ISSN: 0975-833X

Available online at http://www.journalcra.com

International Journal of Current Research
Vol. 4, Issue, 04, pp.216-220, April, 2012

INTERNATIONAL JOURNAL OF CURRENT RESEARCH

RESEARCH ARTICLE

FOREIGN DIRECT INVESTMENT: SOURCE OF ECONOMIC GROWTH IN NIGERIA

[1]Njogo, Bibiana Oluchukwu and [2]Afaha, John Sylvester

[1]Department of Banking and Finance, College of Social and Management Sciences, Caleb University, Imota, Ikorodu, Lagos - Nigeria

[2]Department of Economics, College of Social and Management Sciences, Caleb University, Imota, Ikorodu, Lagos, Nigeria

ARTICLE INFO

Article History:
Received 27th January, 2012
Received in revised form
29th February, 2012
Accepted 24th March, 2012
Published online 30th April, 2012

Key words:
Foreign Direct Investment,
Gross Domestic Product,
Nigerian Economic Growth.

ABSTRACT

The aim of this study is to explore empirically the relationship between foreign direct investment and gross domestic product growth in Nigeria. Using co-integration, Error correction mechanism, Unit roots techniques for this study analysis, the findings of the study are: First, the main determinants of FDI in Nigeria are market size (proxied by GDP), stable macroeconomic policies and a level of human capital that is tolerable by investors. Secondly, FDI contributes positively to Nigeria's economic growth. It had a positive and significant relationship with the growth of the whole economy. In other words, trade is very important to growth of the Nigerian economy, and most importantly to the oil sector since the oil industry is producing mainly for export at the moment. From these findings we can assert that: FDI in Nigeria induces the nation's economic growth. Although the overall effect of FDI on the whole economy may not be significant, the components of FDI positively affect economic growth.

Copy Right, IJCR, 2012, Academic Journals. All rights reserved.

INTRODUCTION

Foreign direct investment is one of the most dynamic international resource flows to developing countries. It is important because it is a package of tangible and intangible assets, and firms deploying them are being regarded as very important players in the global economy. Foreign direct investment serves as an engine for economic growth most especially to developing countries like Nigeria. Holger and Greenaway,(2004) notes that these is a considerable evidence that Foreign direct investment can effect growth and development by complementing domestic investment and by facilitating trade and transfer of knowledge and technology. Foreign direct investment is attached with great importance especially in the growth of an economy. And because of this, Nigeria tries to attract greater volume of this important potential resource. Ajayi, (2000) notes that Africa, like many other developing regions of the world, needs a substantial inflows of external resources in order to fill the savings and foreign exchange gaps and leaping itself to sustainable growth levels in order to eliminates its pervasive poverty. And because of this, developing countries regard foreign direct investment as an engine of economic growth as it provides much needed capital for investment, increases competition in the host country industries, and aids local firms to become more productive by adopting more efficient technology or by investing in human and /or physical capital. Foreign direct investment inflows into developing countries have grown rapidly over the years, and this is because the developing countries see foreign direct investment as an important element in their strategy for economic development, Ayanwale, (2007). FDI is not only important for developing countries, it is equally important for developed countries and because of its great importance in an economy, countries comes up with some promotional measures like mergers and acquisitions through privatisation to lure FDI into their economy. Kyaw, (2003) submits that mergers and acquisitions including private-to-private transactions as well as acquisitions through privatisation which increased significantly in developing countries because an increasingly important vehicle for FDI. UNCTAD (2008) reported that the increase in FDI inflows largely reflected relatively high economic growth and strong corporate performance in many parts of the world.

***Corresponding author:** bibiananjogo@yahoo.com
johnafaha@yahoo.com

Promoting and attracting FDI has therefore become a major component of development strategies for developing countries. In the case of Nigeria, the role of FDI as a source of capital has become increasingly important not only because of the belief that it can help to bridge the savings- investment gap but also because it can assist in the attainment of millennium Development goal targets. FDI contributes to growth in substantially manner because it is more stable than other forms of capital flow. Other benefits of FDI in an economy include, employment, facilitating access to foreign market and – generating both technological and efficiency spill over to local firms. Abimbola, (2010) points out that the benefits of FDI vary with respect to the level of openness and quality of

human capital in developing countries. The economy of Nigeria is a middle income, mixed economy marked with well developed financial, legal, communications, transport and entertainment sectors. It is ranked 31st in the world in terms of GDP (PPP) as of 2009 Wikipedia, (2011). From 2003 to 2007, Nigeria attempted to implement an economic reforms program called the National Economic Empowerment Developing Strategy (NEEDS). The purpose of the NEEDS was to raise the country's standard of living through a variety of reforms, including macroeconomic stability, deregulation, liberation, privatisation, transparency and accountability. Oil continues to dominate the public finance and foreign exchange resources in Nigeria. Amadi (2002) opined that with oil as the main sources of foreign exchange, a one –product monoculture economy must be continuously deficient in investment capital. FDI also compete with domestic firms. Markusen and Venables(1999), in their analysis of the effect of foreign firms on the developing of domestic firms in the industrial sector, discovered that foreign companies compete with domestic producers while creating additional demand for domestically produced intermediate goods through linkages with local suppliers.

Nigeria is endowed with reach natural resources. According to Asiedu (2003),the level of FDI attracted by Nigeria is mediocre compared with the resource base and potential need. The aim of this paper is to examine the causal relationship between FDI and growth in the Nigerian economy using co-integration, unit roots techniques and Granger for analysis. This study contributes to the existing literature but is quite different from previous studies in scope because of the larger numbers years. The rest of the paper is organised as follows: in section 2 review of both theoretical and empirical studies on FDI and GDP, In section 3,the methodology would be discussed, section 4 presents the findings and finally, section 5 concludes with Summary and Policy Implication to FDI : engine of economic growth in Nigeria.

LITERATURE REVIEW

Giving attention on the foreign direct investment and economic growth in an economy, researchers have various findings. In line with the expected benefits, many studies have been conducted, in some, results do not give conclusive evidence of the impact of foreign direct investment on the economy of developing countries, see Sylvester (2005); Lumbila(2005) and Ndikumana and Verick (2008). The work of this researchers shows that foreign direct investment has significant positive effect on economic growth while Fry, (1993); Hermes and Lensink,(2003) and Dutt work shows that FDI does not have positive effects on economic growth. These are a lot of theories of direct investment, in this study two notable theories would be discussed and they include the classical theory and product theory. The classical theory is that theory that claims that Foreign direct investment and multinational corporations are vital to economic growth and therefore contributes to development in the host countries through several channels which include the following; the transfer of capital, advance technology equipment and skills, improvement in the balance of payments, the expansion of tax base, foreign exchange earnings, creation of employment, infrastructural development and the integration of the host economy into international markets zein,(2006).

The product life cycle states that FDI exist because of the search for cheaper cost of production and its assumes the following dimensions;

1 The introduction stage, which has to do with innovation, production and sales in the original country.
2 The growth stage, which is characterised by increase in export by the innovating country, more competition, increase in capital intensity and some foreign production.
3 The maturity stage, which has to do with decline in exports from the innovating country, more production standardization, more capital intensity and increased competitiveness of price.
4 Decline stage, this is characterised by concentration of production in LDCs and innovating country becoming net importer.

In view of the two theories above , Shiro (2005) submits that foreign direct investment is therefore suppose to serve as means of augmenting Nigeria's domestic resources in order to carry out effectively, her development program and raise the standard of living of her people. Ajayi,(2006) opines that FDI stimulates domestic investment and the total investment in the country is enhanced. Also Carkovic and Levine, (2002) notes that FDI produces externalities in the form of technology transfer and spillovers. Foreign direct investment according to Abdul and George (2003),,has potentially desirable features that affect the quality of growth with significant implications for poverty reduction. FDI also generates revenue and support the development of safety net for the poor countries. Klein et al (2001).

Some studies on the relationship between foreign direct investment and economic growth particularly on developing countries suggest that FDI has a positive impact on economic growth but this also depends on some crucial factors such as human capital base in the host country, the trade regime and the degree of openness on the economy (Balasubramanyam et al .1996 and 1999, Baliamoune 2002 and Boreszterim et al 1998.) FDI has both cost and benefits. Based on this notion, Tendon (2002), argued that multinational enterprises are in business to make profit and not for development.

Empirical Literature

A number of empirical studies have been undertaken to establish consensus result as regards to the causal relationship between foreign direct investment and economic growth. The empirical analysis on foreign direct investment – growth like theoretical literature gives ambiguous findings. The findings of FDI-growth by these Ndikumana and Verick (2008), Andreas (2006) and Lumbila (2005) shows that FDI has a positive significant effect on economic growth while the findings of : Akinlo, 2004: Ayanwale(2007): De Mello,(1999) and Longani and Razin (2003) shows negative or a non significant effect of FDI on economic growth. Extending the scope of this study to other developing countries , Basu and Guaniglia, (2007) empirically conducted a study of a sample of 119 developing countries for the period of 1970-1999 using the Generalised methods of moments (GMM), result revealed that FDI enhances both educational inequalities and economic growth in developing countries. Also Hyun, (2006) used a sample of 59 developing countries in his study for the period

of 1984- 1995, using ordinary least square (OLS) method concluded that FDI has positive effect on economic growth. Johnson,(2006) also used ordinary least square (OLS). In his empirical analysis of 90 developed and developing countries for the time period of 1980-2002 and concluded that FDI inflows accelerate economic growth in developing countries.

In Nigeria, Samuel, (2007) examines the relationship between foreign direct investment (FDI) and economic growth and measuring the gross domestic product (GDP) finds out that gross domestic product causes foreign direct investment and that the contribution of FDI to economic growth is significant. Nadiri (1993) in his study, also finds positive and significant effects from U.S sourced FDI on productivity growth of manufacturing industries in France, Germany Japan and United kingdom. Equally Lumbila (2005) used a panel analysis to study the impact of foreign direct investment on economic growth in 47 African countries between 1980 and 2000 and found that FDI exerts a significant positive effect on economic growth. Hapiyaremya and Ziesemer (2006) in a study of SSA Countries found that the overall level of capital investment does not seem to significantly affect economic growth because most of the capital was in the primary sector. Similarly, Adelegan (2000) explored the seemingly unrelated regression model to examine the impact of FDI on economic growth in Nigeria and found out that FDI is pro-consumption and negatively related to gross domestic investment. Finally, Ariyo (1998) studied the investment trend and its impact on Nigeria's economy growth over the years. He found out that only private domestic capital consistently contributed to raising GDP growth rates during the period of 1970-1995.

Methodology and data

In this study, our hypothesis is to examine the causal relationship between FDI and Nigerian Economic growth for the period of 1970-2009.This study makes use of time series data. The sources of the data are from annual reports and Statement of Accounts of the Central Bank of Nigeria (CBN) and the federal office of Statistics. The data involved for this study, cover the Gross domestic product (GDP) and foreign direct investment between 1970-2009.

The Model

The purpose of the empirical analysis is to determine the causal relationship between Foreign direct investment and economic growth in the Nigerian economy for the period of 1970-2009. Following Ayanwale's (2007) specification as a benchmark, we calculate the relationship between foreign direct investment and economic growth in the Nigerian economy based on the following equation:

$\Delta 1nRGDP_t = \beta 0, + \beta 1\ \Delta\ 1n\ FDI_t + E\ i$

Where, In = is the natural logarithm

$RGDP_t$= is the real gross domestic product (A proxy for growth)

FDI_t= is the foreign direct investment

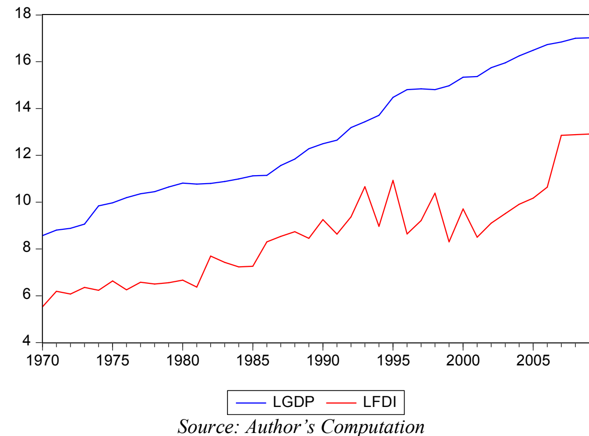
$\beta 0$, = is the constant term

$\beta 1$ = is the slope while in error term.

For this study, in this empirical analysis, the Unit roots test would be used to trace the direction of causality between FDI and GDP. Other economic tests such as co-integration and Error correction mechanism were also performed to determine the stationarity of the data and long-run relationship between the variables.

Data Diagnostics and Findings

As specified earlier, the variables to be employed in this study in line with the model specifications are: GDP (gross domestic product), and FDI (foreign direct investment). A graphical diagnostic representation of the behavior of the economic variables used in this study (in their log forms) is presented in the following figure:



Source: Author's Computation

Figure 1: A Graphical Representation of the Behavior of the Economic Variables Used

Stationarity Test

Unit root tests are conducted for the variables using the Augmented Dickey-Fuller test and the results are presented in the table that follows. Note that the MacKinnon (1996) critical values for the Augmented Dickey-Fuller (ADF) test using the Akaike information criterion (AIC) method at 1%, 5% and 10% significance level are -3.615588, -2.941145 and - 2.609066 respectively. Stationarity (unit root) tests conducted for the set of variables enumerated above revealed that all the variables are I(1) variables (integrated of order 1). That is, they are not stationary at levels but are all stationary at their various first differences.

Table 1: Stationarity Test

Variables	Augmented Dickey-Fuller Test statistic	Order of integration	Max. no of lags
GDP	-4.97128	I (1)	9
FDI	-5.100397	I (2)	9

Source: Author's Computation

Series: LOGGDP LOGFDI
Lags interval (in first differences): 1 to 1
Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.316651	14.61512	12.32090	0.0203
At most 1	0.003851	0.146615	4.129906	0.7518

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

Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.316651	14.46851	11.22480	0.0130
At most 1	0.003851	0.146615	4.129906	0.7518

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

Table 2: Error Correction Result

Dependent Variable: LGDP
Method: Least Squares
Date: 10/17/11 Time: 02:05
Sample (adjusted): 1981 2009
Included observations: 29 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.483062	0.277629	1.739951	0.0980
LFDI(-1)	0.259723	0.045279	5.736000	0.0000
LFDI(-2)	0.265872	0.046494	5.718422	0.0000
LFDI(-3)	0.092861	0.057798	1.606647	0.1246
LFDI(-7)	0.070076	0.064874	1.080183	0.2936
LFDI(-8)	0.185488	0.066922	2.771718	0.0121
LFDI(-9)	0.253426	0.063233	4.007850	0.0008
LFDI(-10)	0.348164	0.059312	5.870057	0.0000
LFDI(-11)	0.131145	0.064282	2.040166	0.0555
ECM(-1)	-5.90E-08	1.22E-08	-4.820447	0.0001

R-squared	0.995401	Mean dependent var	13.91628
Adjusted R-squared	0.993222	S.D. dependent var	2.180135
S.E. of regression	0.179486	Akaike info criterion	-0.330639
Sum squared resid	0.612090	Schwarz criterion	0.140842
Log likelihood	14.79427	Hannan-Quinn criter.	-0.182977
F-statistic	456.8973	Durbin-Watson stat	1.853626
Prob(F-statistic)	0.000000		

Table 1 above presents the cointegration result for the combined variables. Here, it is observed that the variables in the equation are cointegrated; the existence of this cointegration implies that there is a long-run equilibrium relationship existing between the variables in the equation. This is to say that if a set of variables are cointegrated, the effects of a shock to one variable spread to the others, possibly with time lags, so as to preserve a long-run relationship between the variables. The existence of this long-run relationship is the basis for the short-run disequilibrium adjustment in the model generally known as error correction mechanism (ECM), the result of which is presented in table 2 above. It is observable from the results, given the value of the R^2 (adjusted), that the independent variable in the model significantly explain changes in gross domestic position of Nigeria as about 99% of changes in the GDP of the country are attributed to the independent variable. The model is overall significant given the probability value of the F-statistic. The Durbin-Watson statistic only corroborates findings that the residual of the model contains insignificant serial correlation. Coming down to the variables in the model, it is evident from thence that the inclusion of the immediate past period lagged of the dependent variable captures part of the changes in GDP accumulation. The result for FDI inflows is positive and significant in all the periods but for the third and seventh period lags that is otherwise. As regards the effect and significance of these variables on Nigeria's Growth incidence (GDP), the result found out is in line with the anticipation of this study that the size of the Gross Domestic Product (GDP) increases with inflow of foreign direct investment and capital. Economic theory suggests further that with the inflow of FDI and capital, there will be adequate provision of employment and infrastructure thus leading to general elevation from poverty, thereby obviating the necessity of de-accumulating the stock of reserves for these purposes.

Summary and Policy Implication

The objective of this study was to explore empirically the relationship between FDI and GDP growth in Nigeria. Data were collected from secondary sources analyzed with the aim of achieving the stated objectives. From the findings of the study the following can be inferred: The main determinants of FDI in Nigeria are market size (proxied by GDP), stable macroeconomic policies and a level of human capital that is tolerable by investors. Secondly, FDI contributes positively to Nigeria's economic growth. It had a positive and significant relationship with the growth of the whole economy. In other words, trade is very important to growth of the oil sector since the oil industry is producing mainly for export. From these findings we can assert that: FDI in Nigeria induces the nation's economic growth. Although the overall effect of FDI on the whole economy may not be significant, the components of FDI positively affect economic growth and therefore FDI needs to be encouraged.

REFERENCES

Abdur, C and George, M. (2003)" FDI growth; what causes what' A paper presented at the WIDER Conference on " Sharing Global Prosperity" *WIDER,* Helsinki, 6-7 September.

Abimbola, B (2010) "FDI and Economic Growth ; A comparison of the effect of trade openness and human capital between BRIMCs and SSA Countries. " Paper prepared for the 21st Chinese Economic Association Conference*, University of Oxford, (UK)* , July 12-13, 2010.

Adelegan J.O (2000) "Foreign direct investment and economic growth in Nigeria: A seemingly unrelated Model" *Africa Review Of Money, Finance and Banking.* Supplementary issues of savings and development, 2000.italy Milan.

Ajayi , S.I (1999) " The Challenges Of Financing Development in Africa". UNECA Discussion paper series ESPD/DPS/99/2. *United Nations Economic Commission for Africa, Addis Ababa, Ethiopia.*

Ajayi , S.I (2000) "What Africas needs to do to benefits from globalization" *finance and development* 38 (4); 6-8.

Ajayi, S.(2006) "Accelerating Africa's Development five years into the twenty first century"paper presentation at the *ADB/AE/RC international conference.* Tunis Tunisia.

Akilo ,A(2004) " Foreign direct investment and Growth: Evidence from Nigeria*" Africa Economic Research Consortium Paper* 165 Nairobi.

Amadi, SN,(2002) "The impact of macro economic environment on foreign Direct Investment in Nigeria " *Int J.Dev;* 4 (2).

Andreas , J.(2006) " The effect of FDI inflows on host country economic growth. *CESIS Electronic UK. Working paper series* No 58.

Ariyo, A (1998) "Investment and Nigeria's Economic growth" investment in the growth processs. *Proceeding of Nigeria Economic society Annual Conference* 1998, pp385-415, Nigeria, Ibadan.

Asiedu, E(2003) "Capital Controls and Foreign Direct investment" *world development* 32(3) 479-90.

Ayanwale ,A.B (2007)"FDI and Economic Growth; Evidence From Nigeria, *African Economic Research Consortium* Paper 165, Nairobi.

Balasubramannyam, Salisu, M nad Dapsoford, D.(1996) " Foreign direct investment in EP and IS countries*"* *Economic journal*, 106,92-105.

Balasubramanyam, V.N, Salisu, M and Saps dord, D. (1999) " Foreign direct investment as an engine of growth *Journal of international trade and economic development*, 8.pp-27-40.

Basu, A. and Guarighia, A (2007)" Foreign direct investment, inequality and growth" *journal of macroeconomics* 29.pp:824-839.

Borenszterim, E.j de Gregorio and J. Ke (1998) " How does foreign direct investment affects economic growth". *Journal of international economics,* vol 45.pp115-135.

Carkovic M and Levine, R (2002) "Does foreign direct investment Accelerate Economic Growth? H.T Moron E.Graham and Bolomstrom (eds) Does FDI promote Development *washing DC, INSTITUTE FOR INTERNATIONAL Economics.*

De Mello, L.R (1995) "Foreign investment- led growth: Evidence from time series and panel data". *Oxford Economic Papers*, 51: 133-151

Dutt, A.k (1997)"The pattern of Foreign Direct Investment and Economic Growth". . *World development.* 25(1) 1925-1936.

Fry, M.J (1993) "FDI in a macroeconomic framework: finance, efficiency, incentives and distortions policy" *Research-working Washington, DC World Bank papers* No (14).

Habiyaremya, A and Ziesemer. T. (2006) "Absorptive capacity and export diversification in SSA countries', *United Nations University MESR. WP* No 2006:30

Hermes ,N. and Lensink,R(2003) " Foreign direct investment: financial development and economic growth*" J.Dev.stus* 40(1) 142-153.

Holger, G and Greenaway , D. (2004) " on whether domestic firms benefits from foreign direct investment".*The world bank research observer,* 9(2). 171-97.

Hyun H.J (2006) "Foreign direct investment and economic growth in developing countries". *Indiana University*.

Johnson , A(2006) "The effects of FDI inflows on host country economic growth". *CESIS Electronics working paper series.* Paper No 58.

Klein, M. Aaron,C and Hadjimiheal, B.(2001) " Foreign direct investment and poverty reduction" .Paper presented at the *OECD Conference on New Horizons and policy-challenges* for foreign direct investment in the 21st century, Mexico city November 26-27 2001.

Kyan, S.(2003) " FDI in developing Countries in the Globalised world. Paper presented at the DSA Conference. *University of Strathclyde Glasgow*.

Longani, P. and Razin,A (2003) "How beneficial is foreign direct investment for developing countries?' *finance and development*(2), 1-7.

Lumbila , K.N (2005)" What makes FDI work? A panel Analysis of the growth effect of FDI in Africa, *Africa Region working* paper series No 80.

Markusen , J and Venables, A.J (1999) "Foreign Direct Investment as a catalyst for industrial Development". *European Economic Review* 43:335-338.

Ndikumana, L.and Verick, S.(2008) " The linkages between FDI and domestic investment unraveling the development impact of foreign direct investment in sub-Sahara Africa. *IZA working paper* No- 3296.

Samuel, G.E (2009) "Foreign direct investment and economic growth in Nigeria: A Granger causality test" Department of economics, *Nigeria Delta University, Wilberforce island.*

Shiro, A.A (2005) "The Impact of foreign direct investment on the Nigerian economy." *www.Unilag.edu.ng /publication/opendoc.php*.

Sylvester ,K.(2005) " Foreign Direct investment, growth and income inequality in less Developed countries" *inter. Rev. Appl Eco* 19(3): 299-300

UNCTAD (2008) "world investment report". TNCs and the infrastructural challenge.

Wikipedia (2011) "Economy of Nigeria'. http: //en.wiki pedia.org.

****