*Imperatives of Globalization on Growth of Emerging Economies:*
*Evidence From Nigeria (1980-2013)*

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**Abstract**
This study investigates the impact of globalization on Nigeria's economic growth. This study covers the periods between 1980 to 2013. Quantitative research methodology was adopted using Augmented Dickey- Fuller unit-root test, to test for stationarity of the variables. The result of the stationarity (unit root) test shows that, the variables were all stationary at first difference. Co-integration test was conducted; likelihood ratio (L. R) test indicates 3 co-integrated equations at 5% significance level. L.R was compared to the critical values at 5%. Findings show that, there were three co-integrating equations (vectors) in the set of normalized co-integrating vectors. Result of study also shows that, export, total trade, balanced of trade, foreign direct investment played major impact on Nigerian's economic growth; while import has no significant effect on the Nigeria economy. Based on the research finding, study rejects the null hypothesis and concludes that, there is significant relationship between export, total trade, foreign direct investment, balance of trade and gross domestic product of Nigeria; while import plays no significant impact on gross domestic product of Nigeria. Findings show that, there is strong relationship between globalization and gross domestic product (GDP). Study recommends that, Nigeria should implement strong macroeconomic and structural policies to be able to reap the gains of globalizations. On the other hand, government should also diversify from mono-cultural dependency of oil production to agricultural production. This will help the country to achieve high export potentials, increase profitability resulting from economies of large scale production and location economies.

Keywords: Globalization, Economic Growth, Gross Domestic Product, Co-integration, Nigeria.

**Introduction**

The process of globalization has been going on for the past decades, but it has considerably accelerated since the end of the Soviet Union in 1991. According to Tehranian (1998) elements of globalization include trans-border capital, labor, management, news, images, and data flows. The main engines of globalization includes the following; the transnational corporations (TNCs), transnational media organizations (TMCs), intergovernmental organizations (IGOs), non-governmental organizations (NGOs), and alternative government organizations (AGOs).

Westhuizen (2003) emphasizes that "globalization involves the process by which most of the world's developed countries and some of the developing countries aim to improve *inter alia* the free flow of information, money, ideas, cooperation, detection, exchange, technology, and trade between nations."

Khor (1995) argue that globalization is ''what the third world (developing) countries have for several centuries called colonization." The author further argue that globalization favors one side of the world called 'stronger countries' more than the other side of the world called 'weaker countries'. Ogboru (2004) concludes that globalization results to uneven distribution of benefits and losses on economic growth of emerging economies and the Nigeria's situation is not quite different. As a result of this, it favors developed countries more than developing countries because of their weaker macroeconomic and structural policies adopted. As studies of Obadan (2001) argue that, it leads to polarization between the developed countries that gain, and the developing countries that lose out.

Apart from its polarization effect, it also influences economic growth and expansion in some developing countries like Nigeria due her poor social infrastructure and domestic economic capacity; thereby resulting to low commodity prices and dept, as well as preventing the country from benefiting from export opportunities as pointed by (Obadan, 2001 & Ogboru, 2004).

The effect of globalization has resulted to wide gap between rich countries and poor countries and this is evidence of a fast growing gap between the two economies. The distribution of its gains and losses are controlled by the developed nations over developing nations. According to United Nations Development Program (UNDP, 1992) publication about 20% of the world's population in the developed countries receive 82.7% of total world income; while 20% of the world's population in the developing countries receive only 1.4% of total world income vis-à-vis. Comparing the two economies, there is a difference of 81.3% showing a level of marginalization in the distribution index between developed and undeveloped nation. This margin is a clear indication why some countries are richer than others. In other to address these problems, research purpose is formulated which aims to investigate impact of globalization on economic growth of Nigeria.

Several researches have been identified in this area of study. However, very little or no research has been identified on: "imperatives of globalization on economic growth of emerging economies; evidence from Nigeria" from (1980-2013). The above gap demarcates this research from previous studies thus leading to main study objective, which investigates impact of globalization on economic growth of Nigeria's

economy. To explore this study further, the relevant question that calls to mind is; what impact does globalization play on economic growth of Nigeria? In other words, this study links globalization and gross domestic product (GDP) (as evidenced to have any relationship on Nigeria economy between the periods of 1980 to 2013).

Globalization came into existence in 15th century. It is often used to describe global relationship and the increasing interaction among nations and the integration of economic activities of human societies around the world as pointed by (Ajayi, 2001). Recent study by International Monetary Fund (1997) state that "globalization is the growing economic interdependence of countries worldwide through the increasing volume and variety of cross-border transactions in goods and services and of international capital flows, and also through the more rapid and widespread diffusion of technology."

In view of this, Obaseki (2000) also observe that increase in foreign direct investment (FDI) flow facilitates growth in world trade and global output through increase in mobility of capital and other resources in the production process.  FDI also facilitates technological innovation and efficient use of resources to achieve lower cost of production. This process helps to increase global wealth, standard of living, poverty reduction and among others. Globalization is responsible for economic growth and development across the globe.

Studies of Obaseki (2000) also note that, globalization has positive and negative effect. Positive effects of globalization include: increase in specialization and efficiency, better quality products at reduced prices, economics of scale in production, competitiveness and improvement, and increase in managerial capabilities. According to this author, increase in specialization and efficiency brings about increase in world trade and output due to globalization. Apart from that, it helps to maintain high quality products at lower cost due to increase in competition.  Economics of scale is also maintained as a result of increase in production of goods and services at reduced price.

Furthermore, globalization also counters inflationary growth, and fiscal imbalances with approved real interest rates, that is, it brings good prospects for investment and structural reforms especially in transition economies. Loto (2011) stress that globalization opens and stabilizes the economy through export strategy. Structural adjustment program (SAP) is one of the measures adopted as liberation strategy to open up the economy and penetrate international market.

However, globalization has negative effect. One of these effects of globalization is that it does not improve global welfare as noted by (Obaseki & Ojo, 1998). Differences in macroeconomic, sectoral and structural policies of countries have resulted to varying degrees of benefits and looses of the rapid integration of goods, services and financial sector across the globe.

With regards to this, globalization does not favor countries that have weak macroeconomic policies towards financial and exchange rate stability. Policy measures should be applied to prevent banking crises to be able to achieve current account convertibility through removal of non-tariff barriers to trade to allow free flow of goods and services and factors of production. Sequel to this, Ogboru (2004)

admits that globalization tends to favor countries that have adopted strong macroeconomic and sectoral policies. The same author referred to this situation of unequal distribution of benefits and losses between two economies of strong and weak nations as ''marriage of unequal''.

In view of this, Obaseki and Ojo (1998) note that developed nations (such as; Europe, Japan, North America and others) are favored while developing countries such as (Nigeria, Ghana, Cameroon and others) are not favored. Schneider and Enste (2002) observe that many other countries suffer because their economic regimes were not properly managed, and this weakness unsavory reduces their global competitive edge. The authors stress that, international flow of capital, technological improvement in information and communication and liberalization of financial markets are strategies to get rid of market forces.

UNCTAD (2001a) report also point that liberalization of the world economy is geared towards frustrating opportunities for growth of developing countries. Not only that, as developing countries have increased their ability to produce and export goods, the developed countries have become active in promoting tariff peaks and escalations. Such measures can neither solve the South's development problems nor allow for a narrowing of the North–South divide.

For a long time now, the growth of gross domestic product (GDP) of Nigeria is very unsatisfactory. With regards to this, the standard of living is also poor as a result of improved condition of living. In the 19th century, globalization has led to more open doors of market economy (domestic market). Market economy is a modern way of reviving the economy especially in developing world, which is not different from Nigeria's experience (Loto, 2011).

**Theoretical Framework**

Globalization has been used extensively to describe the increasing internationalization of financial markets and of markets for goods and services.  Recent report by OECD (2005) states that globalization is a dynamic and multidimensional process of economic integration whereby national resources become more and more internationally mobile while national economies become increasingly interdependent.

It is defined as the process of the integration of economic, political, social and cultural relations across international boundaries; aimed at ''making global being present worldwide at the world stage or global arena'' (Akindele, Gidado, & Olaopo, 2002). According to the same authors, the process of globalization is driven by the following; increasing international division of labor; the global distribution of economic and political power; global finance in the operation of national states; the decline of the Keynesian welfare state; and the established social contact between labor and government. Apart from that, globalization is also characterized of free market capitalism which facilitates changes within the functioning of global political community in current times.

Giddens (2006) also add that globalization is an economic phenomenon derived from the role of transnational corporations, whose operations extend across national borders, influencing global production processes and the international flow of global

capital. With respect to this, Hills (2009) stress that, most transnational corporation's focus on cost reduction to leverage subsidiary skills (that is, transfer core competence and skills within the company and pay outside attention to pressures from local responsiveness and cost.

Onwuka and Equavon (2007) also point that other benefits of globalization include the following; exposure to new ideas and products; greater specialization and expanded opportunities for mergers and acquisitions; leading to growth in size and power of corporation. It also improves competiveness and efficiency in the utilization of productive resources and major improvements in social development and human welfare of nations.

The authors stress that; globalization promotes trade and investment flows which have positive impact on economic growth. When such flows are in the form of foreign direct investment (FDI), they improve access to international best practices in areas of; marketing, managerial and technology, acquisition of skills among others. Apart from its benefits, a recent report of UNCTAD (2002a) also show that the stock of outward foreign direct investment (FDI) increases from 1.7 trillion dollars to 6.6 trillion dollars between 1990 to 2001; while in 2001; sales of 19 trillion dollars were recorded. This estimate is more than twice as high as world export of that year.

According to (UNCTAD, 2002a) report, globalization is driven by the following; technological changes, improved transportation and competition. Improvement in information technology and communication (ICT) promotes trade and reduces risk of doing business between nations. On the other hand, improved transportation such as containerization (both in-land and sea-based) also reduces lead time (that is, transit time) by approximately 67%. Competition also allows firms to compete favorably by increasing efficiency and cost reduction. Most government policies have removed barriers to trade and control international mobility of capital and services, thus creating market equilibrium in a closed economy.

**Model of Closed Economy**

Study of Obaseki and Ojo (1998) point that closed economy is one whose state of equilibrium is attained. The authors further stress that in such an economy the aggregate demand ($A^d$) must be equal to aggregate supply ($A^s$). Aggregate demand comprises of government fiscal operations such as, expenditure, marginal productivity of capital, income, consumption, capital stock, interest rates and among others. The authors also note that, aggregate demand or supply has relationship with adsorption which is represented mathematically as:

$A^d = A^s$

$A^d = A$.………………….equation (1)

$A^d$ = aggregate demand; $A^s$ = aggregate supply; A= adsorption

According to Obaseki and Ojo (1998), equation (1), indicate that aggregate demand grows through absorption, and by implication it constitutes a major problem to that economy thus limiting the extent of its economic growth. In the case of open economy, additional savings from other countries is used for investment purposes in that economy. The authors also point that, in an open economy, import from other countries helps in the production purposes. Apart from that, resources can also be

exported to other countries to earn foreign currencies necessary for economic growth. This is further explained in equation (2) as follows; where

$A^d = A = Cab$ ……………equation (2)

Where, $Cab$ = Current account balance

In view of this, Obaseki and Ojo (1998), further stress that aggregate demand is also a function of current account balance. Current account balance comprises of several factors such as; domestic absorption, foreign absorption and real exchange. In principle, aggregate demand represents a function of both domestic and foreign influences and factors. Based on this assumption, equation (3) is formulated.

$Y = A + Cab + Tr \_ft$………equation (3)

Where, Y = Aggregate growth rate of output or GDP

Tr = Transfers

$N_{ft}$ = Net Foreign Indebtedness

## Mundel-Fleming Model of Open Economy

It is based on the notion of one price. Obaseki and Ojo (1998) note that the more an economy is open, the higher the rate of economic growth. The authors highlight that an economy is liberalized and fully opened when it contains the following factors; the competitiveness of the external sector, the level of the exchange rate, domestic gross capital formation, among other things. Mundel-Fleming model of open economy is derived from growth rate of gross domestic product (GDP). It is mathematically stated as follows:

$Y = f^{(t/y,\ r,\ mg,\ f/y,\ In)}$ ……equation (4)

$t/y > 0,\ r > 0,\ m > 0,\ f/y <,\ In < 0$

Where

Y = GDP; t/y = Total trade /GDP)

r = Measure of real exchange rate,

mg = Measures of real growth rate of money supply; f/y = Ratio of fiscal deficit /surplus over GDP; $In$ = Inflation

Obaseki and Ojo (1998) further conclude that a positive sign is expected to show in an index for openness variable and real exchange rate; while a negative sign is also expected for money supply variable, ratio of fiscal deficit /surplus over GDP and inflation. The outcomes are based on a priori expectation.

## Research Methodology

Study adopts quantitative research methodology using Augmented Dickey-Fuller (ADF, 1989) unit-root test, to test for stationarity of the variables. Secondary data were also used for the purpose of data analysis and is sourced quantitatively from (CBN Statistical Bulletin, 2011 & UNCTAD, 2012). Discussion of this section is divided into three sub-sections in the following; model specification, unit-root test and estimation model.

## Model Specification

In order to capture the precise relationship between globalization and economic growth, study adopts an empirical model that incorporates the effects of import,

export, total trade, foreign direct investment inflows and balance of trade on the Gross Domestic Product of Nigeria between 1980 and 2013. GDP was also used as a parameter for measuring economic growth. Based on the specification above, a functional model was stated as follows: GDP = $f$ (IMP, XPT, TLD, FDI, and BDE)
Where: GDP= Gross Domestic Products,
IMP = Import; XPT = Export,
TLD = Total Trade; FDI = Foreign Direct Investment Inflows; BDE= Balance of Trade.
GDP = $b_0$ + $b_1$IMP + $b_2$XPT + $b_3$TLD + $b_4$FDI + $b_5$BDE + $U$

## Unit Root Test

In this section, study adopted the testing procedure for the ADF test to the equation below;
$$\Delta_{yt} = \varepsilon + \gamma t + \gamma y_{t-1} + \delta_1 \Delta y_{t-1} + \dots \dots$$
$$\delta_{\rho-1} \Delta yt_{-\rho+1} + \varepsilon_t$$

Where $\varepsilon$ is a constant, $\gamma$ is the coefficient of time trend and $\rho$ is the lag order of the autoregressive process. Using the constraints where, $\varepsilon = 0$ and $\gamma = 0$ corresponds to modeling a random walk and using the constraint where, $\gamma = 0$ corresponds to modeling a random walk with a drift.

By including lags of the order $\rho$, the ADF (Augmented Dickey-Fuller) formulation allows for higher-order autoregressive processes. This means that the lag length $p$ is determined when applying the test. One possible approach is to test down from high orders and examine the t-values on coefficients. Secondly, another alternative is to examine information criteria such as the Akaike information criterion, Bayesian information criterion or the Hanna-Quinn information criterion.

Sequel to this, the unit root test is carried out under the null hypothesis, at $\gamma = 0$ against the alternative hypothesis of $\gamma > 0$. Once the value for the test statistic, for $DF_T$ = $\gamma / _{SE (\gamma)}$ is computed, it is compared to the relevant critical value for the Dickey–Fuller Test. If the test statistic is less (that is, if the test is non symmetrical it means that, it is not consider an absolute value) than the critical value (larger negative) then the null hypothesis of $\gamma = 0$ is rejected, which implies that no unit root is present.

## Estimation of Model

Study applied VAR (Vector Auto-Regressive) model for multivariate analysis of GDP on the globalization variables to determine the long-run relationship and to test the significance effect of globalization on economic growth between the years (1980-2013). To further investigate the influence (effect and causes) of globalization on economic growth, Unit root test procedure was used to find out the order of time series variable stationarity. Test of significance of parameter estimates for (t-statistics) was also carried out at the level of 5% significant. The essence is to compare the probability of computed t-statistic or f-statistics at various situation of empirical analysis with the critical value at 5% to establish significance. When the computed t-statistic probability associated with it is greater than the critical value at 5%, the parameter is statistically significant, if the parameter is less than the critical value, it is not significant.

**Presentation of Data Analysis**

This section presents the data collected and interprets the results obtained from quantitative research. Independence variables such as import, export, total trade, foreign direct investment (in-flows), balance of trade and dependent variable (Gross domestic product, GDP) was presented against time period of 1980 to 2013. The table is shown below.

Table 2.2.1: Data on globalization variables (import, export, total trade, foreign direct investment in-flows, and balance of trade) and gross domestic product) against time periods.

| Year (Year ) | Import (IMP) | Export (XPT) | Total Trade (TLD) | Foreign Direct Investment (FDI) | Balance of (BDE) | Gross Domestic Pr (GDP) |
|---|---|---|---|---|---|---|
| 1980 | 9,095.6 | 14,186.7 | 23,282.3 | 739 | 5,091.1 | 49,632.32 |
| 1981 | 12,893.6 | 11,023.3 | 23,862.9 | 542.0 | 1,816.3 | 47,619.66 |
| 1982 | 10,770.5 | 8,206.4 | 18,976.9 | 431.0 | 2,564.1 | 49,069.28 |
| 1983 | 8,903.7 | 7,502.5 | 16,406.2 | 364.0 | 1,401.2 | 53,107.38 |
| 1984 | 7,178.3 | 9,088.0 | 16,266.3 | 189.0 | 1,909.7 | 59,622.53 |
| 1985 | 7,062.6 | 11,720.8 | 18,783.4 | 486.0 | 4,658.2 | 67,908.55 |
| 1986 | 5,983.6 | 8,920.6 | 14,904.2 | 193.0 | 2,937.0 | 69,146.99 |
| 1987 | 17,861.7 | 30,360.6 | 48,222.3 | 611.0 | 12,498.9 | 105,222.84 |
| 1988 | 21,445.7 | 31,192.8 | 52,638.5 | 379.0 | 9,747.1 | 139,085.30 |
| 1989 | 30,860.2 | 57,971.2 | 88,831.4 | 1,884.0 | 27,111.0 | 216,797.54 |
| 1990 | 45,717.9 | 109,886.1 | 155,604.0 | 1,003.0 | 64,168.2 | 267,549.99 |
| 1991 | 89,488.2 | 121,535.4 | 211,023.6 | 1,124.0 | 32,047.2 | 312,139.74 |
| 1992 | 143,151.2 | 205,611.7 | 348,762.9 | 1,157.0 | 62,460.5 | 532,613.83 |
| 1993 | 165,629.4 | 218,770.1 | 384,399.5 | 1,878.0 | 53,140.7 | 683,869.79 |
| 1994 | 162,788.8 | 206,059.2 | 368,848.0 | 2,287.0 | 43,270.4 | 899,863.22 |
| 1995 | 755,127.7 | 950,661.4 | 1,705,789.1 | 1,271.0 | 195,533.7 | 1,933,211.55 |
| 1996 | 562,626.6 | 1,309,543.4 | 1,872,170.0 | 2,191.0 | 746,916.8 | 2,702,719.13 |
| 1997 | 845,716.6 | 1,241,662.7 | 2,087,379.3 | 1,642.0 | 395,946.1 | 2,801,972.58 |
| 1998 | 837,418.7 | 751,856.7 | 1,589,275.4 | 1,210.0 | 85,562.0 | 2,708,430.86 |
| 1999 | 862,515.7 | 1,188,969.8 | 2,051,485.5 | 1,178.0 | 326,454.1 | 3,194,014.97 |
| 2000 | 985,022.4 | 1,945,723.3 | 2,930,745.7 | 1,310.0 | 960,700.9 | 4,582,127.29 |
| 2001 | 1,358,150.3 | 1,867,953.9 | 3,226,134.2 | 1,277.0 | 509,773.5 | 4,725,086.00 |
| 2002 | 1,512,695.2 | 1,744,177.7 | 3,256,873.0 | 2,040.0 | 231,482.3 | 6,912,381.25 |
| 2003 | 2,080,235.3 | 3,087,886.4 | 5,168,121.7 | 2,171.0 | 1,007,651.1 | 8,487,031.57 |
| 2004 | 1,987,045 | 4,602,781. | 6,589,826. | 2,127.0 | 2,615,736 | 11,411,066. |

| | .3 | 5 | 8 | | .3 | 91 |
|---|---|---|---|---|---|---|
| 2005 | 2,800,856.3 | 7,246,534.8 | 10,047,391.1 | 4,978.0 | 4,445,678.5 | 14,572,239.12 |
| 2006 | 3,108,519.3 | 7,324,680.6 | 10,433,200.0 | 4,898.0 | 4,216,161.3 | 18,564,594.73 |
| 2007 | 3,911,952.6 | 8,309,758.3 | 12,221,711.0 | 6,087.0 | 4,397,805.7 | 20,657,317.67 |
| 2008 | 5,189,802.6 | 10,161,490.1 | 15,351,292.7 | 8,249.0 | 4,971,687.5 | 24,296,329.29 |
| 2009 | 5,102,534.4 | 8,356,385.6 | 13,458,920.0 | 8,650.0 | 3,253,851.2 | 24,794,238.66 |
| 2010 | 8,005,374.2 | 11,035,794.5 | 19,041,168.8 | 6,099.0 | 3,030,420.3 | 29,205,782.96 |
| *2011 | 6,099,237.1 | 9,851,223.4 | 15,950,460.5 | 7,666.0 | 37,519,86.3 | 26,098,783.60 |
| 2012 | 6,402,381.9 | 9,747,801.2 | 16,150,183.1 | 7,471.7 | 33,454,19.3 | 26,699,601.7 |
| 2013 | 6,835,664.4 | 10,211,606.4 | 17,047,270.8 | 7,078.9 | 33,759,42.0 | 27,334,722.8 |

[Source: CBN Statistical Bulletin 2011 & UNCTAD Statistics 2012]; *Source: Data Based On Authors' Computation

**Empirical Findings**

Prior to estimation of the growth model, standard econometric tests like stationarity test and co-integration test were conducted in order to avoid the generation of spurious regression results. Empirical findings is discussed in the following sub-sections; result of stationarity unit-root test, Johanson co-integration test, un-normalized co-integration co-efficient, regression result, and test of hypothesis. The result of stationarity (unit-root) test is shown in the table below.

**TABLE 2.3.1 Results of Stationarity (Unit Root) Test.**

| Variables | ADF-Statistics | Critical values | Order of integration |
|---|---|---|---|
| GDP | -4.722242 (0.0001) | 1% = -4.3082 5% = -3.5731 10% =-3.2203 | Stationary at First difference |
| IMP | -6.476267 (0.0000) | 1% = -4.3082 5% = -3.5731 10% =-3.2203 | Stationary at First difference |
| XPT | -6.822522 (0.0000) | 1% = -4.3082 | Stationary at First |

| | | 5% = - 3.5731 10% =- 3.2203 | difference |
|---|---|---|---|
| TLD | -8.442686 (0.00000) | 1% = - 4.3082 5% = - 3.5731 10% =- 3.2203 | Stationary at First difference |
| FDI | -5.113016 (0.000090) | 1% = - 4.3082 5% = - 3.5731 10% =- 3.2203 | Stationary at First difference |
| BDE | -4.052541 (0.00004) | 1%=- 3.6752 5%= - 2.9665 10%= - 2.6220 | Stationary at First difference |

The results of the stationarity (Unit Root) test summarized above indicate that the variables were all stationary at first difference. Based on this, study rejects the null hypothesis and concludes that there is no unit root. Hence the variables were all stationary at first difference the test for co-integration test were also performed and the result is shown below:

**Table 2.3.2 Johanson Co-integration test**

| Eigen value | Likelihood Ratio | 5% Critical value | 1% Critical value | Hypothesized no. of CE (s) |
|---|---|---|---|---|
| 0.920938 | 143.9662 | 68.52 | 76.07 | None ** |
| 0.746687 | 70.37790 | 47.21 | 54.46 | At most 1 ** |
| 0.464213 | 30.55716 | 29.68 | 35.65 | At most 2 * |
| 0.298719 | 12.46062 | 15.41 | 20.04 | At most 3 |
| 0.072099 | 2.170080 | 3.76 | 6.65 | At most 4 |

*(* *) Denotes the rejection of the null hypothesis at 5%, significant level. Likelihood ratio (L. R) test indicates three (3) co-integrating equations at 5% significance level. The likelihood ratios were compared to the critical values at 5%. The hypothesis of no co-integrating or the existence of at most one co- integrating vector was rejected. The result shows that there are three co-integrating equations (Vectors) in the set of normalized co-integrating vectors.

**Table 2.3.3 Unnormalized Cointegrating Coefficient**

| Import (IMP) | Export (XPT) | Balance of Trade (BDE) | Total Trade (TLD) | Foreign Direct Investment (FDI) |
|---|---|---|---|---|
| -0.002691 | -0.002695 | 1.81E-06 | 0.002692 | 9.36E-05 |
| -0.024937 | -0.024935 | -8.60E-07 | 0.024936 | 7.18E-05 |
| -0.003322 | -0.003338 | 7.83E-06 | 0.003330 | -2.80E-05 |
| 0.000676 | 0.000678 | -1.30E-06 | -0.000677 | 0.000301 |
| -0.000445 | -0.000437 | -4.43E-06 | 0.000441 | -0.000260 |

The test also revealed the existence of equilibrium condition that keeps the variables in proportion to each other in the long run.

**Table 2.3.4 Regression Result**

The regression result is presented in the table below:
Dependent Variable: GDP
Method: Least Squares
Date: 07/08/13   Time: 23:24
Sample: 1980 2013
Included observations: 31

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| C | -313148.5 | 2.377066 | -1.317374 | 0.0097 |
| IMP | 2797.526 | 0.395107 | -2.0524 | 0.8027 |
| XPT | 2795.674 | 0.151511 | 8.00391 | 0.0428 |
| TLD | -2795.144 | 0.395108 | 0.00353 | 0.0052 |
| FDI | 460.3460 | 0.886508 | 2.44002 | 0.0021 |
| BDE | 0.883660 | 0.154978 | 17.0149 | 0.0053 |

| | | | |
|---|---|---|---|
| R-squared | 0.991960 | Mean dependent var. | 8.971026 |
| Adjusted R-squared | R- 0.990352 | S.D. dependent var. | 19.95059 |
| S.E. of regression | 1.840596 | Akaike info criterion | 30.32537 |
| Sum squared resid. | 1822.33 | Schwarz criterion | 30.60292 |
| Log likelihood | -464.0433 | F-statistic | 616.8992 |
| Durbin-Watson stat | 2.664066 | Prob. (F-statistic) | 0.000000 |

From the result above, GDP equation is stated as;
GDP= -313148.5 + 2797.53$_{imp.}$ + 2795.7$_{xpt}$ -2795.144$_{tld}$ + 460$_{fdi}$ +0.883660$_{bde}$.

The regression result shows that import, export, foreign direct investment and balance of trade contributed positively to economic growth while total trade made negative contribution to economic growth during the period of analysis.

**Test of Hypotheses**

Hypothesis 1

Ho : There is no significant relationship between import and Economic growth
  To test this hypothesis, study is focused on the explanatory variable (Import). The t-cal. Value of -2.0524 (Prob. 0.8027) greater than 0.05, it imply that the variable is not significant. So we accept the null hypothesis and conclude that import has no significant effect on Nigerian economic growth.

Hypothesis ii
Ho: There is no significant relationship between export and Economic growth

In testing this hypothesis, study focus on the variable export (XPT) in the table above. The T. cal value of 8.00391 (Prob.0.0428), less than 0.05.  This implies that the variable is significant and the null hypothesis is rejected. Based on this, study concludes that export has a positive significant effect on the Nigerian economy.

Hypothesis iii
Ho: There is no significant relationship between total trade and economic growth

In testing this hypothesis, study focus on the variable total trade (TLD) in the table above. The T.cal. value of 0.00353 (prob. 0.0052), less than 0.05. This implies that the variable is significant and null hypothesis is rejected. Based on this, study concludes that total trade is not significant and the null hypothesis is accepted. Based on this, study concludes that total trade has no significant effect on the Nigerian economy.

Hypothesis IV
Ho: There is no significant relationship between balance of trade and economic growth

In testing this hypothesis, study focus on the variable balance of trade (BDE) in the table above. The T.cal.value of 17.0149 (Prob.0.0053), less than 0.05. This implies that the variable is significant and null hypothesis is rejected. Based on this, study concludes that balance of trade has significant effect on the Nigerian economy.

Hypothesis v:
Ho: There is no significant relationship between foreign direct investment and economic growth

In testing this hypothesis, study focus on the variable foreign direct investment (FDI) in the table above. The T.cal. value of 2.44002 (prob. 0.0053), less than 0.05. This implies that the variable is significant and null hypothesis rejected. Based on this, study concludes that foreign direct investment has significant effect on the Nigerian economy.

**Interpretation and Discussion of Results**

The estimation results reveal that 99 percent relationship exist between the dependent variable (GDP) and the independent variables (Import, Export, Total trade, Balance of trade and foreign Direct Investment). The explanatory variables jointly account for approximately 99 percentage changes in the Gross Domestic Product. The Durbin Watson statistic (2.66) illustrates the absence of auto correlation. With the Prob. (F-Statistics) of 0.00000 at 5% level of significance, it means that the model is significant and can be used for meaningful decision. The results show that export (XPT), Total Trade (TDE), foreign direct investment inflows (FDI) and balance of trade are statistically significant at 5% significance level in explaining changes in the economy; while import (IMP) is not statistically significant in explaining changes in the economy.

**Conclusion**

As mentioned before that, study focus on impact of globalization on Nigeria economy between the periods of 1990 to 2010. Result of study shows that, export, total trade, balanced of trade, foreign direct investment played major impact on Nigerian's economic growth. Result of study rejects the null hypothesis and concludes that, there is significant relationship between export, total trade, foreign direct investment, balance of trade and gross domestic product of Nigeria; while import plays no significant impact on Gross domestic product of Nigeria economy. Based on this, the result of study concludes that, there is strong relationship between globalization and Gross domestic product (GDP).

**Recommendations**

Study recommends that Nigeria should implement strong macroeconomic and structural policies required to gain confidence of foreign investors so as to boost country's productivity, growth and competitiveness. Doing this breaks the jinx of 'unequal marriage' attributed to why some countries gain or loss from globalization.

Related to this, research also recommends diversification of the Nigerian economy from mono-cultural dependency of oil production to agricultural production vis-à-vis. Doing this, helps the country to achieve high export potentials, increase profitability resulting from economies of large scale production and location economies.

Nigeria should confront the challenges on globalization by revolutionizing its social infrastructure in every key strategy area in the economy, especially in the areas of; transportation and electricity to attract foreign investors.

Also, borrow a leaf from newly industrialized nations like four tiger Asian Countries (South Korea, Thailand, Singapore, and Hong Kong).

Finally, study recommends further research on impact of globalization on Nigerian economy between the periods of 1960 to 2011 or impact of globalization on other African countries like Ghana, Cameroon among others.

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**Appendix**

**Result of Unit Root Test**

| ADF Test Statistic | -3.471152 | 1% | Critical Value* | -2.6522 |
|---|---|---|---|---|
| | | 5% | Critical Value | -1.9540 |
| | | 10% | Critical Value | -1.6223 |

*MacKinnon critical values for rejection of hypothesis of a unit root.

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(GDP,3)
Method: Least Squares
Date: 07/08/13   Time: 07:45
Sample(adjusted): 1984 2010
Included observations: 27 after adjusting endpoints

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| D(GDP(-1),2) | -1.417200 | 0.408280 | -3.471152 | 0.0019 |
| D(GDP(-1),3) | -0.368449 | 0.249497 | -1.476766 | 0.1522 |

| | | | | |
|---|---|---|---|---|
| R-squared | 0.875039 | Mean dependent var | 144853.6 |
| Adjusted R-squared | 0.870041 | S.D. dependent var | 2160747. |
| S.E. of regression | 778946.2 | Akaike info criterion | 30.04046 |
| Sum squared resid | 1.52E+13 | Schwarz criterion | 30.13645 |
| Log likelihood | -403.5462 | Durbin-Watson stat | 1.872028 |

| ADF Test Statistic | -11.70304 | 1%  Critical Value* | -4.3382 |
| | | 5%  Critical Value | -3.5867 |
| | | 10% Critical Value | -3.2279 |

*MacKinnon critical values for rejection of hypothesis of a unit root.

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(IMP,3)
Method: Least Squares
Date: 07/08/13   Time: 07:49
Sample(adjusted): 1984 2010
Included observations: 27 after adjusting endpoints

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| D(IMP(-1),2) | -4.186139 | 0.357697 | -11.70304 | 0.0000 |
| D(IMP(-1),3) | 1.199020 | 0.215163 | 5.572618 | 0.0000 |
| C | -208683.6 | 129023.2 | -1.617412 | 0.1194 |
| @TREND(1980) | 21563.36 | 6984.585 | 3.087279 | 0.0052 |
| R-squared | 0.947564 | Mean dependent var | | 110735.2 |
| Adjusted R-squared | 0.940725 | S.D. dependent var | | 1141099. |
| S.E. of regression | 277817.5 | Akaike info criterion | | 28.04327 |
| Sum squared resid | 1.78E+12 | Schwarz criterion | | 28.23525 |
| Log likelihood | -374.5841 | F-statistic | | 138.5440 |
| Durbin-Watson stat | 1.614236 | Prob(F-statistic) | | 0.000000 |

| ADF Test Statistic | -7.062317 | 1%  Critical Value* | -4.3382 |
| | | 5%  Critical Value | -3.5867 |
| | | 10% Critical Value | -3.2279 |

*MacKinnon critical values for rejection of hypothesis of a unit root.

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(XPT,3)
Method: Least Squares
Date: 07/08/13   Time: 22:45
Sample(adjusted): 1984 2010
Included observations: 27 after adjusting endpoints

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| D(XPT(-1),2) | -2.760387 | 0.390861 | -7.062317 | 0.0000 |
| D(XPT(-1),3) | 0.711691 | 0.273052 | 2.606428 | 0.0158 |
| C | 53496.39 | 444288.7 | 0.120409 | 0.9052 |
| @TREND(1980) | 1450.480 | 23922.99 | 0.060631 | 0.9522 |
| R-squared | 0.829078 | Mean dependent var | | 166014. |

| | | | 8 |
|---|---|---|---|
| Adjusted R-squared | 0.806784 | S.D. dependent var | 2172424 . |
| S.E. of regression | 954919.2 | Akaike info criterion | 30.5125 9 |
| Sum squared resid | 2.10E+13 | Schwarz criterion | 30.7045 7 |
| Log likelihood | -407.9200 | F-statistic | 37.1880 5 |
| Durbin-Watson stat | 1.856892 | Prob(F-statistic) | 0.00000 0 |

| ADF Test Statistic | -3.770118 | 1% Critical Value* | -4.3226 |
|---|---|---|---|
| | | 5% Critical Value | -3.5796 |
| | | 10% Critical Value | -3.2239 |

*MacKinnon critical values for rejection of hypothesis of a unit root.

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(TLD,2)
Method: Least Squares
Date: 07/08/13   Time: 07:53
Sample(adjusted): 1983 2010
Included observations: 28 after adjusting endpoints

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| D(TLD(-1)) | -1.538394 | 0.408049 | -3.770118 | 0.0009 |
| D(TLD(-1),2) | -0.166179 | 0.289579 | -0.573863 | 0.5714 |
| C | -984388.0 | 522891.1 | -1.882587 | 0.0719 |
| @TREND(1980) | 115809.2 | 37732.94 | 3.069181 | 0.0053 |
| R-squared | 0.747257 | Mean dependent var | | 199540.5 |
| Adjusted R-squared | 0.715664 | S.D. dependent var | | 1984565. |
| S.E. of regression | 1058233. | Akaike info criterion | | 30.71366 |
| Sum squared resid | 2.69E+13 | Schwarz criterion | | 30.90398 |
| Log likelihood | -425.9913 | F-statistic | | 23.65270 |
| Durbin-Watson stat | 2.044822 | Prob(F-statistic) | | 0.000000 |

| ADF Test Statistic | -3.818861 | 1% Critical Value* | -4.3226 |
|---|---|---|---|
| | | 5% Critical Value | -3.5796 |
| | | 10% Critical Value | -3.2239 |

*MacKinnon critical values for rejection of hypothesis of a unit root.

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(FDI,2)
Method: Least Squares
Date: 07/08/13   Time: 07:54
Sample(adjusted): 1983 2010
Included observations: 28 after adjusting endpoints

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| D(FDI(-1)) | -1.647984 | 0.431538 | -3.818861 | 0.0008 |
| D(FDI(-1),2) | 0.299037 | 0.264698 | 1.129731 | 0.2698 |
| C | -294.7265 | 463.2198 | -0.636256 | 0.5306 |
| @TREND(1980) | 41.11552 | 29.27969 | 1.404233 | 0.1731 |

| | | | |
|---|---|---|---|
| R-squared | 0.536079 | Mean dependent var | -87.14286 |
| Adjusted R-squared | 0.478089 | S.D. dependent var | 1389.976 |
| S.E. of regression | 1004.167 | Akaike info criterion | 16.79327 |
| Sum squared resid | 24200423 | Schwarz criterion | 16.98358 |
| Log likelihood | -231.1057 | F-statistic | 9.244305 |
| Durbin-Watson stat | 1.655428 | Prob(F-statistic) | 0.000303 |

| | | | | |
|---|---|---|---|---|
| ADF Test Statistic | -6.241774 | 1% | Critical Value* | -3.6959 |
| | | 5% | Critical Value | -2.9750 |
| | | 10% | Critical Value | -2.6265 |

*MacKinnon critical values for rejection of hypothesis of a unit root.

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(BDE,3)
Method: Least Squares
Date: 07/08/13   Time: 07:56
Sample(adjusted): 1984 2010
Included observations: 27 after adjusting endpoints

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| D(BDE(-1),2) | -1.991247 | 0.319019 | -6.241774 | 0.0000 |
| D(BDE(-1),3) | 0.583048 | 0.234846 | 2.482680 | 0.0204 |
| C | -21751.22 | 135630.2 | -0.160371 | 0.8739 |

| | | | |
|---|---|---|---|
| R-squared | 0.709698 | Mean dependent var | 55419.12 |
| Adjusted R-squared | 0.685507 | S.D. dependent var | 1251493. |
| S.E. of regression | 701833.7 | Akaike info criterion | 29.86522 |
| Sum squared resid | 1.18E+13 | Schwarz criterion | 30.00920 |
| Log likelihood | -400.1805 | F-statistic | 29.33631 |
| Durbin-Watson stat | 1.890392 | Prob(F-statistic) | 0.000000 |

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