debt fund;  $e$  = error term.

Hypothesis II:  $y = a + bx + e$

Where  $y$  = availability of internet use;  $a$  = constant,  $b$  = coefficient of the regression equation;  $x$  = effect of external debt;  $e$  = error term.

Hypothesis III:  $y = a + bx + e$

Where  $y$  = population accessible to electricity;  $a$  = constant,  $b$  = coefficient of the regression equation;  $x$  = impact of the external debt;  $e$  = error term

### **Results and Findings**

The results of the ordinary least square regression analysis are presented in tables 1, 2 and 3 below.

Table 1: Summary OLS Results between Population Access to Portable Water and External Debt Fund

Dependent Variable: PATPW

Method: Least Squares

Date: 12/20/18 Time: 01:06

Sample: 1 16

Included observations: 16

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	18.19987	0.264508	68.80663	0.0000
EXTDEBTF	0.031601	0.012861	2.457136	0.0277
R-squared	0.301311	Mean dependent var		18.66438
Adjusted R-squared	0.251404	S.D. dependent var		0.855313
S.E. of regression	0.740029	Akaike info criterion		2.352213
Sum squared resid	7.666993	Schwarz criterion		2.448786
Log likelihood	-16.81770	Hannan-Quinn criter.		2.357158
F-statistic	6.037517	Durbin-Watson stat		0.726688
Prob(F-statistic)	0.027661			

**Source: Author's computation using Eview 10**

Table 2: Summary OLS Results between Availability of Internet Use and External Debt Fund

Dependent Variable: AOIU  
 Method: Least Squares  
 Date: 12/20/18 Time: 01:14  
 Sample: 1 16  
 Included observations: 16

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.657954	2.273768	1.608763	0.1300
EXTDEBTF	0.352763	0.110557	3.190790	0.0065
R-squared	0.421036	Mean dependent var		8.843125
Adjusted R-squared	0.379682	S.D. dependent var		8.076988
S.E. of regression	6.361458	Akaike info criterion		6.654861
Sum squared resid	566.5540	Schwarz criterion		6.751434
Log likelihood	-51.23889	Hannan-Quinn criter.		6.659806
F-statistic	10.18114	Durbin-Watson stat		1.107606
Prob(F-statistic)	0.006539			

**Source: Author's computation using Eview 10**

Table 3: Summary OLS Results between Population Accessible to Electricity and External Debt Fund

Dependent Variable: PATE  
 Method: Least Squares  
 Date: 12/20/18 Time: 01:17  
 Sample: 1 16  
 Included observations: 16

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	47.04132	1.190199	39.52391	0.0000
EXTDEBTF	0.199119	0.057871	3.440768	0.0040
R-squared	0.458181	Mean dependent var		49.96813
Adjusted R-squared	0.419480	S.D. dependent var		4.370401
S.E. of regression	3.329891	Akaike info criterion		5.360225
Sum squared resid	155.2344	Schwarz criterion		5.456798
Log likelihood	-40.88180	Hannan-Quinn criter.		5.365170
F-statistic	11.83888	Durbin-Watson stat		1.583750
Prob(F-statistic)	0.003977			

**Source:** Author's computation using Eview 10

From the estimated results of table 1, the intercept or constant parameter has a positive relationship (18.19987) with population access to portable water (PATPW) and it is statistically significant (Prob. = 0.0000). External Debt Fund (EXTDEBTF) has a significant positive relationship with PATPW (coeff. = 0.031601; Prob. = 0.0277). The coefficient of multiple determination ( $R^2$ ) with a value of 0.301311 implies that approximately 30% of total variation in PATPW is explained by EXTDEBTF while the remaining 70% is accounted for by factors not specified in the model. F statistics value of 6.037517 shows that the model is significant i.e. it sufficiently captures the effect of external debt on economic growth and this is further justified by the probability value of 0.027661.

In the estimated results of table 2, the intercept or constant parameter has a positive relationship (3.657954) with availability of internet use (AOIU) but statistically not significant (Prob. = 0.1300). External Debt Fund (EXTDEBTF) has a significant positive relationship with AOIU (coeff. = 0.199119; Prob. = 0.0040). The coefficient of multiple determination ( $R^2$ ) with a value of 0.421036 implies that approximately 42% of total variation in AOIU is explained by EXTDEBTF while the remaining 58% is accounted for by factors not specified in the model. F statistics value of 11.83888 shows that the model is significant i.e. it sufficiently captures the effect of external debt on economic growth and this is further justified by the probability value of 0.003977.

For the table 3, the intercept or constant parameter has a positive relationship (47.04132) with population accessible to electricity (PATE) and it is statistically significant (Prob. = 0.0000). External Debt Fund (EXTDEBTF) has a significant positive relationship with PATE (coeff. = 0.352763; Prob. = 0.0065). The coefficient of multiple determination ( $R^2$ ) with a value of 0.458181 implies that approximately 46% of total variation in PATE is explained by EXTDEBTF while the remaining 54% is accounted for by factors not specified in the model. F statistics value of 10.18114 shows that the model is significant i.e. it sufficiently captures the effect of external debt on economic growth and this is further justified by the probability value of 0.006539.

### **Conclusion and Recommendation**

The study employed ordinary least squares regression method to analyse the data obtained from the CBN statistical bulletin and World Bank. The study found that significant positive relationship existed between economic growth and external debts in Nigeria. Positive significant relationship exist between population access to water and external debts fund; availability of internet use and external debts fund; population accessible to electricity and external debts fund. The study recommended that external debt should be acquired and channeled to economic development only, and adequate and favourable repayment method be strictly followed to avoid negative effects. The study equally recommends further studies on effect of external debt on other economic parameters, such as accessibility to good roads, security, health services etc.

**Reference**

- Adepoju, A. A, Salaru, A.S and Obayelu, A. E. (2007). “The Effect of External Debt Management on Sustainable Economic Growth and Development: Lessons from Nigeria”. Munich Personal REPEC Achieve (MPRA). Paper N0.2147.
- Adesola, W.A. (2009). “Debt servicing and Economic Growth and Public Investment: The case of Nigeria”. *Journal of Social Science*. 8(2).
- Afxentious P. and A. Serletis (1996). Growth and Foreign Debtedness in Developing Countries: An Empirical Study Using Long-Term Cross Country Data. *The journal of Developing Areas* 31 Pall, Page 30.
- Aluko, F and Arowolo, D. (2010). “Foreign, Aid, the Third World debt crisis and the implication for Economic Development: The Nigerian Experience”. *African Journal of Political Science and International Relations* 4 (4), 120127.
- Ameed, H., Ashraf and Chaudary, M.A. (2008). “External Debt and its Impact on Economic and Business Growth in Pakistan”.
- Audu, Isa (2004). “The Impact of External Debt on Economic Growth and Public Investment: The Case of Nigeria.
- Ayadi, F.S and Ayadi, F.O (2008). “The Impact of External Debt on Economic Growth: A comparative Study of Nigeria and South Africa”.
- Cordeeella, Tito, Luccaa. Ricci, and Marta Ruizarranz, (2005). “Debt over Hang Debt Irrelevance. Revisiting the Debt – Growth link”, IMF Working paper No, 05/223, International Monetary Fund, Washington DC.
- Fosu, A.K (2007). “The External Debt Servicing Constraint and Public Expenditure Composition: Evidence from African Economies”.
- Gohar, M, Bhutto N. A and Butt F. (2012). “The Impact of External Debt Servicing on the Growth of Low-Income Countries”.
- Moss, Todd. J. and Hanley .S. Chianey (2003). *The Investment and Growth in Low-Income Country IMF Working Paper No. 03/249, International Monetary Fund, Washington Dc.*
- Obadan, M.I (2004). “Foreign Capital Flows and External Debt: Perspectives on Nigeria and the LDCs Group”.
- Ogundipe, Adeyemi A. and Philip O. Alege. (2013). “Interest Rate Pass Through to Macroeconomic Variables: The Nigerian Experiences”.
- Onuigbo, O. B (2018). *Effect of External Debt Management Policies on the Economic Growth of Nigeria (2005 – 2015), HND Research Project IMT, Enugu.*
- Pattilo, Catherine, Helen, Porison, and Luca and Ricci (2004). “What Are The Channels Through Which External Debt Affects Growth? IMF Working Paper, No. 04/15. International Monetary Fund Washington, DC.
- Uzoma, M. O. (2018). *An Analysis of External Debt and Economic Growth in Nigeria (2004-2015). HND Research Project, IMT-Enugu.*