

# GLOBALIZATION AND THE DEVELOPING ECONOMIES: SOME EMPIRICAL LESSONS FROM NIGERIA

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## ABSTRACT

In this paper Nigeria's experience is used to highlight the challenges facing developing economies that must, as is often said, keep with the Joneses by opening up to the rest of the world. We have specified a model of the relationship between economic growth and selected macro-economic variables. Using the vector auto regressions technique, we have established a rather unsavory influence on the country's economic growth prospects of openness, exchange rate fluctuations, fiscal deficits, average world price of primary products, and balance of payments disequilibria. We have also confirmed the positive influence on economic growth of a rising volume of external reserves, net foreign indebtedness and foreign direct investment. Obviously therefore, globalization has its own costs and benefits. Consequently, what is necessary is a properly regulated approach to globalization so as to ensure that, on balance, its benefits far surpass its costs. To this end, we have charted the contours of an appropriate development strategy for developing economies which favour a guided approach, in deference to the inevitability of globalization.

**KEYWORDS:** Globalization, Openness, Development and Technology

## INTRODUCTION

Globalization, which demands, among other things, neutrality in trade policy connotes openness. It is a process through which an increasingly free flow of ideas, people, services, capital and culture leads to the integration of national economies and societies across the globe. It is a call on national economies all over the world to be open, as a matter of deliberate policy, to trade, international capital movements and the mobility of labour.

According to its apostles, globalization is expected to boost the standard of living in all participating countries through rising incomes and the transfer of sophisticated technology (as in informatics and biotech agriculture) from the developed to the developing economies through promoting human freedom by spreading information that broadens their choices (Annam-Yao, 1996).

Globalization has a very long history. It is common knowledge that the world was already highly globalized by the end of the 19<sup>th</sup> century. The abolition of the corn law in 1864, the two world wars, the great depression of the 1930s and the activities of the multinationals all led to growth in trade, followed by unprecedented flows of international capital.

Besides, colonialism was essentially about creating a more integrated global economy controlled by the metropolitan countries. Falling ship costs were accompanied by a rapid rise in trade, and in 1913 the ratio of world trade to world output reached a peak that could only be matched in the 1970s. This growth in trade was followed by unprecedented flows of capital and mass migration, especially, to the Americas and Europe (Ndiyo, 1999; Aninat, 2002). These all bear testimonies to the early globalization process, albeit a narrow one, compared to what we are witnessing today.

The expansion of trade, the diffusion of technology and the cross fertilization of diverse cultures and ideas are quite familiar. It is therefore proper to say that globalization has always been with us. What is novel and, therefore, curious about the new wave of globalization is the rate, depth and intensity with which global markets are created and integrated, and the rein it has given to financial (speculative) capital. A feature of the modern form of globalization is that the ease with which information is processed and exchanged is capable of breaking barriers that may be imposed by culture

and domestic commercial policies. It is this revolution in information technology that has served as a catalyst to the new form of globalization; a revolution that is making the pursuit of an independent national monetary policy difficult.

There are fears therefore that globalization would erode national policy sovereignty by encouraging policy interdependence. It would also lead to environmentally damaging production and consumption methods; high unemployment which is a source of diverse migration, and violence which is damaging to the social sector. Globalization is also associated with rapid spread of shocks and disturbances as these are transmitted from one market to another. Yet the ability to adjust to absorb such shocks and achieve macro-economic stability in developing economies is less than that of advanced economies (Annam-Yao, 1996).

Not surprising, therefore, the new wave of globalization has come under severe attacks of recent. The antiglobalizers have raised questions as to whether poor developing countries actually share in its benefits. They contend that while the new technological revolution may have opened up new professional opportunities in the advanced economies, it is observed to have significantly reduced labour requirements and employment opportunities in the developing economies. They have alluded to such other costs of globalization as loss of local control over domestic economic programmes, de-industrialization, and the erosion of culture and communities (Aninat, 2002).

There is no doubt that greater integration into the world economy and the tendency towards a global village provide, perhaps, the surest path to a more secured and peaceful world and a more hopeful future (World Bank, 1988). However, as a developing country, Nigeria occupies a weak position in the world economy. The phenomenon of globalization appears to be a constraint; as she cannot be expected to pose any serious resistance to the demands of stronger economies. Weak and underdeveloped economies which open their markets and adopt difficult reform policies without safety nets face the gloomy prospects of increased poverty, unemployment, instability, corruption and the mutilation of indigenous socio-cultural institutions and values (Ihonvbere, 2002:2; Tandon, 1998). Being caught in the web of constant global interactions, there is an urgent need for developing economies not only to understand the challenges globalization poses but also how to handle them.

In this paper, we treat globalization largely as an economic phenomenon and have attempted to show how best its benefits can be distributed equitably and costs more fairly shared between the developed and the developing economies. Using Nigeria as a case study, we do this by demonstrating the challenges that globalization poses to developing economies, specifying the roles to be played and who should play what role and why.

The rest of the paper is divided into five parts. These introductory remarks are followed by a discussion of the economic channels of globalization in part two. The framework of analysis comprising the model as well as the data and method of analysis are the focus of part three. Drawing empirical lessons from Nigeria's experience constitute the contents of part four. We present the policy implications of our findings and the recommendations in part five. The paper ends in part six with the summary and conclusion.

## 2. The economic channels of globalization

Apart from the institutional channels (the reformed Bretton woods institutions, the World Trade Organizations, the G8, and the Transnational Corporations), the economic channels through which globalization affects a given economy are highlighted below.

- (i) **Openness:** Economic growth is an overriding objective in developing countries. The share of imports and exports in overall output provides a ready measure of the extent of globalization of the goods markets. Growth theories suggest a positive relationship between openness and the rate of growth of GDP in the long run. Ekpo (1995) asserts that openness to trade enhances an economy's growth rate since it provides access to a variety of imported inputs, especially technology. Again openness expands the market for domestic exports, returns to innovation and specialization (Roemer, 1986; Martin, 1992 and Ekpo, 1995). However Martin (1992:6), also points to the fact that the new growth literature does not predict that greater will unambiguously raise the growth rate of national output. It is rather shown that growth can be lowered by increased foreign competition or it can be increased by import protection, if protection promotes investment in research-intensive production. Hence, since the new growth literature is not clear about how increased openness affects the growth rate of an economy, the direction of the growth impact of openness has therefore remained an empirical issue.
- (ii) **Foreign direct investment (FDI):** The flows of capital-debt, portfolio equity, and direct and real estate investment-between one country and the others are recorded in the capital account of its balance of payments. Outflows include residents' purchases of foreign assets and repayment of foreign loans; inflows include foreigners' investments in home-country's financial markets and loans to home-country residents (Eichengreen, et, al, 1999:2). Allowing capital to flow freely in or out of a country without controls or restrictions is known as capital account liberalization. An inflow is known as foreign direct investment. Under globalization, foreign direct investment is given a free rein. Classical economics argues that international capital mobility allows countries with limited savings to attract financing for productive domestic investment projects; that it enables investors to diversify their portfolios; that it spread investment risk more broadly; and that it promotes inter-temporal trade, the trading of goods today for goods in the future. In turn, higher rates of

return can encourage saving and investment that deliver faster economic growth. There is therefore a positive relationship between FDI and economic growth.

- (iii) **External reserves:** The external reserves of a country are the financial assets available to its monetary authorities to meet temporary imbalances in external payments position as well as pursue other policy objectives. External reserves management is the technique of optimizing a country's external resources to complement domestic resources with which to meet its economic needs. In Nigeria the Central Bank of Nigeria has the sole responsibility for the management of external reserves, comprising monetary gold, reserve position in the International Monetary Fund (IMF), holdings of Special Drawing Rights (SDRs), and foreign exchange (CBN, 1988). The management of the reserves affects the conduct of monetary policy and ultimately the performance of the economy. This is because changes in net foreign assets could influence the level of money supply directly. Therefore, one of the major objectives of external reserves management is to maintain an adequate level of reserves to facilitate international transactions. This, of course, can affect economic growth positively.
- (iv) **Foreign exchange rate:** The strength of a country's currency depends on a number of factors including the state of the economy in terms of the competitiveness and volume of its exports; the level of domestic production; and the quantum of foreign reserves (CBN, 1999). In a free-market system, the exchange rate of a country's currency is determined by the interplay of the supply of and demand for that currency. In some cases, the exchange rate may be administratively determined. The main objectives of exchange rate policy are to preserve the international value of the domestic currency; maintain a favourable external reserve position; and ensure external balance without compromising the need for internal balance and the overall goal of macro-economic stability. During a period of rapid economic growth, driven by the twin forces of globalization and liberalization of markets and trade, the shift from fixed exchange rates toward more flexible exchange rates seems to have served a number of countries well. But the challenges facing countries may change overtime, suggesting a need to adapt exchange rate policies to changing circumstances. Where the importation of essential goods and services that will improve the well-being of the poor becomes costly, as a result of increase in prices of domestic goods there is a reduction in the purchasing power of the domestic currency. Hence, the well being of the common man deteriorates because the amount of money at his disposal cannot buy the needed quantity of goods and services, following a depreciation of the domestic currency. Therefore, a globalization process that leads to high naira exchange rate can further increase distress in the economy – a sense in which growth and exchange rate are said to be inversely related (Caramazza and Aziz, 1998).
- (v) **Net foreign indebtedness:** Economic theory suggests that reasonable levels of borrowing by a developing country are likely to enhance its economic growth and reduce poverty. Countries at the early stages of development have small stocks of capital and are likely to have investment opportunities with rates of return higher than those in advanced

economies (Pattillo, et al., 2000). As long as they use such borrowed funds for productive investment and do not suffer from either macro-economic instability or policies that distort economic incentives, growth should increase and allow for timely debt repayments. However, the explanation for the slow growth in Nigeria resulting from accumulated external debt could be found in debt overhang theories.

These theories show that if there is some likelihood that, in the future, debt will be larger than a country's repayment ability, expected debt-service costs will discourage further domestic and foreign investment and thus harm economic growth. The increase in Nigeria's external debt stock has been complicated, among other things, by accumulated debt payment arrears; penalties on payments due but not made; and the exchange rate of the creditor countries vis-à-vis the Nigeria (Olaniyan, 1997:225).

(vi) **Fiscal deficits:** Fiscal deficit is a reliable indicator of overall macro-economic stability. High deficits show up in external debt crisis, inflation, shortage of foreign exchange, high interest rate and crowding-out of investment. Deficits trigger volatility in interest rates and exchange rates and render highly indebted countries vulnerable to global market forces and declining national savings and investment (Weiner, 1995; Ball and Mankiw, 1995; Masson, 1985; World Bank, 1988; Anyanwu, 1997).

Government expenditure must correspondingly match its revenues, in order to curtail fiscal deficits. The issue of fiscal deficit and the long-run sustainability of such deficits have become central to fiscal policy planning and management in Nigeria (Komolafe, 1999:7). Anyanwu (1997), is of the opinion that fiscal deficits siphon funds from productive investment thereby retarding growth and ultimately reducing standards of living. It also creates potentially large burdens on future generations. In the long run, the fall in investment lower the capital stock, reducing the productive capacity of the economy and real wages.

(vii) **Average world prices:** Continuous rising prices are another cause of economic depression. Inflation is an economic phenomenon that shows in a persistent rise in the general price level. It has a widespread effect on every citizen and in all of the economy. When prices rise the purchasing power of money falls and this leads to the impoverishment of the middle lower and poorer sections of the society (Gbosi, 2001). It is a problem that has often proved difficult to tackle largely because any purposeful attempt at curing it would entail a trade-off among other important macro-economic and social objectives: such as employment, social safety nets, crime and economic growth (Jhingan, 1997). In other circumstances, inflationary pressures are reflected in an excessive drain of the country's foreign exchange reserves as imports become cheaper. A globalizing economy is open to the vagaries of world prices of which it has no control.

(viii) **Balance of payments:** Net exports or trade balance is often defined as exports less imports. When the trade balance is negative we say there is a trade deficit, and if it is positive, we say there is a trade surplus. The balance of payments accounts keeps track of all the trade transactions between one country and the rest of the world. There are two parts to the balance of payments: the current account and the capital account. (for details of these sub-

accounts, see Taylor, 1995: 1040-1046). As a monetary tool, a favourable balance of payments position is an indication of a healthy economy. Macro-economic management for growth and stability demands that these variables be kept under strict control. It is doubtful whether a globalizing nation can be allowed a free hand to exercise such a control.

3. Framework of analysis

3.1 The model

The national income accounting framework in an open economy expresses aggregate demand (AD) as

$$AD \Rightarrow Y^d = C + I + G + (X - Z) \quad (1)$$

Where;

- $Y^d$  = Aggregate demand (AD)
- $C$  = Consumption expenditure
- $I$  = Investment expenditure
- $G$  = Government expenditure
- $X$  = The value of export goods and services
- $Z$  = The value of import goods and services

In the same way the aggregate supply (AS) is

given as: -

$$AS \Rightarrow Y^s = C + S + T \quad (2)$$

Where;

- $Y^s$  = Aggregate supply
- $C$  = (as defined in equation 1)
- $S$  = Savings
- $T$  = Taxes

In the keynesian macro-economic theory, the equilibrium levels of output and employment are determined jointly by aggregate supply and aggregate demand, thus:

$$C + S + T \equiv Y \equiv C + I + G + (X - Z) \quad (3)$$

By rearranging terms, the equilibrium condition for an open goods market in equation (1) is written as:

$$Y - (C + I + G) = X - Z \quad (4)$$

$$Y - A = X - Z \quad (5)$$

Where

- $A = (C + I + G)$  = Domestic absorption
- $X - Z$  = External current account balance.

Equation (5) says that an excess of domestic absorption over national income is equal to an external current account (CA) deficit. The equation also shows that a surplus on CA necessarily requires domestic absorption to be smaller than domestic national income. Equation (3) can alternatively be expressed as

$$(S - I) + (T - G) = X - Z \quad (6)$$

Which says that the sum of net saving by the private sector ( $S - I$ ) and net saving by the government ( $T - G$ ) equals the external balance. The implication of a deficit, therefore, is that the economy is engaged in net dissaving as it is using more resources than are made available by its national product. This excess is obtained from abroad and financed by net borrowing and depletion of foreign exchange reserves.

But since we need to measure all the expenditure in the same currency, the imports of goods and services should amount to  $Z$  units of foreign currency. Valuing this in terms of the domestic currency is to divide  $Z$  by the exchange rate,  $e$ , which is the number of units of foreign currency that can exchange for one unit of domestic currency. That is, equation (5) now becomes

$$Y = A + X_e - 1/eZ \quad (7)$$

Or, from equation (5),

$$Y - A = X - Z(I/e) \quad (8)$$

Identities (6) and (8) show that the BOP, which is a macro-economic phenomenon must always be equal to the difference between national income and domestic absorption (i.e.,  $Y - A$ ). A deficit on the CA implies that current domestic absorption (or domestic aggregate expenditure on goods and services) is greater than national income and that excess of expenditure over income is financed by borrowing from abroad, selling existing assets to foreigners or by running down foreign reserves. The identities show that any policy, which will successfully eliminate a BOP deficit on CA, must increase national income ( $Y$ ) more than it increases domestic absorption ( $A$ ). The identities also show that a surplus on CA necessarily requires domestic absorption to be smaller than domestic income. This implies that domestic savings and taxes are larger than domestic investment and government expenditure and that the difference is spent on the net acquisition of foreign assets (Levacic and Rehmann, 1982).

According to the "New Cambridge" school of economists, the net acquisition of assets by the private sector ( $S - I$ ) is a stable linear function of disposable income. Therefore, they conclude that fluctuation in income and in the balance on CA are often induced by changes in government fiscal stance. Thus, if  $S - I$  is not greatly changed by an increase in income, then identity (6) implies that any change in the government budget deficit or surplus will be mirrored in the balance on CA. Hence any increase in the government budget deficit (i.e., fall in budget surplus) will result in a decline in the balance on CA. This shows that development in the current account is a function of three factors: domestic absorption, foreign absorption and the real exchange rate. Therefore, national accounting is influenced by both domestic and foreign factors with the prospects of synergetic effects.

From the foregoing, it is pertinent that equation (7) be extended further by adding portfolio adjustments to take account of other factors in the external component of aggregate output. It is pertinent that equation (7) be extended further by adding portfolio adjustments to take factors in the external component of aggregate output. Following the Mundel-Fleming model of open macro-economics in Obaseki (1999), the openness equation, which captures some aspects of globalization by providing impetus for socio-economic integration, can be expressed as:

$$GDP_g = \pm + + \pm + - \pm \quad (9)$$

$$\text{f(OPEN, FDI, EXTR, NFI, FDEF, WPRICE, BOP)}$$

Where

GDP <sub>g</sub>	=	Growth rate of output
OPEN	=	Openness [(X + M)/GDP]
FDI	=	Foreign direct investment
EXTR	=	External reserves
FEXR	=	Foreign exchange rate
NFI	=	Net foreign indebtedness
EDEF	=	Fiscal deficit
WPRICE	=	Average world prices
BOP	=	Balance of payments.

The signs above the variables express a priori expectations. We are conscious that openness, foreign exchange rate, net foreign indebtedness and balance of payments may exhibit unpredictable movements depending on their levels. It is influenced by factors such as the strength of the domestic economy, the competitiveness of the external sector, and external account balance, among others (Obaseki, 1999).

### 3.2 Data and method of analysis

Annual time series data covering 1970 – 2000 have been used. The basic data for this analysis are GDP, exports, imports, foreign domestic investment, external reserves, foreign exchange rate, net foreign indebtedness, fiscal deficit, average world prices, and balance of payments. These data were collected from three main sources: *International Financial Statistics Year Book* – a publication of the IMF; *Statistical Abstract* – a publication of Nigeria's Federal Office of Statistics and *Statistical Bulletin* – a publication of the Central Bank of Nigeria. All variables except BOP and FDEF are in logarithmic form. Also, GDP, FDI, EXTR, NFI, were converted to real terms using GDP deflator.

There is a general tendency for time series data to contain a unit root. Consequently, an attempt has been made to render the data stationary prior to specification and estimation. Moreover, as the residuals of non-stationary time series are correlated with their own lagged values, a standard assumption of ordinary least squares (OLS) theory, that disturbances are not correlated with each other, is violated. Hence, OLS estimates of such series are biased and inconsistent, and standard errors computed with such random walk variables are generally underestimated. In that case, OLS is no longer efficient among linear estimators (Ndiyo, 2003). This study employs a vector autoregressive (VAR) technique that is commonly used for forecasting systems of interrelated time series and for analyzing the dynamic impact of random disturbances on a system of variables.

The adoption of VAR is informed by the fact that VAR methodology of potentially spurious a priori constraints that are employed in the specification of structural models. Also, since few restrictions are placed on the way in which the system of variables interact, this method is well suited for examining the channels through which a variable operates. The VAR approach sidesteps the need for structural modeling by modeling the endogenous variable as a function of its lagged value. Since only the lagged value of the endogenous variable appears on the right hand side of the equation, there is no issue of simultaneity. In effect, the strength of the VAR model lies in its ability to incorporate the residual from the past observation into the regression model for the current observation. The approach also has the advantages of being easy to understand, generally applicable, and easily extended to nonlinear specifications and models that contain endogenous right-hand-side variables. In addition, the nonlinear least squares estimates of this method are asymptotically equivalent to maximum likelihood estimates and are asymptotically efficient. The coefficient may be interpreted in the usual manner, but the results involving the residuals, differ however, from those computed under OLS settings.

### 4. Empirical lessons

We approach the issue of drawing empirical lessons from Nigeria's experience in the following three stages: the correlation analysis, the stationarity test, and vector autoregressive (VAR) regressions.

#### 4.1 Correlation analysis

The correlations matrix below provides the opportunity to assess the degree of multicollinearity between the variables of the model before the regression analysis. The first column of figures indicates the correlation between the dependent variable and the explanatory variables. The other columns indicate the correlations of the independent variables to themselves and to each other.

Table 1: Correlation matrix of growth and globalization variables

VARIABLE	LGDP	LOPEN	LFDI	LEXTR	LFEXR	LNFI	FDEF	LWPRICE	BOP
LGDP	1.000000								
LOPEN	0.432497	1.000000							
LFDI	0.799279	0.526102	1.000000						
LEXTR	0.779418	0.543789	0.939453	1.000000					
LFEXR	0.815035	0.541282	0.891823	0.801956	1.000000				
LNFI	0.824343	0.520896	0.968243	0.902528	0.960710	1.000000			
FDEF	0.795221	0.647935	0.811258	0.578834	0.084173	0.953478	1.000000		
LWPRICE	0.780680	0.592075	0.982279	0.938754	0.849066	0.929983	0.597274	1.000000	
BOP	0.096336	0.542218	0.017290	0.283998	0.057899	0.024666	0.699053	0.091775	1.000000

Note: L implies natural log. Source: Computed by the Authors.

First, the correlations between GDP (dependent variable) and the independent variables show impressive coefficients that range between 0.43 and 0.93. However, only BOP shows weak relationships with most variables, except OPEN and FDEF variables. Other coefficients are strongly correlated with one another except FDEF and FEXR with a weak correlation coefficient of 8 percent. Thus, multicollinearity is a serious problem in the model.

#### 4.2 Stationarity test

The stationarity status of the series is established by considering the order of integration of each series using the Augmented Dickey-Fuller (ADF) and the Philips-Perron (PP)

classes of unit root tests. We use the PP approach to test for stationarity of the variables because PP test statistic, which is a modification of the ADF, takes into account the less restrictive nature of the error process. Moreover, this replaces the use of lags in the ADF test, which has been criticized as being arbitrary (Nyong, 2003). Both the ADF and the PP tests strongly support the hypothesis that the variables used are non-stationary. Thus, the hypothesis of stationarity is rejected. The results show that the variables are integrated of order one or two and become stationary after first or second differences, respectively. We thus conclude that they have unit roots Dickey and Fuller, 1981; Hendry, 1986; Engel and Granger, 1987; Philips and Peron, 1988; Johnansen, 1988.

Table 2: Stationarity Test

Variable	Augmented Dickey-Fuller Test		Phillips-Peron Test		Remark
	Without Trend	With Trend	Without Trend	With Trend	
LnGDP	-2.255950	-0.835725	-1.670209	-0.627839	1(1)
DLnGDP	-3.223708	-4.406573	-4.482049	-5.239263	1(0)
LnOPEN	-0.381768	-2.454174	-0.048824	-1.963222	1(1)
DLnOPEN	-3.236101	-3.175417	-3.620313	-3.550203	1(0)
LnFDI	-5.002796	-4.870921	-6.882777	-6.721202	1(0)
LnWPRICE	-1.054111	-1.258227	-1.056004	-1.763785	1(1)
DLnWPRICE	-4.914201	-4.930813	-6.772896	-6.751859	1(0)
FDEF	-0.240051	-2.614794	-0.387472	-1.927179	1(1)
DFDEF	-3.506904	-3.386161	-2.687736	-2.599333	1(0)
LnFEXR	-5.328134	-5.395836	-5.247111	-5.327093	1(0)
LnERES	-2.514444	-2.042844	-0.107043	-1.909457	1(1)
DLnERES	-5.891070	-4.401478	-3.949951	-5.900762	1(0)
BOP	-3.572136	-3.486210	-6.695218	-5.722748	1(1)
DBOP	-5.896242	-5.910247	-3.741559	-2.891143	1(0)
LnNFI	-1.439263	-1.154111	-1.758227	-2.355950	1(1)
DLnNFI	-3.763222	-4.814201	-4.830813	-3.423708	1(0)
<b>Critical Values</b>					
i) Level					
1%	-3.6752	-4.3082	-3.6661	-4.2949	
5%	-2.9665	-3.5731	-2.9627	-3.5670	
ii) 1 <sup>st</sup> difference					
1%	-3.6852	-4.3226	-3.6752	-4.3082	
5%	-2.9705	-3.5796	-2.9665	-3.5731	

Source: Computed by the Authors.

The tests for unit root among the variables employed in the regression equations are shown in Table 1. Very interesting insights are gained from the exercise. First, real gross domestic product (GDP) has a unit root based on the ADF test. The result is robust with respect to alternative PP

test for unit root. The results also show that OPEN, WPRICE, EXTR, FDEF, NFI, and BOP have unit roots and are integrated of order one. However, FDI and FEXR are stationary at level. This means that all the explanatory variables in the model do not have the same order of integration.

### 4.3 Vector autoregressive (VAR) regressions

The explanatory power of the VAR model is high across the 3 specifications shown in table 3. the  $R^2$  and even the adjusted  $R^2$  in all results are satisfactory, indicating that the arguments highly explain variations in national output.

Table 3: Preferred specification of VAR model Dependent variable: LGDP

Variables	1	2	3
LGDP-1	1.983* (1.69)	2.507** (1.5)	3.46** (2.84)
LGDP-2		0.051*** (3.49)	
DLOPEN	-0.173* (-2.25)	0.144* (1.85)	-0.211** (-2.39)
LFDI	0.254 (1.29)	0.253 (1.09)	0.209* (2.08)
LERES	0.411*** (4.19)	0.361*** (3.72)	0.29** (2.83)
DLERES	0.04** (2.30)		0.014 (1.03)
LFE XR	-1.267 (-1.64)	0.314** (2.39)	-1.6427* (-1.99)
DLNFI	2.621* (2.02)	3.391** (2.70)	
DFDEF	-0.002 (-0.03)	0.010 (0.14)	-0.059** (-2.84)
LWPRICE		0.171 (1.82)	-0.024** (-2.52)
DLWPRICE	-0.229*** (-4.18)	-0.206*** (-3.74)	0.158** (2.79)
BOP	-0.185*** (-3.43)	-0.211** (-2.66)	
$R^2$	0.88	0.78	0.59
Adj- $R^2$	0.83	0.72	0.85
F-statistic	15.60	18.52	23.97
SER	0.066	0.069	0.077
Number observation	30	29	30

**Note:** t- statistic in parentheses  
 \* = Significant @ 10 percent level;  
 \*\* = Significant @ 5 percent level;  
 and  
 \*\*\* = Significant @ 1 percent level.

**Source:** Computed by the Authors.

Most of the estimated parameters have the expected signs and are statically significant at the 5% level of significance ( see the t-values).

- (i) Openness is observed to be inversely related to (have a depressing effect on) growth, confirming the import dependency syndrome of the Nigerian economy.
- (ii) Net foreign indebtedness tends to increase with economic growth. This result, however, should be interpreted with caution since a large part of the Nigerian external debt is channeled into unproductive investment within and outside the country.
- (iii) BOP has been used here to gauge the contribution of foreign trade to overall national output. Its negative coefficient indicates higher level of imports to export reflecting a trade balance that has been persistently in deficit and an export sector that has remained monoculture in nature. Other factors that contribute to this deplorable situation include;
  - non-performance of the non-oil sector,

- increased external debt burdens, and
  - misalignment of the exchange rate.
- (iv) Growth in external reserve has not been too impressive in Nigeria. Having been continually used to finance overall balance of payment attributed to unfavourable oil prices in the international market for a good part of the period under review.
  - (v) The positive but insignificant coefficient of foreign direct investment in the estimated model may be due to the fact that as capital inflows increase, tension will likely develop between the authorities desire to contain inflation and to maintain a stable (and competitive) exchange rate. As a sign of overheating appears and investors become increasingly aware of the tension between the two policy goals, a turnaround in market sentiments may occur, triggering a sudden reversal in capital inflows which could warrant the observed negligible contribution to economic growth.
  - (vi) Average world prices impacted negatively on economic growth in Nigeria. As a variable source of imported inflation in Nigeria, this is to be expected.
  - (vii) The role of foreign exchange (FEXR) appears contractionary but significant in the model. Theoretically, depreciation of a currency should encourage exports and discourage imports. This could be the case in a monocultural economy like Nigeria. Rather, the impact of too high real exchange rate volatility has been inflationary, promoting neither economic growth nor employment. The explanation is that beguiled by sometimes large interest differential between loans made in foreign and domestic currencies, banks and corporations in Nigeria make liberal use of foreign currency denominated debt. The large devaluation that subsequently occurred raises the domestic currency value of the debt, wreaking havoc and inducing financial distress and major dislocations in credit, employment, output and prices.
  - (viii) The relationship between economic growth and fiscal deficits (FDEF) is negative but significant. The size of the coefficient is an indication of the extent of needed external resources. This evidence is in line with cross-country observations, which support the argument that the reduction of current account imbalances in developing countries requires fiscal discipline. Inappropriate fiscal policy resulting in fiscal deficits and huge public debts burden are important sources of macroeconomic instability in the developing economies.

### 5. Policy Implications and Recommendations

The negative impacts on existing macroeconomic growth (output) levels of openness, balance of payments position, world prices, foreign exchange and fiscal deficits have shown up in the relationship estimated above. Only net foreign indebtedness and foreign indebtedness and direct investment related positively with national output. Either way, it is obvious that the economy is fragile and ill-prepared for the stress of globalization. Below we highlight the policy implications of each of these relationships and make recommendations.

- (i) The negative relationship between openness and output strengthens the case for a package of policies aimed at stemming the economy's dependence on import and its narrow export base. To this extent the on-going privatization exercise makes a lot of sense if it seeks to achieve these goals. A case is also made

- for a gradual approach to globalization to shield the economy from the full impact of its costs.
- (ii) The positive but insignificant effect of foreign direct investment on output notwithstanding, volatility in cross-border capital flows appears to have come to stay. This calls for policies that check excessive reliance on short-term capital flows, even though such short-term flows may help provide liquidity to the currency market.
  - (iii) The negative effect of balance on growth can be stemmed by policies that promote the competitiveness of the domestic economy, reduce the debt burden and moderate fluctuations in the foreign exchange rate. The positive showing of external reserves variations is commendable only if its accumulation was not at the expense of productive economic activities that had to be stalled because vital machines, equipment and spares could not be imported.
  - (iv) The behaviour of the external debt variable calls for a strategy that exercises tight controls on new loans. Meanwhile, efforts should continue at debt reduction (if not total elimination) of the debt stock, either through debt buy-back, cancellation, or where justifiable, outright repudiation.
  - (v) That national output is inversely related to world prices is not surprising. As a primary producer/exporter, the economy is merely a price-taker. It is necessary to be able to foster and sustain open trade and payments in favourable terms. The possibility of opening up new markets should be explored. At home, efforts should be geared towards redirecting production towards local inputs and consumption towards home-made goods.
  - (vi) The negative but significant relationship between growth and the foreign exchange rate is instructive. A flexible exchange rate policy appears desirable. However, exchange rate flexibility need not imply free-floating exchange rate regimes. It may involve adopting wider bands, around formal or informal central parities, while effecting interventions within the band.
  - (vii) The relationship between national output and fiscal deficit is to be expected. Fiscal crisis in the form of unsustainable fiscal deficits in Nigeria are due to heavy expenditures on subsidies and transfers to loss-making enterprises, or over-ambitious public investment programmes. Fiscal policy reforms are necessary to restore macro-economic stability. This should include cutting down on the size of public-sector deficits. It is necessary because fiscal crisis, which usually manifests in the form of large budget deficits creates external disequilibrium and macro-economic instability in Nigeria.

## 6. SUMMARY AND CONCLUSION

In this paper, we have treated globalization as a market place for integrating national economic decisions that foster free market disciplines, investment flows and trade. Using the vector autoregressive approach, we have examined selected macro-economic variables to determine how they have fared as a typical developing country like Nigeria globalizes.

We have found that globalization could have some positive but more negative effects on the Nigerian economy. We suspect that the negative impacts are predominant because the Nigerian

economy is not yet ready for full-scale globalization. It is yet largely a price taker in many respects. It has neither the economic power nor the political clout to control, let alone stop the process. Internal distortions abound in the economy. Moreover, the environment for market-oriented policies to take root is still lacking. Yet for developing countries participation is not optional, and it does not matter whether they are ready or not. We therefore call for some form of guided globalization. This is not calling for wanton restrictions, but the relaxation of controls in an orderly, well-sequences manner, accompanied by sound macro-economic policies, a strengthened domestic financial system, fiscal discipline and improved transparency through timely disclosure of financial and economic information. These would ensure a virile, viable and self-sustaining economy.

As the changing structure of the world's economy affects developing countries mainly through trade, their developed counterparts could assist them by allowing generous trading and payment terms. They could, under the aegis of the G8 and the OECD, encourage real debt reductions, and the transfer of real resources to the developing world, if the prosperity arising from globalization must go round, and if developing countries must not share in the costs only, and not in the benefits of globalization. Unless some deliberate efforts are made at the international level to carry developing countries along as the world globalizes, the original vision of greater freedom, egalitarianism and enhanced living standards will remain a mirage in these countries.

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