

# FOREIGN DIRECT INVESTMENT AND ECONOMIC GROWTH: A CASE OF NIGERIA

**OLOKOYO, FELICIA OMOWUNMI (Lecturer II)**  
Department of Finance, College of Development studies,  
Covenant university, Km 10, idiroko road,  
P.m.b 1023, ota, ogun state, Nigeria.

---

## **Abstract**

*This paper examined the effects of Foreign Direct Investment (FDI) on the development of Nigerian economy. Foreign Direct Investment is assumed to benefit a developing country like Nigeria, not only by supplementing domestic investment, but also in terms of employment creation, transfer of technology, increased domestic competition and other positive externalities. The paper tried to answer the question: what are the FDI determinants in Nigeria and how do they affect the Nigerian economy? The study employed the use of Ordinary Least Square (OLS) regression technique to test the time series data from 1970 – 2007. The Cochrane-Orcutt iterative method was also used to correct for autocorrelation. The model used hypothesizes that there is a functional relationship between the economy development of Nigeria using the real gross domestic product (RGDP) and Foreign Direct Investment. The regression analysis results evidently do not provide much support for the view of a robust link between FDI and economic growth in Nigeria as suggested by extant previous literatures. Though the result does not imply that FDI is unimportant, the model analysis reduces the confidence in the belief that FDI has exerted an independent growth effect in Nigeria.*

**Keywords:** Foreign Direct Investment, economic growth, exchange rate, gross domestic product, balance of trade, domestic investment.

## **1.0 Introduction**

Foreign investment inflow, particularly foreign direct investment (FDI) is perceived to have a positive impact on economic growth of a host country through various direct and indirect channels. It augments domestic investment, which is crucial to the attainment of sustained growth and development. Consequently, many developing countries, Nigeria included, have offered generous incentives to attract FDI inflows and, in addition, undertaken macroeconomic reforms, often under pressure from Bretton Woods Institutions, also geared towards the same end creating an investor-friendly environment. Some foreign firms have taken advantage of the incentives to satisfy their various motives of ensuring stable monopolistic control over sources of raw materials for their parent companies, access to control of local markets, utilizing low cost labour and realizing the possibility of higher returns and until the last five years, Nigeria also received very low proportions of global FDI inflows, inspite of its being blessed with enormous human and natural resources. This is perhaps because the economy was perceived by investors as a high-risk market for investment.

The foreign direct investor may acquire 10% or more of the voting power of an enterprise in an economy through; incorporating a wholly owned subsidiary or company, acquiring shares in an associated enterprise, through merger or an unrelated enterprise and, participating in an equity joint venture with another investor. Foreign direct investment incentives may be in form of low corporate and income tax rates, tax holidays, other types of tax concessions, preferential tariffs, special economic zones, investment financial subsidies, soft loan or loan guarantees, free land or land subsidies, relocation and expatriation subsidies, job training and employment subsidies, infrastructure subsidies, research and development support and derogation from regulations, usually for very large projects (Obadan, 2004).

Attempts at attracting FDI into Nigerian economy have been based on the need to maximize the potential benefits derived from them; and to minimize the negative effects their operations could impose on the country. As a result of the persistent global panic, unemployment has been on the rise, jobs are being lost, there is shortage of liquidity and acute scarcity of credit has remained visible in the financial institutions. For Nigeria to generate more foreign direct

investment, efforts should be made at solving problems of government involvement in business; relative closed economy; corruption; weak public institutions; and poor external image.

Nigeria is one of the economies with great demand for goods and services and has attracted some FDI over the years. According to CBN (2006), the amount of FDI inflow into Nigeria reached US\$2.3 billion in 2003 and it rose to US\$5.31 billion in 2004 (138% increase) this figure rose again to US\$9.92 billion (87% increase) in 2005. The banking reform engendered the interest of foreign banks in the Nigerian market making foreign direct investment (FDI) into Nigeria grew by 134% to N1.123 trillion (US\$9.6 billion) in 2007. Out of a total US\$36 billion of FDI that went into Africa, Nigeria received 26.66% of the inflow. The Vanguard Newspaper of May 19, 2008, reported that a total of US\$12.5 billion of foreign investment inflow was recorded in the economy at the end of 2007, and that this was an indication that “Nigeria is a beautiful bride for foreign investors”. This has not also been so, however.

In Nigeria, FDI is defined as an investment undertaken by an enterprise that is either wholly or partly foreign-owned. The

Investment Code that created the Nigerian Investment Promotion Commission (NIPC) (Decree No. 16 of 1995) and the Foreign Exchange (Monitoring and Miscellaneous Provision) Decree, also enacted in 1995, gives full backing for FDI in Nigeria. Nigeria has a high potential to attract significant foreign private investment inflow. Most countries strive to attract FDI because of its acknowledged advantages as a tool of economic development. Africa and Nigeria in particular, joined the rest of the world in seeking FDI as evidenced by the formation of the New Partnership for Africa’s Development (NEPAD), which has the attraction of foreign investment to Africa as a major component. Openness to trade and available human capital, however, are not FDI inducing. FDI in Nigeria contributes positively to economic growth. Although the overall effect of FDI on economic growth may not be significant, the components of FDI do have a positive impact. The FDI in the ICT sector has the highest potential to grow the economy and is in multiples of that of the oil sector.

Various classifications have been made of foreign direct investment (FDI). Policymakers believe that FDI produces positive effects on host economies. Some of these benefits are in the form of externalities

and the adoption of foreign technology. Externalities here can be in the form of licensing agreements, imitation, employee training and the introduction of new processes by the foreign firms (Alfaro, 2006). When FDI is undertaken in high risk areas or new industries, economic rents are created accruing to old technologies and traditional management styles. These are highly beneficial to the recipient economy. In addition, FDI helps in bridging the capital shortage gap and complement domestic investment especially when it flows to a high risk areas of new firms where domestic resource is limited. Foreign direct investment (FDI) is starting to shift more and more towards services; these services are also becoming more traditional. Foreign investment has provided a lot of opportunities such as employment opportunities, infrastructure and technology transfer, increased productive efficiency, etc. In conclusion, considering the wide range of critical empirical studies on how foreign direct investment in Nigeria affects its economic growth and development, one cannot draw conclusions from it with minimal acceptable level of confidence. There is therefore need for further studies to be carried out on how FDI affects the

growth and development of the Nigerian economy.

The major objective of this paper is to critically examine the effects of foreign direct investment on the development of the Nigerian economy and ascertain the FDI determinants in the Nigerian economy. The paper has five sections; following this introduction is the literature review as section two, section three is the methodology of the study while analysis of data, findings/results and the conclusion make up the last two sections.

## **2.0 Literature Review**

Foreign direct investment (FDI) is a major component of foreign investment. FDI is generally investment made to acquire lasting interest in an enterprise operating in an economy other than that of the investor, the investor's purpose being an effective voice in the management or control of an enterprise (IMF, 1977). FDI, which is mostly carried out by multinational corporations, differs from portfolio investment in that the former does carry control over the borrowing entity while the latter may not involve any direct control over the use of lending funds. In recent years, FDI has gained renewed importance as a vehicle for transferring resources and

technology across national borders. As the developing world's access to international capital in the form of official development assistance and commercial bank borrowing is shrinking due to a massive flow of funds from the Western world to the newly emerging market-based economies of Central and Eastern Europe, the poor countries are intensifying their efforts to attract FDI. To succeed in this venture, Nigeria must identify the major factors determining the inflow of FDI.

Nigeria as a country, given her natural resource base and large market size, qualifies to be a major recipient of FDI in Africa and indeed is one of the top three leading African countries that consistently received FDI in the past decade. However, the level of FDI attracted by Nigeria is mediocre compared with the resource base and potential need (Asiedu, 2003). Although some FDI promotion efforts are probably motivated by temporary macroeconomic problems such as low growth rates and rising unemployment, there are also more fundamental explanations for the increasing emphasis on investment promotion in recent years. In particular, it appears that the globalization and regionalization of the international economy have made FDI incentives more interesting and important

for national governments. Foreign direct investment has been proved in the literature to be an important promoter of growth in its own right. In effect, FDI is argued to increase the level of domestic capital formation. This also implies producing on large scale which in turn results in benefits of economies of scale and specialization and also increasing export and employment opportunities.

FDI is seen as an important source of non-debt inflows, and is increasing being sought as a vehicle flows and as a means of attaining competitive efficiency by creating a meaningful network of global interconnections. FDI consists of external resources, including technology, managerial and marketing expertise and capital. All these generate a considerable impact on host nation's production capabilities. At the current level of GDP, the success of governments' policies of stimulating the productive base of the economy depends largely on her ability to control adequate amount of FDI comprising of managerial, capital, and technological resources to boost the existing production capabilities. The Nigerian government had in the past endeavored to provide foreign investors with a healthy climate as well as generous tax incentives, but the result had not been

sufficiently encouraging. Nigeria still requires foreign assistance in the form of managerial entrepreneurial and technical skills that often accompany FDI.

FDI has also been argued to act as a catalyst for inward investment by complementing local resources and providing a signal of confidence in investment opportunities (Agosin and Mayer, 2000). New projects may invite complementary local private investments that provide inputs to, or use outputs of the foreign firms. It is also likely that private investment increases by more than the FDI flows because foreign equity capital finances only part of the total investment project. A substantial part of foreign investment projects is usually financed from local financial markets as well. It should be noted that the foreign capital inflows, by themselves, can lead to increase in domestic credit supply (Jansen, 1995).

FDI is a distinctive feature of multinational enterprise hence; a theory of FDI is also a theory of multinational enterprises as an actor in the world economy (Hennart, 1982). Based on this theory, FDI is not simply an international transfer of capital but rather, the extension of enterprise from its home country into foreign host country. The

extension of enterprise involves flows of capital, technology, and entrepreneurial skills and, in more recent case, management practices to the host economy, where they are combined with the local factors in the production of goods and services. FDI is growing faster than world gross domestic product (GDP), world trade, thus showing the rising importance of FDI.

FDI is an effective strategy that is used by developing countries of the world to achieve economic growth and development. Nigeria with its large reserves of human and natural resources presents foreign investors with a unique market in which to invest their money. However, as can be seen by the large multinationals in the oil sector, such investments though having great economic benefits to various groups who are equally stakeholders in the industry, it might not in the long run guarantee sustainable development in its entire ramifications. For FDI to impact on sustainable development, both the public and private sector must pursue corporate social responsibility (CSR) as an end in itself. From the public sector, the creation of a competitive economy through economic policies such as deregulation and privatization should be pursued. The private sector, companies, especially multinational corporations should

voluntarily comply with various international, national and industrial regulations and code of conduct. The classification of FDI is based firstly on the direction of investment both for assets or liabilities; secondly, on the investment instrument used (shares, loans, etc.); and thirdly on the sector breakdown. As for the direction, it can be looked at it from the home and the host perspectives. From the home perspective, financing of any type extended by the resident parent company to its nonresident affiliated would be included as direct investment abroad. By contrast, financing of any type extended by non-resident subsidiaries, associates or branches to their resident parent company are classified as a decrease in direct investment abroad, rather than as an FDI. From the host perspective, the financing extended by non-resident parent companies to their resident subsidiaries, associates or branches would be recorded, in the country of residence of the affiliated companies, under FDI, and the financing extended by resident subsidiaries, associates and branches to their non-resident parent company would be classified as a decrease in FDI rather than as a direct investment abroad. This directional principle does not apply if the parent company and its subsidiaries, associates or branches have

cross-holdings in each other's share capital of more than 10%.

As for the instruments, FDI capital comprises the capital provided (either directly or through other related enterprises) by a direct investor to a direct investment enterprise and the capital received by a direct investor from a direct investment enterprise. Firms pursuing international business opportunities analyze a number of factors regarding the FDI location decision (Porter, 2000). At the same time, countries compete to attract foreign firm's FDI inflows.

FDI is a form of lending or finance in the area of equity participation. It generally involves the transfer of resources, including capital, technology, and management and marketing expertise. Such resources usually extend the production capabilities of the recipient country (Odozi 1995). According to Ekpo (1997), the factors influencing foreign direct investment include; inflation, exchange rate, uncertainty, credibility, government expenditure as well as institutional and political factors. Other factors include; domestic interest rates, debt service, credit rating and political stability. For years, it has been unclear whether

developing countries benefit from devoting substantial resources to attracting FDI.

In order to bring Nigeria into more competitive position for FDI, the government has legislated two major laws to guarantee investments against nationalization by any tier of government, and to ensure the free transfer and repatriation of funds from Nigeria. The two laws in question are the Nigerian Investment Promotion Commission (NIPC) Act 16 and Foreign Exchange (Monitoring and Miscellaneous Provision) Act 17, both of which were enacted in 1995. The commission is located in Nigeria's capital, Abuja. The NIPC was established to address the problems of multiplicity of government agencies which investors confront when they come to Nigeria. Thus, the commission assists investors in going through the formerly cumbersome process of pre-investment registrations within two weeks. The commission guarantees the protection of foreign interests in Nigeria against expropriation, administers appropriate incentive packages available to investors, guarantees transferability of profits and other funds by investors, and identify difficulties and problems encountered by investors, proffer solutions and render

assistance to them. The Nigerian Investment Promotion Commission (NIPC) provides up-to-date information on investment opportunities available in the country, links foreign investors with local partner, provides information on available incentives for investment, issues business permits to foreign investors, coordinates the issuance of expatriate quota, negotiates in consultation with appropriate government agencies, specific incentive packages for investors, enters directly into bilateral agreement with investors for purposes of investment promotion, and identifies specific project and invites interested investors to partake in them.

**2.1 FDI in Africa: Performance, Challenges, and Responsibilities** After gaining political independence in the 1960s, african countries, like most developing nations were very skeptical about the virtues of free trade and investment. Consequently, in the 1970s and 1980s several countries in the region imposed trade restrictions and capital controls as part of a policy of import-substitution industrialization aimed at protecting domestic industries and conserving scarce foreign exchange reserves. There is now substantial evidence that this inward-looking development



strategy discouraged trade as well as FDI and had deleterious effects on economic growth and living conditions in the region (Rodrik, 1998). The disappointing economic performance of African countries beginning in the late 1970s up till the mid 1990s, coupled with the globalization of activities in the world economy, has led to a regime shift in favour of outward-looking development strategies. Since the mid-1990s, there has been a relative improvement in economic performance in a number of african countries as a result of the change in policy framework (Fischer et al, 1998).

Over the past three decades, Africa's participation in the world economy has declined. Africa's share of world exports fell from 5.9% in 1980 to 2.3% in 2003. Its share of world imports declined from 4.6% to 2.2% over 1980 to 2003 (UNCTAD, 2004). Given the unpredictability of aid flows, the low share of Africa in world trade, the high volatility of short-term capital flows, and the low savings rate of African countries, the desired increase in investment has to be achieved through an increase in FDI flows at least in the short-run. Until recently, FDI was not fully embraced by African leaders as an essential feature of economic development, reflecting

largely fears that it could lead to the loss of political sovereignty, push domestic firms into bankruptcy due to increased competition and, if entry is predominantly in the natural resource sector, accelerate the pace of environmental degradation. Moss, et al (2004) argued that much of African skepticism toward foreign investment is rooted in history, ideology, and the politics of the post-independence period. They also argue that the prevailing attitudes and concerns in Africa are due in part to the fact that policymakers in Africa are not convinced that the potential benefits of FDI could be fully realized in Africa. Clearly, the sector in which a country receives FDI affects the extent to which it could realize its potential benefits.

All African countries are keen on attracting FDI. Their reasons would differ but may be summarized as trying to overcome scarcities of resources such as capital, entrepreneurship; access to foreign markets; efficient managerial techniques; technological transfer and innovation; and employment creation. In their attempts to attract FDI, African countries design and implement policies; build institutions; and sign investment agreements. These benefits of African countries are difficult to assess but will differ from sector to sector

depending on the capabilities of workers, firm size, and the level of competitiveness of domestic industries.

Nigeria, consequent upon recognizing the critical role that FDI can play in its economic growth process, competes aggressively with other countries (such as Angola, South Africa, and Egypt) in attracting FDI. Overshadowing the drive, Nigeria's infrastructure is down, power supply is epileptic, the roads are chaotic and queues at petrol stations are long-winding, though the country is among the largest producers of crude oil in the world. This situation calls for proper strategies to sustain and further attract more FDI in order to facilitate sustainable economic growth and development. Nigeria witnessed a reasonable level of macroeconomic stability and GDP growth was estimated to have surpassed 5% in 2004 (Financial times, 2007). The growth and development of Africa and indeed Nigeria's economy depends largely on FDI, which has been described as the major carrier for transfer of new scientific knowledge and related technological innovations. The need to step up Nigeria's industrialization process and growth, calls for more technology spill-over through foreign investments (Dutse, 2008). The rapid advances in technology in the last

few decades especially in transport and communication have led to tremendous increases in FDI. Global inward FDI flows rose from US\$59 billion in 1982 to a peak of US\$1,491 billion in 2000. On an annual average basis, FDI inflows increased from 23.1% in the period 1986-90 to 40.2% over the period 1996-2000. Furthermore, FDI outflows rose from 25.7% to 35.7% within the same period (UNCTAD, 2003). In 2001, FDI flows declined for the first time since 1991, reflecting largely the slowdown in global economic activity as well as the poor performance of stock markets in the major industrial countries. FDI inflows and outflows each fell by 41%. In 2002, global FDI inflows dropped by 21% while outflows fell by 9%. The main factors responsible for the further decline include the lower than expected recovery in the global economy, the winding down of privatization in several countries, and the adverse effects of the auditing and accounting scandals in some advanced countries on stock markets. The declining trend in FDI flows continued in 2003 with inflows falling by 18%. Outflows however rose by 3% (Dupasquier and Osakwe, 2005).

Africa has never been a major recipient of FDI flows and so lags behind other regions of the world. On annual average basis,

Africa's share of global FDI inflows was 1.8% in the period 1986-90 and 0.8% in the period 1999-2000. A slight improvement was observed in 2001 when inflows to Africa rose from US\$9 billion in 2000 to US\$19 billion in 2001, increasing Africa's share of global FDI to 2.3%. Increase was largely due to unusual cross-border Mergers and Acquisitions in South Africa and Morocco. FDI inflows to Africa fell by 40% in 2002 but grew by 28% in 2003. Within Africa, the distribution of FDI flows is uneven. In 2001, the major recipients of flows in Africa were South Africa, Morocco, Nigeria, Angola, and Algeria (Dupasquier and Osakwe, 2005). Furthermore, in 2003, Morocco, Angola, Equatorial Guinea, Nigeria and Sudan accounted for half of the total inflows to Africa. The primary sector remains the most important destination for FDI flows into Africa, accounting for more than 50% of inflows from major investors to Africa over the period 1996-2000. Within the primary sector, oil and gas are the most important industries. Since 1999, there has been an increase in inflows into the tertiary sector. In fact in 1999, the tertiary sector attracted more inflows (US\$3,108 million) than the primary sector (US\$726 million). In 2000, the primary and tertiary sectors attracted inflows worth US\$2,029 million

and US\$1,931million respectively (Dupasquier and Osakwe, 2005). In designing policies and measures to promote foreign investment and reverse the current dismal FDI trend in Africa, it is important to recognize three facts. First, FDI requires a long-term commitment to the host country, involves very high sunk costs and, in the short run, it is difficult for foreign investors to recoup their initial investments if there is sudden change in the degree of risk associated with their location. The implication of this short-run irreversibility of FDI is that decisions on entry into a host country are highly sensitive to uncertainty about the investment environment.

Second, foreign investors regard Africa as a high risk investment region. In addition, economic and political risks are highly contagious due in part to the interdependence of African economies and the globalization of the world economy. The interdependence of African economies affects investors' assessment of risk in individual countries. Because of imperfect information, foreign investors associate the outbreak or occurrence of risk in one country with the likelihood of similar risks in other countries in Africa. Consequently, for the most part, they do not differentiate between countries in Africa-a phenomenon

known as statistical discrimination. This implies that an increase in political stability in one African country will diminish the probability of FDI flows to that country as well as to other countries in Africa. What is needed is a regional approach that recognizes the interdependent nature of African economies and the fact that economic and political risks are contagious.

Finally, the intensity of competition of FDI among developing countries has increased with globalization. Most developing countries have recognized this fact and are taking, or have taken, steps to adapt to the changing external environment. The implication of this increase in competition for FDI is that African countries need to have comprehensive, as opposed to selective, policy reforms if they are to attract significant FDI to Africa. In this regard, successful promotion of FDI to Africa requires actions at the national, regional, and international level.

### **3.0 Methodology**

The statistical technique employed in this study is Ordinary Least Squares (OLS) econometric technique using a time series secondary data from 1970-2007, which were obtained from the Central Bank of Nigeria

(CBN) statistical bulletin. The effect of FDI on the development of the Nigerian economy has witnessed series of write ups and empirical explanations, yet the riddle is not broken, hence the need for more research work.

### **3.1 Statement of Hypotheses**

The main arguments of the study were synthesized into the following hypotheses and the analysis was carried out based on them:

#### **Hypothesis 1**

H<sub>0</sub>: Foreign direct investment (FDI) inflow has no significant impact on the growth of the Nigerian economy.

H<sub>1</sub>: Foreign direct investment (FDI) has relative impact on the growth of the Nigerian economy.

#### **Hypothesis 2**

H<sub>0</sub>: the level of the balance of payment (BOP) and exchange rate (EXR) has no significant impact on the growth of the Nigerian economy.

H<sub>1</sub>: the level of balance of payment (BOP) and exchange rate has relative impact on the development of the Nigerian economy.

### 3.2 Model Specification

The model try to examine the relationship between FDI as it affects the economic growth of Nigeria between 1970 to 2007. RGDP which is the dependent variable was measured as a function of independent variables which are BOP, FDI, and EXR. This statement is written in functional form as;

$$RGDP = F (FDI, BOP, EXR) \text{ --}$$

----- (1)

The OLS linear regression equation based on the above functional relation is;

$$Y = \alpha_0 + \alpha_1 X_1 + \alpha_2 X_2 + \alpha_3 X_3 + \mu \text{ ----}$$

----- (2)

The equation can further be written in linear form as;

$$RGDP = FDI + BOP + EXR + \mu$$

----- (3)

Where:

RGDP= Real Gross Domestic Product

FDI= Foreign Direct Investment

BOP= Balance of Payment

EXR= Official Exchange Rate

$\mu$  = Error Term

### 3.3 Description of Variables

The dependent variable used is RGDP (in log form), it shows the rate of economic growth of a particular country and it is a proxy for investment development. The independent variables included in the model are:

1. Foreign Direct Investment: It is investment that comes from abroad. FDI will get to countries that pay higher return on capital. A higher GDP implies a brighter prospect for FDI in Nigeria. Since FDI comes into a country to enable it have a better economy, it would boost the RGDP.
2. Balance of Payment: It is a record of transaction between a resident of a country and the rest of the world. If a country's balance of payment is good, it would reflect in a nation's RGDP.
3. Exchange Rate: It is the charge for exchanging currency of one country for the currency of another. A higher exchange rate would attract low FDI, while a lower exchange rate indicates that an economy is doing well which may lead to attracting

FDI which in turn makes a country have a better RGDP.

The error term ( $\mu$ ) is a random variable that has well defined probabilistic properties. It is assumed to capture other exogenous factors that are capable of influencing investment growth. Hence,

$$RGDP = \alpha_0 + \alpha_1 FDI + \alpha_2 BOP + \alpha_3 EXR + \mu \text{ ----- (4)}$$

Where;

$\alpha$  = intercept

The model was logged so as to break them into a smaller digits and to avoid problem of large numbers. The t-1 is the past time period, hence the dependent variable, independent variables and the error term carry the t-1. Hence,

$$\text{LogGDP}_{t-1} = \alpha_0 + \text{Log}\alpha_1 FDI_{t-1} + \text{Log}\alpha_2 BOP_{t-1} + \alpha_3 EXR_{t-1} + \mu_{t-1} \text{ ----- (5)}$$

The apriori expectations are  $\alpha_1 > 0$ ,  $\alpha_2 > 0$  and  $\alpha_3 > 0$ , which means we expect a positive relationship between the dependent variable and the independent variables.

## 4.0 Analyses of data and findings

The variables presented below include gross domestic product, foreign direct investment, balance of payment, and exchange rate in Nigeria covering a period of 38 years (1970 to 2007). The model specified in chapter three was estimated using the Ordinary Least Square (OLS) estimation. If there is the presence of autocorrelation, the model would be corrected using Cochrane-Orcutt estimation.

## 4.1 Interpretation of Results

### 4.1.1 Ordinary Least Square Estimation

**Table 4.1 OLS when logged**

| Variable | Coefficient | Std. Error | t-statistic | Prob   | R-Squ. | Adj. R-squ. | D.W Stat. |
|----------|-------------|------------|-------------|--------|--------|-------------|-----------|
| FDI      | 0.481460    | 0.09567    | 5.032684    | 0.0000 | 0.6082 | 0.5735      | 0.2681    |
| BOP      | 1.62E-07    | 2.98E-07   | 0.544584    | 0.5896 |        |             |           |
| EXR      | -0.006207   | 0.005845   | -1.06203    | 0.2957 |        |             |           |
| C        | 7.839028    | 0.682914   | 11.47880    | 0.0000 |        |             |           |

Table 4.1 shows a relationship between the dependent variable (RGDP) and the explanatory variables (FDI, BOP, EXR). RGDP and FDI figures were logged as a result of huge figures recorded. From the table above, it shows that R-squared and adj. R-squared are not a good fit. As a result of the presence of autocorrelation (as shown in

the Durbin-Watson indicating 0.2681), the Cochrane-Orcutt iteration method was used to correct this. Cochrane-Orcutt iteration method was used to correct this.

#### 4.1.2 Cochrane Orcutt Iterative Method

**Table 4.2 Cochrane Orcutt Iterative Method**

| Variable | Coefficient | Std. Error | t-Stat  | Prob.  | R-Squ. | Adj. R-Squ. | D.W Stat. |
|----------|-------------|------------|---------|--------|--------|-------------|-----------|
| LFDI     | -0.011319   | 0.10059    | -0.1125 | 0.9111 | 0.94   | 0.933       | 2.066     |
| BOP      | -1.83E-08   | 1.22E-07   | -0.1503 | 0.8814 |        |             |           |
| EX       | 0.0003      | 0.0048     | 0.0633  | 0.9499 |        |             |           |
| C        | 13.4095     | 1.87747    | 7.1423  | 0.0000 |        |             |           |
| AR (1)   | 0.9180      | 0.04509    | 20.3564 | 0.0000 |        |             |           |

The Cochrane Orcutt iterative method is used to estimate higher-order autoregressive scheme. It is used when Durbin-Watson is very low in the OLS estimation. Autocorrelation, which had previously been noted in the OLS estimation, was eliminated after the Cochrane Orcutt estimation method. The result shows that all the coefficients have their expected relationship. The coefficient of determination ( $R^2$ ) from our result is 0.941 while adjusted  $R^2$  is 0.933. It shows that about 94.1% of

systematic variation in the endogenous variable can be explained by changes in all independent variables. This is surely a good fit because only 5.9% systematic variation in GDP is left unexplained by the model, which may be attributed to the error term. The Durbin Watson value corrected which is 2.066 implies that there is no presence of first-order positive or negative autocorrelation. A test of overall significance of the model shows that the overall model is insignificant at both 1% and 5% levels of significance. This indicates the

entire slope coefficiently taken together is simultaneously insignificantly different from zero.

#### **4.2 Implication of Results**

Foreign direct investment, though not unimportant, has no relevant effect on the Nigerian economy. This implies that it is not a significant variable in determining growth in RGDP of Nigeria. Balance of payment has a negative effect on the value of the GDP and it is the most insignificant as there is a continuous rise in balance of payment. Exchange rate has a negative impact on the value of the GDP; hence it is not statistically significant. The result shows that FDI is insignificant and has a t-statistic of 0.0285 and a P-value of 0.9774. This shows that FDI is insignificant to the economic growth of Nigeria. Balance of payment has a t-statistic of -0.1209 and P-value of 0.9405 which shows that it is insignificant. Exchange rate has a t-statistic of 0.0554 and P-value of 0.9561. This also indicates that exchange rate is also insignificant. If all the independent variables are held constant at zero, GDP will be 13.4 On the basis of the individual significance of the parameter estimates, all the slope coefficients are individually statistically insignificant because their t-values were -0.0113, -1.83E-

08 and 0.0003. The regression also shows that the model is a preferable one relative to other alternative combinations of variables to build a similar model, as the mean dependent variable of 3.499864 is greater than the standard error regression of 0.171662. Therefore, the alternative hypotheses are rejected while the null hypotheses are accepted.

#### **5.0 Conclusion/Recommendations**

This research has examined the effects of FDI on the development of the Nigerian economy. The results shows that exchange rate, balance of payment and FDI have negative impacts on the Nigerian economy. An important finding of this study is that FDI to Nigeria is majorly driven by natural resources, and that governments can play an important role in promoting and developing its natural resources to encourage more investments to Nigeria. From this research work conducted, it can be concluded that foreign direct investment no matter how large its form; may not necessarily have a relative impact on the growth of the Nigerian economy. Nigeria needs to juxtapose foreign investment with domestic investment in order to maintain high levels of income and employment. Foreign investment can be effective if it is directed at



improving and expanding managerial and labour skills. In other words, foreign direct investments into Nigeria will not on its own lead to sustainable economic growth except it is combined with the right structures and infrastructures that could facilitate fruitful results. Thus, the policy that would focus on the enhancement of the productive base of the economy would be a better position than more crusades for foreign direct investment. It is therefore recommended that policies, which would focus on the enhancement of the internal economy, especially the stability of the economy, should be pursued by Nigerian government. Moreover, regulators can undertake sustainability impact assessment and regulate microeconomic and local condition. This includes monitoring of benchmarks and business practice, voluntary guidelines, and transfer of environmentally sound technology. Regulation of investment is only as effective as a country's ability to enforce it. Furthermore, government should improve the investment climate for existing domestic and foreign investors through infrastructure development; the availability of power especially would go a long way because it would reduce the cost on alternative power supply. Provision of services and changes in the regulatory framework relaxing laws on profit

repatriation will also encourage investors to increase their investments and also attract new investors. An improvement in the investment climate will also encourage Nigeria keep its wealth and reduce capital flight.

### **5.1 Limitations/Suggestion for Future Studies**

This study is limited in scope to Nigeria as it only looks at the effect of foreign direct investment (FDI) on the economic growth of Nigeria alone. It is also limited in temporal scope to 37 years during the period from 1970 to 2007 to reduce estimation bias and noises which could be generated as a direct corollary of the global economic downturn in 2008 and 2009. This study employed the use of the Ordinary Least Square method of Estimation in estimating the link between the Nigerian economic growth and FDI, it is suggested on the Nigerian economy could be carried out employing qualitative analysis extensively. The model estimated in this study made use of only three independent variables, further studies could include more variables in order to establish if the results will be more robust.

### **References**

- Agosin, M. & Mayer, R. (2000), "Foreign Investment in Developing Countries: Does it Crowd in Domestic Investment?" *UNCTAD Paper*, No.146.
- Akinlo, A. (2004), "Foreign Direct Investment and Growth in Nigeria: An Empirical Investigation", *Journal of Policy Modeling*, 26, pp.627-639
- Alfaro, L. (2006), "How Does Foreign Direct Investment Promote Economic Growth? Exploring the Effects of Financial Markets on Linkages", *NBER working paper*, No 12522.
- Asiedu, E. (2003), "Capital Controls and Foreign Direct Investment", *World Development*, 32(3), pp. 490-497.
- Central Bank of Nigeria (CBN), (2001), *Annual Report and Financial Statements*, Abuja: Central Bank of Nigeria Press.
- CBN (2007), *CBN Statistical Bulletin*, Abuja: Central Bank of Nigeria Press.
- Dupasquier, C. & Osakwe, P. (2005); "Foreign Direct Investment in Africa: Performance, Challenges and Responsibilities", *African Trade Policy Centre*, 21, p.6
- Dutse, A. (2008); "Nigeria's Economic Growth: Emphasizing the Role of Foreign Direct Investment in Transfer of Technology", *IBIMA Paper*, 3, p.1
- Ekpo, A. H. (1997); "Foreign Direct Investment in Nigeria: Evidence from Time Series Data", *CBN Economic and Financial Review*, 35 (1), pp. 35 -42
- Financial Times, (2007); "Foreign Direct Investment in Nigeria", *Financial Times London*, March 8, retrieved from [www.fdiMagazine.htm](http://www.fdiMagazine.htm).
- Fischer, S., Hernandez-Cata, E. & Khan, M. S. (1998); "Africa: is this the turning point?" *IMF Paper on Policy Analysis and Assessment*, 98, p.6
- Hennart, J. (1982); "A Theory of Multinational Corporations in World Development", Ann Arbor: University of Michigan Press.

- IMF, (1977); “World Economic Outlook”, Washington: International Monetary Fund (IMF).
- Jansen, K. (1995); “Foreign Direct Investment, Information Technology and Economic Growth In the MENA Region”, *World Development*, 23(2), pp.193-210
- Moss, T., Ramachandran, V., & Shah, M. (2004); “Is Africa’s Skepticism of Foreign Capital Justified?-Evidence from East African Firm Survey Data”, *Center for Global Development Working Paper*, No. 41.
- Obadan, M. I. (2004); “*Foreign Capital Flows and External Debt: Perspectives on Nigeria and the LDCs Group*”. Lagos: Broadway Press Ltd.
- Odozi, V.A. (1995); “An Overview of Foreign Investment in Nigeria 1960-1995”. *CBN Research Department Occasional Paper*, No.11, p. 41.
- Porter, M. E. (2000); “Measuring the National Environmental Performance and its Determinant”, in Jeffrey Sachs, et al., eds, *The Global Competitiveness Report*, New York: Oxford University Press.
- Rodrik, D. (1998); “Trade Policy and Economic Performance in Sub-Saharan Africa”, *National Bureau of Economic Research Working Paper* 6562
- UNCTAD, (2003); *World Investment Report 2003*, Geneva:United Nations Conference on Trade and Development (UNCTAD).
- UNCTAD, (2004); *Prospects for Foreign Direct Investment and the Strategies of Transnational Corporations*, Geneva: UNCTAD.

