



An Empirical Analyses of the Effect of National Debt on Inflation Rate in Nigeria

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ABSTRACT

This study reviewed the relationship between national debt and inflation rate in Nigeria using multiple linear regression and simple linear regression. Augmented-Dickey fuller test and Breusch-Pagan test were conducted to ascertain if my model follows the assumptions of ordinal linear regression (OLS). It was found that external debt and domestic debt in a multilinear model does not have any significant effect and/or relationship with inflation rate, while in a simple regression model (using national debt as predictor) does have a negative correlation with inflation rate. This supports the primary purpose for government borrowing, financing deficit budget for the prolonged growth and sustainability of the economy.

Keywords: National Debt; Inflation Rate; Nigeria

1. Introduction

An important economic issue facing policymakers in recent times has been the effects of government debt. The grounds for this concern most often stressed that a higher public debt would reduce national savings, with negative repercussions on future income and overall social welfare, at least in the long term. These repercussions are predicted by Bernheim as the "neoclassical" model, which is a general equilibrium version of the "life cycle" model of consumption and savings developed by Modigliani and associates (Bernheim, 1989).

Nigeria's Government debt is responsible for 16.2 % of the country's Nominal GDP in Dec 2019, compared to the 16.1 % in the previous year. The data reached a record point of 80.5 % in Dec 1992 and a record low of 7.2 % in Dec 2008 (CEIC, 2018). When we trace back countries' debt crisis history, we found Mexico as a pioneering country. In 1982 the Mexican government announced it's inability to service its forthcoming debt from the total 80 billion US dollar owed to international lenders (Wikipedia, 2020) . This is taken as the first debt crisis in history; and many scholars regarded it as the first sign of the international debt crisis. In October 1983; 27 countries, 16 from Latin America including Brazil, Mexico, Argentina and Venezuela rescheduled their debt. Subsequently many underdeveloped countries announced their inability to fulfill their debt obligation. This created major loan defaults and failure on the world largest banks. The origin of this debt crisis can be attributed to Different factors, and can be seen best by categorizing and studying in a chronological order with the following time periods (Ferraro & Rosser, 1994);

First period (1973 -1978)

The quadrupling of crude-oil price following the Egypt -Israel war of the October 1973, created many dis-orders in the international market. To absorb the effect, producers in the industrialized world increased market price both in the domestic and international market. This created inflationary pressure around the industrialized world; and leaves

many of the developing countries on a serious balance of payment problem. (As they were not in a position to withstand the increase in crude oil price and imported goods). Current account deficit in under-developed countries increased from 8.7 billion US\$ in 1973 to US\$ 42.9 billion in 1974 and US\$ 51.3 billion in 1975. As a result, many of them started to borrow from banks on the international capital market (Crémer & Salehi-Isfahani, 1989). This created an avenue for major players in the banking sector to re-direct the fund they collected from a dollar-based oil exporting economy to budget deficit oil importing economies. Debt rose significantly from US\$ 130 billion in 1973 to US\$ 336 billion in 1978. Though most countries experienced healthy economic growth and didn't face difficulties in servicing their debt (Cooper, Little, Corden, & Rajapatirana, 1994).

Second period (1979 -1982)

The major event on this period was the decision made by the Organization of Petroleum Exporting Countries (OPEC), which made a more than double rise in the price of crude oil. From US\$ 13 per barrel to US\$ 32 per barrel, this termed as the second oil shock. The response from the industrial world for the second oil shock was much more similar; at the end of 1979 a tight monetary policy adopted by US is followed by other industrialized countries: UK, Germany, France, Italy and Japan. This further exacerbated the condition of the under-developed countries that maintained their intense borrowing from the developed countries at a high interest rate. For instance, London Inter Bank Offered Rate otherwise known as LIBOR, rose from 9.5 in the mid 1978 to 16.6 until mid – 1981. The complementary outstanding debt rose from 336 billion USD in 1978 to 662 billion USD in 1982 (Solomon, 1981).

Although Nigeria's recourse to national loans for the bridging of domestic resource gaps dates back to the pre-independence period, the country's level of national debt was relatively low up to the late 1970s. Indeed, up to the end of the 1970s and in relation to the absorptive capacity of the economy and its potential for mobilizing external resources, Nigeria could rightly be described as under borrowed. The two jumbo loans of US\$1 billion and US\$750 million which were raised from the international capital market in 1977-78 constituted the only national debts of significance contracted during this period. Since the beginning of the 1980s, there has been a phenomenal growth of Nigeria's total external debt.

With the contracting of the two syndicated bank loans from the Eurodollar market, Nigeria's national debt increased to US\$5,091 million in 1978 which was more than four times the level recorded for 1975. In spite of the considerable growth in the stock of total national debt during the second half of the 1970s, the magnitude in 1979 was still relatively low. Nigeria's national debt witnessed an upward surge with the advent of the Second Republic. Within the first two years of the civilian administration, the amount owed by the country to foreigners had almost doubled and exceeded the US\$10 billion mark. By the end of 1983, when the life of the regime was terminated through a military coup d'état, the stock of external debt had risen to US\$18.5 billion. The end of the Second Republic however did not result in a reversal of the upward trend in the external debt; Nigeria's national debt continued to soar throughout the 1980s. Between 1984 and 1989. The total debt rose further in 1990 and 1991. As a result of the debt that was bought back in 1992 by Nigeria under an agreement concluded with the London Club, the total debt outstanding declined slightly in the year. However, with a total external debt amounting to US\$27.56 billion as at the end of 1992, Nigeria remained sub Saharan Africa's largest debtor and one of seventeen most indebted nations in the world (Fajana, 1993).

The national debt of the Nigeria experienced a significant reversal in an upward trend that gained significant momentum in 1998. The downward trend reached its lowest drop in 2006, this could be attributed to the significant drop in the external loan in 2006 despite domestic debt maintaining its upward trend. 2007 marked the beginning of a bullish trend in the Nigerian national debt, this is a result to increase in Nigeria's domestic debt. Most recently, the 2015 led Government has maintained an exponential growth in national debt with high inflation rate and decline in value of the naira. Hence the need for this research work.

In recent times, Nigeria has incurred so many debts from both national and international bodies. As at September 2020, Nigeria's national debt was recorded to be N32. 2 trillion (\$84.57billion) (Oyekanmi, 2021), and a prediction of N287.69 billion in 2025 (Plecher, 2021). This increasing national debt is not perceived in only Nigeria, but most developing countries. The national debt is the collective borrowings of the government from foreign governments, private organizations, or public bodies (Idenyi, et al., 2016). It is also referred to as public debt and entails the total

funds borrowed to raise financial resources and owed as government liabilities, payment of future pensions, and other goods and services (Ajayi & Edewusi, 2020). With the inability to generate adequate savings needed for economic development, countries resolve to borrow funds to boost productive activities and economic growth.

The economic demand of developing countries like Nigeria to promote economic growth through the creation of employment opportunities and maintenance of economic stability result in the excessive expenditure of the government revenue. The national debt is a result of a country's fiscal policy. This is the policy that guides public debt, fiscal deficit, government revenue, and government expenditure (Bon, 2015). The national debt can be encouraged to improve the nation's economic growth and development when carried out with caution and effectiveness. On the other hand, the national debt can be a negative consequence when there is no limit and effective direction on structural usage, thus leading to unproductive expenditure. The government acquires debt from either the central bank or international financial organizations to raise financial resources and efficiently carry out the development duties.

The concern has been mainly on the increase of national debt in Nigeria, especially in this recent time. This is a concern because an increased level of national debt without appropriate management and efficient use can be disastrous to the economic growth and development of the country (Favour, et al., 2017). National debt increases when there are consistent deficits in the budget (Ajayi & Edewusi, 2020). However, the national debt is often used to enhance productivity and develop human capital through appropriate investment in education, empowerment, employment opportunities, infrastructural development, and increasing private investment in the country (Ajayi & Edewusi, 2020).

Nonetheless, increased debt leads to an increased flow of money into the economy which in turn increases inflation, and as such inflation would remain until the debts are paid and the economy is fully recovered (Sawchuk, 2020). Inflation measures the rate of the average cost of goods and services over time. It is the increased price in the purchase of goods and services at a given period. Inflation is the negative effect of the national debt because as the price of goods increases and the monthly earning of consumers remains the same, there becomes an imbalance in the purchasing power. In this situation, consumers have low purchasing power in the market, which is undesirable. It is apparent that when a government borrows internally; i.e. from the central bank, an increase in inflation will tend to reduce the value of the local currency and as a result, the amount owed. In this case, inflation reduces the national debt load, which could be seen as a positive, but would negatively impact the bondholders who are effectively the lenders of the government debt.

Empirically, there is a limited result on the effect of national debt on the inflation rate in Nigeria, this study, therefore, tends to add to the limited information and fill this knowledge gap.

1.2 Research Objectives

1. *To determine the relationship between inflation rate and national debt in Nigeria*
2. *To outline the nature of the relationship that exists between national debt and inflation rate, if any.*
3. *To outline the impacts of domestic debt and external debt respectively on inflation rate in Nigeria*

National Debt

The national debt is cumulative debt owed by a government or a sovereign state. It's also known as country debt, sovereign debt, or government debt. It consists of two types of debt. This debt could be held by the public, the government owes this to buyers of its bonds. Those buyers could be the citizens, international investors, and foreign governments. It could also be the debt the federal government owes to other government departments. The federal government adds to the debt whenever it spends more than it receives in tax revenue. Thus, the year's budget deficit gets added to the debt and the budget surplus gets subtracted (Amadeo, 2020).

External Debt

This is referring to debt owed to a source outside the country. External debt demands that it is re-paid in the currency in which it is borrowed. External debt can be accessed from international financial institutions like International Monetary Fund, Asian Development Bank, World Bank, etc., foreign commercial banks, and from the government of foreign nations. Normally these types of debts are in form of tied loans, meaning that these have to be used for a predefined purpose as determined by a consensus of the borrower and the lender. The interest rate on foreign loans is linked to London Interbank Offer rate otherwise known as LIBOR and the actual rate will be LIBOR's rate plus applicable spread, depending upon the credit rating of the borrower.

Domestic Debt

Domestic debt is the portion of the national or government debt that is owed to lenders within the country's jurisdiction. It is defined as the government debt incurred internally via borrowing in the local currency. Government domestic borrowing comprises of government securities, overdraft at the Central Bank and advances from commercial banks (Maana, Owino, & Mutai, 2008). Government securities comprise Treasury bills, Treasury bonds and long-term stocks.

Inflation

Inflation is the prolonged rise in the fiscal value of commodities and services as a result of devaluation of a country's currency. Inflation calculates the average change in price of commodities and services over time. The rare but opposite fall in the fiscal value of commodities is known as deflation. Inflation serves as an indication for a decrease in the purchasing power of a unit currency of a country. This is measured in percentage. The upward trend in price of a commodity due to increase in demand of that commodity does not translate to inflation of that commodity. Inflation is rightly defined when there is a general increase in price commodities and services, irrespective of change in demand (Yglesias, 2015)

2. Empirical Framework

José Pablo Barquero Romero and Kerry Loaiza Marín in their paper stated an empirical evidence supporting the hypothesis that, with a total debt of a country given, increases in government debt tend to increase inflation. The results of the regression depicted that an increase in the Debt/GDP ratio is strongly and significantly linked to high inflation in indebted developing countries. (Romero & Marín, 2017).

A study by Ekperiware and Oladeji (2012) studied the effect of external debt relief on the growth of the economy of Nigeria using regression technique on quarterly time series of external debt, external debt service and real gross domestic product. Using Chow- test to the regression result, they observed that there exists a structural break in relationship between external debt and economic growth in Nigeria during the timeframe of 1975 to 2005. The study concluded that the external debt relief made more resources available for economic growth in Nigeria and recommended a shift towards discretionary concessional borrowing. It also recommended external debt relief as a good option for indebted developing countries as a medium of making resources available for economic growth in the real sector where value is created rather than its mismanagement and debt servicing (Ekperiware & Oladeji, 2012).

Ahmad et al. (2012) studies stated that inflation is a critical problem faced by many countries, notably the less developed countries. Employing the OLS regression method, they extensively studied the domestic debt effect on inflation in Pakistan from 1972 to 2009. The work observed domestic debt and how domestic debt servicing affects the price level in Pakistan. The results showed the domestic debt volume and how domestic debt servicing have significant positive effects on price level. The authors argued that the floating debt, i.e. treasury bills make up a significant proportion of the domestic debt total, and interest rate. (Ahmad, Sheikh, & Tariq, 2012).

Obademi (2012) employed the ordinary least squares (OLS) method and an augmented Cobb Douglas model in analyzing the effect of public debt on the growth of Nigerian economy. The variables that were used are the external debt, domestic debt, total debt and budget deficit. He observed that the effect of debt on the growth of the economy

though positive on the short term, was significantly negative in the long-run. The study concluded that its impact in the long-run depressed the economy as a result of inefficient debt management (Obademi, 2012).

Udoka and Ogege (2012) studied the degree of public debt crisis and its effects on the development of an economy considering data on the Nigerian economy from a timeframe of 1970 to 2010. They used the error correction modeling technique with co-integration techniques to examine the nexus between per capita GDP and other macroeconomic variables (foreign reserve, debt stock, investment, debt service payment). The test also showed that political instability may negatively affect the rate of development and also other independent variables were responsible for the underdevelopment of the country. Hence, they recommended that public debt should be reduced to minimal level if economic development crisis were to be avoided (Udoka & Ogege, 2012).

Nastansky et al. (2014) used quarterly data from Germany within a timeframe of 1991 to 2010 to extensively study the relationship between public debt and inflation rate, including mutual impulse response. The authors studied the effect of public debt on inflation through money supply and long-term interest rate using a vector error correction model technique by Johansen approach. The results showed that the public debt level has a positively significant effect on consumer prices. It also showed that public debt statistically causes inflation vis a vis (Nastansky, Mehnert, & Strohe, 2014).

Essien et al (2016) examined the effect of the borrowings of public sectors on prices, interest rates, and output in Nigeria. It used a Vector Autoregressive technique, impulse response, the Granger causality test and variance decomposition of the various innovations to examine the impact. It was found that external debt stock increases prime lending rate, but with a lag. However, the level of national debt across the timeframe of this study had no significant impact on the general price level and output (Mba, Essien, Agboegbulem, & Onumonu, 2016).

3. Methodology

Data for this study was sourced from CBN Statistical Bulletin, 2019. Ordinary least square (OLS) regression was used to estimate the effect of national debt on inflation rate employing both simple and multiple regression model

$$Y = b_0 + b_1X_1 + \mu.$$

$$Y = b_0 + b_1X_1 + b_2X_2 \dots + \mu.$$

Where

Y = the variable we are trying to predict; b_0 = the intercept; b_1 = the slope; X_0 , X_2 = the variables used to predict Y; μ = the error term.

The intercept (b_0) is the value of the dependent variable when the independent variable is equal to zero while the slope of the regression line (b_1) represents the rate of change in Y as X changes. Because Y is dependent on X, the slope describes the predicted values of Y given X.

The above model can thus be applied in this study as

$$GDef = b_0 + b_1DoDebt + b_2ExDebt + \mu \dots \dots \dots \text{Eqn. (1)}$$

Where

GDef = GDP Deflator

DoDebt = Domestic Debt

ExDebt = External Debt

$$GDef = b_0 + ToDebt + \mu \dots \dots \dots \text{Eqn. (2)}$$

GDef = GDP Deflator

ToDebt = National Debt

ExDebt = External Debt

To ensure that the data does not violate the assumptions of classical linear regression model (CLRM) and test for stationarity, the study tested for unit tests using Augmented Dickey-Fuller (ADF). To test for the verifiability of the estimated long run model, additional diagnostic tests, notably: heteroskedasticity, autoregressive conditional heteroskedasticity (ARCH), autocorrelation and normality, were carried out. Regression was used to determine the relationship between external debt and inflation.

Data Source and Presentation

Nigeria National Debt

This Nigerian total debt from 2000 to 2018 is 142816.49 billion naira, 66% of that debt were owed to domestic lenders while 34% of the debt were owed external lenders as clearly depicted in pie chart below.

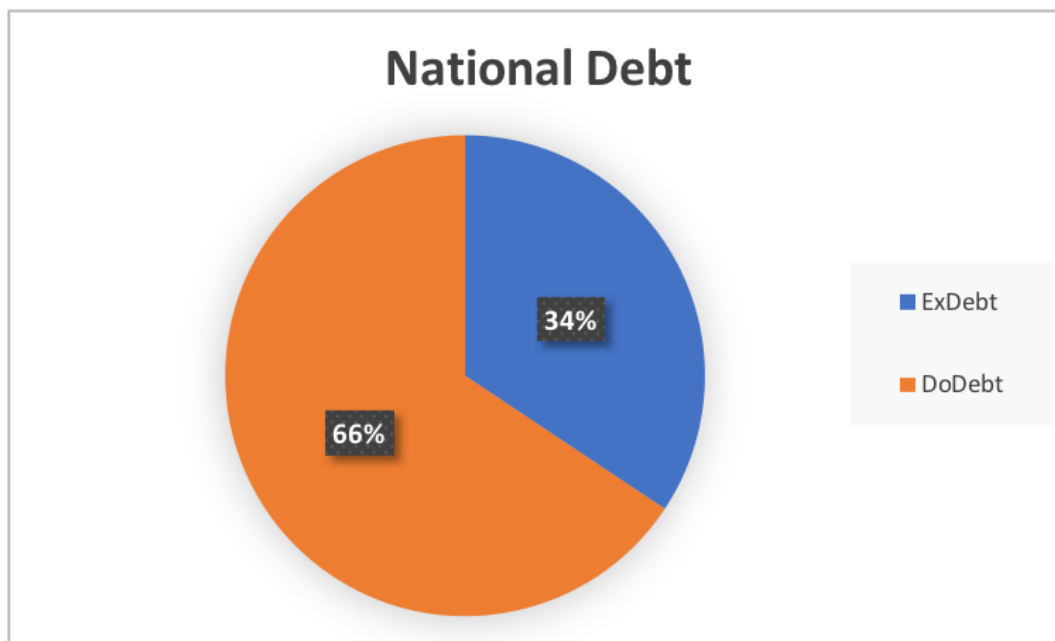


Chart 1: National Debt

From the year 2000, Nigeria major source of borrowing had been from the external source, this trend continued till 2005. In 2006, Nigeria's main source of borrowing changed to domestic lenders. This trend was sustained till 2018 as clearly shown in the chart below.

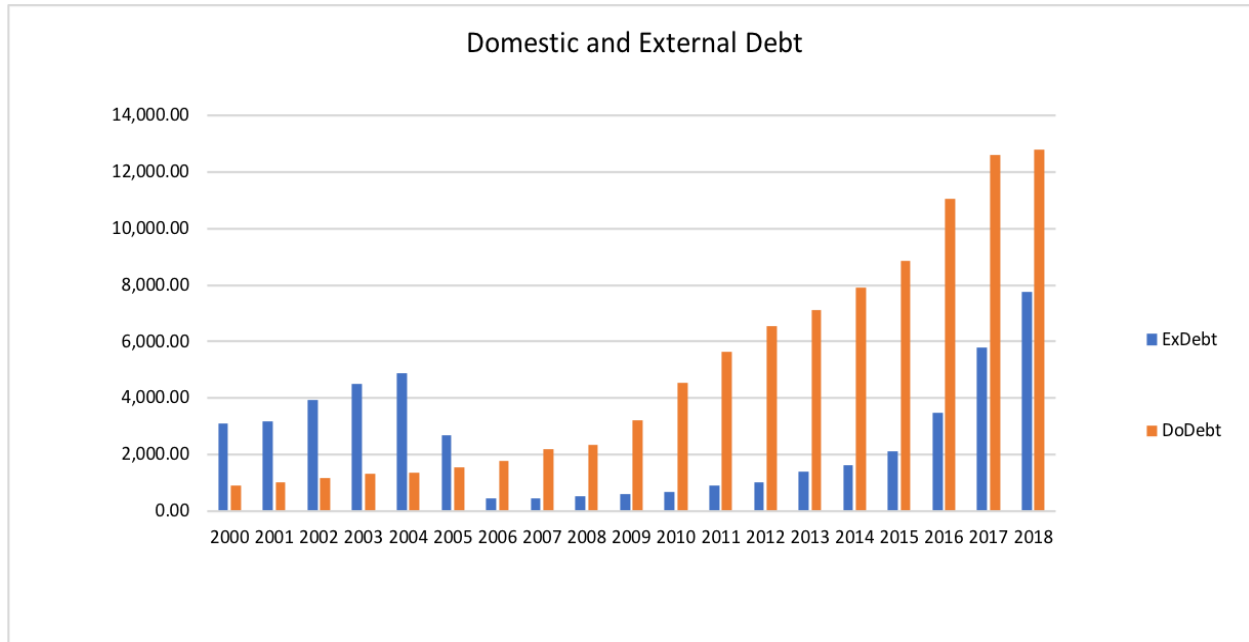


Chart 2: Domestic and External Debt

From the year 2000 to 2004, there was a seemingly weak bullish trend in Nigeria’s national debt. 2005 marked the beginning of a trend reversal which lasted up to 2006. From 2007, there was another trend reversal, a weak bullish trend in Nigeria’s national debt. The trend gained momentum in 2009 and continued till 2018. This is depicted in the chart below.

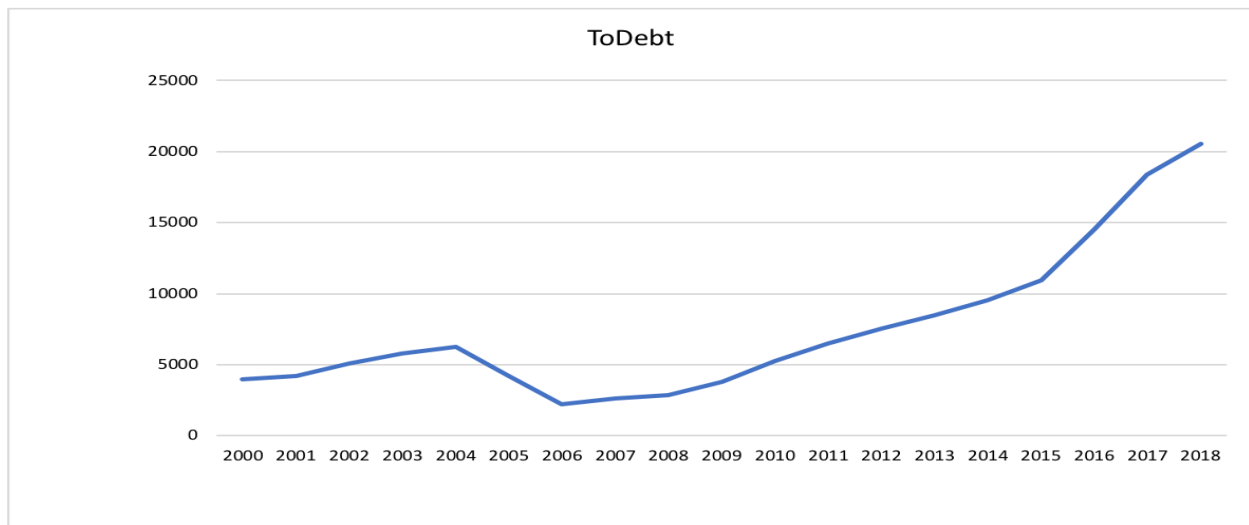


Chart 3: Total Debt (ToDebt)

4.Data Analysis

Augmented Dickey Fuller Test for Stationality

The Augmented Dickey Fuller (ADF) unit root test was conducted to ascertain whether the variables in the model are stationary. The test is inevitable in order to avoid the generation of spurious regression results. The ADF statistics of a variable must be greater than the values at critical values for a variable to be stationary.

Variables	Number of lags	ADF Statistic	Critical Values
DoDebt	1	0.296	1% = -2.624 5% = -1.761 10% = -1.345
ExDebt	1	-1.331	1% = -2.624 5% = -1.761 10% = -1.345
GDef	1	1.429	1% = -2.624 5% = -1.761 10% = -1.345

Table 1: ADF Table (Normal)

The table above shows that at levels, the variables, Domestic Debt (DoDebt), External Debt (ExDebt) and GDP Deflator (GDef) are not stationary at any critical values. Thus the data could not be used for the regression model as it will generate spurious regression results, but at first log difference, the table below shows that the variables, Domestic Debt (dlnDoDebt), External Debt (dlnExDebt) and GDP Deflator (dlnGDef) are stationary at 5%, 10% and the least critical value. This is shown in the table below.

Variables	Number of lags	ADF Statistic	Critical Values
dlnDoDebt	1	-2.284	1% = -2.650 5% = -1.771 10% = -1.350
dlnExDebt	1	-2.284	1% = -2.650 5% = -1.771 10% = -1.350
dlnGDef	1	-2.284	1% = -2.650 5% = -1.771 10% = -1.350

Table 2: Log Differenced ADF Table

Heteroscedasticity Using Breusch-Pagan /Cook-WeisbergTest

The square of the residuals from the original model were regressed on all the explanatory variables (dlnDoDebt and dlnExDebt) and test for the overall significance of the second regression.

```
. reg e2 dlnDoDebt dlnExDebt
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Source	SS	df	MS	Number of obs	=	18
Model	2.1155e-06	2	1.0578e-06	F(2, 15)	=	0.16
Residual	.000099658	15	6.6439e-06	Prob > F	=	0.8542
Total	.000101774	17	5.9867e-06	R-squared	=	0.0208
				Adj R-squared	=	-0.1098
				Root MSE	=	.00258

e2	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
dlnDoDebt	-.0020405	.0070493	-0.29	0.776	-.0170657 .0129847
dlnExDebt	.0006031	.0012153	0.50	0.627	-.0019872 .0031934
_cons	.0019361	.0012035	1.61	0.129	-.0006291 .0045013

Fig 4: Heteroscedasticity for dlnDoDebt and dlnExDebt

With the S-statistic of 0.16 and p-value of 0.8542 for domestic and external debt (dlnDoDebt and dlnExDebt) which is above 0.05, we can infer that there is homoscedasticity in our model, thus accept the null hypothesis that is joint significance in model to conclude that there is no heteroscedasticity in our model. This goes to strengthen the rationale for choosing Ordinal Linear Regression model as good fit for examining the relationship between our dependent and independent variables.

Hypothesis Testing for Relationship Between Domestic (DlnDodebt) and External Debt (Dlnexdebt) and Inflation Rate (dlnGdef)

H_a = There is no linear relationship between Domestic (dlnDoDebt) and External Debt (dlnExDebt) and inflation rate (dlnGdef) in Nigeria

H_b = There is linear relationship between Domestic (dlnDoDebt) and External Debt (dlnExDebt) and inflation rate (dlnGdef) in Nigeria

Decision Rule: Reject H_0 if p-value $\leq .05$, otherwise Do not Reject H_0 .

The R-square of .310 shows that only 31.0% of the variation in the dependent variable can be explained by the independent variables. The Adjusted R-square of .218 shows that about .0092 (9.2%) of the variation in the dependent variable is explained by other factors/variables excluded from the model, representing a minute deviation in prediction. The adjusted error of 3.37 shows that model fit is good as it denotes an insignificant error in prediction. The slopes of [-.0514 and -.0963] shows that at every unit increase in the independent variable, the dependent variable will increase by [-.0514 and -.0963] respectively. This shown in the figure below.

regression of effect of dodebt and exdebt on Def

```
. reg dlnDef dlnExDebt dlnDoDebt
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Source	SS	df	MS	Number of obs	=	18
Model	.013478727	2	.006739364	F(2, 15)	=	3.37
Residual	.029987011	15	.001999134	Prob > F	=	0.0618
Total	.043465738	17	.002556808	R-squared	=	0.3101
				Adj R-squared	=	0.2181
				Root MSE	=	.04471

dlnDef	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
dlnExDebt	-.0514042	.0210807	-2.44	0.028	-.0963367 -.0064717
dlnDoDebt	-.0963474	.1222798	-0.79	0.443	-.3569807 .1642858
_cons	.11895	.0208762	5.70	0.000	.0744533 .1634466

Fig 6: Multiple Linear Regression of National Debt and GDP-Deflator

With the p-value for f-statistic of $0.0618 > 0.05$, we cannot reject the null hypothesis and conclude that there is no relationship between the predicting variables; domestic debt and external debt and the predicted variable; inflation rate(dlnDef) in Nigeria.

Hypothesis testing for Relationship between Nation Debt and Inflation Rate in Nigeria

H_0 = There is no linear relationship between national debt (dlnToDebt) and inflation rate (dlnDef) in Nigeria

H_1 = There is linear relationship between national debt (dlnToDebt) and inflation rate (dlnDef) in Nigeria.

Decision Rule: Reject H_0 if p-value $\leq .05$, otherwise Do not Reject H_0 .

The R-square of .315 shows that only 31.5% of the variation in the dependent variable can be explained by the independent variables. The Adjusted R-square of .272 shows that about .043 (4.3%) of the variation in the dependent variable is explained by other factors/variables excluded from the model, representing a minute deviation in prediction. The adjusted error of 7.36 shows that model fit is good as it denotes an insignificant error in prediction. The slopes of -.1183 shows that at every unit increase in the independent variable, the dependent variable will increase by -.1183. This shown in the figure below.

```
. reg dlnDef dlnToDebt
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Source	SS	df	MS	Number of obs	=	18
Model	.01369999	1	.01369999	F(1, 16)	=	7.36
Residual	.029765748	16	.001860359	Prob > F	=	0.0153
Total	.043465738	17	.002556808	R-squared	=	0.3152
				Adj R-squared	=	0.2724
				Root MSE	=	.04313

dlnDef	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
dlnToDebt	-.1183723	.0436203	-2.71	0.015	-.2108431 -.0259015
_cons	.1128819	.0109127	10.34	0.000	.0897479 .1360159

Fig 7: Simple Linear Regression of dlnToDebt on dlnDef

With the p-value for t-statistics of $0.015 < 0.05$ and p-value for f-statistic of $0.0153 < 0.05$, I reject the null hypothesis and conclude that there is a linear relationship between national debt (dlnToDebt) and inflation rate(dlnDef) in Nigeria.

Conclusion

Nigeria' national debt have a linear relationship with inflation rate. For every percentage increase in total debt, there is about 11.83 percent decrease in the inflation rate in nigeria. It also evident that though cummulatively, total debt has a negative effect on the nigeria's inflation rate , relationship between domestic and external debt to inflation rate could not be established. It was found that external debt and domestic debt in a multilinear model does not have any significant effect and/or relationship with inflation rate, while in a simple regression model (using national debt as predictor), national debt does have a negative correlation with inflation rate. This supports the primary purpose for government borrowing – financing deficit budget for the prolonged growth and sustainability of the economy.

Borrowing in its entirety is not a bad resolution when financing deficit budget, but when done with the intention of squandering and misuse, it becomes a problem. As it is the case with the Nigerian economy, national debt has been growing exponentially, yet the decreasing economic activity and the increased inflation and persistent drop in the value of the Naira.

Recommendation

All government borrowings should be monitored and its use properly investigated and accounted for to avoid diversion of public funds.

Reference

- Ahmad, M., Sheikh, M., & Tariq, K. (2012). Domestic debt and inflationary effects: an evidence from Pakistan. *International Journal of Humanities and Social Science*, 2(18), 256–263.
- Bernheim, B. D. (1989). A Neoclassical Perspective on Budget Deficits. *Journal of Economic Perspectives*, 3, 55-72.
- Cooper, N. R., Little, I. M., Corden, W. M., & Rajapatirana, S. (1994). *Boom, Crisis, and Adjustment ;The Macroeconomic Experience of Developing Countries, 1970-90 A Summary* . Washington D.C.: The United States of America First printing .
- Crémer, J., & Salehi-Isfahani, D. (1989). The Rise and Fall of Oil Prices. *A Competitive View. Annales D'Économie Et De Statistique*, 427-445.
- Ekperiware, M. C., & Oladeji, S. I. (2012). External Debt Relief and Economic Growth in Nigeria. *American Journal of Economics*, 195-205.
- Fajana, F. O. (1993). Nigeria's Debt Crisis. *UNECA Development Research Papers Series No. 5*.
- Ferraro, V., & Rosser, M. (1994). *Global Debt and Third World Development*. Retrieved from mtholyoke: <https://www.mtholyoke.edu/acad/intrel/globdebt.htm>
- Maana, I., Owino, R., & Mutai, N. (2008). Domestic Debt and its Impact on the Economy – The Case of Kenya. *the 13th Annual African Econometric Society Conference*, (pp. 1-27). Pretoria.
- Mba, M., Essien, S., Agboegbulem, N., & Onumonu, O. (2016). An Empirical Analysis of the Macroeconomic Impact of Public Debt in Nigeria. *CBN Journal of Applied Statistics*, 7, 125-145.
- Nastansky, A., Mehnert, A., & Strohe, H. G. (2014). A Vector Error Correction Model for the Relationship between Public Debt and Inflation in Germany. *Statistical Discussion Contributions*.
- Obademi, O. (2012). An Empirical Analysis of the Impact of Public Debt on Economic Growth: Evidence from Nigeria 1975-2005. *Canadian Social Science*, 8(4).
- Romero, J. P., & Marín, K. L. (2017). Inflation and Public Debt. *Monetaria*, 5(1), 39-94.
- Solomon, R. (1981). The Debt of Developing Countries. Another Look. *Brookings Papers on Economic Activity*, 1981, 12(2), 593-608.
- Udoka, C., & Ogege, S. (2012). Public Debt and the Crisis of Development in Nigeria Econometric Investigation. *Asian Journal of Finance & Accounting*.
- Ajayi, I. E. & Edewusi, D. G., 2020. Effect of Public dubr on economic growth of Nigeria: An empirical investigation. *International Journal of Business and Management Review*, 8(1), pp. 18-38.
- Bon, N. V., 2015. The Relationship between public debt and inflation in developing countries; Empirical evidence based on different paneel GMM. *Asian Economic and Social Society*, 5(9), pp. 128-142.
- Favour, O. F., Ideniyi, O. S. O. E. O. & Charity, I. A., 2017. Public debt and economic growth in Nigeria. *Asian Research Journal of Arts and Social Sciences*, 4(3), pp. 1-16.

- Idenyi, O., Igberi, C. O. & Anoke, C., 2016. Public debt and public expenditure in Nigeria: a causality analysis. *Research Journal of Finance and Accounting*, 7(10), pp. 27-38.
- Plecher, H., 2021. *Nigeria: National debt from 2015 to 2025*. [Online] Available at: <https://www.statista.com/statistics/531833/national-debt-of-nigeria/#:~:text=In%202019%2C%20the%20national%20debt,around%20111.54%20billion%20U.S.%20dol lars.> [Accessed 25 February 2021].
- Sawchuk, A., 2020. *The impact of government debt and inflation on investors*. [Online] Available at: <https://www.atb.com/wealth/good-advice/markets/impact-of-government-debt-and-inflation/#:~:text=An%20increase%20in%20debt%20leads,the%20economy%20has%20fully%20recovered> [Accessed 25 February 2021].
- Oyekanmi, S., 2021. *Nigeria's total public debt rises to 32.2trillion (84.57 billion) as at September 2020*. [Online] Available at: <https://nairametrics.com/2021/01/14/nigerias-total-public-debt-rises-to-n32-2-trillion-84-57-billion-as-at-september-2020/> [Accessed 25 February 2021].
- Yglesias, M. (2015, May 11). *Inflation, explained*. Retrieved from Vox: <https://www.vox.com/2014/7/24/18080392/inflation-definition-and-explanation>
- CEIC (2018, July 01). *Nigeria Government Debt: % of GDP*. Retrieved from CEIC: <https://www.ceicdata.com/en/indicator/nigeria/government-debt--of-nominal-gdp>
- Amadeo, K. (2020, July 02). *National Debt: Definitions, Causes, Solution, Impact*. Retrieved from the balance: <https://www.thebalance.com/what-is-the-national-debt-4031393>
- Wikipedia. (2020, July 07). *Wikipedia*. Retrieved from Latin American debt crisis: https://en.wikipedia.org/wiki/Latin_American_debt_crisis
- Macrotrends. (2010, 12 31). *Nigeria Inflation Rate 1960-2020*. Retrieved from macrotrends: <https://www.macrotrends.net/countries/NGA/nigeria/inflation-rate-cpi>.

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