
Impact of Foreign Direct Investment (FDI) on Economic Growth in Nigeria

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Abstract: *In a globalized world of business, foreign direct investment (FDI) is viewed as a major stimulus to successful economic growth in developing countries. Its ability to deal with two (2) major obstacles, namely; shortages of financial resources and technology and skills, has made it the centre of attention for policy-makers in low-income countries in particular. Only a few of these countries have been successful in attracting significant FDI flows. The major objective of this paper is to examine FDI inflows as it affects economic growth of third world economies with specific reference to Nigeria. The paper adopts ex-post facto research design in explaining the influence of FDI on Economic growth of Nigeria from 1981 to 2009. Evidence from the literature showed that FDI is a key ingredient for successful economic growth in developing countries. Therefore our findings is in support of this literatures as the study found that foreign direct investment positively, strongly and significantly influences the economic growth of Nigeria. It is however recommended that Nigeria should improve on its foreign direct investment as this will go a long way in improving on her Economic growth.*

Keywords: *Foreign Direct Investment (FDI), Economic Growth, Nigeria*

1. Introduction

Foreign direct investment (FDI) is viewed as a major stimulus to economic growth in developing countries. Its ability to deal with two major obstacles, namely shortages of financial resources, technology and skills has made it the centre of attention for policy-makers in low-income countries in particular. Only a few of these countries have been successful in attracting significant FDI flows Folorunsho (2009). The last decade of the 20th century has seen major shifts in the size and composition of cross-border capital flows into developing countries. Net debt flows have become less and less important. Portfolio flows have become firmly established. Foreign direct investment has come to swamp all other financial flows. During the past couple of decades the nature of the global economy has changed dramatically. Beginning with the Reagan/Thatcher reforms of the 1980s, many nations throughout the world have been engaged, to a greater or lesser degree, in a process of structural reform. Enterprises and even entire industries that had been owned and operated by governments have been privatized. Government finances and those of individual firms are becoming more and more transparent.

Governments have also been eliminating or reducing regulatory constraints, establishing more meaningful and enforceable property rights, moving toward more flexible exchange rate systems, relaxing restrictions on foreign investment and generally embracing more free-market-based economic systems. These reforms have resulted in growing levels of cross-border investment, as capital is drawn to new areas of perceived opportunity in both industrialized and non-industrialized countries. The heightened mobility of capital that has accompanied these changes has created renewed interest in the theory of foreign investment. In the light of these developments, this may be a particularly good time to take a closer look at foreign direct investment and the economic growth of developing economies with specific reference to Nigeria. Researchers and analysts conventionally classify foreign investment as falling within one of two categories, and the academic literature on foreign investment follows this distinction, with each category normally treated separately and independently.

The World Trade Organization WTO (1996) makes the distinction as follows: "foreign direct Investment (FDI) occurs when an investor based in one country (the home country) acquires an asset in another country (the host country) *with the intent to manage that asset*. The management dimension is what distinguishes FDI from portfolio investment in foreign stocks, bonds and other financial instruments". Furthermore, FDI involves the transfer of much more than capital alone. Technological expertise, marketing and management skills, and other firm-specific resources are transferred to the host country as well. Each country has its own way of defining whether a given investment should be classified as FDI or foreign portfolio investment (FPI).

The main objective of this paper therefore is to examine the trends in FDI inflows and its impact on economic growth of Nigeria. In a nutshell, this paper argues that FDI is a key ingredient for successful economic growth in developing economies like Nigeria. This is because the very essence of economic development is the rapid and efficient transfer and adoption of “best practices” across borders. FDI is particularly well suited to affect this and translate it into broad-based growth, not at least by upgrading human capital. As growth is the single most important factor affecting poverty reduction, thus FDI is central to achieving that goal. In this paper, FDI is the independent variable (IV) while the dependent variable (DV) is economic growth proxied by GDP.

2. Literature Review

For the last two (2) decades, many countries have been making earnest effort to promote their economies as the place for foreign direct investment (FDI, hereafter). The flow of FDI increased sharply in developed and emerging economies that had designated FDI as a major source of economic development UNCTAD (2010). FDI has been a capital formation of choice and is identified as one of the most important factors that contribute to economic expansion through its benefits and externalities. Alfaro *et al.* (2004, 2009) highlight several benefits of FDI that could promote economic growth, for example, knowledge spillover of technology transfers, introduction of new processes to domestic market, learning-by-observing, training of labour force and managerial skills, among others. While there is an extensive body of literature that investigates the relation between FDI and economic growth, the empirical findings are ambiguous and inconclusive. On the one hand, there are studies that find a positive relation between FDI and economic growth De Mello (1999); Yao and Wei 2007; Vu and Noy 2009; among others).

On the other hand, some studies have shown that FDI is negatively related to economic growth (Li and Liu 2005; Elia *et al.* (2009); Doytch and Uctum 2011; among others). There are also studies that find no significant relationship between FDI and economic growth (Carkovic & Levine, 2002); Beugelsdijk *et al.* 2008; Herzer 2008). In search of more consistent results, recent literature has turned to the use of absorptive capacity to explain and to investigate the link between FDI and economic growth. Absorptive capacity is described as a pre-requisite that enables a host country to successfully incorporate the benefits and positive impacts of FDI spillovers Alfaro *et al.* (2009); Hermes and Lensink (2003). That said, the literature of FDI-growth nexus has been extended with the introduction of financial development as one form of absorptive capacity. Collectively, the studies along this branch of the literature indicate that finance matters for the growth effects of FDI (Hermes and Lensink (2003); Alfaro *et al.*, 2004; Ang (2009), and b; Lee and Chang (2009); Azman-Saini *et al.* 2010; Choong (2012). Financial development of a country has been recognized as one form of absorptive capacity since it has the potential to spur economic growth by resolving various financial market imperfections which in turn allows the benefits of FDI to be materialized.

It is well established that a major contribution of foreign investment to the host country comes from its various external effects or spillovers. However, past studies on the effects of FDI on economic growth have shown mixed findings. De Mello (1999) shows that FDI inflows positively affect output growth for a sample of fifteen (15) OECD and seventeen (17) non-OECD countries over the period of 1970 to 1990. Using sectoral data for a group of six (6) OECD countries, Vu and Noy (2009) found that FDI significantly and positively affects economic growth both directly and through its interaction with labour. In their study of twenty nine (29) provinces and municipalities in China over the period of 1979 to 2003, Yao and Wei (2007) conclude that FDI is a powerful driver of economic growth for newly industrialized economies. Many other studies that examine the implications of FDI on economic growth found that FDI contributes negatively to a country's economy. In their study of developed, developing, and transition economies, Carkovic and Levine, 2002 conclude that the effects of FDI on growth are mostly negative.

Azman-Saini *et al.* 2010 examine the effects of outward FDI on Italian firms over the period of 1996 to 2006 and found that foreign activities have negative impacts on the demand for low skilled workers in the parent company's industrial region as well as on the demand for high skilled workers when FDI are addressed to high income countries. In a recent study, Doytch and Uctum (2011) found out that the impact of total FDI on the overall growth in the service-based economies is negative. There are also some studies indicating that an ambiguous relationship exists between FDI and economic growth. Beugelsdijk *et al.*

(2008) report that, while there exist significant positive growth effects from both horizontal (market seeking) or vertical (effectively seeking) FDI in developed countries, there is no evidence of significant growth effects in developing countries. Carkovic and Levine (2002) re-examined the relationship between FDI and economic growth over the study period from 1960 and 1995 and found that the exogenous component of FDI does not exert any positive impact on economic growth. They conclude that there is no reliable cross-country empirical evidence that supports FDI's independent contribution to economic growth. Similarly, Herzer (2008) also discovers unclear association between FDI and economic growth for a sample of twenty eight (28) developing countries. Drawing on the ambiguous and conflicting results of the FDI-growth relationship, recent literature has indentified absorptive capacity of a host country as the key explanatory variable for the varied conclusions.

As noted in Azman-Saini *et al.* (2010), to enable a host country to absorb the benefits from FDI flows, it has to possess specific abilities that allow FDI spillovers to be positively realized. According to Crespo and Fontoura (2007), absorptive capacities of domestic firms and regions are important preconditions for incorporating the benefits of FDI. Since different countries have different levels of development and local conditions, the impacts of FDI in each country would therefore be different. It is expected that maximum benefits of FDI spillovers can be reaped through higher level of absorptive capacity. As stated in Alfaro *et al.* (2009), the success of domestic firms is determined to a certain extent, by local characteristics and the inherent weakness of domestic firms may reduce their abilities to absorb new technologies brought by their foreign counterparts. Consequently, this would hold back technological innovation and limit its impacts on the overall economy. Along the absorptive capacity branch of the literature, several studies have examined the impact of financial development in the FDI-growth link. For example, Hermes and Lensink (2003); Alfaro *et al.* (2004); Ang (2009a, and b); among others, found that the development of banks and stock market are important preconditions for FDI spillovers to be positively realized. Hermes and Lensink (2003) employ the average value of gross FDI inflow as a percentage of GDP to proxy for FDI, per capita growth rate to measure growth, and the log of private sector bank loan to GDP ratio to measure financial development.

In Alfaro *et al.* (2004), financial development is measured using liquid liabilities, bank assets, private sector credit, and bank credit as employed by King and Levine (1993), and stock market value traded and market capitalization as introduced by Levine and Zervos (1998). Using a composite index of financial development, Ang (2009a) shows that a more developed financial system facilitates the FDI spillovers associated with the transfer of new technology in a host country. The four (4) indicators used to construct the composite index of financial development are the following ratios: the number of commercial bank offices per one thousand (1000) people; M3-M1 to nominal GDP; commercial bank assets to the sum of central bank assets and commercial bank assets; and bank claims on private sector to nominal GDP. Ang (2009b) examines Thailand, as a case study and found that although FDI has negative impact on output in the long run, its impact on the economy is nevertheless strengthened by the level of financial development. Similarly, Lee and Chang (2009), and Azman-Saini *et al.* (2010) also found that the impact of FDI spillovers on economic growth required a well-functioning financial market. The result of Azman-Saini *et al.* (2010) based on ninety one (91) countries over the period from 1975 to 2005, shows that FDI's impact on growth is positive only when financial development exceeds a threshold level. Azman-Saini *et al.* (2010) apply the same indicators as Alfaro *et al.* (2004) to proxy for banking sector development. Similarly, in a recent study, Choong (2012) also found that a well-developed domestic financial market is a precondition for FDI to affect economic growth positively.

Studies on FDI-growth issues in Nigeria include Oyejide (2005) which provided conceptual framework for the analysis of the macroeconomic effects of volatile capital flows. It concluded that capital flows have their pros and cons. This however depends on the initial conditions of the developing economy concerned. It can stimulate growth of the real sectors when the initial conditions are right. It could retard growth however, due to macroeconomic shocks that could undermine the stability of real sector and impose higher adjustment cost on the economy. The paper therefore recommends capacity building as a way of maximizing benefits and minimizing risks from capital flows. Otepola (2002) examines the importance of foreign direct investment in Nigeria. The study empirically examined the impact of FDI on growth. He concluded that FDI contributes significantly to growth especially through exports. This study

recommends a mixture of practical government policies to attract FDI to the priority sectors of the economy. Akinlo (2004) investigates the impact of FDI on economic growth in Nigeria using data for the period 1970 to 2001. His error correction model (ECM) results show that both private capital and lagged foreign capital have small and insignificant impact on economic growth. This study however established the positive and significant impact of export on growth. Financial development which he measured as M2/GDP has significant negative impact on growth. This he attributed to capital flight. In another manner, labour force and human capital were found to have significant positive effect on growth.

African countries, eager to achieve high rate of economic growth, are trying their level best to accelerate the rate of capital formation. An increase in investment is no doubt, crucial for the attainment of sustained growth and development in the region. But the levels of income in these countries are so low that additional saving and investment are hard to be generated domestically and this requires mobilization of international financial resources. Given the unpredictability of aid inflows, low share of Africa in world trade (2.34 percent of world exports and 2.22 percent of world imports in the year 2003), high volatility of short-term capital flows, and the low savings rate of African countries (less than 20 percent), the desired increase in investment has to be achieved through an increase in FDI inflows. FDI is viewed as a major stimulus to economic growth in developing countries because of its perceived ability to deal with major obstacles such as shortages of financial resources, technology and skills Mwilima, (2003). FDI is welcomed and indeed actively sought by virtually all the African countries. For this reason they have made considerable efforts over the past decades to improve their investment climate. They have liberalized their investment regulations and have offered incentives to foreign investors. However, the expected surge of FDI into Africa as a whole has not occurred Odenthal and Zimny, (1999).

From the above empirical findings, it can be deduced that most of these studies were conducted in developed countries with very few in developing economies. Beugelsdijk *et al.* (2008) report that, while there exist significant positive growth effects from both horizontal (market seeking) or vertical (effectively seeking) FDI in developed countries, there is no evidence of significant growth effects in developing countries. Also, these papers have addressed different aspects of FDI and growth, it is a known fact that different countries have different levels of development and local conditions, thus the impacts of FDI in each country would therefore be different. Also, most studies on FDI and growth are cross-country studies. Earlier studies in the Nigerian situation examine only the importance of FDI on growth and the channels through which it may be benefiting to the economy. However, this paper assesses the impact of FDI on economic growth. This leaves a huge gap to be addressed by the current paper. If FDI actually contributes to economic growth, then the sustainability of FDI would be a worthwhile activity and a way of achieving its sustainability is by identifying those factors contributing to its growth with a view to ensuring its enhancement. It is against this backdrop that this paper seeks to address the gap with the hope of contributing to the body of knowledge.

2.1 Determinants of Economic Growth

There is a long debate in the theory of international economics regarding the relationship between trade and economic growth. One school of thought has tried to establish free trade as engine of economic growth whereas the other has criticized this doctrine. The theory of export-led strategy for economic growth has established that trade enhances economic growth of the developing countries. Growth of export increases productivity through expanding the economies of scale in the industries producing exportable goods. Open trade helps the country to make better allocation of its internal resources. It brings specialization and thereby efficiency in production. This will in turn reduce the cost of production of the exportable goods and services. Export growth creates the outlet for excess production and earns foreign exchange which helps the country expand import. Open trade provides the platform for the country to participate freely in the international market. Free interaction in international market imports the production technique and knowledge of management efficiency and therefore, increases productivity.

However, import growth fosters capital accumulation, importing capital goods and harnessing intermediate factors of production. Export growth as well as import growth, may have a stronger contribution to the economic growth of any country. There are many policy parameters which have been used as indicator of openness. However, in this paper the inflow of FDI has been considered as another

indicator of openness. Inflow of FDI makes possible to invest more than the domestic savings. It is favourable for economic growth if the productivity of investment remains positive. FDI brings advanced technologies and managerial excellence. Usually, FDI comes with the collaboration with the domestic capital. So, domestic producers can expand production using these advanced technologies. Inflow of FDI produces positive externalities through technology spillovers. Inflow of FDI reduces the gap between the domestic savings and the desired investment in developing countries which suffer from the problem of deficiencies of capital stock. Besides, inflow of FDI may create the employment opportunity of the country. Therefore, it is expected that FDI is likely to have a positive effect on economic growth. However, a handful of empirical studies regarding the relation between economic growth and FDI do not support this view. So far the relationship between the growth of FDI and economic growth is important for policy prescription. This justifies the consideration of the growth of FDI as an important determinant of economic growth.

Therefore, two (2) very important internal factors in the determination of the rate of economic growth are incorporated. These are the growth of gross domestic capital formation and the growth of population. There is no point to deny that growth of capital formation enhances economic growth increasing the productivity of labour. The impact of population growth on economic growth is still now a debatable question. One argument states that population growth helps to supply cheap labour and increases demand for goods and services. It accelerates the growth process. But another view asserts that population growth expands consumption expenditure which slows down the capital formation and thereby creates a leakage in the growth process.

2.2 Determinants of FDI Flows

The unpredictability of autonomous FDI flows, in both scale and direction, has generated a substantial research effort to identify their major determinants. An extensive literature based generally on three (3) approaches - aggregate econometric analysis, survey appraisal of foreign investors' opinion, and econometric study at the industry level - has failed to arrive at a consensus. This can be partly attributed to the lack of reliable data, particularly at the sectoral level, and to the fact that most empirical works have analysed FDI determinants by pooling of countries that may be structurally diverse. Thus, the following are important determinants of FDI flows:

Size of the Market: Econometric studies comparing a cross section of countries indicate a well-established correlation between FDI and the size of the market (proxied by the size of GDP) as well as some of its characteristics (for example, average income levels and growth rates). Some studies found GDP growth rate to be a significant explanatory variable, while GDP was not probably indicating that where the current size of national income is very small, increments may have less relevance to FDI decisions than growth performance as an indicator of market potential. There is little doubt that the size of China's market explains in large part the massive FDI flows it has attracted since the early 1980s. Within China, FDI has been concentrated (over ninety percent (90%) in the coastal areas. Provincial GNP, reflecting economic development and potential demand, has also been indicated as the major determinant of this concentration Broadman and Sun, (1997).

For sub-Saharan Africa as a whole, Bhattacharya *et al.* (1996) identify GDP growth as a major factor. Only three (3) SSA low-income countries are amongst the nine (9) main recipients of FDI flows in recent years, and of these only Nigeria is close to being classified as a large market (according to UNCTAD's benchmark of \$36bn GNP). Angola and Ghana (with GNP of \$8.9bn and \$5.5bn in 1995 respectively), received larger proportional FDI flows in 1995 than Nigeria indicating that small market size need not be a constraint in the case of resource-endowed, export-oriented economies. In fact, extractive industries in the low-income African countries continue to attract foreign investors as they have always done. In contrast, India, Pakistan and to a certain extent, Bangladesh have large markets but received proportionately relatively small (below one percent (1%)) FDI flows in 1986-95. Some analysts interpret this as evidence of high potential for increased FDI flows in the future; others stress that constraints are still restraining the channeling of foreign investment to these countries. For the majority of low-income countries which fail to attract large FDI flows, their small domestic markets are often cited as the main deterrent. Given other economic and political shortcomings, most investors are doubtful about the value of installing a factory

unless they can achieve a 'critical mass' for their products. Regional integration is often perceived as a positive means of compensating for small national markets. There is currently no clear evidence of the degree of this influence on FDI flows. Some investors expect positive spillover effects from South Africa and are generally optimistic about an East African free trade area, but the benefits may well be concentrated in the economically stronger states.

Openness: Whilst access to specific markets - judged by their size and growth - is important, domestic market factors are predictably much less relevant in export-oriented foreign firms. A range of surveys suggests a widespread perception that 'open' economies encourage more foreign investment. One indicator of openness is the relative size of the export sector. Singh and Jun's (1995) study indicates that exports, particularly manufacturing exports, are a significant determinant of FDI flows and that tests show that there is strong evidence that exports precede FDI flows. China, in particular, has attracted much foreign investment into the export sector. In Bangladesh, on the other hand, foreign investors have been attracted to the manufacturing sector by its lack of quota for textiles and clothing exports to the European Union and US markets. Garment exports, for example, rose from virtually nil in the 1970s to over one-half of its export earnings by the early 1990s. In contrast, most low-income SSA economies have remained more inward-oriented.

Labour Costs and Productivity: Empirical research has also found relative labour costs to be statistically significant, particularly for foreign investment in labour-intensive industries and for export-oriented subsidiaries. The decision to invest in China, for example, has been heavily influenced by the prevailing low wage rate. The rapid growth in FDI to Vietnam has also been attributed primarily to the availability of low-cost labour. In India, in contrast, labour market rigidities and relatively high wages in the formal sector have been reported as deterring any significant inflows into the export sector in particular. However, when the cost of labour is relatively insignificant (when wage rates vary little from country to country), the skills of the labour force are expected to have an impact on decisions about FDI location. Productivity levels in sub-Saharan Africa are generally lower than in low-income Asian countries, and attempts to redress the skill shortage by importing foreign workers have usually been frustrated by restrictions and delays in obtaining work permits. The lack of engineers and technical staff in these countries is reported as holding back potential foreign investment, especially in manufacturing; it lessens the attractiveness of investing in productive sectors.

Political Risk: The ranking of political risk among FDI determinants remains somewhat unclear. Where the host country possesses abundant natural resources, no further incentive may be required, as is seen in politically unstable countries such as Nigeria and Angola, where high returns in the extractive industries seem to compensate for political instability. In general, so long as the foreign company is confident of being able to operate profitably without undue risk to its capital and personnel, it will continue to invest. Large mining companies, for example, overcome some of the political risks by investing in their own infrastructure maintenance and their own security forces. Moreover, these companies are limited neither by small local markets nor by exchange-rate risks since they tend to sell almost exclusively on the international market at hard currency prices. Specific proxy variables (e.g. number of strikes and riots, work days lost, etc.) have proved significant in some studies; but these quantitative estimates can capture only some aspects of the qualitative nature of political risk. Surveys carried out in South Asia and sub-Saharan Africa appear to indicate that political instability, expressed in terms of crime level, riots, labour disputes and corruption, is an important factor restraining substantial foreign investment.

Infrastructure: Infrastructure covers many dimensions, ranging from roads, ports, railways and telecommunication systems to institutional development (e.g. accounting, legal services, etc.). Studies in China reveal the extent of transport facilities and the proximity to major ports as having a significant positive effect on the location of FDI within the country. Poor infrastructure can be seen, however, as both an obstacle and an opportunity for foreign investment. For the majority of low-income countries, it is often cited as one of the major constraints. But foreign investors also point to the potential for attracting significant FDI if host governments permit more substantial foreign participation in the infrastructure sector. Recent evidence seems to indicate that, although telecommunications and airlines have attracted FDI flows (e.g. to India and Pakistan), other more basic infrastructure such as road-building remains unattractive, reflecting both the low returns and high political risks of such investments. Surveys in sub-

Saharan Africa indicate that poor accounting standards, inadequate disclosure and weak enforcement of legal obligations have damaged the credibility of financial institutions to the extent of deterring foreign investors. Bad roads, delays in shipments of goods at ports and unreliable means of communication have added to these disincentives.

Incentives and Operating Conditions: Most of the empirical evidence supports the notion that specific incentives such as lower taxes have no major impact on FDI, particularly when they are seen as compensation for continuing comparative disadvantages. On the other hand, removing restrictions and providing good business operating conditions are generally believed to have a positive effect. In China, the 'open-door' policy and enhanced incentives for investing in the special economic zones contributed to the initial influx of FDI. Further incentives, such as the granting of equal treatment to foreign investors in relation to local counterparts and the opening up of new markets (e.g. air transport, retailing, banking), have been reported as important factors in encouraging FDI flows in recent years. The Indian Government has recently relaxed most of the regulations regarding foreign investment. This is seen as contributing to the increased FDI flows in the last couple of years. However, the lack of transparency in investment approval procedures and an extensive bureaucratic system are still deterring foreign investors; hence the relatively low FDI/GNP ratios. In 1991, Bangladesh and Pakistan implemented reforms allowing foreign investors to operate with 100% foreign ownership but still failed to attract significant flows (as a proportion of GNP) because of political instability and an over-extended bureaucracy. Nigeria, in contrast, continues to attract foreign investment as an oil-exporting country despite its erratic and relatively inhospitable policies. With regard to the remaining low-income countries with small FDI inflows, surveys indicate that the lack of a clear-cut policy with respect to foreign investment and excessive delays in approval procedures are amongst the most important deterrents. Although a number of African countries set up 'one-stop investment shops' during the 1980s in order to simplify approval procedures, the increased workload created bottlenecks.

Privatisation: Though privatisation has attracted some foreign investment flows in recent years (e.g. Nigeria in 1993 and Ghana in 1995), progress is still slow in the majority of low-income countries, partly because the divestment of state assets is a highly political issue. In India, for example, organised labour has fiercely resisted privatisation or other moves which threaten existing jobs and workers' rights. At a regional level, 1994 figures show 15% of FDI flows to Latin America as derived from privatisation, but only 8.8% in sub-Saharan Africa and 1.1% in South Asia. A number of structural problems are constraining the process of privatisation. Financial markets in most low-income countries are slow to become competitive; they are characterised by inefficiencies, lack of depth and transparency and the absence of regulatory procedures. They continue to be dominated by government activity and are often protected from competition. Existing stock markets are thin and illiquid and securitized debt is virtually non-existent. An under-developed financial sector of this type inhibits privatisation and discourages foreign investors.

3. Methodology

The Paper adopts ex-post facto design while using secondary source of data through the Central Bank of Nigeria Statistical Bulletin (various years) in explaining the influence of Foreign Direct Investment (FDI) on Economic growth of Nigeria. The choice of this method is necessary given the need to adequately explain the concept of FDI and its relevance to economic growth especially in developing economies. Multiple regression technique was used through the use of statistical package for social science (SPSS).

3.1. Model Specification

To capture the effect of FDI on economic growth, the following model is estimated:

$$GDP = a + \beta_1 FDI + \mu$$

Where GDP = Gross Domestic Product

FDI = Foreign Direct Investment

a = Constant

β_1 = Coefficient of the parameter estimate

μ = Error term

4. Results and Discussions

Table 4.1 shows the summary of the regression results. From the table, the R² which is the coefficient of determination indicates that 78.5% of the changes in the gross domestic product of Nigeria is caused by its foreign direct investment within the study period. In addition the adjusted R² further buttress the R², meaning that after adjusting for error, the Foreign direct investment can still explain the dependent variable which is gross domestic product by 78%.

Table 4.1: Summary of Regression Results

Variables	Coefficient	t-values	Sig
Constant	61365.189	28.774	0.000
FDI	0.626	20.410	0.000
R			0.886
R ²			0.785
Adjusted R ²			0.783
F-Statistics			416.560
F-Significance			0.000
Durbin Watson			0.865

Source: Computed by the Author

The F-statistics value of 416.56 indicates that the model of the study is well fitted; this implies that the variable used in the study is well selected, combined and used. This result can further be substantiated by its significance value implying that the inferences to be drawn from the result will not be due to mere chance as there is 99% percent assurance.

The Durbin Watson value which is far and above 0.5 or 50% indicates that serial correlation or autocorrelation is not a problem. The foreign direct investment has a coefficient value of 0.626 and t-value of 20.410 which is significant at 1%. This shows that foreign direct investment is strongly, positively and significantly influencing the gross domestic product of Nigeria within the study period. This implies that when there is one naira (N1.00) increase in the amount spent on foreign direct investment, the gross domestic product of Nigeria will increase by N0.63. This may be attributed to the fact that foreign direct investment is expected to bring about positive change, as there will be increase in production, increase in the number of people in employment and economic boom is also expected as more fund are being injected into the economy. The summary of the regression results are presented in Appendix I.

This finding is in line with those of Dupasquier and Osakwe (2005), Mwilima (2003) and Akinlo (2004). But contradicts the works of Li and Liu (2005); Elia et al. (2009); Doytch and Uctum (2011); among others who found that FDI is negatively related to economic growth. It also contradicts the studies of (Carkovic and Levine 2002; Beugelsdijk et al. (2008); Herzer 2008 who found no significant relationship between FDI and economic growth.

5. Conclusion and Recommendations

FDI has been acknowledged as a major propellant of growth through transfer of technology, technological innovations, and other externalities. However, this paper found out that FDI has contributed significantly to gross domestic product (GDP) in Nigeria. The efficacy of FDI in generating the desired growth may be motivated by the level of infrastructural development in Nigeria. Foreign direct investment however has been found to exert some level of influence on economic growth. While this paper also recognizes that creating the necessary environment is critical to the attraction of FDI, Nigerian government as well as those of the developing countries must not blindly reduce taxes, wages, and change regulations so as to attract FDI.

References

- African Growth and Opportunity Act (AGOA) website: <http://www.agoa.gov/agoa-legislation/index.asp>.
- Alfaro, L. A. Chanda, S. Kalemli-Ozcan, S. and Sayek, S. 2004, FDI and economic growth: the role of local financial markets. *Journal of International Economics* 64: 89–112.
- Alfaro, L., Kalemli-Ozcan, S. and Sayek, S. 2009, FDI productivity and financial development. *The World Economy* 32 (1): 111–135.
- Alfaro, L. Arendam, C. Sebrem, K.O. and Selin, S. 2006, "How Does Foreign Direct Investment Promote Economic Growth?" Exploring the Effects of Financial Markets on Linkages. NBER working paper No 12522.
- Akinlo, A. E. 2004, "Foreign Direct Investment and Growth in Nigeria: An Empirical Investigation." *Journal of Policy Modeling*. (26) 5 627-639.
- Akhter, S. H. 1993, Foreign Direct Investment in the Developing Countries. *International Trade Journal*, 7, 655-673.
- Ang, J. B. 2009a, Financial development and the FDI-growth nexus: the Malaysian experience. *Applied Economics* 41: 1595–1601.
- Ang, J. B. 2009b, Foreign direct investment and its impact on the Thai economy: the role of financial development. *Journal of Economics and Finance* 33: 316–323.
- Azman-Saini, W. N. W., Law, S. H. and Abdul Halim, A. 2010, FDI and economic growth: new evidence of the role of financial markets. *Economics Letters* 210: 211–213.
- Broadman, H.G. and Sun, X. 1997, *The Distribution of Foreign Direct Investment in China*, Policy Research Working Paper No.1720, World Bank, Washington DC.
- Beugelsdijk, S., Smeets, R. and Zwinkels, R. 2008, The impact of horizontal and vertical FDI on host's country economic growth. *International Business Review* 17: 452–472.
- Carkovic, M., and Levine, R. 2002, *Does foreign direct investment accelerate economic growth? Working Paper*. University of Minnesota Department of Finance.
- Choong, C. K. 2012, Does the domestic financial development enhance the linkages between foreign direct investment and economic growth? *Empirical Economics* 42: 819–834.
- Crespo, N. and Fontoura, M.P. 2007, Determinant factors of FDI spillovers – what do we really know? *World Development* 35(3): 410–425.
- De Melo, Luiz R. Jr. 1999, "Foreign Direct Investment-led Growth: Evidence from Time Series and Panel Data." *Oxford Economic Papers*. 51(1).
- De Mello, L.R. 1999, Foreign Direct Investment-led Growth: Evidence from Time Series and Panel Data. *Oxford Economic Papers* 51: 133-151.
- Doytch, N. and Uctum, M. 2011, Does the worldwide shift of FDI from manufacturing to services accelerate economic growth? A GMM estimation study. *Journal of International Money and Finance* 30: 410–427.
- Foreign Investment Advisory Service 1994, *Ghana: The Investor Road Map*. Final Draft. Washington, D.C.: Foreign Investment Advisory Service, November.
- Folorunso S. A. 2009, *Repositioning African Business and Development for the 21st Century*. Simon Sigué (Ed.). *Proceedings of the 10th Annual Conference*. IAABD
- Hermes, N., and Lensink, R. 2003, Foreign direct investment, financial development and economic growth. *The Journal of Development Studies* 40(1): 142–163.
- Herzer, D., Klasen, S. and Nowak-Lehmann, D.F. 2008, In search of FDI-led growth in developing countries: the way forward. *Economic Modelling* 25: 793–810.
- Lee, C. C., and Chang, C.P. 2009, FDI, financial development and economic growth: international evidence. *Journal of Applied Economics* 12(2): 249–271.
- IMF. 2000, "How Can the Poorest Countries Catch Up?" *Chapter IV in the World Economic Outlook*. May 2000. Washington, D.C.: International Monetary Fund.
- Lensink, R. and Hermes, N. 2004, The short-term effects of foreign bank entry on domestic bank behavior: does economic development matter? *Journal of Banking & Finance* 28: 55-568.
- Levine, R. 2005, Finance and growth: Theory and evidence. In Aghion, P., and S. Durlaff (Eds.), *Handbook of Economic Growth*. The Netherlands: Elsevier Science.
- Li, X., and Liu, X. 2005, Foreign direct investment and economic growth: an increasingly

- endogenous relationship. *World Development* 33 (3): 393–407.
- OECD. 1998, *OECD Economic Outlook*. June. Paris: Organization for Economic Cooperation and Development.
- Otepolo A. 2002, “*Foreign Direct Investment as a factor of Economic Growth in Nigeria.*” Africa Institute for Economic Development and Planning (IDEP), Dakar, Seregal.
- Oyejide T. A. 2005, “*Capital Flows and Economic Transformation: A Conceptual Framework*”, Proceedings of Central Bank of Nigeria 5th Annual Monetary Policy Conference with the theme “Capital Flows and Economic Transformation in Nigeria.” Held at the CBN Conference Hall, Abuja. November 10th to 11th.
- Singh, H. and Jun, K.W. 1995, “*Some New Evidence on Determinants of Foreign Direct Investment in Developing Countries*”, Policy Research Working Paper No.1531
- UNCTAD 2010, *World Investment Report: Investing in a Low-Carbon Economy*. New York and Geneva: United Nations.
- UNCTAD *World Investment Report 2013, Global Value Chains: Investment and Trade for Development*. New York and Geneva: United Nations.
- UNCTAD 1985, *World Investment Report, Transnational Corporations & Competitiveness* (Various reports 1985-95)
- UNCTAD 1996, *World Investment Report, Transnational Corporations & Competitiveness, Vol. V – Africa*
- UNCTAD 1995, “*The Determinants of Foreign Direct Investment - A Survey of the Evidence World Bank Development Indicators*”, <http://data.worldbank.org/indicator>.
- Vu, T. B., and Noy, I. 2009, Sectoral analysis of foreign direct investment and growth in the developed countries. *International Financial Markets, Institutions and Money* 19: 402– 413.
- Wilhelms, Saskia K.S. 1996, “*Comprehensive Tax Reform in Developing Economies.*” Medford, MA: Fletcher School of Law and Diplomacy, December.
- Wilhelms, Saskia K.S. 1996, “*The Controversy over International Labor Standards and Wage Regulation.*” Cambridge, MA: Harvard University Graduate School of Business Administration, April.
- Wilhelms, Saskia K.S. 1998, *Institutional FDI Fitness: Determinants of Foreign Direct Investment to Emerging Economies*. PhD Thesis. Medford, MA: Fletcher School of Law and Diplomacy, February.
- World Bank 1997, *Private Capital flows to Developing Countries - The Road to Financial Integration*, World Bank Policy Research Report, Washington DC. World Trade organization website, www.wto.org.
- Yan, W., and Yudong Y. 2003, “Sources of China's Economic Growth 1952-1999: Incorporating Human Capital Accumulation.” *China Economic Review* 14: 32-52.
- Yao, S., and Wei, K. 2007, Economic growth in the presence of FDI: the perspective of newly industrializing economies. *Journal of Comparative Economics* 35: 211–234.

Appendix I: Summary of Regression Results

Variables Entered/Removed

Model	Variables Entered	Variables Removed	Method
1	FDI ^a		Enter

a. All requested variables entered.

b. Dependent Variable: GDP

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.886 ^a	.785	.783	18847.15800	.785	416.560	1	114	.000	.865

a. Predictors: (Constant), FDI

b. Dependent Variable: GDP

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.480E11	1	1.480E11	416.560	.000 ^a
	Residual	4.049E10	114	3.552E8		
	Total	1.885E11	115			

a. Predictors: (Constant), FDI

b. Dependent Variable: GDP

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	61365.189	2132.690		28.774	.000		
	FDI	.626	.031	.886	20.410	.000	1.000	1.000

a. Dependent Variable: GDP

Collinearity Diagnostics^a

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	FDI
1	1	1.572	1.000	.21	.21
	2	.428	1.915	.79	.79

a. Dependent Variable: GDP

Residuals Statistics

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	6.1362E4	1.8395E5	8.6246E4	35870.34074	116
Residual	-4.71456E4	9.58599E4	.00000	18765.03492	116
Std. Predicted Value	-.694	2.724	.000	1.000	116
Std. Residual	-2.501	5.086	.000	.996	116

a. Dependent Variable: GDP