



An Empirical Investigation on Nigeria's External Debt Default: Implication for Domestic Debt Outstanding, External Reserve and Balance of Trade (1981 - 2015)

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Author's contribution

The sole author designed the study, managed the literature searches, analyzed, interpreted result, prepared and proof read the manuscript.

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ABSTRACT

This study determines the long run association between external debt default, domestic debt outstanding, external reserve and balance of trade over a period of thirty five years from 1981 to 2015. The secondary data covering the period of the study were sourced from the Central Bank of Nigeria statistical bulletin. The stationarity test conducted on the variables via Augmented Dickey-Fuller (ADF) and Phillips Perron (PP) reveal that the variables were free from stationarity encumbrances in connection with most time series data. The Johansen co-integration test indicates the existence of a long run association between external debt default, domestic debt outstanding and external reserve but no evidence of a long run association between external debt default and Nigeria's balance of trade. The granger effect assessment result suggests that external debt default has no significant effect on domestic debt outstanding, external reserve and balance of trade. Among the control variables introduced in the models, exchange rate was found to have significant effect on external reserve and it exhibits a positive and statistically relationship with balance of trade in short run but with external reserve in both long and short run. On the premises

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of the result of the analysis performed in this study, the government should as a matter of urgency diversify the economy from oil dependent to export oriented as was the case in the 1970s on the argument that a favourable and continually improved balance of trade position would lead to appreciation of the Naira against the US dollar, and an increase in the value of Naira on the other hand would encourage more exports by citizens which in turn lead to economic growth and development of Nigeria.

Keywords: External debt default; domestic debt; external reserve; balance of trade.

1. INTRODUCTION

The government of Nigeria over the years has consistently embraced external borrowing in an effort to drive economic growth and development. The major reason adduced by the government for such action is lack of domestic resources required to take the country to level of development promised during electioneering periods. In the words of [1], "no one will quarrel with any developing country for resorting to external borrowing provided that the proceeds are utilized in a productive way that will facilitate the eventual servicing and liquidation of the debt". It is with dismay to observe that the level of development and growth attained in the country is not in comparison with the quantum of fund sourced externally. It is been vehemently upheld that when such funds are made available for projects executions, government officials divert the funds to their personal use. This general assertion of public fund embezzlement by government functionaries is factual as some corrupt government officials have been convicted by the court and some properties acquired with looted funds confiscated. This scenario has kept the country backward in development as succinctly evident in high level of poverty, unemployment, and ranked high in term of corruption in the world just to mention a few.

According to mercantilism assertion, a favourable/surplus balance of trade is a source of foreign exchange for any country. Conversely, classical economists prefer a nation to effectively utilize its economic resources to obtaining trade surplus and concerned themselves with theories on adjustment of balance of trade [2]. [3] noted the availability of strong empirical evidence that the accumulation of foreign exchange reserves may lead to lower exchange rates, which in turn stimulate export-led growth. The growth of export would help improve the balance of trade position. However, resorting to currency devaluation as a lever for improving balance of trade, would make exports cheaper and imports exorbitant. [4] observed that countries that resorted to currency

devaluation in the 20th centuries as a means of enhancing balance of trade could not achieve such goal as they experienced unemployment, lower incomes, and decreased imports. It was not uncommon to find, however, the price of imports rising under such an initiative to the point where the aggregate value of imported goods continued to outpace the value of the higher, newly attained level of exports [5].

Discretionary spending of government funds and mismanagement funds are rampant. The signalling role of relative price changes, low saving and investment, high cost of doing business, high inflationary rate, and reduction in international competition prevailed as exports are relatively made expensive. Thus, impacting negatively on balance of payment. All these lead to Nigeria's external debt default. The domestic debt being a major factor in government incentive to allow inflation shoot beyond the benchmark. Although this factor "domestic debt" is merely mentioned and much less employed in time series analysis. Against this background of persistent external shock and the depleting tendency of the nation's reserve and high debt profile, call for debate and investigation as to how to mitigate the rising debt profile and default became apt. The major objective of this paper therefore, is to determine the long run association between external debt default and domestic debt outstanding, external reserve and balance of trade. Furthermore, the effect of external debt default on domestic debt outstanding, external reserve and balance of trade would be assessed. Accordingly, it throws up a hypothesis stated in the null format as:

1. External debt default has no significant effect on domestic debt, external reserve and balance of trade.

The remainder of this paper is organised as follows: review of related literature (concept of external debt default, domestic debt outstanding, external reserve, balance of trade, theoretical

background and empirical studies), methodology, results and discussion of findings and conclusion and policy implications.

2. REVIEW OF RELATED LITERATURE

The maintenance of internal and external balance through fiscal stability, balance of payment and low debt threshold sustainability are the most common objectives of macroeconomic and financial policy worldwide. In Nigeria, the formulation of monetary policy by the Central Bank of Nigeria and its targeting of sensitive variables have remained a growing challenge. This has resulted to growing external debt in excess of its revenue generating capacities. The Debt Management Office (DMO) has experienced debt servicing challenges, restructuring and rescheduling of external debt have led to series of default. In fact, well over five times within the period under review (1986-2015). A good amount of government revenue is being channelled towards meeting debt related maturing financial obligations but, not in its finality. The dwindling of oil price earnings since 2014 has ignited a chain reaction of events which threatened macroeconomic stability, continued depletion of foreign direct investment income, federal executive receipts are on the decline, the impasse at the Federation Account Allocation Committee (FAAC), the discretionary spending out spacing economic growth over the past ten years with large deficit abound. Exchange rate is facing unprecedented pressure, there are no more new projects, execution of old ones halted, with all internally generated revenue low [6].

Following a decade of robust growth and debt relief initiatives, many developing countries now face significantly lower debt burdens and have envisaged large scale investment projects financed by fresh borrowing [7]. The level of external reserve in a country is influenced by external sector developments such as international trade transactions, exchange rate, external debt and other related external obligations [8]. Where a country resort to its external reserve for provision of domestic foreign exchanges need, domestic fluctuation in monetary policy mechanism is bound to rise. For instance, the Central Bank of Nigeria on 24th May, 2016 announced a flexible exchange rate system geared towards making foreign currencies available and accessible to Nigerians. According to the Governor of Central Bank of Nigeria, Mr. Godwin Emefiele, the flexible

exchange rate regime was introduced due to ruthless pressures on Nigeria's external reserve and foreign exchange crisis. The optimal levels of external debt and of the stock of capital are functions of the productivity of capital, of the cost of financing, and of the welfare losses generated by external shocks [7].

2.1 Clarification of Major Concepts

2.1.1 External debt default

External debt default is defined as the failure of any government (Nigeria inclusive) to meet a principal or interest payment on the due date or within the specified grace period. These episodes include instances in which rescheduled is ultimately extinguished in terms less favourable than the original obligation [9]. At times, the default is accurately classified as a crisis year. These defaults according to policy economist may occur between an interval of five (5) years, fifty (50) years or one hundred (100) years [9]. Whenever a country defaults on its obligation to any party, a debt outstanding is created which would ultimately be serviced by mapping out a certain amount of money from yearly expenditure or whatever source the government deemed fit and efficient. A growing body of academic literature including contribution from [10] had documented external debt defaults due to macroeconomic volatility in the 1980s. According to scholars, episode of external debt default have affected Africa, Asia and Latin America in varying degrees, often involving a combination of triggering factors such as inflation, exchange rate, external reserves, domestic debt, balance of trade disequilibrium, foreign direct investment and a chronic level and protracted banking crises. Nigeria since gaining independence has defaulted over five (5) times, Venezuela six (6) times, Colombia, Costa Rica, Dominican Republic and Honduras defaulting four (4) times each. In Europe, a number of countries have defaulted just after the Napoleonic wars. Global defaults occurred from the late 1860s to the 1870's and again from the 1880s and 1890's up till the 19th, 20th and 21st centuries [9]. In the 250 episodes of external debt defaults, domestic debt was said to take the lead. Surveys have investigated on one or two variables leading to the defaults resulting to both internal and external misbalance.

2.1.2 Balance of trade

[2] defined balance of trade as a larger part of economic unit, balance of payment, which

represents the difference in value over a given period of time between an economy's (which can be a country, a region, etc.) imports and exports of goods and services and includes all economic transactions between residents of one country and those of other countries. The balance of trade of a country depends upon voluminous aspects which contains exchange rate variations, monetary and fiscal policy, national and foreign income growth and supply shortage [11]. The contribution of balance of trade to the overall performance of the economy has been put to test following the dominance of the petroleum sector which is the main stay of the economy. With the fall in crude oil prices in the international oil market, the government of Nigeria has embarked on various policy implementation to diversify the economy from oil base to export oriented base. The Nigeria export and import trade has its foundation in the neo-classical factor endowment theory of international trade as postulated by two German economists [12] and [13].

2.1.3 External reserve

External reserves could also be known as foreign reserve, foreign exchange reserve or international reserve. The International Monetary Fund (IMF) 6th Edition of its Balance of Payment Manual defined a country's external reserves as those external assets that are readily available to and controlled by monetary authorities for meeting balance of payments financing needs, for intervention in exchange markets to affect the currency exchange rate, and for other related purposes (such as maintaining confidence in the currency and the economy, and serving as a basis for foreign borrowing). The concept of international reserves is based on the balance-sheet framework, with reserve assets being a gross concept and it does not include external liabilities of the monetary authorities [14]. There has been anxiety by the Nigerian public regarding the safety or otherwise of our foreign reserves as over 90 percent of this is denominated in US dollar assets [8]. The Nigeria external reserve dropped significantly to \$26.196 billion as at 31st August, 2016 from \$34.24 billion on 30th June, 2015 indicating a 23.49% depreciation in Nigeria international reserve. This current level of reserve cannot effectively support Nigeria imports obligation for four months as Nigeria monthly requirement of foreign exchange for imports is estimated to be \$7 billion.

2.1.4 Domestic debt outstanding

This is the amount of money the government owes to its citizens at a given period of time usually a year. [15] noted that the beginning of the existing market for government borrowing in Nigeria is the financial reforms introduced by the colonial government in 1958 enveloped creation of the Central Bank of Nigeria (CBN) and the creation of Marketable Public Securities to finance fiscal deficit. According to [16], government seek resort to domestic borrowing to firstly, to finance fiscal deficit, secondly, for effective and efficient implementation of monetary policy and the third, is to develop the financial sector (supplying tradable financial instrument so as to deepen the financial markets). The need to finance rising of government expenditure has been identified to be responsible for the rapid increase in the stock of Nigeria's domestic debt [17]. Nigeria government domestic debt has been on the rise over the years. For example, the domestic debt increased from 1,525.91 billion in 2005 to 8,837.0 billion in 2015 reflecting about 479.13% up surge in domestic debt within a period of ten (10) years. The reason attributed to this rise in domestic debt in government quarters is to reduce the escalating external debt profile of the government. Large domestic borrowing can have severe implications on the economy as domestic interest payments consume a significant part of government revenue more so if the associated interest rates are higher compared to those on external debt [18]. When issuing domestic debt, governments tap domestic private savings that would otherwise be available to private sector [19].

2.2 Theoretical Background

2.2.1 Neo-classical factor endowment theory of international trade

The neo-classical factor endowment theory of international trade theory was developed by Eli Heckscher and Bertil Ohlin in 1919 and 1933 respectively. This theory is a follow up of the David Ricardo's theory of comparative advantage. The neo-classical factor endowment theory postulated that natural endowment or resources is a strong foundation to both internal and external potential for increase in trade for economic development and resource build-up, hence the inter-relationship. Put differently, a nation will export commodities that they apply abundant and cheap factor of production and

import commodities that involve the utilization of the nation scarce resources. [20] points out that there are two sources of misunderstandings. "First, the principle of comparative advantage is clearly counter-intuitive. Many results from the formal model are contrary to simple logic. Secondly, the theory is easy to confuse with another notion about advantageous trade, known in trade theory as the theory of absolute advantage. The logic behind absolute advantage is quite intuitive." [21] clearly put forward this idea: "If a foreign country can supply us with a commodity cheaper than we ourselves can make it, better buy it off them with some part of the produce of our own industry, employed in a way in which we have some advantage." The theory of comparative advantage allows, however, that a nation may nevertheless benefit from free trade even though it is assumed to be technologically inferior to another nation in the production of everything.

2.2.2 Threshold theory of debt

The threshold school of thoughts are of the opinion that debt accumulation by a nation will negatively affects its economic growth and development. According to this theory, if a country borrow too much to the extent that it exceed a certain endogenous threshold level, such borrowing would have adverse effect on the growth of the economy. The fall in growth is due to the higher distortionary tax burden on capital required to service the debt resulting in lower rate of return on capital, lower investment and hence lower growth [22]. For [23], the loss of efficiency in growth is due partly to the magnitude of the debt burden and the inability of the country to invest part of its income because of servicing the debt. In the occurrence of such loss of efficiency in economic growth, debt forgiveness is recommended, and it will come at a minimal cost for creditors: a reduction in the face value of the debt will not lead to a reduction in the expected value of the repayments because, it will decrease the risk of default [23]. [24] established a threshold level range of 11% to 12% as capable of triggering external debt default for developing countries including Nigeria and 20% for developed countries of the world. [25] using annual data from 1970 to 2003 linked effect of external debt on economic growth of Nigeria but could not establish an optimal threshold of inflation. However, from an earlier study by [26], an inflation threshold of 6% was found for Nigeria. [27] found no evidence for a universally applicable threshold effect in the

relationship between public debt and economic growth.

2.2.3 Precautionary perspective on external reserve

Precautionary motive for holding reserves is a desire to be able to deal effectively with unexpected events that requires cash outlay. [28] envisaged that the management of external reserve is a process that ensures that adequate official public sector foreign assets are readily available to and controlled by the authorities for meeting a defined range of objectives for a country or union. Countries all over the world maintain external reserves to safeguard the value of domestic currency, timely meeting of international payment obligations, accumulation of wealth, management of exchange rate volatility, boosting a country's credit worthiness, to provide fall back for the rainy day and to provide buffer against external shock. Away from the need to hold reserves for exchange-rate management, countries that face conditional access to global capital markets and costly tax collection will hold precautionary reserves to smooth consumption and distortions inter-temporally [29]. On the other hand, [29] noted that political instability or corruption could stimulate countries decide to reduce the demand for precautionary reserves. Precautionary motive for holding foreign currency, like the demand for money, can be positively related to wealth and the cost of covering unplanned deficit, and negatively related to the return from alternative assets [28]. The accumulation of foreign exchange reserves contributes to economic growth by increasing both the investment/gross domestic product ratio and capital productivity, hence less need to contract external debt [30].

2.3 Related Empirical Studies

[2] underline the fact that there is a direct correlation between the increasing external debt of Romania from 1990 to 2010 and the balance of trade increasing deficit, which is mainly due to lack of domestic capital as well as decreasing productivity. The research methodology was based on theoretical model of sustainability, using time series data and multi-equational model. The result shows that the higher the import, the higher the external debt and as a consequence the higher the balance of trade deficit, if productivity is low. The finding was consistent with Romania experience and its

implication are very large and will multiply over the years.

[31] studied the impact of current account deficit of India on its external borrowings as well as on foreign exchange rates, trend of India's current account balance and external debt of India over a period of two decades i.e. from 1991 to 2013 and the correlation between India's current account balance with external debt. The finding revealed that India's current account balance has a strong positive relationship with external debt, long term debt and short term debt. This further indicates that rise in current account deficit puts additional pressure and results in increases the amount of external borrowings of India (both long term as well as short term debts).

[32] explore what long-run impacts accumulated foreign exchange reserves have on macro variables in developing countries. In the first part, they analysed a simple open economy model where increased foreign exchange reserves reduce costs of liquidity risk. In the second part, they showed several empirical supports to the theoretical implications. The cross-country evidence showed that increased foreign exchange reserves make external debt outstanding larger and debt maturity shorter. It also implies that increased foreign exchange reserves lead to a decline of consumption but can enhance investment and economic growth. The positive impact on economic growth, however, disappears when we control the impact through investment.

[33] focused on the interactions between public debt policy and foreign exchange reserve management. They found that, although foreign currency debt issuance can contribute significantly to the growth of foreign exchange reserves, it can cause serious difficulties in the assessment of reserve adequacy, especially during crisis periods. Furthermore, it affects the profit-loss of the central bank. On the other hand, the accumulation of foreign exchange reserves may affect the public deficit and debt as well.

[3] applied time series analysis found that China's short term external debts, foreign exchange reserves, total external debts have significant impact on China's economic growth rates within the period of 1982-2009. According to Granger causality analysis, China's foreign exchange reserves can forecast China's economic growth rates. Impulse response analysis and variance decomposition analysis

implies that China's foreign exchange reserves innovation impact on China's economic growth rates is more than China's short term external debt rates innovation impact on China's economic growth rates.

[34] studied why emerging economies have been accumulating reserves without reducing their levels of debt. This behaviour is puzzling because, these economies could also decrease their vulnerability by decreasing their debt. A stochastic dynamic equilibrium model of a small open economy with non-contingent debt and reserve assets was constructed. Reserves have the benefit of smoothing consumption when the country is in autarky, after defaulting. The results also showed that the optimal policy is to accumulate positive levels of debt and reserves in equilibrium. These economies accumulate reserves without decreasing debt because, it decreases the cost of autarky after they defaulted. For governments to accumulate reserves and debt simultaneously they need to be patient enough to save but still have positive probability of default, the asymmetric default costs generate that.

[7] addressed the issue of choosing debt and reserves levels in the context of models of debt repudiation. The focus has thus been on the effect of the balance sheet composition immediately after a default and the subsequent closure of capital markets. Using panel data for 138 low-income and middle-income countries over the period 1967-2012, the study found that central bank reserves are most often used after terms of trade shocks. Hence, the paper modelled the optimal asset-liability decisions of a country assuming it faces risks of exogenous external shocks. External borrowing finances a scale-up in public capital. The optimal levels of external debt and of the stock of capital are functions of the productivity of capital, of the cost of financing, and of the welfare losses generated by external shocks.

[18] analysed the development in public domestic debt in Kenya and its impact on the economy for the period 1996 to 2007. The study finds that the composition of Kenya's public debt has shifted in favour of domestic debt while considerable progress has been made in extending the maturity profile of the debt, and diversification of the investor base towards institutional investors and individuals. The significant rise in domestic debt during the period resulted in higher domestic interest payments which present a significant burden to the budget. However, due to

a considerable level of financial development in Kenya, the study found no evidence that the growth in domestic debt crowds-out private sector lending in Kenya.

[35] employed econometric tools to analysed time series data sourced from Central Bank Nigeria statistical bulletin. VAR and Wald tests point out that past value of gross domestic product is significant in explaining the current values of foreign reserves with the causality effect. The model revealed that the foreign exchange reserve was statistically significant in the current year (-1) but statistically insignificant in the previous years while among the macroeconomic variables only inflation was significant to foreign exchange reserve. The study upheld that accumulation of foreign reserves does not produce satisfactory returns for Nigeria but effort should be made to create job and enabling environment for openness in trade that in turn increases the gross domestic product of the Nigerian economy.

3. METHODOLOGY

In an effort to determine the long run association between external debt default and domestic debt outstanding, external reserve and balance of trade, this paper adopted the Johansen Co-integration approach. On the other hand, the effect of external debt default on domestic debt outstanding, external reserve and balance of trade, the granger test of causation was assessed. Time series data from the Central Bank of Nigeria statistical bulletin of 2015 from 1981 to 2015 was used for the analysis. The unit root test via Augmented Dickey-Fuller (ADF) and Philip Perron (PP) were conducted to ensure that the data are free from stationarity defect linked with most time series data.

3.1 Description of Variables

External Debt Default (EDD) is the independent variable and it is proxied by the Nigeria's external debt outstanding. Domestic Debt Outstanding (DDO), External Reserve (ETR) and Balance of Trade (BOT) are the dependent variables. Gross Domestic Product Growth (GDP), Trade Openness (TOP), Exchange Rate (EXR), Inflation (INF), Lending Rate (LDR) and Fiscal Deficit (FD) were included as control variables. A stable exchange rate system affects the level of external reserve and impact positively on the balance of trade. Balance of trade would also be

affected the prevailing lending rate in the country. Since domestic debt are sourced through the money market, macroeconomic instability in the place of inflation and fiscal deficit may influence the capacity of the government to payback as at when due, hence rising domestic debt.

3.2 Model Specification

This paper adopted the model of [2] where balance of trade was expressed as a function of external debt. However, the model was modified to incorporate external reserve and domestic debt as other significant variables influenced by external debt default. The multivariate models for this study are developed as follows:

$$DDO = f(EDD, INF, FD, GDP, TOP) \quad (3.1)$$

$$ETR = f(EDD, EXR, FD) \quad (3.2)$$

$$BOT = f(EDD, EXR, LDR) \quad (3.3)$$

However, the variables in the models were transformed to their natural logarithm for easy interpretation as well as permitting for equating the dependent and independent variables in the same numerical base. Thus:

Model 1

$$\begin{aligned} \text{Log}DDO_t = \alpha_0 + \alpha_1 \text{Log}EDD_t + \alpha_2 \text{Log}INF_t \\ + \alpha_3 \text{Log}FD_t + \alpha_4 \text{Log}GDP_t \\ + \alpha_5 \text{Log}TOP_t + \varepsilon_t \end{aligned} \quad (3.4)$$

Model 2

$$\begin{aligned} \text{Log}ETR_t = \alpha_0 + \alpha_1 \text{Log}EDD_t + \alpha_2 \text{Log}EXR_t \\ + \alpha_3 \text{Log}FD_t + \varepsilon_t \end{aligned} \quad (3.5)$$

Model 3

$$\begin{aligned} \text{Log}BOT_t = \alpha_0 + \alpha_1 \text{Log}EDD_t + \alpha_2 \text{Log}EXR_t \\ + \alpha_3 \text{Log}LDR_t + \varepsilon_t \end{aligned} \quad (3.6)$$

Where: DDO_t , ETR_t and BOT_t are domestic debt outstanding, external reserve and balance of trade respectively in year t ; α_0 is the coefficient constant; α_1 is the coefficient of independent variables; EDD_t , INF_t , FD_t , EXR_t , LDR_t , GDP_t and TOP_t are external debt default, inflation, fiscal deficit, exchange rate depreciation, lending rate, gross domestic product growth and trade openness in year t ; and ε_t is the error term in year t .

The a priori expectation is that the independent variables in the models: external debt default

should increase the level of domestic debt outstanding but should negatively impact on external reserve and balance of trade; exchange rate depreciation and lending rate should have an inverse relationship with external reserve and balance of trade; inflation should have negative effect on domestic debt outstanding; fiscal deficit should increase the level of domestic debt outstanding but deplete the external reserve. Gross domestic product growth and trade openness should lower the level of domestic debt outstanding.

4. RESULTS AND DISCUSSION OF FINDINGS

4.1 Characteristic of Descriptive Statistics

The descriptive characteristics of the variables are presented in Table 4.1. The mean values of the DDO, ETR, BOT, EDD, EXR, FD, LDR, INF, GDP and TOP are 1761803, 15418.17, 70.47731, 1271218, 1102165, 70.47731, -21605.54, 77.9064, 19.66500, 28411.81 and 36.27382 while their median are 531290.0, 6857.555, 213500.0, 606625.0, 21.96860, -1909.450, 17.54500, 12.05000, 22060.99 and 39.14000 respectively. The variables show the maximum values of 8837000, 58472.88, 5822600, 4890270, 217.7900, 32049.40, 2071.000, 72.80000, 69023.93 and 63.19000 for DDO, ETR, BOT, EDD, EXR, FD, LDR, INF, GDP and TOP respectively. The minimum values are 11190.00 for DDO, 456.6400 for ETR, -2230900 for BOT, 2330.000 for EDD, 0.610000 for EXR, 285104.7 for FD, 7.750000 for LDR, 5.400000 for INF, 184.8600 for GDP and 9.480000 for TOP. All the variables are positively skewed towards normality as evidenced by the positive sign of the skewness except FD and TOP. The Jarque-Bera suggests that all the variables are normally distributed as the p-values are significant at 5% level of significance except GDP and TOP.

4.2 Diagnostic Test

4.2.1 Serial correlation LM test

The serial correlation LM test is utilized to test the presence of serial correlation in a model which, if observed, would suggest that conclusions drawn from the estimation would not be correct. The p-values (at 5% significance

level) of the Breusch-Godfrey serial correlation test in Table 4.2a indicates that the variables in the models are free from autocorrelation, hence results from estimation is correct. The serial correlation is preferred to Durbin Watson in testing autocorrelation in any proposed model.

4.2.2 Heteroskedasticity test

One of the important of assumption of classical linear regression is that the variance of the residuals should not increase with fitted values of response or dependent variable. The p-values of the models (significant at 5% level of significance) in Table 4.2b discloses that the models are free from heteroskedasticity problem. The models were checked for heteroskedasticity using the Glejser test of heteroskedasticity.

4.2.3 Ramsey RESET specification

The Ramsey Reset Test is a misspecification test associated with the functional form of models to check whether power transforms need to be added to a model. The p-values (at 5% significance level) in Table 4.2c entails that the linear combination of the independent variables have no power in explaining the dependent variables, hence the models are well specified.

4.2.4 Multicollinearity test

This test is a measurement of the strength of the linear relationships among variables. The presence of multicollinearity between the independent variables increases the standard errors of the coefficients. Increased standard error of coefficients suggest that some of the independent variables may be insignificant when ordinarily they are significant. Table 4.2d shows that the correlation between the independent variables are not more than ± 0.56 . Thus, this paper concludes that the independent variables in the models are free from problem of multicollinearity.

4.3 Unit Root Test

4.3.1 Augmented Dickey-Fuller (ADF) test

The ADF test was performed at level and first difference. The result in Table 4.3a indicates that the variables are stationary, hence the variables are free from stationarity defect connected with most time series data.

Table 4.1. Summary of descriptive statistics

	DDO	ETR	BOT	EDD	EXR	FD	LDR	INF	GDP	TOP
Mean	1761803.	15418.17	1271218.	1102165.	70.47731	-21605.54	77.90647	19.66500	28411.81	36.27382
Median	531290.0	6857.555	213500.0	606625.0	21.96860	-1909.450	17.54500	12.05000	22060.99	39.14000
Maximum	8837000.	58472.88	5822600.	4890270.	217.7900	32049.40	2071.000	72.80000	69023.93	63.19000
Minimum	11190.00	456.6400	-2230900.	2330.000	0.610000	-285104.7	7.750000	5.400000	184.8600	9.480000
Std. Dev.	2541322.	17291.43	1994724.	1347006.	67.93435	56327.45	352.2043	17.44908	20084.07	15.68800
Skewness	1.602161	1.045761	0.927985	1.558301	0.371635	-3.460817	5.568790	1.554538	0.517177	-0.074633
Kurtosis	4.254697	2.562572	2.697708	4.294136	1.614240	15.66222	32.01811	4.426072	2.359594	1.850189
Jarque-Bera	16.77608	6.468232	5.009335	16.13300	3.503106	295.0077	1368.636	16.57505	2.096681	1.904489
Probability	0.000228	0.039395	0.008170	0.000314	0.017350	0.000000	0.000000	0.000252	0.350519	0.385874
Sum	59901290	524217.9	43221400	37473621	2396.228	-734588.5	2648.820	668.6100	966001.6	1233.310
Sum Sq. Dev.	2.13E+14	9.87E+09	1.31E+14	5.99E+13	152297.5	1.05E+11	4093580.	10047.52	1.33E+10	8121.743
Observations	34	34	34	34	34	34	34	34	34	34

Source: Computer output data using E-views 8.0

Table 4.2a. Serial correlation LM test result

Models	F-statistic	P-value
Model 1	4.260491	0.0487
Model 2	4.843923	0.0156
Model 3	11.97168	0.0002

Source: Computer output data using E-views 8.0

Table 4.2c. Ramsey RESET specification result

Models	F-statistic	P-value
Model 1	62.18627	0.0000
Model 2	4.809300	0.0000
Model 3	5.259997	0.0000

Source: Computer output data using E-views 8.0

Table 4.2b. Heteroskedasticity test result

Models	F-statistic	P-value
Model 1	4.142881	0.0061
Model 2	3.702846	0.0223
Model 3	7.994753	0.0005

Source: Computer output data using E-views 8.0

4.3.2 Phillips Perron (PP) test

The Phillips Perron Test was conducted at level and first difference to ascertain the stationarity of the variables. Table 4.3b discloses that all the variables are stationary either at level form or first difference.

Table 4.2d. Correlation matrix

	DDO	ETR	BOT	EDD	EXR	FD	LDR	INF	GDP	TOP
DDO	1.00	0.74	0.52	0.20	0.83	0.19	-0.03	-0.33	0.91	-0.08
ETR	0.74	1.00	0.83	0.03	0.78	0.21	-0.08	-0.35	0.85	0.29
BOT	0.52	0.83	1.00	0.05	0.60	0.22	-0.02	-0.31	0.65	0.32
EDD	0.20	0.03	0.05	1.00	0.56	-0.07	0.45	-0.20	0.30	0.37
EXR	0.83	0.78	0.60	0.56	1.00	0.13	0.15	-0.42	0.91	0.32
FD	0.19	0.21	0.22	-0.07	0.13	1.00	0.06	-0.06	0.15	-0.03
LDR	-0.03	-0.08	-0.02	0.45	0.15	0.06	1.00	-0.05	0.03	0.18
INF	-0.33	-0.35	-0.31	-0.20	-0.42	-0.06	-0.05	1.00	-0.32	-0.02
GDP	0.91	0.85	0.65	0.30	0.91	0.15	0.03	-0.32	1.00	0.25
TOP	-0.08	0.26	0.32	0.37	0.32	-0.03	0.18	-0.02	0.25	1.00

Source: Computer output data using E-views 8.0

Table 4.3a. ADF test result

Variables	ADF test statistic	Test critical value at 1%	Test critical value at 5%	Order of integration /remark
DDO	-5.656547 (0.00)*	-3.653730	-2.957110	1(1)/Stationary
ETR	-3.873667 (0.00)*	-3.646342	-2.954021	1(1)/Stationary
BOT	-4.736029 (0.00)*	-3.711457	-2.981038	1(0)/Stationary
EDD	-4.200693 (0.00)*	-3.670170	-2.963972	1(1)/Stationary
EXR	-4.618881 (0.00)*	-3.646342	-2.954021	1(1)/Stationary
FD	-3.885899 (0.00)*	-3.639407	-2.951125	1(0)/Stationary
LDR	-5.805848 (0.00)*	-3.639407	-2.951125	1(0)/Stationary
INF	-5.623109 (0.00)*	-3.646342	-2.954021	1(1)/Stationary
GDP	-3.792049 (0.00)*	-2.636901	-1.951332	1(1)/Stationary
TOP	-8.084608 (0.00)*	-2.636901	-1.951332	1(1)/Stationary

Source: Computer Output using E-view 8.0.

Note: The optimal lag for ADF test is selected based on the Akaike Info Criteria (AIC), p-values are in parentheses where (*) and (**) denote significance at 1% and 5% respectively

Table 4.3b. PP test result

Variables	PP test statistic	Test critical value at 1%	Test critical value at 5%	Order of integration /remark
DDO	-5.802170 (0.00)*	-2.639210	-1.951687	1(1)/Stationary
ETR	-3.594289 (0.02)**	-3.646342	-2.954021	1(1)/Stationary
BOT	-5.434469 (0.00)*	-2.639210	-1.951687	1(1)/Stationary
EDD	-3.356365 (0.00)*	-2.644302	-1.952473	1(1)/Stationary
EXR	-3.960155 (0.00)*	-2.636901	-1.951332	1(1)/Stationary
FD	-3.677707 (0.00)*	-3.639407	-2.951125	1(0)/Stationary
LDR	-5.806032 (0.00)*	-3.639407	-2.951125	1(0)/Stationary
INF	-9.616803 (0.00)*	-2.636901	-1.951332	1(1)/Stationary
GDP	-5.559598 (0.00)*	-3.646342	-2.954021	1(1)/Stationary
TOP	-8.073698 (0.00)*	-3.646342	-2.954021	1(1)/Stationary

Source: Computer Output using E-view 8.0.

Note: In determining the truncation lag for PP test, the spectral estimation method selected is Bartlett kernel and Newey-West method for Bandwidth, p-values are in parentheses where (*) and (**) denote significance at 1% and 5% respectively

4.4 Ordinary Least Square Result

4.4.1 Domestic debt outstanding and external debt default

The regression result in Table 4.4a shows that there is a positive and significant relationship between gross domestic product growth and domestic debt outstanding while a negative relationship exists between inflation, external debt default, fiscal deficit, trade openness and domestic debt outstanding. The coefficient of the constant -77273.39 indicates that if gross domestic product growth, external debt default, inflation, fiscal deficit and trade openness are held constant, domestic debt outstanding would down by ₦77, 273.39 million. The external debt default coefficient of -0.030345 is an indication that a percentage increase in external debt default would result ₦0.030345 decrease in domestic debt. It would be deduced from the inflation coefficient of -756.2768 that a percentage increase in level of inflation would result to ₦756.28 million reduction in domestic debt. This is expected as during high inflationary period, government borrowing from its resident would be drastically reduced as such borrowing would not enable the government achieve its goal that necessitated the fund. The fiscal deficit coefficient of -0.373548 signifies that a percentage increase in government fiscal deficit would result in ₦0.373548 million reduction in domestic debt. This discloses that domestic debt would decline if the government embraces high and continuous fiscal deficit. The growth in the economy would swell result to rise in domestic debt by ₦14.73 million whereas an increase in

trade openness would lower the domestic debt by a magnitude of ₦2, 750.19 million.

The Adjusted R-squared shows that 99.61% variations in domestic debt outstanding was as a result of the combined changes in gross domestic product growth, external debt default, inflation, fiscal deficit and trade openness. The F-statistic of 869.4104 with a p-value of 0.0000 infer that the independent variables statistically and significantly explained the changes in domestic debt within the period covered by the study. The Durbin Watson value of 1.90 is an indication of no autocorrelation. However, this is also confirmed with the aid of the serial correlation test in Table 4.2a.

4.4.2 External reserve and external debt default

From Table 4.4b exchange rate and fiscal deficit are positively related with external reserve while external debt default is negative related with external reserve. The relationship that exists between external debt default, exchange rate and external reserve is statistically significant at 1% level of significance. The constant coefficient of 4126.933 means that holding external debt default, fiscal deficit and exchange rate constant, external reserve would be \$4, 126.933 million. The external debt default coefficient of -0.007541 gives an inference that each time Nigeria defaults in its external debt obligation, the external reserve would be down by \$0.007541 million. The exchange rate coefficient of 281.2228 entails that a percentage appreciation in the Nigeria exchange rate of Naira against the

US dollar would result in 281.22 million increase in the external reserve. A unit increase in fiscal deficit would increase the external reserve by \$0.010056 million. This is against a priori expectation of a corresponding reduction in external reserve as government may withdraw from external reserve to finance fiscal deficit.

From the Adjusted R-squared in Table 4.4b, 84.18% changes in external reserve was attributed to the joint effect of external debt default, fiscal deficit and exchange rate. The F-statistic of 59.51795 and p-value of 0.0000 show that external debt default, fiscal deficit and exchange rate statistically and significantly explained the variation in external reserve within the period under review. The Durbin Watson value of 0.16 is not quite close to the bench mark of 2.0. Nevertheless, the serial correlation test in Table 4.2a shows that the variables in the model are not serially correlated.

4.4.3 Balance of trade and external debt default

The regression outcome as depicted in Table 4.4c exhibits that balance of trade is significantly related with external debt default and exchange rate but the significant relationship between balance of trade external debt default is negative while that of exchange rate is positive. On other hand the relationship between balance of trade and lending rate is positive but insignificant. From the constant coefficient of 227277.2, holding of external debt default, lending rate and exchange rate constant, balance of trade would be ₦227277.2 million. A

unit rise in external debt default would result to ₦0.648486 million depreciation in the balance of trade position of Nigeria. A percentage appreciation in the exchange rate would increase the balance of trade by ₦24693.26 million. The prime lending rate in Nigeria does not affect the balance of trade as a unit increase in the lending rate would rather increase the balance of trade by ₦235.7296 million.

It is observed from the Adjusted R-squared in Table 4.4c that only 43.38 variation in balance of trade was jointly explained by external debt default, lending rate and exchange rate and this is statistically significant as evidenced in the F-statistic of 9.43 and p-value of 0.000152. The Durbin Watson statistic of 0.911690 showing autocorrelation was annulled by the serial correlation of in Table 4.2a which affirms the existence of no autocorrelation in the model.

4.5 Long Run Relation

The unit root test as substantiated in Table 4.3a and 4.3b revealed that variables are not encumbered stationarity weakness of most time series data. Accordingly, the study proceeded to testing the long run association between the variables by applying the Johansen Co-integration methodology and the outcome presented in Table 4.5a, 4.5b and 4.5c. The long run result in Table 4.5a indicates that there is a long run association between domestic debt outstanding and external debt default. This is evidenced from the trace and max-eigenvalue test which each indicated the presence of one (1) co-integrating equation at 5% level significance.

Table 4.4a. OLS regression for domestic debt outstanding and external debt default dependent variable: Domestic debt outstanding

Variable	Coefficient	Std. error	t-statistic	Prob.
C	-77273.39	111596.4	-0.692436	0.4953
EDD	-0.030345	0.027526	-1.102416	0.2812
INF	-756.2768	2023.710	-0.373708	0.7119
FD	-0.373548	0.587805	-0.635497	0.5311
GDP	14.72953	7.085857	2.078722	0.0485
TOP	-2750.189	3661.844	-0.751039	0.4599
DDO(-1)	1.456626	0.185523	7.851455	0.0000
DDO(-2)	-0.503858	0.185303	-2.719105	0.0120
R-squared	0.996072	Mean dependent var		1871097.
Adjusted R-squared	0.994926	S.D. dependent var		2581737.
S.E. of regression	183897.9	Akaike info criterion		27.29447
Sum squared resid	8.12E+11	Schwarz criterion		27.66090
Log likelihood	-428.7115	Hannan-Quinn criter.		27.41593
F-statistic	869.4104	Durbin-Watson stat		1.900545
Prob (F-statistic)	0.000000			

Source: Computer output data using E-views 8.0

Table 4.4b. OLS regression for external reserve and external debt default dependent variable: Domestic debt outstanding

Variable	Coefficient	Std. error	t-statistic	Prob.
C	4126.933	1840.277	2.242560	0.0325
EDD	-0.007541	0.001085	-6.947614	0.0000
EXR	281.2228	21.65851	12.98440	0.0000
FD	0.010056	0.021746	0.462415	0.6471
R-squared	0.856152	Mean dependent var		15418.17
Adjusted R-squared	0.841767	S.D. dependent var		17291.43
S.E. of regression	6878.263	Akaike info criterion		20.62025
Sum squared resid	1.42E+09	Schwarz criterion		20.79982
Log likelihood	-346.5443	Hannan-Quinn criter.		20.68149
F-statistic	59.51795	Durbin-Watson stat		1.200435
Prob (F-statistic)	0.000000			

Source: Computer output data using E-views 8.0

Table 4.4c. OLS regression for balance of trade and external debt default dependent variable: Domestic debt outstanding

Variable	Coefficient	Std. error	t-statistic	Prob.
C	227277.2	381893.8	0.595132	0.5562
EDD	-0.648486	0.259946	-2.494699	0.0183
EXR	24693.26	4667.676	5.290269	0.0000
LDR	235.7296	835.8965	0.282008	0.7799
R-squared	0.485234	Mean dependent var		1271218.
Adjusted R-squared	0.433757	S.D. dependent var		1994724.
S.E. of regression	1501013.	Akaike info criterion		31.39131
Sum squared resid	6.76E+13	Schwarz criterion		31.57088
Log likelihood	-529.6523	Hannan-Quinn criter.		31.45255
F-statistic	9.426289	Durbin-Watson stat		0.911690
Prob (F-statistic)	0.000152			

Source: Computer output data using E-views 8.0

Table 4.5a. Johansen co-integration result for DDO, EDD, INF, FD, GDP and TOP

Unrestricted co-integration rank test (Trace) DDO, EDD, INF and FD				
Hypothesized number of CE(s)	Eigen value	Trace statistic	0.05 critical value	Prob..*
None *	0.803507	103.0674	95.75366	0.0143
At most 1	0.474924	54.25351	69.81889	0.4507
At most 2	0.429607	34.92717	47.85613	0.4519
At most 3	0.301599	18.08430	29.79707	0.5598
At most 4	0.205604	7.315443	15.49471	0.5412
At most 5	0.013582	0.410250	3.841466	0.5218
Unrestricted co-integration rank test (Maximum eigen value) DDO, EDD, INF and FD				
Hypothesized number of CE(s)	Eigen value	Maximum eigen statistic	0.05 critical value	Prob..*
None *	0.803507	48.81385	40.07757	0.0041
At most 1	0.474924	19.32634	33.87687	0.8015
At most 2	0.429607	16.84287	27.58434	0.5935
At most 3	0.301599	10.76886	21.13162	0.6703
At most 4	0.205604	6.905193	14.26460	0.5004
At most 5	0.013582	0.410250	3.841466	0.5218

Trace test and Max-eigenvalue test indicate 1 co-integrating eqn(s) each at the 0.05 level;

* denotes rejection of the hypothesis at the 0.05 level; **MacKinnon-Haug-Michelis (1999) p-values

From Table 4.5b, the trace test shows the presence of one (1) co-integrating equation while the Max-eigenvalue test reveals two (2) co-integrating equations at the 5% level of

significance in line with MacKinnon-Haug-Michelis (1999) p-values. The result in Table 4.5b discloses the existence of a long run relationship between external reserve and external debt default.

The implication of the result in Table 4.5c is that there is no long run association between balance of trade and external debt default in Nigeria. The trace and Max-eigenvalue test reveal no co-integrating equations at the 5% level of significance.

4.6 Pairwise Granger Causality Test

To test the significant effect if the explanatory variables on the response variables, the study applied the granger causality effect assessment test and the outcome summarized in Tables 4.6a, 4.6b and 4.6c.

Table 4.6a reveals that external debt default has no significant effect on domestic debt outstanding in Nigeria within the period of the study. Again, none of the control variables exerted a significance influence of domestic debt.

From Table 4.6b, external debt again has no significant effect on Nigeria’s external reserve. However, it is worthy to note that one of the control variable: exchange rate has a unidirectional relationship with external reserve. This implies that exchange rate has a significant influence on external reserve. Causality flows from exchange rate to external reserve at 5% level of significance. From the 5% significance level of exchange rate, the result in Table 4.4b on the positive significant relationship between exchange rate and external reserve is authenticated.

Table 4.5b. Johansen co-integration result for ETR, EDD, EXR and FD

Unrestricted co-integration rank test (Trace) ETR, EDD, EXR and FD				
Hypothesized number of CE(s)	Eigen value	Trace statistic	0.05 critical value	Prob..
None *	0.604326	56.21663	47.85613	0.0068
At most 1	0.506101	28.40172	29.79707	0.0718
At most 2	0.213143	7.238974	15.49471	0.5500
At most 3	0.001589	0.047712	3.841466	0.8271
Unrestricted co-integration rank test (Maximum eigen value) ETR, EDD, EXR and FD				
Hypothesized number of CE(s)	Eigen value	Maximum eigen statistic	0.05 critical value	Prob..
None *	0.604326	27.81491	27.58434	0.0467
At most 1*	0.506101	21.16275	21.13162	0.0495
At most 2	0.213143	7.191261	14.26460	0.4668
At most 3	0.001589	0.047712	3.841466	0.8271

*Trace test and Max-eigenvalue test indicate 1 and 2 co-integrating eqn(s) at the 0.05 level respectively; * denotes rejection of the hypothesis at the 0.05 level; **MacKinnon-Haug-Michelis (1999) p-values*

Table 4.5c. Johansen co-integration result for BOT, EDD, EXR and LDR

Unrestricted co-integration Rank Test (Trace) BOT and EDD, EXR and LDR				
Hypothesized number of CE(s)	Eigen value	Trace statistic	0.05 critical value	Prob..
None	0.577606	39.91050	47.85613	0.2257
At most 1	0.366268	14.05602	29.79707	0.8375
At most 2	0.007903	0.372156	15.49471	1.0000
At most 3	0.004461	0.134129	3.841466	0.7142
Unrestricted co-integration rank test (Maximum eigen value) BOT, EDD, EXR & LDR				
Hypothesized number of CE(s)	Eigen value	Maximum eigen statistic	0.05 critical value	Prob..
None	0.577606	25.85449	27.58434	0.0819
At most 1	0.366268	13.68386	21.13162	0.3915
At most 2	0.007903	0.238027	14.26460	1.0000
At most 3	0.004461	0.134129	3.841466	0.7142

*Trace test and Max-eigenvalue test indicate no co-integrating eqn(s) at the 0.05 level; * denotes rejection of the hypothesis at the 0.05 level; **MacKinnon-Haug-Michelis (1999) p-values*

Table 4.6a. Granger causality result DDO, EDD, INF and FD

Null hypothesis:	Obs	F-Statistic	Prob.	Remarks
EDD does not Granger Cause DDO	30	0.34566	0.7111	No causality
DDO does not Granger Cause EDD		0.10435	0.9013	No causality
INF does not Granger Cause DDO	30	0.17689	0.8838	No causality
DDO does not Granger Cause INF		0.98464	0.3861	No causality
FD does not Granger Cause DDO	30	0.24778	0.7822	No causality
DDO does not Granger Cause FD		0.64346	0.5331	No causality
GDP does not Granger Cause DDO	30	1.97864	0.1571	No causality
DDO does not Granger Cause GDP		0.45867	0.6368	No causality
TOP does not Granger Cause DDO	30	2.49088	0.1010	No causality
DDO does not Granger Cause TOP		1.77555	0.1879	No causality

Source: Computer analysis using E-views 8.0

Table 4.6b. Granger causality result ETR, EDD, EXR and FD

Null Hypothesis:	Obs	F-Statistic	Prob.	Remarks
EDD does not Granger Cause ETR	30	0.08050	0.9229	No causality
ETR does not Granger Cause EDD		0.02887	0.9716	No causality
EXR does not Granger Cause ETR	30	3.69678	0.0376	Causality
ETR does not Granger Cause EXR		0.62861	0.5407	No causality
FD does not Granger Cause ETR	30	0.09527	0.9094	No causality
ETR does not Granger Cause FD		0.82705	0.4477	No causality

Source: Computer analysis using E-views 8.0

Table 4.6c. Granger causality result BOT, EDD, EXR and LDR

Null hypothesis:	Obs	F-statistic	Prob.	Remarks
EDD does not Granger Cause BOT	30	0.10982	0.8964	No causality
BOT does not Granger Cause EDD		0.68385	0.5139	No causality
EXR does not Granger Cause BOT	30	1.71739	0.1979	No causality
BOT does not Granger Cause EXR		5.97203	0.0069	Causality
LDR does not Granger Cause BOT	30	1.14319	0.3332	No causality
BOT does not Granger Cause LDR		0.21793	0.8055	No causality

Source: Computer analysis using E-views 8.0

Finally, it would be inferred from Table 4.6c also that external debt default has no significant effect on balance of trade. The p-value of the F-statistic is statistically insignificant at 5%. Nevertheless, balance of trade has a significant effect on exchange rate. This suggests that if Nigeria improve vehemently and continually on her balance of trade, then the exchange rate of Naira against will appreciate as was the case in 1970s when Nigeria solely dependent on export of agricultural commodities.

4.7 Test of Hypothesis

Decision Criteria: If the F-statistic in Granger causality test is less than 0.05, the null

hypothesis is rejected. On the other hand, if the F-statistic in Granger causality test is greater than 0.05, the null hypothesis is accepted.

The result of the pairwise granger effect assessment test in Tables 4.6a, 4.6b and 4.6c have proved beyond reasonable doubt that the null hypothesis that external debt default has no significant effect on domestic debt, external reserve and balance of trade would not be rejected. This based on the ground that the p-values of the F-statistic for external debt default in the models are insignificant at 5% level of significance.

5. CONCLUDING REMARK AND POLICY IMPLICATIONS

This study assessed the long run association between external debt default, domestic debt outstanding, external reserve and balance of trade as well as the significant effect of external debt default on domestic debt outstanding, external reserve and balance of trade over a period of thirty five years. In an attempt to achieve these objectives, this study utilised various econometric tools such as unit root test, Johansen co-integration, granger causality assessment test and diagnostic test of serial correlation, Ramsey Specification, Heteroskedasticity and test of multicollinearity. The result of the analysis indicates the existence of a long run association between external debt default, domestic debt outstanding and external reserve but no long run association between external debt default and balance of trade. The finding also indicates that external debt default has no significant effect on domestic debt outstanding, external reserve and balance of trade. Consequently, the null hypothesis as developed in section one would not be rejected based on the p-values of external debt default for the three models as it is statistically insignificant at 5% level of significance. This study concludes that there is a long run relationship between Nigeria external debt default on the level of her external reserve and domestic debt only.

The existence of a statistically significant negative relationship between external debt default and external reserve is an indication that the government should discontinue from further external borrowing as this depletes the external reserve to a considerably high extent and increases debt obligation of the government to the citizens, hence may crowd out investment in the country. In consideration of the significant effect of exchange rate on external reserve on one side and balance of trade on exchange rate on the other side, the government should as a matter of urgency diversify the economy from oil dependent to export oriented as was the case in the 1970s on the premises that a favourable and continually improved balance of trade position would lead to appreciation of the Naira against the US dollar, and an increase in the value of Naira on the other hand would increase exports by citizens which in turn lead to economic growth and development of Nigeria. Accordingly, all relevant stakeholders: Central Bank of Nigeria (CBN), financial institutions, International Monetary Fund (IMF), international trading

partners and organised private sector need to collaborate to grow the real sector with the view of decreasing Nigeria's dependence on imports in favour of growing export revenue. Building the external reserve is key as it shows the way to external borrowing and the attendant default.

COMPETING INTERESTS

Author has declared that no competing interests exist.

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