An empirical analysis of globalization and economic integration in the Nigerian economy

Adeyi Emmanuel Ola
University of Kelaniya, Sri Lanka and Gombe State University, Nigeria

Abstract

Trade openness and economic integration are believed to stimulate economic growth due to their influence in integrating world economies and generating better markets. This study examines the impact of globalization and economic integration on the Nigerian economy. Data sourced from Central Bank of Nigeria (CBN), and National Bureau of Statistics (NBS) were analyzed through the employment of multiple regression model of Ordinary Least Squares (OLS).The study examines a unique long-run relationship between economic performances, Foreign Direct Investment (FDI), Exchange Rate, government fiscal status and trade openness. In Nigeria, 80.3% of economic performance is explained by FDI and other explanatory variables. In addition, FDI, exchange rate and government fiscal status impact positively on the economy of Nigeria. However, the trade openness impacts negatively, indicating that Nigeria must be properly keyed into the process of globalization or be marginalized. The study therefore recommends, amongst others, that the country should develop its infrastructural and institutional capacities to encourage investment and exports.

Keywords: Globalization, Economic Performance, Foreign Direct Investment, Trade Openness

Introduction

Globalization means different things to different people, as the word globalization is used in two ways, which is a source of confusion. It is used in a *positive* sense to *describe* a process of integration into the world economy. It is also used in a *normative* sense to *prescribe* a strategy of development based on rapid integration of the world economy. Additionally, its characterization is by no means uniform. It can be described simply as an expansion of economic activities across the national boundaries. There are three economic manifestations of this phenomenon: international trade, international investment and international finance. This also constitutes its cutting edge and forms the basis for economic integration to create pareto-optimal conditions for nations involved; as it is about the expansion of economic transactions and the organization of economic activities across the political boundaries of nation states. More precisely, it can be defined as a process associated with increasing openness, growing economic interdependence and deepening economic integration in the world economy.

A quick look at the past two decades reveals that globalization and economic integration have accelerated due to factors like technology development: embracing telephone, computers and internet. And the Economic Community of West African States (ECOWAS) is greatly affected by the process as they entail the breaking down of national economic barriers, financial activities, production activities as well as the power of trans-national cooperation.

It is however, important to note that though West African States are affected by the globalization and economic integration process, the economically better and stronger countries are the major ECOWAS players who control the process and policies, and are able to maintain control over their own national policies as well as determine the policies and practice of the economic organization.

The background to the creation of ECOWAS was the unprecedented arrival of two Heads of State (of Nigeria and Togo) in May 1975, to a summit in Lagos to give birth to the formation of ECOWAS as they formally approved its establishment and signed its treaty with their country's ratification. Also unprecedented was the fact that within a matter of weeks, all sixteen West African countries ratified the treaty. However, following the withdrawal of Mauritania in December 2000, membership dropped to fifteen. Moreover, it is perceived that the integration of economies is imperative as it would engender pareto-optimality in the allocation of resources to foster economic growth.

There are numerous scholarly articles as well as speeches given on globalization and economic integration of Nigeria regionally and globally. Adedeji (2002) argues that there has been an increasing trend of globalization and integration in the ECOWAS region but there is yet to be positive impact on development and poverty alleviation in the region. He however, failed to highlight the advantages and effects of globalization in the region, though he commended the ECOWAS Monitoring Group (ECOMOG) for maintaining world regional peace.

There are other analyses on globalization and economic integration but not without shortcomings as regards the nature of the relationship between the macroeconomic variables and the indices of globalization and economic integration. It is against this background that this paper is set- to highlight clearly, even to the average person, the impact of globalization through economic integration on economic growth and development, the channels in which this impact can be created as well as the challenges, risks and consequences associated with globalization and economic integration in Nigeria. The paper also suggests the way out for Nigeria and ECOWAS, using interpreted results of regression analysis of the data obtained from secondary sources.

Objective of the Paper

The main objective of this paper is to empirically evaluate the trends as well as impact of globalization and economic integration on the economy in the ECOWAS region with greater emphasis on Nigeria.

Other specific objectives are to discuss the challenges of globalization and economic integration faced by ECOWAS in general, and Nigeria in particular. Secondly, to examine the possible channels through which globalization and economic integration make an impact on economic growth and development.

Review of Literature

Globalization and economic integration are central to economic development of every nation. As a result, many scholars from different fields of endeavor advocate that special attention should be given to this subject.

According to Marwa, (1999), globalization is the latest technological effort in reducing the physical distance among nations and societies of the world through information transfer at a speed that is hitherto unknown in information technology. He further buttressed that this development is capable of transforming a country from being a dependent nation to a self- sustaining and economically viable one.

Collier (1998) viewed globalization as a process of integration in product and financial market. In economic sense, it is seen as a progressive and intricately structured division of labour on a worldwide basis. Expatiating on this point, Elaigwu (2000) argued that globalization means the relative liberalization and homogenization of the globe as a result of the technological revolution, which encourages or facilitates the global economy to be liberalized rapidly. Thus, there is a widening and deepening of international flows of trade, finance and information in a single global market, which would in turn produce the outcome for human welfare and economic development.

According to United Nations Reports (1999), globalization is a process by which value systems, economic activities, cultural and social systems are fast converging and becoming standardized and interdependent. This means that people's lives around the globe are linked more deeply, more intensely, more immediately than ever before. To the mind of sociologist, Roland (1992), globalization is seen as the compression of the world and the intensification of consciousness of the world as a whole. Paying credence to this fact, Giddens (1990), viewed globalization as the intensification of world social relations which link distinct localities in such a way that local happenings are shaped by events occurring many miles away.

Shafaeddin (2005) defines globalization as the development of a global network in the form of international consortia, cross-licensing agreements and joint ventures, the aim of which is either to reduce the cost of production by finding low-cost suppliers of production, material inputs and intermediate products or by expanding their market scope to enjoy economies of scale.

Therefore, in view of all the submissions on globalization, it is the position of this paper that globalization is defined as extreme competition among nations of the world that is characterized by the multiplicity of linkages and interconnections between states that make up the present world system.

On the part of economic integration, it can be said to be any type of arrangement in which countries agree to coordinate their trade, fiscal and monetary policies. Obviously, there are many degrees of integration such as, Preferential Trade Agreement (PTA), Free Trade Area (FTA), custom union, common market, economic union and monetary union.

Regional economic integration is therefore viewed as the legal and institutional relationship within a region in which economic transactions take place or as the market relationship among goods and services. As a sub-system of international relations, regional groupings involve interactions among various groups in the international economic system ranging from conflict to cooperation.

Regional integration is an effective means to attain high levels of economic growth by all the countries involved when it is seen as a process and not an end itself. Moreover, an important concern which should motivate integration is the benefit derivable from regional and global integration arrangements. One of the benefits is the growth effect which has been found to be significant (Oyejide, et al, 2003). International evidence suggests that regional integration is capable of providing mutual benefits to all countries involved.

Theoretical Explanations

This section focuses on the theoretical explanations advanced by several scholars on the subject of globalization and trade, which cut across virtually all disciplines of human endeavors.

In this study, three theories are used so as to underlie the point of departure and controversies surrounding the understanding of globalization and its attendant consequences on Nigerian foreign trade. These theories are: Liberalism, Realism and Marxism.

Liberalism

The liberals believe that globalization is a national out-growth of capitalist development. Smith (1776), the pioneer classical liberal thinker argued in his work, *An Enquiry into Nature and the Causes of the Wealth of Nations* that national wealth and power are a derivation of economic growth and that trade is the lubricant of the globalization game that can enhance the engine of growth. The liberal thinkers also stated that nations should specialize in what they can produce best in order to be wealthy and powerful, and that the market should regulate itself through the invisible hand (market forces of demand and supply), a principle of laissez-faire extended globally. In agreement with the liberals, Gilpins (1986) stated that economic specialization produces gains in productive efficiency and national income. He further noted that the neo-liberals advocated the deepening of globalization through the dismantling of official regulations. This assertion was buttressed by Breton Woods Institutions (IMF and the World Bank), WTO and the mainstream academic economists.

However, the basic weakness of this theory as lamented by Milton (2001) is the assumption that all nations are equal. He argued that the theory has polarized nations into an international division of labour where poor countries specialize in the production of mostly primary commodities without the option of opting out.

Realism

The second school of thought on this subject is Realism whose tradition is identified with the Mercantilist writers of the early modern period, such as the German historical school of late 19th century and economic nationalists of the 20th century. Proponents of this school include Alexander Hamilton, George Hegel, Johann Fiche et al. Milton, (ibid) argued that Hamilton, a leading scholar of this school, demonstrated that manufacture is superior to agriculture. Thus, every nation should be able to create essentials of national supply. The theory centers on protectionism, industrialization and state intervention in trade. The relevance of this theory is that nations, which concentrate and excel in manufacturing or production of industrial goods, are the significant beneficiaries of globalization, because they will accumulate wealth and power to themselves, while the primary producers of raw materials are clear losers in the global economy.

This theory has been criticized on the grounds that economic interest can be pursued to the detriment of other nations and the whole international economy. This could lead to insecurity through inequality, exploitation of weak and vulnerable nations and creating an arena of global conflict. This in essence, forms the basis of the Marxist argument.

Marxism

In his submission on Marxism, Wallestein (1997) traced the origin of Marxist theory to works of Karl Marx (1818-1883) and Fredrick Engels (1820-1895).Wallestein (ibid) submitted to the works propounded under the auspices of underdevelopment and dependency scholars of classical Marxism such as André Gunder Frank, Samir Amin, and Walter Rodney et al. Karl Marx observed that the history of all hitherto existing societies is the history of class and class struggle. To the Marxists, globalization is tantamount to imperialism. They vehemently lament that an equitable distribution of trade benefits cannot be obtained within a capitalist system, characterized by gross exploitation of weak nations.

In consonance with Marxist theory, Akinsanya (2002), described globalization as the latest stage of European economic and cultural domination over the rest of the world. Submitting to this, Toyo (2009), lamented that the current global economic crisis which the world has found itself in is a consequence of the greedy and antagonistic competition of the capitalists, where even human beings are sold and killed, all in attempts to make money. He cried out that capitalism is returning the world to the era of slavery. However, in his criticism, Iyoha (2005), identified the weakness of Marxism as its failure to bail the third world nations from the shackle of capitalist biased system. He concluded that the submission of Marxism is no longer useful and effective in explaining contemporary global matters of trade and economic development.

The viewpoint of this paper is that globalization has become an irreversible phenomenon, not even a matter of choice, although it has adverse consequences for a significant proportion of the world's population, which is quite incapable of facing its challenge. Developing countries such as Nigeria seem to be facing major challenges posed by globalization as the world becomes more integrated. Thus, the argument presented in this paper is in conformity with realist and liberalist theories.

Methodology

Methodology

The study makes use of the econometric procedure in estimating the relationship between the indices of globalization and economic integration and economic growth from 1981 to 2010. The data that are sourced from the secondary sources: Central Bank of Nigeria (CBN), National Bureau of Statistics (NBS), International Monetary Fund (IMF), journals and bulletins are utilized using Ordinary Least Squares (OLS) technique as contained in E-View 5.1 [see Table s1r 2].

Model Specification

Generally speaking, in economics it is believed that change in one variable may result in changes in one or more variables. As a result of this we have a functional relationship between the variables of the study as;

GDP=f(FDI,ER,GFS,DTO) .... (1)

And the econometric form of it as a model is;

$GDP=\alpha_{0+}\alpha_1 FDI+\alpha_2 ER+\alpha_3 GFS+\alpha_4 DTO+U$ .... (2)

Where

GDP= Real Gross Domestic Product growth rate

FDI= Foreign Direct Investment

ER= Exchange Rate of Naira to US Dollar

GFS= Government Fiscal Status (deficits or surplus)

DTO= Degree of Trade Openness

α_0=Intercept

α_1= Coefficient of FDI

α_2= Coefficient of ER

α_3= Coefficient of GFS

α_4=Coefficient of DTO

U= Stochastic Random Term

With the apriori expectation that is based on economic theory that, high level of FDI, GFS and DTO have positive relationship with the real GDP.

Data Analysis and Results

Table 1: Descriptive Statistics

	ER	GDP	GFS	FDI	RESID	SER01	DOP
Mean	46.87296	319029.8	-73734.8	12825.63	1.35E-13	16404.93	5.311111
Median	21.89000	275450.6	-22116.1	6263.700	-11300.6	29323.90	1.600000
Maximum	133.5000	634251.1	32049.4	55999.30	150073.7	78409.80	19.00000
Minimum	0.610000	183563.0	-301402.	584.9000	-30189.8	-78355.5	0.000000
Std. Dev.	53.60376	131849.5	94353.88	14611.46	36204.21	40261.31	6.180013
Skewedness	0.710437	1.139965	-1.08398	1.610114	2.844718	-0.98737	1.082234
Kurtosis	1.663327	3.124755	3.025947	4.627281	12.09701	3.270950	3.095768
Jarque-Bera	4.281272	5.865355	5.288295	14.64515	129.5160	4.469652	5.280851
Probability	0.117580	0.053254	0.071066	0.000066	0.000000	0.107011	0.071331

Extracted from the E-View 5.1 output

From the descriptive statistics in Table 1 above, it can be seen that standard deviation of GDP is far more than FDI, GFS, ER and DOP. In addition, GDP has the highest coefficient of variation while DOP has the lowest of all. This indicates that the most volatile variable is the GDP followed by GFS and DOP respectively. The Table also reveals that Kurtosis exceeds 3, pointing out the presence of fat tails which can also be seen in GDP, GFS, FDI and DOP but not in ER. In addition, the negative skewedness and significance of Jarque-Bera test statistics imply deviations from normality. The five variables possess similar characteristics which are common with most series.

Table 2: Regression Results

Dependent Variable: GDP

Method: Least Squares

Date: 20/10/12 Time: 20:18

Sample: 1981 2010

Included observations: 30

Variable	Coefficient	Std. Error	t-Statistic	prob.
C	168876	17982.1	17989.3	0.0000
FDI	1.082895	1.03193	1.03084	0.0006
ER	907.55	1034.43	1035.38	0.1175
GFS	-0.03997	7064.89	0.2914	0.0711
DTO	12043.98	0.291561	7065.981	0.0713

R-squared	0.830458	Mean dependent var	21.37273
Adjusted R-squared	0.803332	S.D. dependent var	18.67785
S.E. of regression	17.29598	Akaike info criterion	8.597517
Sum squared resid	9273.675	Schwarz criterion	8.688214
Log likelihood	-1083.340	F-statistic	30.61411
Durbin-Watson stat	0.627475	Prob (F-statistic)	0.000011

E-view 5.1

From the regression results in Table 2, 1% increase in foreign direct investment brings about the same 1% increase in GDP, 1% increase in exchange rate brings about 907% increase in the value of GDP, on the part of trade openness, 1% in it results to a large increase of over 1000% increase in GDP. However, from the results, 1% increases in government fiscal status leads to almost 0% decrease or increase in real GDP.

The value of R-squared (R) is 0.830458 and when it is adjusted ($\bar{R}$) is 0.803332. This is consistent with the statistical criterion that $0<R^2<1$. The implication of this is that about 83% of the total variation is explained by the regression relationship between GDP and the determinants of globalization and economic integration which are the explanatory variables (FDI, ER, GFS and DTO) in our model.

There is a higher F-calculated compared to the tabulated F value. This indicates that our model is adequate and therefore statistically significant at 5% level of significance. The DW value of less than 2 indicates the presence of serial/auto correlation of the error terms of the variables.

Table 3: Unit Roots Test Results

Variable	ADF	1%	5%	10%	Order of integration
GDP	-3.739476	-3.6955			I(1)
FDI	-6.719118	-3.6959			I(1)
ER	-3.102458		-2.9750		I(1)
GFS	-4.861758	-3.6852			I(1)
DOP	-1.727109			-1.6218	I(0)

Extracted from the E-View 5.1 output

Table 3 shows the unit root test of stationarity of the variables and the residuals. It can be seen that all variables with the exception of Degree of Trade Openness (DOP) passed the stationarity tests at first difference because their Augmented Dickey Fuller value is greater than the critical values at either 1%, 5% or 10% levels. Likewise all variables are integrated of order (1) with exception of DOP that is integrated of order (0).

Conclusions

This study reflected the implication of globalization and economic integration in Nigeria. It is observed from the findings that globalization does not guarantee equitable distribution of global and regional wealth but has made most people and countries better off. Optimal benefits of globalization and economic integration can only be achieved when the laid down requisites for globalization are met. It was discovered that trade openness, is an ingredient of globalization. It entails the ratio of trade in GDP. All other variables that are indices of globalization and economic integration contribute positively to GDP in Nigeria with the exception of Government Fiscal Status (GFS) that showed a negligible but negative effect on GDP. This can be attributed to the fact that there is no genuine fiscal discipline on the part of policy makers of government in Nigeria.

The fundamental fact is that globalization is an unstoppable process, as it is a natural development of human efforts in finding ways and means of overcoming the barriers imposed by distance and differences. Any country or region that opposes globalization and integration or does not create a conducive environment will be ousted from the process and will be marginalized. As Greenspan (2001) noted, the globalization process may generate victims of progress.

Recommendations

The problem of globalization and economic integration is not that it is harmful in themselves, but the increased risk that comes with their increased benefits may be harmful. The challenge is to realize these increased benefits without their associated increased risks. The risks or negative impacts are predominant in the Nigerian economy in particular, and the economies of West African countries in general. This is because they are not ready for full scale globalization, and at the same time cannot stop the process.

Following are some suggested recommendations so as to manage the risks and maximize the benefits that come with globalization and economic integration so as not to be a victim of progress and then be marginalized;

a. The member countries of ECOWAS should pursue broad-based growth strategies that will empower the poor nations to bring about rapid and sustainable development in the region.

b. The Nigerian government should create efforts directed at enhancement of strategies that will make the country technologically advanced and independent.

c. There should be conscious effort to develop other sectors of the economy so as to reduce imports and encourage exports, as well as reduce dependence on the oil sector, thereby adjusting unfavorable balance of payment.

d. Nigeria as a country should develop its infrastructural and institutional capacities to encourage investment.

e. The government needs to continue meeting the basic needs of its people as it has been observed that countries that benefit most from globalization are those that meet the basic needs of their citizens in a sustained manner.

References

Adedeji, A. (2002). 'History and Prospects of Regional Integration in Africa: An Empirical Analysis.' Paper presented at the third Meeting of African Development Forum, Adis Ababa.

Akinsanya, A.O. (2002). Recent Theoretical Explanations of Industrial Development in Developing Countries. *Nigeria Journal of Economic and Social Studies.Vol.6, No.3.*

Collier, D. (1998). The Challenges of Globalization in Africa and the Division of Labour. Washington, D.C.: World Bank, Africa Region.

Elaigwu, J.I. (2000). Nigeria: A Rebirth for the 21st Century. Institute of Governance and Social Research, Jos. Monograph Series.

Giddens, A. (1990). *The Consequences of Modernity*. Cambridge: Cambridge Polity.

Gilpins, R. (1986). *The Political Economy of International Relations*. New Jersey: Princeton University Press.

Greenspan, A. (2001). *Speeches*. Federal Reserve Board, USA.

Iyoha, M.A. (2005). "When will Africa's Sleeping Giant Awake?" Inaugural Lecture, University of Benin, May 19, 2005.

Marwa, B.M. (1999). 'The Transforming Power of Globalization.' Proceedings of a one-day Seminar of the Nigeria Economic Society, Abuja. Feb.11, 1999.

Milton, I.A. (2001). Globalization, Competitiveness, and Asia's Economic Future. *Global Beat Pacnet. No.11, March 13, 2001*.

Oyejide, T. A., Ogunkola, E., Adenikinju, A., Bankole, A. & Alabi, O.B. (2003). Nigeria's Trade Policy Overview Assessment and Impediments to Integration into World Trade, A final Report. Washington D.C.: World Bank.

Roland, R. (1992). *Globalization: An Analysis*. London: Sage Publishing.

Shafeddin, S. M. (2005). Trade Liberalization and Economic Reform in Developing Countries: Structural Change or De-Industrialization? *UNCTAD discussionIdeas. repec.org/e/psh 25.html.*

Smith, A. (1776). *An Enquiry into the Nature and Causes of the Wealth of Nations*. London: Adam Smith Institute.

Toyo, E. (2009, February 27). Global Economic Crisis: Capitalist contradiction and the current Economic Order. *Daily Trust Newspaper*, p. 13.

United Nations Reports (1999). Human Development, *Awake Magazine*, *May 22, 1999*, p. 4.

Wallestein, T. (1997). *The Capitalist World Economy. The States, The Movement, and The Civilization*. Cambridge: Cambridge University Press.