Responses of Growth to Domestic Debt Stimuli in Nigeria.

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Abstract: With impulse responses test, this study found that economic growth proxied by growth responded to the shocks of domestic debt in both positive and negative direction using variables that found to be stationary at order one. The speed of adjustment of short term errors in the long run was seen to be one hundred percent using Vector Error Correction Model. Error Correction Model revealed that domestic debt from Central Bank of Nigeria and Deposit Money Banks exert positive and significant impact on economic growth at certain stage. Pairwise granger causality showed a unidirectional effect between domestic debt from Central Bank of Nigeria, Deposit Money Banks and economic growth, while no causality was established between non deposit bank debt and economic growth. The researchers therefore suggest that Central Bank of Nigeria and Debt Management Office should supervise the non-deposit bank debt in order exert significantly on the growth of the economy.

Keywords: Domestic Debt, Economic growth, Impulse responses and VECM.

1. Introduction

The level at which the Federal Government of Nigeria borrows both internally and externally has made one feel that borrowing has a lot of impact on the economic growth of Nigeria. There has been a lot of focus on External Debt impact on the economic growth of Nigeria, while the impact of Domestic growth has been down played, until recently.

From the time of 1982 debt crisis, a reasonable attention has been given to the external debt of developing countries in various ways such as: economic growth in developing countries, ability of governments to service the debt, the sustainability of economic policies and the external debt burden

The discussions has dove tailed into plan of reducing huge debts, which brought about the enhancement of the Heavily Indebted Poor Countries (HIPC) move that has advocated for reduction in the external debt stocks in the Heavily Indebted Countries, whereby more money or resources will be used to finance the spending in the area of favourable items of growth in government.

Recently, domestic debt has taken front burner in the economic growth discuss of developing countries because it is felt that it has impact on economic growth, government budgets, private sector lending and macroeconomic stability. There have not been enough empirical studies on domestic debt in Nigeria, rather so many studies carried out has concentrated on theoretical analyses of domestic debt. These studies include that of Rapu(2003);Garba (1998);Odozi (1996) and Okunrounmu (1992). The risk characteristics of Domestic Debt to Economic growth were studied by Asogwa and Ezenwa (2005), while Anyanwu (1998) examined a cross-sectional quarterly growth impact in some English-speaking West African countries. Christine (2004) on the other hand empirically analysed the impact of domestic borrowing on government and private sector credit with a data base of 27 non-CFA sub-Saharan African countries covering 1980-2000.

Recently, there has been a paradigm shift in interest to domestic debt in the academics as a result of huge growth in domestic debt in Nigeria when compared to external debt.(Punch Newspapers of 10th January, 2019). According to the DMO, the nation's total debt as of September 30, 2018, stood at N22.43tn.As of June 30, 2015, the country's total debt stood at N12.12tn. This means that within the tenure of the present administration which came to power on May 29, 2015, the country's total debt has risen by N10.31tn or 85.06 per cent of the total debt, the external component of both the Federal Government and state governments' debts including that of the Federal Capital Territory (FCT) stood at $21.59bn. (DMO,2018).

As of June 30, 2015, the external debt component of the country's total debt stood at $10.32bn. This means that the external debt component rose by $11.27bn or 109.21 per cent. On the other hand, the domestic debt of both the Federal Government and the sub national governments stood at N15.81tn.

Analysing the debt statistics further showed that the domestic debt of the Federal Government alone stood at N12.29tn as at September 30, 2018.The domestic debt of the Federal Government as at June 30, 2015, stood at N8.4bn while that of the states and FCT stood at N1.69tn.The Debt Management Office (2018) added that the debt statistics as of September 30, 2018, was only slightly different from the statistics as of June 30, 2018.

On the difference between the debt statistics of the two quarters, the DMO said, External debt declined by 2.02 per cent to $21.59bn due largely to the redemption by Nigeria of a $500m Eurobond which matured on July 12, 2018.The Eurobond which was issued for a tenor of five years in 2013 was the first Eurobond maturity for Nigeria and Nigeria's ability to repay it seamlessly boosted Nigeria's position as a good creditor in the International Capital Market. (DMO,2018).

The domestic debt of the Federal Government of Nigeria (FGN), states and the FCT grew by 1.19 per cent from N15.63tn in June 2018 to N15.8tn in September 2018. This increase of N185bn was attributed to the FGN (N135bn) and states and FCT (N50bn).It added, "The combination of an increase in the level of domestic debt and a decrease in the external debt stock resulted in a slight shift in the portfolio composition. As of September 30, 2018, the share of domestic debt was 70.51 per cent compared to 69.83 per cent in June 2018'' Having the domestic debt being higher than external debt, it is important to study its impact on economic growth in Nigeria.

Therefore, our aim is to investigate the impact of domestic debt on the growth of Nigerian economy.

2 Review of Related Literature

2.1 *Conceptual framework*

Odozi(1996), defined domestic debt as the gross liability of Government, which should include Federal, State and Local Governments transfer obligations to the citizens and corporate firms within the country.

On the other hand, Oshadami (2006) sees Domestic debt of Government as debt instruments issued by the Federal Government and denominated in local currency. In principle, state and local government can also issue debt instruments, but limited in their ability to issue such debts. Debt instruments include Nigerian Treasury certificates, Federal Government development stocks, and bonds. Treasury bills, Treasury certificates and development stocks are marketable and negotiable while treasury bonds; ways and means advances are not marketable but held solely by CBN. The CBN's responsibility includes but not limited to banker and financial adviser to the Federal Government. It is therefore the Debt Management Office (DMO) that is mandated to manage Nigeria's public debt (External and Domestic, including Contingent Liabilities).

Lipsey (1986) defined economic growth as the positive trend in the nation's total output overlong period of time. The implication of this is a continuous growth in the Gross Domestic Product for a long time.

Schiller (1999) on the other hand said that economic growth is an increase in output (real GDP) and expansion in product possibility curve.

Dolan and Lindsey (1991) maintained that economic growth is frequently expressed in terms of increase in Gross domestic Product (GDP), a measure of the economy's total output of goods and services. What this means is that the GDP must be measured in real terms (be adjusted for the effects of inflations for it to show meaningful measure of growth over time.

2.2 *Theoretical framework*

Alison (2003), states that Government budget deficit financing, monetary policy implementation and financial sector development (supply of tradable financial instruments to deepen the financial markets) are among the main justifications for government domestic debt. Odozi (1996) stated that the factors considered being responsible for the increasing domestic debt profile in Nigeria includes high budget deficits, low output growth, large expenditure growth, high inflation rate and narrow revenue base.

Modern Economic growth theory identifies three channels through which domestic debt might affect capital accumulation and technological progress. Hence be a hindrance to long term growth. The channels are advisory role, policy formulation, and management. The profligacy theory is closely related to the above theory, which on the other hand is an extension of the system stability theory. It suggests that debt arise from weak institutions and policies, thereby encouraging relative prices distortion and capital flight.

Patillo (2002) used core of debt overhang theory to explain that high debt acts as an anticipated foreign tax by reducing the incentives to save and invest thereby promoting capital flight. Similarly, large debt stock somehow hinders growth through the channel of reduced investment. It is true that debt accumulation stimulates growth initially; however, past debt accumulation impairs growth by way of liquidity constraint. Importantly, debt services and repayments reduce export earnings and thus exert negative effects on growth. An inappropriate macroeconomic policy environment affects growth via poorly designed, allocation and execution of projects thereby lowering the productivity of capital.

The nexus of the above theories to this paper is the explanation of why economic growth may be hampered or improved despite rising domestic debt profile.

2.3 *Empirical Literature Review*

Literature is scarce on domestic debt and economic growth of which most researchers are focusing on external debt.

Barro (1978) investigates the effect of domestic debt on economic growth using the unanticipated component of domestic debt, or the debt stock and growth. The study employed OLS. He concluded that the unanticipated component of domestic debt affects growth. This study shows that domestic debt has a negative effect on the growth of the economy.

Kormendi (1983) used a cross-section analysis of 34 countries. The sample extends widely from the highly developed countries (the USA, the UK, Japan and Australia) to the underdeveloped countries (Sri Lanka). He concluded that debt and growth are not related. However, many of his critics viewed that the aggregation of such diverse groups may not yield meaningful results.

Charan (1999) investigated the relationship between domestic debt and economic growth for India using the co-integration and Granger causality tests for India for the period 1959-95. Co-integration and Granger causality tests support the Ricardian equivalence hypothesis between domestic debt and economic growth, which suggests that it does not matter whether a government finances it's spending with debt or taxes increase; the effect on total level of demand in an economy is the same.

Christensen (2005) uses a cross country survey of the role of domestic debt markets in sub-Saharan Africa based on a new data set of 27 sub-Saharan African countries during the 20 year period (1980-2000) and found out that domestic markets in these countries are generally small, highly short term and often have a narrower investor base. He also found out that domestic interest rate payments present a significant burden to the budget with significant crowding-out effects.

Asogwa (2005) employs a more comprehensive econometric techniques in investigating the effect of domestic debt on economic growth concluded that domestic government debt in Nigeria has continued to suffer form of confidence crisis as market participants have consistently shown greater unwillingness to hold longer maturities. The government has only been able to issue more of short term debt instrument.

Abbas (2007) and Abbas and Christensen (2010) analyze optimal domestic debt levels in low income countries (including 40 sub-Saharan Africa countries) and emerging markets between 1975 and 2004 using cross sectional analysis and found that moderate levels of marketable domestic debt as a percentage of GDP have significant positive effects on growth of the economy. The study provided evidence that debt levels exceeding 35% of total bank deposits have negative impact on economic growth. This suggests that domestic debt is productive if effectively and efficiently employed.

Patillo(2002), in their study assessed the non-linear impact of external debt on growth using a panel data of 93 countries over 1969-98 employing econometric methodologies. Their findings suggested the average impact of debt becomes negative at about 160-170 %of exports or 35-40% of GDP. Their findings also show that the marginal impact of debt starts being negative at about half of these values.

Maana, l. (2008) examines the impact of domestic debt in the Kenyan economy using the Barro Growth Regression Model (BGRM). The results indicate that although the composition of Kenya's public debt has shifted in favour of domestic debt. Domestic debt expansion had a positive but not significant effect on economic growth during the period. He further stated that the Barro Model needs a sophisticated data set which may not be available for a developing country like Kenya.

Adofu and Abula (2010) investigate the relationship between domestic and economic growth in Nigeria for the period 1986-2005 using econometric tools. Their findings showed that domestic debt has affected the growth of the Nigerian economy negatively and recommended that it be discouraged. They suggested that the Nigerian economy should instead concentrate on widening the tax revenue base. This study investigates the relationship between debt and economic growth in Nigeria using advanced econometric technique.

3. Research Methodology

3.1 *Sources of Data*

In this research, domestic debt (Central Bank of Nigeria Debt, Deposit Money Bank Debt and Non- Bank Deposit Debt) and economic growth (Gross Domestic Product (GDP)) were collected from Central Bank of Nigeria (CBN) Statistical Bulletin of 2018 for the period of 1981 to 2018. The data will be analyzed and interpreted with the following econometric tools; Descriptive Statistics, Correlation Matrix, Ordinary Least Square Method (OLS), Augmented Dickey Fuller (ADF) unit root test, Error Correction Model (ECM), Pairwise Granger Causality Test, Vector Autoregressive (VAR) model.

3.2 *Model Specifications*

The variables for this study can be specified in the following functional model;

GDP = f (CBN, DMB, NBD) (1)

The explicit model is;

$GDP=\alpha_0+\alpha_1 CBN+ \alpha_2 DMB+\alpha_3 NBD + U_t$ (2)

$\log GDP = \alpha_0+\alpha_1 \log CBN+ \alpha_2 \log DMD+\alpha_3 NBD + U_t$ (3)

For VAR Specification;

$GDP_t = \alpha_{01}+\alpha_{11} GDP_{t-1} + \alpha_{21} CBN_{t-1}+\alpha_{31} DMB_{t-1}+\alpha_{41} NDB_{t-1}+ U_1$ (4)

$CBN_t =\beta_{02}+\beta_{12} GDP_{t-1}+\beta_{22} CBN_{t-1}+ \beta_{32} DMB_{t-1}+\beta_{42} NDB_{t-1}+U_2$ (5)

$DMB_t = \Upsilon_{03}+ \Upsilon_{13} GDP_{t-1} +\Upsilon_{23} CBN_{t-1}+\Upsilon_{33} DMB_{t-1}+\Upsilon_{43} NDB_{t-1}+ U_3$ (6)

$NDB_t = Z_{04}+ Z_{14} GDP_{t-1} +Z_{24} CBN_{t-1}+Z_{34} DMB_{t-1}+Z_{44} NDB_{t-1}+U_4$ (7)

Where,

GDP = Gross Domestic Product, CBN = Central Bank of Nigeria Debt, DMB = Deposit Money Bank Debt,NBD = Non- Bank Deposit Debt, α_0 =Autonomous component, α_1, α_2, α_3 = Coefficients or Parameters, U_t = Stochastic Elements

3.3. Apriori Expectation

We therefore operationalise as follows;

GDP =f(CBN, DMB, NBD), $\mathbf{f_1, f_2, f_3 > 0 < 0. f_1, f_2, f_3}$arethe coefficients of Central Bank of Nigeria Debt, Deposit Money Bank Debt and Non- Bank Deposit Debt respectively. It is expected that the more government obtains domestic debt; it can impact either positively or adversely on the economy.

4. Analysis and Results

Descriptive Statistics Test

Table 4.1 Descriptive Statistics

	GDP	CBN	DMB	NBD
Mean	27569.37	401.0929	1107.283	1024.818
Median	6102.422	329.3574	273.1904	57.73000
Maximum	127762.5	2005.440	5351.800	6905.300
Minimum	144.8312	4.523600	1.843300	4.825700
Std. Dev.	37734.90	467.9022	1559.903	1824.893
Skewness	1.279906	2.123139	1.230369	1.921420
Kurtosis	3.322978	7.268270	3.082035	5.515863
Jarque-Bera	10.54017	57.39427	9.598103	33.40356
Probability	0.005143	0.000000	0.008238	0.000000
Sum	1047636.	15241.53	42076.75	38943.10
Sum Sq. Dev.	5.27E+10	8100503.	90031967	1.23E+08
Observations	38	38	38	38

Source: Authors Computation

Table 4.1 above shows a summary of statistics where GDP has standard deviation (SD) of 37734.90, JarqueBera Statistic (JBS) of 10.54017 with Probability Value (P-value) of 0.005143. CBN has SD of 467.9022, JBS of 57.39427 with P-value of 0.000000, DMB has SD of 1559.903, JBS of 9.598103 with P-value of 0.008238 and NBD has SD of 1824.893, JBS of 33.40356 with P-value of 0.000000, which informs that GDP, CBN, DMB and NBD abnormally distributed.

Multicolinearity Test

Table 4.2 Correlation matrix

	GDP	CBN	DMB	NBP
GDP	1.000000	0.764859	0.967900	0.961210
CBN	0.764859	1.000000	0.672114	0.834871
DMB	0.967900	0.672114	1.000000	0.890749
NBD	0.961210	0.834871	0.890749	1.000000

Source: Authors Computation

Table 4.2 above provides correlation matrix of the variables. The correlation matrix between CBN and DMB is0.672114, DMB and NBP is0.890749, whereas GDP and CBN is 0.764859, GDP and DMB is 0.967900 and GDP and NBD is 0.961210. That shows that none of pairs of correlation among the variables is linearly perfectly correlated. Hence, there is no presence of multicolinearity.

Ordinary Least Square (OLS) Test

Table 4.3 Level Series Multiple Correlation

Dependent Variable: GDP
Method: Least Squares
Date: 08/08/19 Time: 08:44
Sample: 1981 2018
Included observations: 38

Variable	Coefficient	Std. Error	t-Statistic	Prob.
CBN	0.307927	3.282071	0.093821	0.9258
DMB	13.11331	1.192315	10.99819	0.0000
NBD	9.825323	1.370981	7.166634	0.0000
C	2856.545	1219.205	2.342956	0.0251

R-squared	0.984334	Mean dependent var	27569.37
Adjusted R-squared	0.982951	S.D. dependent var	37734.90
S.E. of regression	4927.068	Akaike info criterion	19.94218
Sum squared resid	8.25E+08	Schwarz criterion	20.11455
Log likelihood	-374.9014	Hannan-Quinn criter.	20.00351
F-statistic	712.0851	Durbin-Watson stat	0.910513
Prob(F-statistic)	0.000000		

Source: Authors Computation

Table 4.4 reveals the level series multiple regression estimated model for the relationship between domestic debt and economic growth. From the table, the adjusted R-squared (R^2) is 98.43% and Durbin Watson (Dw) statistics is approximately 0.9, which shows the presence of positive autocorrelation. This is unreliable and cannot be used for analysis and policy formulation. This calls for further examination of the time dependent characteristics of the variables in our model.

Non-Stationarity Test

Table 4.4 Augmented Dickey-Fuller (ADF) Unit Root Test

Variables	lag	1st difference	1st diff. Probility	Order of Integration
LGDP	0	-3.180464	0.0295	1(1)
LCBN	0	-6.149833	0.0000	1(1)
LDMB	3	-3.989623	0.0042	1(1)
LNBD	0	-6.033232	0.0000	1(1)

Source: Authors Computation

Table 4.4 presents the ADF unit root test. The result shows that the variables are differenced once to be stationary, hence said to be integrated at order one (1(1)). Therefore, we proceed to testing if long run relationship exists among the variables.

Cointegration Test

Table 4.5 Johansen Cointegration Test

Sample (adjusted): 1984 2018
Included observations: 35 after adjustments
Trend assumption: Linear deterministic trend
Series: LGDP LCBN LDMB LNBP
Lags interval (in first differences): 1 to 2

Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.529302	50.45616	47.85613	0.0279
At most 1	0.422392	24.08233	29.79707	0.1970
At most 2	0.125954	4.872203	15.49471	0.8222
At most 3	0.004573	0.160424	3.841466	0.6888

Trace test indicates 1 cointegrating eqn(s) at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values

Table 4.5 above we indicates that unrestricted rank test has one cointegration equation at 5% level of significance among the variables. This shows that long run relationship exists between the dependent variable (GDP) and independent variables (CBN, DMB, and NDB).

Error Correction Mechanism (ECM)

The cointegration test result provides for short run fluctuations. Therefore, we apply error correction model to examine the interplay of the long run and short term fluctuations in the model using the general specific approach.

Table 4.6Parsimonious ECM

Dependent Variable: D(LGDP)
Method: Least Squares
Sample (adjusted): 1984 2018
Included observations: 35 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(LGDP(-1))	0.664733	0.127638	5.207971	0.0000
D(LCBN(-1))	0.071993	0.039028	1.844664	0.0761
D(LCBN(-2))	0.037668	0.041108	0.916316	0.3676
D(LDMB(-1))	0.023030	0.032317	0.712649	0.4822
D(LDMB(-2))	0.071061	0.029416	2.415695	0.0227
D(LNBP(-1))	0.054158	0.049953	1.084182	0.2879
D(LNBP(-2))	0.045839	0.047034	0.974607	0.3384
ECM(-1)	-0.034888	0.083616	-0.417246	0.6798

R-squared	0.470741	Mean dependent var	0.190405
Adjusted R-squared	0.333525	S.D. dependent var	0.105452
S.E. of regression	0.086089	Akaike info criterion	-1.869244
Sum squared resid	0.200104	Schwarz criterion	-1.513736
Log likelihood	40.71178	Hannan-Quinn criter.	-1.746523
Durbin-Watson stat	2.480318		

Source: Authors Computation

Table 4.6 above shows Parsimonious ECM estimate with maximum lag of two. The Dw statistic is 2.480318 and Adjusted R^2 is 47.07%. That shows absence of autocorrelation. The result also indicates that GDP reinforces itself. That CBN at Lag 1 exerts positive and significant impact on GDP @ 10% significance level, while DMB at lag 2 positively and significantly related to GDP.

Granger Causality Test

Table 4.7 Pairwise Granger Causality

Pairwise Granger Causality Tests
Sample: 1981 2018
Lags: 2

Null Hypothesis:	Obs	F-Statistic	Prob.
LCBN does not Granger Cause LGDP	36	3.72107	0.0356
LGDP does not Granger Cause LCBN		0.26876	0.7661
LDMB does not Granger Cause LGDP	36	0.04467	0.9564
LGDP does not Granger Cause LDMB		5.74040	0.0076
LNDB does not Granger Cause LGDP	36	0.01458	0.9855
LGDP does not Granger Cause LNDB		1.15904	0.3270

Source: Authors Computation

Table 4.7 above, reveals that CBN granger causes GDP, whereas GDP does not granger cause CBN. DMB does granger cause GDP, where as GDP granger causes DMB, while no causal effect between GDP and NDB. That means CBN, DMB and GDP have unidirectional effect.

Having established the relationship and causal effects among the variables, we then move to analysing the model with VAR. Firstly, establishing the VAR length as seen below.

Table 4.8 VAR Lag Order Selection Criteria

VAR Lag Order Selection Criteria
Endogenous variables: LGDP LCBN LDMB LNBP
Exogenous variables: LGDP
Date: 01/01/10 Time: 19:57
Sample: 1981 2018
Included observations: 35

Lag	LogL	LR	FPE	AIC	SC	HQ
0	976.4099	NA*	8.67e-30*	-55.56628*	-55.38853*	-55.50492*
1	891.4414	-145.6604	2.80e-27	-49.79665	-48.90788	-49.48985
2	874.5716	-25.06363	1.91e-26	-47.91838	-46.31859	-47.36613
3	884.7103	12.74580	2.95e-26	-47.58345	-45.27264	-46.78576

* indicates lag order selected by the criterion
LR: sequential modified LR test statistic (each test at 5% level)
FPE: Final prediction error
AIC: Akaike information criterion
SC: Schwarz information criterion
HQ: Hannan-Quinn information criterion

The VAR lag order selection criteria on table 4.8 above shows that lag length of 0 is selected at 5% level based on sequential modified LR test statistic, Final prediction error (FPE), Akaike information criterion (AIC), Schwarz information criterion (SC) and Hannan-Quinn information criterion (HQ). Then move to evaluating the stationarity for policy by employing Inverse Roots of AR Characteristics Polynomial Test as shown below.

Fig 4.1 Inverse Roots of AR Characteristics Polynomial Test

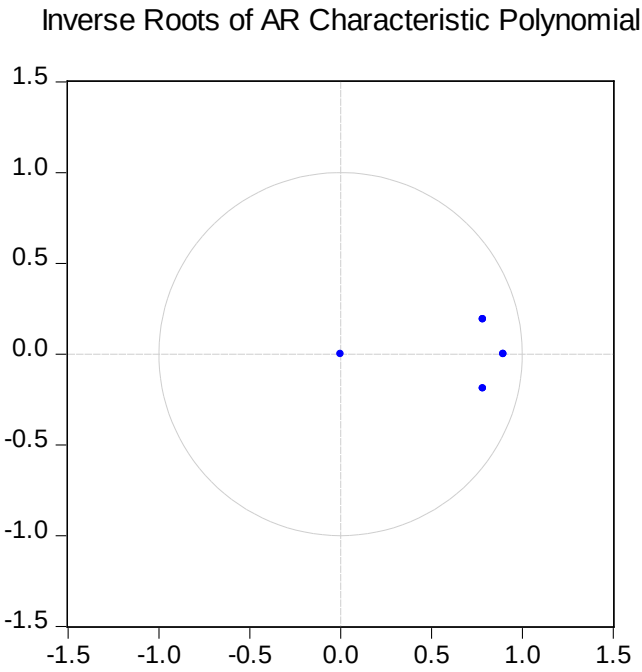

Figure 4.1 above shows that all np roots of the characteristics polynomial are in circle or lie within the unit imaginery circle (modulus). Hence, all are stationary. Next is checking if the model is heteroscedastic as shown below.

Table 4. 9VAR Residual Heteroskedasticity Tests (Levels and Squares)

Sample: 1981 2018
Included observations: 37

Joint test:

Chi-sq	Df	Prob.
114.5785	100	0.1512

In the same vein shows that Chi-sq is 114.5785 wtih P-value of 0.1512, meaning rejection of the null hypothesis. Hence, the model is homoskedastic.

We then proceed to checking the responses of economic growth to the variables of domestic debt stimuli. Let's start from the response of economic growth proxied by GDP to the shock of CBN associated debt as shown in Fig 4.2

Fig 4.2 Response of GDP to CBN

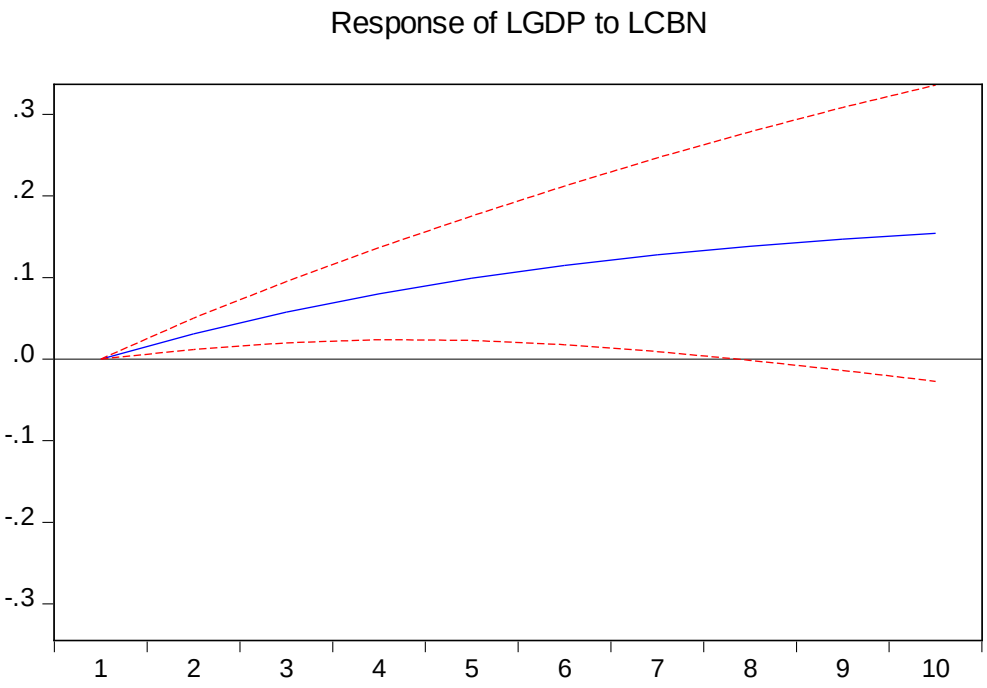

Fig.4.2 shows that GDP responds positively to a shock in CBN debt from zero percent thresholds in first year progressively until the tenth year. In other words, a shock from CBN engenders increase to the GDP.

To explore the relationship between GDP and DMB, the researchers present the impulse response graph in fig. 4.3 as follows.

Fig 4.3 Response of GDP to DMB

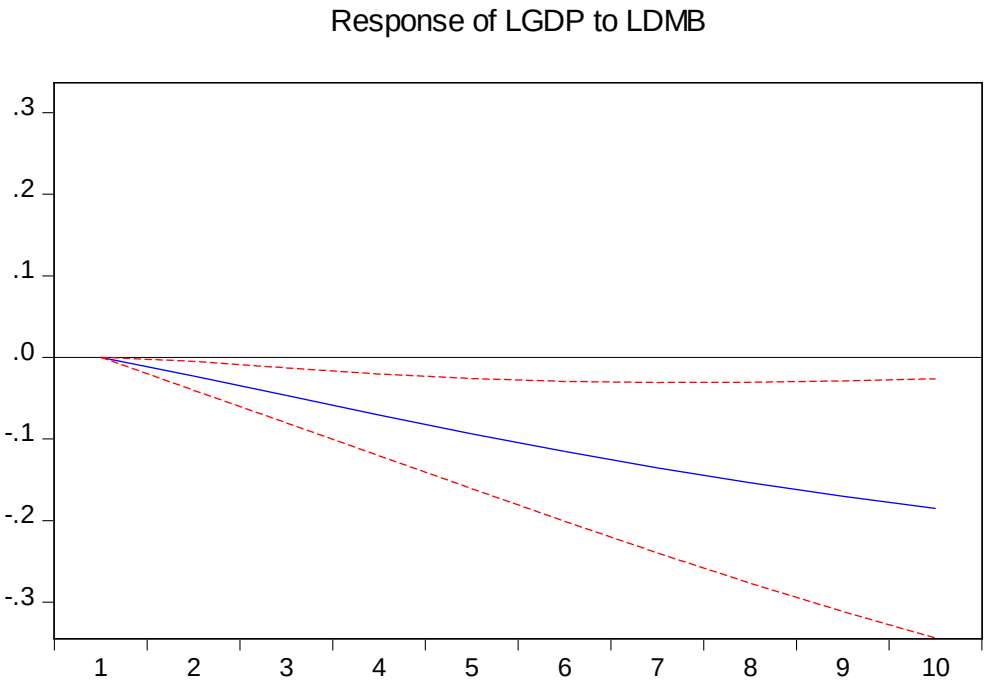

Fig.4.3 shows that GDP responds negatively in a rapid action to a shock in Deposit Banks debt from zero percent thresholds in first year until the tenth year. That means shock DMB engenders decrease effect to the GDP.

To explore the relationship between GDP and NDB, the researcher presents the impulse response graph in fig. 4.4 as follows.

Fig 4.4 Response of GDP to NDB

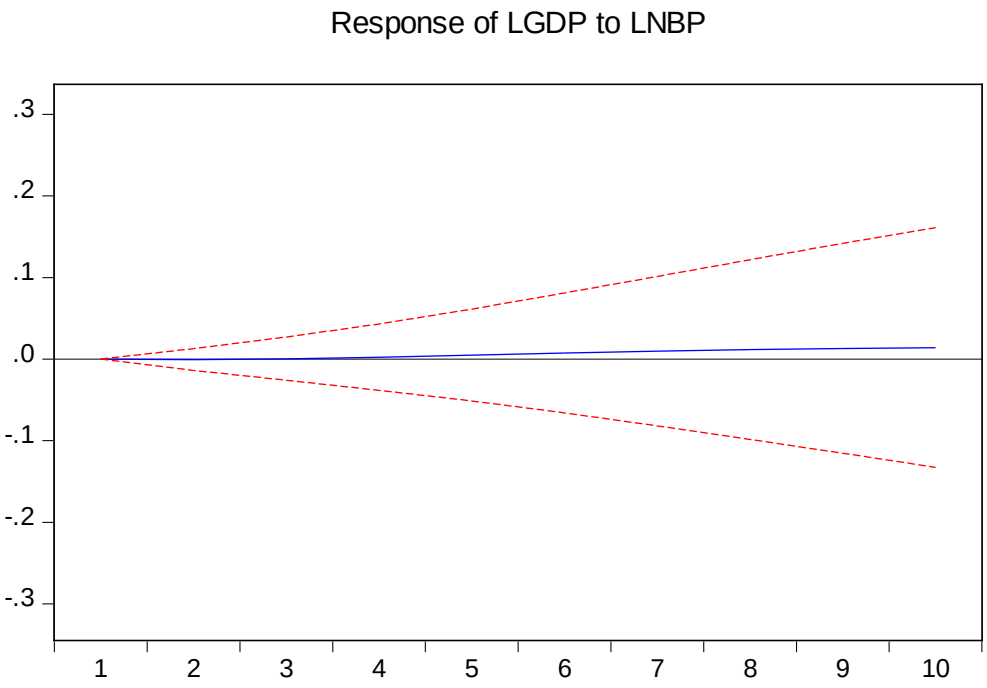

Fig.4.4 shows that GDP responds to a shock in Non deposit bank debt within zero percent thresholds in first year until after fifth year, and then rises slightly on a positive direction until the tenth year. That means the shock from NDB to GDP is almost without notice.

We then proceed to variance decomposition.

Table 4.10 Variance Decomposition

Period	S.E.	LGDP	LCBN	LDMB	LNBP
1	0.093503	100.0000	0.000000	0.000000	0.000000
2	0.143264	92.88253	4.608337	2.506717	0.002415
3	0.195503	81.86734	11.10150	7.029546	0.001617
4	0.253010	71.36625	16.65408	11.96975	0.009920
5	0.315246	62.82486	20.61405	16.53087	0.030223
6	0.381009	56.25830	23.20138	20.48215	0.058164
7	0.449130	51.28622	24.79523	23.83038	0.088167
8	0.518652	47.51373	25.71623	26.65404	0.115999
9	0.588842	44.62501	26.19494	29.04086	0.139184
10	0.659174	42.38647	26.38819	31.06867	0.156670

From the above, GDP explains 100 percent of its variations in the first period and diminishes 42.3 percent in the tenth period. In other words, "the own shock" started from 100 percent and decreased to 42.3 percent. CBN started from zero percent of the variation in GDP in the first period and increased to 26.38 in the tenth year. DMB also started from zero percent in the first period and increased to 31.06 percent in the tenth period, while, fluctuates from 0.00 to 0.156 within the period.

We then move to know if short term errors can be corrected in the long run using VECM as shown below;

Table 4.11 Vector Error Correction Estimates

Error Correction:	D(LGDP)	D(LCBN)	D(LDMB)	D(LNBP)
CointEq1	-1.000000	0.234399	0.967671	-0.201688
	(4.2E-09)	(0.94044)	(1.12292)	(0.65298)
	[-2.4e+08]	[0.24924]	[0.86174]	[-0.30887]

The analysis in table 4.11 above shows that error correction equation (CointEq1) satisfied the condition, hence, significant. The speed of adjustment is 100%. That means short term errors can be corrected in the long run with annual speed of adjustment of 100%. Also long run casuality flows from independent to dependent

5. Conclusion and Recommendation.

This study reveals that domestic debt from Central Bank of Nigeria and Deposit Money Banks exert positive and significant impact on economic growth at certain stage. This result corroborates the findings of Abbas (2007) and the overhang theory. Then non-deposit bank debt impact insignificantly to the growth of Nigerian economy. This corroborates the work of Kormendi (1983). That causality showed a unidirectional effect between domestic debt from Central Bank of Nigeria, Deposit Money Banks and economic growth, while no causality was established between non deposit bank debt and economic growth. This study found that economic growth proxied by growth respond to the shocks of domestic debt in both positive and negative direction. The researchers therefore suggest that Central Bank of Nigeria and Debt Management Office should supervise the non-deposit bank debt in order exert significantly on the growth of the economy. And that Central Bank of Nigeria and Debt Management Office should consistent with their debt policies on Deposit money Bank.

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