

## **MEASURING INVESTORS' RESPONSE TO NIGERIAN ECONOMIC REFORMS A TIME SERIAL STUDY 1999 - 2012**

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### **Abstract**

Given that no nation in the world have been known to develop economically on its own without foreign investments, various countries of the world have strived to put in place measures to attract and retain various forms of foreign investments into their economy. Nigeria is no exception to this rule. Indeed, successive governments in Nigeria have since the return to civil rule in 1999 embarked upon various economic reforms to transform the economy and attract foreign investments. This study evaluated foreign investors' response to the various economic reforms in Nigeria since the return of civil rule in 1999. This was achieved by examining the quantum of foreign investments that have accrued to the country since 1999 and the causal relationship between these foreign capital inflows and economic growth in Nigeria during the sample period. The results from the analysis revealed that causal relationship exist between foreign capital inflows and economic growth in Nigeria, which supports the foreign capital inflows-led economic growth hypothesis. Besides, the dynamic interaction among foreign capital inflows and economic growth of the Nigerian economy was also analyzed using the Granger causality analysis. The result of the analysis supports the result of the cointegration analysis which showed that, causality runs from aid, remittance (RMC), and foreign direct investment (FDI) to real GDP (growth). It is therefore recommended based on the result of the econometric modeling that government should continue to pursue with vigor the various economic reforms embarked upon since the return to civil rule in 1999 and should accelerate the provision and development of infrastructure in the country. Moreover, government should provide stable macroeconomic environment to enable domestic and foreign investments to thrive in the country.

**Keywords:** Foreign Investors, Foreign Direct Investment, Reforms, Investors Response

## **1. Introduction**

There is a broad consensus in extant literature that developing countries require both local and foreign investments to attain sustainable economic growth and development (Akinkugbe, 2003; Nnnana et al, 2006, Adeolu, 2007). Indeed, in most developing economies, domestic private investment has proven to be insufficient in giving the economy the required boost to enable it meet its growth target because of the mismatch between their capital requirements and saving capacity (see Okogu, 2002 and Acemoglu et al., 2003). Foreign private investment, thus, augments domestic resources to enable the country carry out effectively her development programmes and raise the standard of living of her people. According to the International Monetary Fund (IMF, 2010), foreign direct investment (FDI) is a category of cross-border investment that involves residents of one economy obtaining a lasting interest in an enterprise located in another economy. A lasting interest is commonly understood to involve at least 10% of ordinary shareholding or voting power. In effect, FDI need not entail much transfer of funds and can involve a firm bringing its brand, technology, management, and marketing strengths to bear on its local interest. Foreign Portfolio Investment (FPI), in contrast to foreign direct investment, represents passive holdings of securities such as foreign stocks, bonds, or other financial assets and does not convey significant control over the management or operations of the foreign firm. The benefits of FDI for economic development have been well established (for example, Balogun, 2003; Mathew, 2008; Okpe and Abu, 2009; and Okuedo, 2003). According to the United Nations Commission for Trade and Development (UNCTAD, 2011), a global network of 80,000 multinational corporations and 800,000 foreign affiliates has helped create millions of jobs, transferred technology, upgraded skills, fostered competition, and contributed to the fiscal standing of many economies. Through capital spillovers, FDI has encouraged the adoption of new production technologies. Foreign companies have also stimulated knowledge transfers by training local workers, developing their skills, and introducing new management practices and better organizational arrangements. Foreign investment has also helped break up cozy local oligopolies and cartels.

In recognition of the critical role of foreign investments in achieving sustainable economic growth and developments, successive governments in Nigeria have instituted various economic reforms aimed at attracting foreign investments into the country. In this paper, attempt is made to empirically evaluate the response of investors to the various economic reforms embarked upon by government especially since the return of democracy in Nigeria in 1999. Specifically, the paper will evaluate the quantum of foreign investments that have accrued to the country from 1999 to 2012. Secondly, the paper will also evaluate the impact of these foreign investments on economic growth and development in Nigeria within the period under review. The rest of the paper is structured as follows. Following this introduction in section 1, section 2 will briefly review the various economic reforms that have the capacity of attracting foreign investments in the country while section 3 will review the empirical literature on foreign investments and economic growth nexus. Section 4 will present the methodology of the paper while in section 5; the result of the study will be presented. Section 6 will summarize and conclude the work.

## **2. Review of Economic Reforms in Nigeria (1999 – 2012)**

Following many years of economic stagnation as a result of prolong military rule in Nigeria, the country embarked on a comprehensive reform program on return to civilian rule in 1999.

According to Okonjo-Iweala and Osafo-Kwako (2010), the most articulate and comprehensive of the reform programs is arguably the home-grown National Economic Empowerment and Development Strategy (NEEDS). NEEDS program focused on four main areas namely: improving the macroeconomic environment, pursuing structural reforms, strengthening public expenditure management, and implementing institutional and governance reforms. All these pillars of reforms have implication for creating a favourable investment climate and attracting foreign investments into the country. To this end, our review of economic reforms in Nigeria will focus on these areas.

**Macroeconomic Reforms:** Nigeria's economic performance in the two decades prior to economic reforms was generally poor. Over the period 1992 to 2009, annual GDP growth had averaged about 2.25 percent while population growth had averaged 3.5 percent, meaning the population growth was outstripping production capacity (Okonjo-Iweala & Osafo-Kwako, 2010). This has serious implication for sustainable economic development. A major challenge for the Nigerian economy was its macroeconomic volatility driven largely by external terms of trade shocks and the country's large reliance on oil export earnings. By some measures, Nigeria's economy ranked among the most volatile in the world for the period 1960 to 2000 (World Bank, 2003). Volatile fiscal spending also tended to cause real exchange rate volatility. In particular, fiscal expansions financed by oil revenues often resulted in domestic currency appreciation, creating Dutch-disease concerns and reducing competitiveness of the non-oil economy (Barnett & Ossowski, 2002). The costs of macroeconomic volatility were significant for Nigeria. There is considerable theoretical and empirical evidence on the adverse effects of volatility for growth (see Fatas & Mihov, 2003; Servén, 2003; Bleaney & Greenaway, 2001). These adverse consequences may occur via two channels: first, unsteady revenue flows tend to reduce the quality and productivity of government expenditures; and second, private domestic and foreign investments tend to be reduced in a volatile environment. Both effects appear to have occurred in the case of Nigeria. Macroeconomic instability also hindered long-term planning by the private sector and resulted in a concentration of economic activity in various short-term arbitrage opportunities (particularly in retail trade) rather than productive long-term investments. Therefore, a central objective of the macroeconomic reform was to stabilize the Nigerian economy, to improve budgetary planning and execution, and to provide a platform for sustained economic diversification and non-oil growth. Since the return of civil rule in 1999 and the implementation of various economic reforms, these objectives appear to being realized. The implementation of monetary policy has similarly being fairly disciplined within the period under review, with the central bank adhering to various monetary targets and reducing inflation. End-year inflation declined from 21.8 percent in 2003 to 10 percent in 2004 but increased slightly to 11.6 percent at the end of 2005 and has remained in single digit since 2010. Similarly, interest rates, although relatively high, are gradually declining: prime lending rates have declined from about 21.3 percent at the end of 1999 to 17.6 percent at the end of 2005 (Adeolu, 2007). The adoption of the Wholesale Dutch Auction System facilitated the convergence of foreign exchange markets and the elimination of a previous black market premium (Okonjo-Iweala & Osafo-Kwako, 2010).

The improved implementation of fiscal and monetary policies has provided a stable macroeconomic environment, which is attracting domestic and foreign private sector

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participation in the domestic economy. Overall, the attainment of macroeconomic stability has provided a platform for improved growth performance in recent years. Growth rates have averaged about 7.1 percent annually for the period 2003 to 2010 (CBN, 2011). This is a notable improvement on the performance over the decade before reform when annual growth rates averaged about 2.3 percent. More importantly, the recent strong growth rates have been driven by strong growth in the non-oil sectors, which is needed for employment creation. Growth in the non-oil sector for 2003, 2004, and 2005 was 4.4, 7.4, and 8.26 percent, respectively (Okonjo-Iweala and Osafo-Kwako, 2010). The country's recent sovereign credit rating of BB+ by Fitch and Standards & Poor further affirmed the recent progress made.

**Structural Reforms:** According to Okonjo-Iweala and Osafo-Kwako (2010), a broad range of structural reforms were also needed to improve the domestic business climate and enhance competitiveness, to deregulate and reduce government activity in various economic sectors, and to address various structural constraints to growth; all in a bid to attract foreign investments into the country. Some of the structural reforms within the period under review include:

**Privatization:** Prior to the various economic reforms, the Nigerian public sector was underperforming and imposed a significant financial drain on the treasury. Within the public sector, the underperformance of state-owned enterprises was particularly costly. Large public investments in state-owned enterprises in previous decades had yielded very few concrete benefits. State-owned enterprises often were poorly managed, with a great deal of both hidden and overt corruption. These enterprises incurred repeated losses and required annual government transfers to remain operational. As an example, direct government financial support to state-owned enterprises in 2001 totaled about US\$323 million (or 0.68 percent of GDP), with about one-half of the total subsidy allocated to oil refineries and the telecom sector (Okonjo-Iweala & Osafo-Kwako, 2010). The actual overall costs of operating government enterprises were larger if various indirect subsidies such as tax exemptions and loans were included. The Adam Smith Institute estimated that for the period 2000 to 2003, it cost the federal government about N74.3 billion (US\$558 million) to operate the Nigerian Ports Authority, which comprised of direct financial flows and various foregone earnings to the government (Adam Smith International, 2006). Privatization of some state-owned enterprises, as well as deregulation of government activities in some sectors, was therefore needed to improve the efficiency of these enterprises, to curb corruption, and also to reduce the financial costs to the federal government. Between 1999 and 2006, about 116 enterprises were privatized, including various loss-making government enterprises operating in industries such as aluminum, telecommunications, petrochemical, insurance, and hotel (BPE, 2007). A major component of the privatization program was the unbundling and sale of the Power Holding Company of Nigeria (PHCN) into 18 companies responsible for power generation, transmission, and distribution. In some instances, state owned enterprises such as ports were also concessioned to private sector operators. Moreover, government also concluded the successful sale of 51 percent of its stake in the Hilton Hotel (in Abuja) and the sale of the state-owned Nigeria Telecommunications Limited (NITEL) (BPE, 2007). Privatization has also been accompanied by deregulation of various economic sectors to encourage private sector participation, notably in telecommunications, power, and downstream petroleum sectors. Liberalization of the telecom sector has been particularly successful, resulting in an increase in the number of telephone lines in the country from about 500,000 landlines in 2001 to over 82 million GSM lines at present. The sector has attracted over US\$1 billion a year

in investments in the past four years and Nigeria has been rated as one of the countries with the fastest growing teledensity in the world (NCC, 2010).

**Civil Service Reform:** Before the recent reforms, the Nigerian civil service was oversized and poorly remunerated, resulting in poor service delivery. Rapid public sector recruitment under military administrations had resulted in an oversized and under-skilled work force in which employees often did not have the appropriate technical skills needed for their assignments. According to Okonjo-Iweala and Osafo-Kwako (2010), civil service reform began with five pilot ministries and subsequently was extended to nine MDAs (Ministries, Departments and Agencies). In each instance, internal consultations were performed while verification exercises were conducted to update personnel records and payroll data. Organizational structures for the reforming ministries were reviewed and rationalized, while the appropriate professional skills needed were identified. Redundancy packages and retraining programs were offered to severed staff. A total of 35,700 officials have been severed from the civil service at an estimated cost of about N26 billion (US\$203 million), while over 10,000 high flying university graduates are being recruited. In the process of restructuring, an estimated 8,000 ghost workers were expunged from the government payroll. Government pay scales have also been reviewed. An initial recommendation from the Shonekan Committee had recommended public sector wage increases of 25 percent in 2007 and a further 10 percent annually (plus cost-of-living adjustment) for the next 10 years.

**Banking Sector Reforms:** Prior to the recent economic and banking sector reforms the Nigerian banking sector was weak and fragmented, often financing short-term arbitrage opportunities rather than productive private investments. The roots of the financial sector weakness may be traced to the poorly managed liberalization during the Structural Adjustment Program (SAP) of the 1980s (Okogu, 1992). The financial system was repressed before the structural adjustment program largely because of the imposition of interest rate ceilings that resulted in negative real interest rates (Ikhide and Alawode, 2002). Initial attempts at financial liberalization, however, yielded poor results. Supervision remained weak and there was evidence that many banks had poor balance sheets. Many banks conducted only limited lending to the private sector while engaging predominantly in more lucrative short-term arbitrage foreign exchange “round-tripping” activities. Consolidation and improved supervision of the sector were needed to strengthen the financial sector. To strengthen the financial sector and improve availability of domestic credit to the private sector, a bank consolidation exercise was launched in mid-2004. The Central Bank of Nigeria requested all deposit banks to raise their minimum capital base from about N2billion (US\$15 million) to N25billion (US\$192 million) by the end of 2005. Banks failing to meet the new requirements were expected to merge or else have their licenses revoked. Implementation of the consolidation exercise triggered various mergers in the banking sector and reduced the number of deposit banks in Nigeria from 89 to 25 and later 24 (CBN, 2010). Moreover, in the process of meeting the new capital requirements, banks raised the equivalent of about \$3 billion from domestic capital markets and attracted about \$652 million of FDI into the Nigerian banking sector (Okonjo-Iweala & Osafo-Kwako, 2010).

**Trade Policy Reform:** For the two decades prior to economic reforms, Nigeria’s trade regime was viewed as complex, restrictive, and opaque (WTO, 2005). Following the structural

adjustment program (SAP) in 1986, a seven-year tariff schedule was adopted which significantly reduced tariff averages. However, further tariff revisions were made, often in response to pressures from domestic lobbies. Since 1978, the government had also introduced policies on import prohibitions which banned selected products that were viewed as strategic for the economy or which needed infant industry protection. Ad hoc import prohibitions and tariff revisions reduced the transparency and predictability of the tariff regime as tariffs applied at ports could differ from published tariffs. According to Okonjo-Iweala and Osafo-Kwako (2010), prior to the recent economic reform, Nigeria maintained a complex tariff structure comprised of about 19 bands and 5,146 lines (at the HS-8 digit level), with tariffs ranging between 2.5 and 150 percent. Nigeria liberalized its import tariff regime by adopting the Common External Tariff (CET) of the Economic Community of West African States (ECOWAS). This was in keeping with the government's commitment to simplify the tariff structure and improve the transparency and predictability of Nigeria's trade policies (NPC, 2010). Under the new ECOWAS tariff structure, Nigeria has adopted a four-band arrangement with duty rates of zero, 5, 10, and 20 percent for capital goods, raw materials, intermediate products, and finished goods, respectively. A temporary 50 percent band exists but was phased out by the end of 2007, while a few import prohibitions were billed to be eliminated progressively. The use of the 50 percent tariff band is permitted under current ECOWAS trade rules and provides Nigeria with some flexibility in its future industrial policies. For example, the 50 percent tariff is currently levied on goods in selected sectors in which the country has a comparative advantage and aims to support domestic production, such as vegetable oils (HS sections 15.11, 15.12, 15.13) and starch (HS sections 11.08) (NPC, 2010).

**Institutional and Governance Reforms:** A bane of Nigeria's existence since the oil boom of the 1970s has been the reputation for corruption, largely justified, but also partly the result of perception (Okogu, 1999). According to Okogu, (1999), corruption and poor governance affected growth and public service delivery in Nigeria in various ways. Corruption distorts the climate for doing business and serves as a tax on private investments. In a corrupt environment, resources for human capital and other needed investments, such as in infrastructure, health and education are often diverted. There are various ways in which this may occur, including procurement fraud, patronage for access to services, absenteeism and misuse of facilities. In particular, poor households are disproportionately hurt in communities where corruption is most prevalent. According to Okonjo-Iweala and Osafo-Kwako (2010), a key tenet of the NEEDS reform program, was to prioritize anti-corruption measures as a central component of the reforms. Analytical studies on the extent of corruption in Nigeria before the recent reforms were often very negative. A survey of Nigerian firms in 2002 revealed widespread bribery across various public institutions (World Bank, 2003). About 70 percent of firms surveyed reported that they need to bribe government officials to obtain trade permits, about 83 percent paid bribes to obtain utility services, about 65 percent paid bribes when paying taxes, an estimated 90 percent paid bribes during procurement, and 70 percent of firms acknowledged the need for bribes to obtain favorable judicial decisions (World Bank, 2003). In addition, there was widespread perception of the leakage of public funds (see Kaufmann et al, 2005). Moreover, 100 percent of Nigerian firms surveyed agreed that public funds were diverted to private groups in contrast to about 78 percent of firms in Russia, and about 45 percent of firms in South Africa (Okonjo-Iweala and Osafo-Kwako, 2010).

According to NEEDs program (NPC, 2004), tackling corruption under the economic reforms required two main elements: first, embedding anti-corruption measures in a comprehensive reform program, and second, conducting diagnostic studies to identify specific areas in which corruption had a high negative impact on the public purse. By embedding anti-corruption programs in the reform agenda, the battle against corruption was perceived to be an integral part of a broader exercise of economic reform needed to stimulate growth and address poverty in Nigeria. Identifying areas of major corruption also enabled government to focus reform measures on high impact areas. As an example, public procurement in Nigeria was reviewed to determine the costs of corruption in government contracts. Although procurement fraud tends to be one of the most common avenues of corruption in most countries, its incidence in Nigeria was particularly severe. An IMF funded-federal government survey noted that prior to 1999 the government lost an average of about N40 billion (US\$300 million) each year from corrupt practices in public procurement (IMF, 2005). This occurred in various forms: inflation of contract costs, award of contracts for non-existent projects, over-invoicing, and diversion of public funds to foreign banks, and low project quality because of the use of inexperienced contractors. Moreover, procurement costs in Nigeria were significantly higher compared with costs for similar projects in neighboring countries such as Ghana.

### **The Oil and Gas Sector and the NEITI Initiative**

The lack of transparency in the Nigerian oil and gas sector, particularly under previous military administrations, also presented a major challenge for economic governance. In 2003, Nigeria was among the first countries to adopt the Extractive Industries Transparency Initiative (EITI) to help improve governance of the sector. According to Okonjo-Iweala and Osafo-Kwako (2010), President Obasanjo personally enrolled the country in the initiative. One of the key acts of the EITI aimed at improving transparency was to commission an independent audit of the oil and gas sector from 1999 to 2004. This was an unprecedented exercise domestically, and Nigeria was the first country in the EITI initiative to commit to such an undertaking. The audit presented a number of instructive findings. Overall, 99.8 percent of revenues in the sector were accounted for. About 0.02 percent of aggregate revenue was unaccounted for, although this remains within the conventional margin of error for such audits. However, the audit showed a history of poor data keeping. In the financial audit, only minor disparities were observed between revenues that oil companies reported as paid and the actual amounts received by the central bank. Coordination among government agencies was however found to be weak and government data-keeping was also poor such that reported revenues fluctuated - in some years reported income exceeded what the central bank received while in other years the reverse occurred. A physical audit also pointed to the systematic loss of crude oil between the wellhead and export metering terminals. Poor metering infrastructure also hampered proper data collection on gross volumes. Finally, the audit highlighted some concerns with the discretionary powers of the petroleum minister in oil block allocation arising from the Petroleum Act of 1969. The findings of the study were subsequently disseminated to the public while various remediation measures are currently being implemented by the government.

### **Prosecuting Corrupt Practices**

To further demonstrate government commitments to tackling corruption; two institutions were established with specific mandates to deal with corrupt practices. The Economic and Financial Crimes Commission (EFCC) and the Independent Corrupt Practices and other Related Offenses Commission (ICPC) are pursuing cases of corrupt practices such as Internet fraud and corruption in public office. There have been a number of high profile convictions: many advance fee fraud (“419”) kingpins have been detained, two judges have been sacked and two others suspended, several legislators (including a past Senate president) have lost their legislative posts and are being prosecuted, three ministers have been dismissed, a former Inspector General of Police – the top law enforcement official in the country – has been tried, convicted and jailed for corruption, and three former state governors have been impeached by their state assemblies for corruption. EFCC investigations have made good use of the monthly revenue share publications mentioned above, highlighting the importance of information and transparency in the fight against corruption. The EFCC and ICPC are gradually making efforts in removing the concept of the untouchable “big man” in Nigeria and in re-establishing the rule of law for all. Overall, about 350 EFCC cases are at an advanced stage of prosecution. About 5,000 people have been arrested over the past three years. There have been about 91 convictions for various corruption crimes and assets worth over \$5 billion have been seized, confiscated and refunded to the state and various victims of crime (Okonjo-Iweala and Osafo-Kwako, 2010). Overall, despite existing challenges, governance reforms appear to have yielded some concrete results. A survey data from Kaufman et al (2005) indicate that there has been a reduction in the perception of corruption by Nigerian firms in obtaining trade permits, in paying taxes, in procurement, in the judiciary, in the leakage of public funds, and in money laundering.

### **Improving the Domestic Business Climate**

It has been well established that uncoordinated and bureaucratic regulatory procedures often hinders domestic and foreign private sector activities in Nigeria (see WTO, 2005, World Bank, 2003 and Okodua, 2009). The annual IFC/World Bank Doing Business survey (quoted in Akinlo, 2008) identifies regulatory issues that affect the investment climate in various countries. The report examines various regulatory issues such as the time taken to start and close a business, the effectiveness of property registration, and the ease of obtaining licenses. Nigeria’s performance in the survey’s rankings increased marginally from 109 out of 175 countries in 2005 to 108 out of 175 countries in 2006 and this may partly reflect limitations in obtaining more recent data. However, the business climate studies provide useful lessons and insight for policy-makers in reforming countries. Recent efforts to establish a one stop-shop investment center and harmonize tax policies at the federal and state levels reflect the government’s commitment to improving the business environment. However, additional challenges remain, such as computerizing land registration titles in various states, accelerating customs reforms, and increasing the efficiency of the judicial system. Improving the domestic climate for doing business must remain a priority for Nigerian policymakers in the future.

### **Expanding and Maintaining Investments in Infrastructure**

Decades of underinvestment resulted in the deterioration of public infrastructure in Nigeria. The existing poor domestic infrastructure imposes large transaction costs on businesses and reduces the competitiveness of the Nigerian private sector. Major infrastructural bottlenecks exist in areas such as power, road and rail transportation, and ports. To address the infrastructure

bottleneck in Nigeria, governments in Nigeria since 1999 have focused on improving the quantity and quality of infrastructures in the country. Nigeria's current dearth of infrastructure implies that additional investments are needed in the medium term. Some estimates that a minimum of US\$5 billion a year for the next 10 years is needed to maintain and expand all types of infrastructure (Jerome and Ogunkolo, 2004). In particular, progress must be maintained in implementing the federal government's *Power Master Plan* and, in the short-term, achieving the target of generating 10,000 megawatts of power in the country by the end of 2020.

Second, the federal government must work more closely with state governments to jointly finance infrastructure programs. This may be particularly important in developing large-scale projects (for example, an irrigation dam), which may benefit a group of states, but may be too costly to be financed by a single state. Third, private investments in infrastructure must be encouraged to complement the government's efforts. The present administration of President Buhari has already started galvanizing effort in this regard. The administration must continue to promote public-private partnerships (PPP) in infrastructure projects such as power plants, toll roads, and bridges. The Infrastructure Concession Regulatory Act that was passed in November 2005 provides an appropriate legal framework for such partnerships. PPPs may be structured in diverse ways such as: the BOT (Build-Operate-and-Transfer), BOOT (Build-Own-Operate-and-Transfer), and the ROT (Rehabilitate- Operate-and-Transfer).

### **Tackling Unrest in the North Eastern Nigeria and Niger Delta Region**

Social unrest in the Niger Delta was for many years a serious challenge for successive governments in Nigeria; vandalization of oil pipelines by militants and kidnappings of expatriates and Nigerians working in the oil companies in Niger Delta regions was the order of the day. These activities not only frighten away investments in the oil sector but also in other potential sectors of the Nigerian economy. After 60 years of oil exploitation in the Delta, widespread poverty remains in the region, causing discontent and the breakdown of social capital. In a sense, residents of the Delta have been let down by their governments and oil companies alike. This ugly situation in the region was largely laid to rest by late Yar'Adua's administration in a historic amnesty deal. Presently, there is relative peace in the region. The federal government is also supporting the Niger Delta with targeted investments by the Niger Delta Development Commission (NDDC), building a new university and supporting local schools, and constructing the East-West highway linking various Niger delta states. Youth employment opportunities are also being improved, with indigenes from the region being given preferential treatment for jobs in the military and police service.

Just as the problems in the Niger Delta appears to have been solved, another major challenge reared its ugly heads in mostly the North Eastern Region of Nigeria, particularly in Maiduguri, Borno State, where an Islamic militants known as Boko Haram (literally meaning 'western education is evil'), has held the States in the North East Region in a siege. Thousands of people have been killed, properties worth millions of naira lost while thousands have fled their homelands into neighboring countries like Cameroon, Niger and Chad. Social and economic activities have been paralyzed in some states of the North East Region. Needless to say that domestic and foreign investors have been scared away from these States in particular and the country in general. The present administration of President Buhari has renewed onslaught against the sect and many other neighboring countries have signed protocols to collaborate in the effort to tackle the insurgency.

The extent to which the prevailing macroeconomic environment promotes investment (both domestic and foreign) in Nigeria can be gauged by examining the gap between domestic savings and investment as well as the rate of foreign direct investment in Nigeria. This can be assessed by examining the quantum of foreign direct investments that have flowed into the country within the period under review and the impact of these inflows on economic growth in Nigeria.

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 still insignificant compared with the resource base and potential need (Okonjo-Iweala & Osafo-Kwako, 2010). Further, the empirical linkage between FDI and economic growth in Nigeria is yet unclear, despite numerous studies that have examined the influence of FDI on Nigeria's economic growth with varying outcomes (Adelegan, 2000 and Akinola, 2004). To this end, there is still a compelling need to verify the quantum and impact of foreign investments into the country since the return of civil rule in 1999. The next section will briefly review the influx of foreign investments in Nigeria and economic development nexus.

### **Review of Foreign Direct Investments in Nigeria 1999-2012**

To measure investors' response to Nigeria's economic reforms since 1999, we reviewed the influx of foreign direct investments into the country since 1999. Foreign direct investment is an easily quantifiable proxy for investors' response to Nigeria's economic reforms. The data on FDI and other relevant macroeconomic variables are presented in Table 1.

**Table 1 – Gross Domestic Product, Foreign Direct Investment Inflow, Savings, Government Tax Revenue and Foreign Exchange in Nigeria for the period 1986 - 2012**

	GDP	FDI INFLOW	SAVINGS	GOVERNMENT TAX REVENUE	FOREIGN EXCHANGE
1986	70,806.4	4,024.0	13,934.1	12,595.8	2.02
1987	71,194.9	5,110.8	18,676.3	25,380.6	4.02
1988	77,733.2	6,236.7	23,249.0	27,596.7	4.54
1989	83,179.0	4,692.7	23,801.3	53,870.4	7.39
1990	92,238.5	10,450.2	29,651.2	98,102.4	8.04
1991	94,235.3	5,610.2	37,738.2	100,991.6	9.91
1992	97,019.9	11,730.7	55,116.8	190,453.2	17.30
1993	99,604.2	42,624.9	85,027.9	192,769.4	22.05
1994	100,936.7	7,825.5	108,460.5	201,910.8	21.89
1995	103,078.6	55,999.3	108,490.3	459,987.3	21.89
1996	106,600.6	5,672.9	134,503.2	523,597.0	21.89
1997	109,972.5	10,004.0	177,648.7	591,151.0	21.89
1998	113,509.0	32,434.5	200,065.1	463,608.8	21.89
1999	116,655.5	4,035.5	277,667.5	949,187.9	92.69
2000	121,207.8	16,453.6	385,190.9	1,906,159.7	102.11
2001	126,323.8	4,937.0	488,045.4	2,231,532.9	111.94
2002	131,489.8	8,988.5	592,094.0	1,731,837.5	120.97
2003	136,460.0	13,531.2	655,739.7	2,576,100.0	129.36
2004	527,576.0	20,064.4	797,517.2	3,960,800.0	133.50

2005	561,931.4	26,083.7	1,078,330.1	6,697,600.0	132.15
2006	595,821.6	41,734.0	1,604,174.5	6,061,000.0	128.65
2007	634,656.6	54,254.2	2,500,159.9	6,715,600.0	125.65
2008	672,322.2	182,711.8	5,133,324.7	7,444,200.2	117.78
2009	719,045.7	218,322.1	5,300,423.1	8,761,320.4	147.27
2010	776,311.0	353,044.6	4,238,254.2	5,150,443.8	148.30
2011	834,012.8	490,400.3	3,233,934.7	8,233.453.8	151.82
2012	889,942.4	664,211.7	4,383,042.8	8,748,500.0	155.45

Source: Central Bank of Nigeria Statistical Bulletin, Various Years

Data on Table 1 above reveals that the contribution of FDI to GDP before the return to civil rule in Nigeria in 1999 has not been very impressive. In 1986, it was 0.06, 0.11 in 1990, 0.54 in 1995, 0.14 in 2000, 0.05 in 2005 and 0.09 in 2007. It improved significantly to 0.27 in 2008, 0.30 in 2009, 0.45 in 2010, 0.59 in 2011 and 0.74 in 2012. There is no doubt to the fact that FDI has the potential to positively impact upon the economy. For instance, the Index Value of FDI rose from 24.46 percent in 1986 to 63.51 percent in 1990 and 340.34 percent in 1995. It stabilized at 100 percent in 2000 but increased to 158.63 percent in 2005, 329.73 percent in 2007 and 423.7 percent in 2012. However, the domestic economy could not take advantage of foreign investments due to poor corporate relations with indigenous communities, vandalization of oil infrastructure, severe ecological damage and personal security problems throughout the Niger Delta oil-producing region, political instability, corruption, poor macroeconomic management and other factors highlighted in this study. Most of these problems are being tackled since the return to civil rule in Nigeria in 1999 and that accounts for the improvement in FDI inflows into the country since 1999. It could therefore, be rightly inferred that foreign investors are responding positively to economic reforms embarked upon by successive governments in Nigeria since the return to civil rule in 1999.

### 3. Empirical Review on Foreign Investments and Economic Growth Nexus

Several studies have examined the direct effect of foreign capital inflows on economic growth. Some of these studies disaggregated the foreign capital inflows into its components to ascertain the most influential component. For instance, Papanek (1973) in his work disaggregated foreign capital inflows into three principal components: foreign aid, foreign private investment and all other foreign inflows. He examined 34 countries in 1950 and 51 countries in 1960 using a cross sectional data and found out that all the three flows had a statistically significant positive impact on growth. Among the components, foreign aid exhibited stronger effect on economic growth than other factors. Similarly, Burnside and Dollar (2000) estimated a model using a panel data of 56 countries. In estimating the model they employed TSLS method for growth, foreign aid and policy. By making assumptions about the separate effects of foreign aid and policy, they observed that foreign aid had a robust positive impact on economic growth. When they entered foreign aid directly into their model, it was not significant. However, it was significant when interacted with the policy index.

Hansen and Tarp (2001) examined the relationship between foreign aid and economic growth in real GDP per capita. Average growth rate in 56 countries covering the years 1974-1993 in five periods was regressed on several policy and institutional control variables and foreign aid. The study observes that foreign aid increased the growth rate and was not conditional on good policy

as suggested by Burnside and Dollar (2000). Oyinlola (1995) disaggregated foreign capital into; foreign loans, direct foreign investments and export earnings. Using Chenery and Stout's two-gap model, he observed that FDI has a negative effect on economic development in Nigeria. In the same vein, Adelegan (2000) examined the impact of FDI on economic growth in Nigeria in a seemingly unrelated regression and found out that FDI is pro-consumption and pro-import and negatively related to gross domestic investment. Akinlo (2004) in his study revealed that foreign capital has a small and not statistically significant effect on economic growth in Nigeria. Ayanwale (2007) also analyzed the empirical relationship between non-extractive FDI and economic growth in Nigeria. Using OLS estimates, he observed that FDI has a positive link with economic growth but cautioned that the overall effect of FDI on economic growth may not be significant. Chakraborty and Nunnenkamp, (2006) analyzed the effect of foreign direct investment and economic reforms in India. The study centered on industry specific FDI and its growth, by using Granger Causality and panel cointegration. Their results showed that the growth effects of FDI vary widely across different sectors. There was no casual relationship found in case of primary sector. While only transitory effect of FDI on output was found in the service sector. These differences in FDI-Growth relation suggests that FDI is unlikely to make wonders in India if only regulations are relaxed and still more industries are opened up.

Herzer et al (2006) employing a bivariate VAR modeling technique, observed a positive FDI-led growth relation for Nigeria, Sri Lanka, Tunisia, and Egypt. Based on weak exogeneity tests, a long-run causality between FDI and economic growth running in both directions was observed for the same set of countries. In a seemingly unrelated model, Okodua (2009) examined the sustainability of the FDI-growth relationship in Nigeria. Using the Johansen cointegration framework and a multivariate VAR within a vector error correction model, he observed a long-run equilibrium relationship between economic growth and FDI inflows. The study also revealed a unidirectional causality from FDI to economic growth. Duasa, (2007) analyzed the FDI-growth relation with respect to stability in Malaysia. Quarterly data from the first quarter of 1990 to fourth quarter 2002 is collected. GARCH and causality are applied to analyze the impact of FDI on the stability of economic growth, and causal relationship between FDI and growth respectively. The study revealed no strong causal relationship between FDI and economic growth. However it was found that flow of FDI contributes less to the volatility of economic growth and vice versa. Hence, Malaysia FDI does not cause economic growth but it does provide stability to economic growth.

Tiwari and Mutascu (2011) also examined the relationship between economic growth and FDI for Asian countries using Panel data approach. The sample period comprises 1986 to 2008, and they analyzed data of 23 countries. Hence, they observed that both foreign direct investment and exports enhances the growth process. Also that, labor and capital also play a significant role in economic growth.

Mohamed and Sidiropoulos (2010) in their study analyzed the effect of workers remittance on economic growth. The data for this were sourced from the seven MENA countries for the period of 1975-2006. Both fixed effect and random effect models were used for empirical analysis. Their results showed support for fixed effect models, and revealed that remittances have a positive impact on economic growth both directly and indirectly via their interaction with financial and institutional channels. Bowen (1998) carried out a study to measure the direct and indirect relation between foreign aid and economic growth using a cross-sectional data for 67

less developed economies for the period, 1970-1988. He observed an indirect foreign aid growth relationship through its interaction with domestic savings and was significant and negative. Similarly, Razzaque and Ahmed (2000) estimated a time-series relationship between foreign aid and domestic savings for Bangladesh for the period, 1973-1998 using cointegration technique. They observed a negative relationship between domestic savings and foreign aid. The short-run relationship between these two variables was significantly negative. However, the estimated coefficient of foreign aid from different techniques varied.

The empirical study of Hansen and Tarp (2000) which looked at the effects of foreign aid on savings, investment and growth was reviewed. In their study they classified 131 regression results. The explanatory variables included are identified measure of foreign aid in the first group with a total of 104 regressions and aggregate foreign inflow measures in the second group with a total of 27 regressions in which aid was not separated from the various aggregate foreign inflows measures. They observed that most of the studies revealed a significant positive effect of foreign aid and foreign resources inflow on economic growth and investment. In the case of savings, most of the empirical studies revealed a negative effect of foreign and foreign resources inflows on domestic savings.

In decomposing foreign capital inflows into its various components, Aurangzeb and UI Haq (2012) examined the impact of foreign capital inflows on economic growth of Pakistan for the period of 1981-2010. A multiple regression analysis technique was used to identify the significance of different factors. Their results indicate that the three independent variables (remittances, external debt and foreign direct investment) are positive and have a significant relationship with economic growth (GDP). Also, they observed that the Granger-Causality test showed a bidirectional relationship between remittances and external debt, GDP and external debt, foreign direct investment and external debt, and foreign direct investment and remittances. On the other side the results revealed a unidirectional relationship from gross domestic production to foreign direct investment. Hence, they concluded that foreign capital inflows are very important for the growth of any economy.

In the case of Nigeria, Ayashagba and Abachi (2002) carried empirical investigation on the effects of foreign direct investment on economic growth in Nigeria from 1980 to 1997. The result showed that foreign direct investment had an insignificant impact on economic growth in Nigeria. The study therefore concluded that the presence of foreign direct investment in the LDCs particularly in Nigeria is not totally useful. Akinlo (2004) also investigated the impact of foreign direct investment (FDI) on economic growth in Nigeria, for the period 1970–2001. The ECM results showed that both private capital and lagged foreign capital have small, and not a statistically significant effect, on the economic growth. The results seem to support the argument that extractive FDI might not be growth enhancing as much as manufacturing FDI.

Obadan (2004) addressed the various issues associated with capital flows in both conceptual and empirical contexts. He posits that the desirability or otherwise of foreign capital depends on the use to which such capital is put. Foreign capital, if channeled into productive uses, as against consumption, can be highly desirable, as it will bring about the much needed economic growth and development. Ayanwale and Bamire (2004) reported a positive and significant effect of FDI on firm's productivity of both domestic and foreign firms in the Nigerian Agro/agro allied sector. Ariyo (1998) studied the investment trend and its impact on Nigeria's economic growth over the 25 years. He found that only private domestic investment consistently contributed to raising GDP growth rates during the period considered (1970-1995). Furthermore, there is no reliable

evidence that all the investment variables included in his analysis have any perceptible influence on economic growth. He therefore suggested the need for an institutional rearrangement that recognizes and protects the interest of major partners in the development of the economy.

Examining the contributions of foreign capital to the prosperity or poverty of LDCs, Oyinola (1995) conceptualized foreign capital to include foreign loans, direct foreign investments and export earnings. Using Chenery and Stout's two-gap model (Chenery and Stout, 1966) cited in Adeolu (2007) he concluded that Foreign Direct Investment (FDI) has a negative effect on economic development in Nigeria.

However, these studies did not control for the fact that most of the Foreign Direct Investment (FDI) was concentrated in the extractive industry. In other words, it could be put that these works assessed the impact of investment in extractive industry (oil and natural resources on Nigeria's economic growth). On firm level productivity spillover, Ayanwale and Bamire (2001) assessed the influence of Foreign Direct Investment (FDI) and firm level productivity in Nigeria and report a positive spillover of foreign firms on domestic firm's productivity.

Much of the other empirical work on Foreign Direct Investment (FDI) in Nigeria centered on examination of its nature, determinants and potentials. For example, Odozi (1995) notes that foreign investment in Nigeria was made up of mostly "Greenfield" investment, that is, it is mostly utilized for the establishment of new enterprises and some through the existing enterprises. Aremu (1997) categorized the various types of foreign investment in Nigeria into five: wholly foreign owned; joint ventures; special contract arrangements; technology management and marketing arrangements; and subcontract co-production and specialization.

In his study of the determinants of Foreign Direct Investment (FDI) in Nigeria, Anyanwu (1998) identified change in domestic investment, change in domestic output or market size, indigenization policy, and change in openness of the economy as major determinants of Foreign Direct Investment (FDI) inflow into Nigeria and that effort must be made to raise the nation's economic growth so as to be able to attract more Foreign Direct Investment (FDI).

Jerome and Ogunkola (2004) assessed the magnitude, direction and prospects of Foreign Direct Investment (FDI) in Nigeria. They noted that while the Foreign Direct Investment (FDI) regime in Nigeria was generally improving, some serious deficiencies remain. These deficiencies are mainly in the area of the corporate environment (such as corporate law, bankruptcy, labour law etc) and institutional uncertainty, as well as the rule of law. The establishment and the activities of the Economic and Financial Crimes Commission (EFCC), the Independent Corrupt Practices Commission, and the Nigerian Investment Promotion Commission (NIPC) are efforts to improve the corporate environment and uphold the rule of law.

Moreover, an important fact about Foreign Direct Investment (FDI) and growth debate is the endogeneity case in which Foreign Direct Investment (FDI) is theorized to impact positively on economic growth and consequently, lead to greater market which in turn attracts further Foreign Direct Investment (FDI) as well (market size hypothesis). Market size hypothesis states that markets with rapidly expanding economic growth tend to give multinational firms more opportunities to make more sales and profits and therefore become more attractive to Foreign Direct Investment (FDI).

However, despite the quantum of literature on foreign capital inflows-growth relation, the issue is not clearly resolved. Some studies as shown in the foregoing review find evidence of positive relationship between foreign capital inflows-growth respectively, while others finds such nexus subtle, and another group finds such relation dependent on domestic policies, country

characteristics, economic and institutional environment and donors interest. Also most of the studies on foreign capital flows-growth are cross-sectional such results obtained by cross-country studies must be treated with great caution as they are subject to extreme limitations. Such limitations include; a common economic structure and similar production technology across different countries which appears not be accurate in reality. However, this study is an attempt to contribute to the existing literatures on foreign inflows and economic growth in Nigeria.

#### 4. Data and Methodology

This section focuses on the analytical procedure and the data adopted in this study. The data for this study were obtained from secondary sources. Specifically, annual time series data of the variables were obtained. The data include; gross domestic product (GDP) proxy for economic growth and as a dependent variable while foreign aid (official development aid), foreign remittances, and foreign direct investment are collected as independent variables for the period of 1999 to 2012. The data were sourced from Central Bank of Nigeria (CBN) Statistical Bulletin, International Development Statistics and Nigerian Capital Market Statistical Bulletin.

In attempting to establish the relationship between foreign capital inflows components and growth, the study employed econometric techniques such as; cointegration test, this enables us to establish a long-run relationship between the variables and growth and as a basis for causality (Granger, 1986 and Granger, 1987). Theoretically, if the variables are cointegrated it means causality exist (Granger, 1988, Miller and Russek, 1990). Error-Correction Modeling (ECM) is employed for analysis since it contains full information on causal relationships and the dynamic interactions among the cointegrating variables. However, since most time series are prone to unit root problem, therefore, before carrying out cointegration test and ECM analysis, the unit root test is conducted on the series using Augmented Dickey-Fuller (ADF). This enables us test for stationarity of the variables included in the model.

Given the above background and in line with the theoretical foundation of Papanek (1973) and empirical modeling of Tokunbo and Amaghionyeodiwe (2010), the functional relationship between foreign capital inflows and economic growth of Nigeria are expressed in the following way:

$$\text{Growth} = f(\text{AID}, \text{RMT}, \text{FDI}) \dots \dots \dots 4.1$$

Where Growth represents economic growth (real GDP), and AID, RMC, and FDI represents foreign aid, foreign remittance, and foreign direct investment respectively. Theoretical support for the disaggregation of foreign investments into foreign aid, foreign remittance and foreign direct investment is found in Papanek (1973) and Akinkugbe (2003).

Moreover, equation (4.1) can only be estimated in its econometric form which is stated as follows:

$$\text{Growth}_t = B_0 + B_1 \text{AID}_t + B_2 \text{RMT}_t + B_3 \text{FDI}_t + \varepsilon_t \dots \dots \dots 4.2$$

$B_0$  denotes the constant term,  $B_1, B_2, B_3$  are slope coefficients representing parameters to be estimated and  $\varepsilon_t$  is the disturbance term assumed to be purely random. Our a priori expectation is that  $B_1, B_2, B_3 > 0$ .

#### 5. Results Analysis

##### 5.1 Empirical Results

**Table 5.1: Basic Ordinary Least Square Estimates**

Variables	Coefficients	t	P(t)
Growth (GDP)	Dependent variable		
Constant	18764.08	0.516166	0.6420
AID	0.1667	9.2341	0.0000
RMT	0.0393	1.2367	0.2249
FDI	0.2580	1.1502	0.2583
R <sup>2</sup>	0.8952		
F	849.94	P(F) = 0.0000	

Source: Computed from data from CBN Statistical Bulletin (Various Issues) using E-Views Econometric Package

All the variables were regressed at levels. The result above shows that jointly, all the explanatory variables are significant in determining economic growth in Nigeria since the probability of the F-ratio is significant at 0.05 having a calculated value of 849.94. On individual level, the regression coefficient for foreign aid (AID), foreign remittances (RMT), and foreign direct investments (FDI) were significant at 5%.

Again, the adequacy of the model was confirmed with the coefficient of determination computed at 0.895. In other words, 89.5% of the changes in growth of gross domestic product are attributed to changes in the explanatory variables including foreign direct investments.

**Unit Root test for Stationarity**

These OLS estimates obtained from the analysis above could be spurious if the time series data were not checked for stationarity or randomness. To achieve this purpose, the Augmented Dickey fuller was employed for this purpose.

The stochastic properties of the time series checked using the Augmented Dickey – Fuller (ADF) unit root test are as follows:

$$\partial Y_t = t_0 + t_1 y_{t-1} + t_a \text{ trend} + \sum_{j=1}^p \partial y_{t-j} + y_t \dots \dots \dots 5.1$$

Where  $\partial y$  indicates the first difference of  $y_t$  and  $P$  is the lag length of the augmented terms for  $Y_t$ . The equation above allows the researcher to test whether the variable  $Y_t$  is a stationary time series.

*Hypothesis:* Ho:  $Y_t$  is non-stationary

**Decision Rule:** Reject Ho: if the absolute value of the computed t-statistic for  $Y_t$  is greater than the critical value at 0.05 level of significance. Accept, if otherwise. Thus, the result of the Augmented Dickey-Fuller Unit Root test is presented in table 5.2.

**Table 5.2: Result of Dickey-Fuller Unit Root test of the time series data**

Variables	Intercept and trend	5% critical Value	Order
Growth	-3.0601	-2.9378	I(1)
AID	-4.0290	-2.9358	I(0)
RMT	-4.4232	-2.9378	I(1)
FDI	-3.6515	-2.9378	I(1)

The time series above were all stationary at levels and in order of 1(1) except for foreign aid (AID). The study has to go further to test for co-integration knowing that when time series are not stationary individually, they may be stationary when combined together (Gujarati and Porter, 2005).

### 5.2 Cointegration Analysis

The study employed a method of cointegration - the Johansen maximum likelihood approach. The Johansen procedure is a multiple equation method that permits the identification of the cointegration space using a canonical correlation method, which enables the testing of how many cointegration relationships exist. The Johansen test for cointegration is a multivariate unit root test which estimates the cointegrating rank  $r$  in the multivariate case, and which is also able to estimate the  $\beta$  parameters of these cointegrating relationships. The Johansen Cointegrating test uses two test statistics. The first is called the maximum eigenvalue test ( $\lambda_{max}$ ), which tests the null hypothesis that there are  $r+1$  cointegrating vectors versus the alternative hypothesis that there are  $r$  cointegration vectors. The second, labeled the trace test is employed to test the hypothesis that there are at most  $r$  cointegrating vectors. The study used Johansen Cointegration procedure. Again, Eviews runs the Cointegration test using the Eigenvalues and the Maximum Likelihood Ratio.

**Decision Rule:** Reject the null hypothesis of no co-integration if it is found that there are ‘ $r$  number’ of cointegrating equations. If otherwise, accept the null hypothesis. The result is presented in Table 5.3 below.

**Table 5.3: Result Johansen Cointegration Analysis**

Date: 06/08/15 Time: 15:09				
Sample: 1999 2012				
Included observations: 13				
Test assumption: Linear deterministic trend in the data				
Series: GDP AID RMT FDI				
Lags interval: 1 to 1				
	Likelihood	5 Percent	1 Percent	Hypothesized
Eigenvalue	Ratio	Critical Value	Critical Value	No. of CE(s)
0.998848	651.7481	192.89	204.95	None **
0.985512	381.0963	156.00	168.36	At most 1 **
0.836102	211.7190	124.24	133.57	At most 2 **
0.730615	139.3785	94.15	103.18	At most 3 **

\*(\*\*) denotes rejection of the hypothesis at 5%, (1%) significance level

L.R. test indicates 4 cointegrating equation(s) at 5% significance level

Result shows that there are four (04) cointegrating equations. This is obtained by comparing the value of Likelihood ratio and the 5% critical values. The value of the likelihood ratio was higher in the four instances. With this, we can conclude that there is a long run relationship between economic growth and the explanatory variables in Nigeria during the period under review.

### 5.3 Granger Causality Analysis

The study employed the technique of Granger causality procedure to test and predict the direction of causality between economic growth and foreign direct investments.

For example the Granger causality test assumed that the information relevant to the prediction of these respective variables, growth and foreign direct investment, is contained solely in the time series data on these variables. The test involves estimating the following pair of regressions:

$$\text{Growth}_t = \sum \beta_i \text{FDI}_{t-1} + \sum \beta_j \text{Growth}_{t-j} + \mu_{1t} \dots \dots \dots // // // \dots \dots \dots 5.2$$

$$\text{Growth}_t = \sum \hat{\alpha}_i \text{FDI}_{t-1} + \sum \hat{\alpha}_j \text{Growth}_{t-j} + \mu_{2t} \dots \dots \dots 5.3$$

The causality relationship between these two variables may be one directional (unilateral-when one is significant) or two-way (bilateral-when both are significant).

$H_0$ : There is no causality relationship between Growth and FDI

The Granger Causality analysis follows the F-distribution.

*Decision Rule:* Reject  $H_0$ : If computed  $F^*$  is less than 0.05. Accept, if otherwise.

**Table 5.4: Result of Granger Causality Test**

Pairwise Granger Causality Tests			
Date: 06/08/15 Time: 15:40			
Sample: 1999 2012			
Lags: 2			
Null Hypothesis:	Obs	F-Statistic	Probability
FDI does not Granger Cause Growth	13	5.02745	0.01204
Growth does not Granger Cause FDI		15.5649	1. 5E-05

For the purpose of concentrating on the main variables in this study, table 5.4 above shows the causality test runs between foreign direct investments and economic development. From the above, it is discernible based on F-ratio statistic that there is bilateral causality relationship between foreign direct investment and economic growth, where the probabilities of the F-ratio falls below 5%, (that is 0.01204 and 1.5E-05 <0.05). That is, both foreign direct investment and economic growth Granger cause each other. Foreign direct investment helps in economic growth and a country with strong economic growth will, other things being equal, attract greater foreign direct investments. This is in line with the findings of Herzer et al (2006)

**6. Conclusion and Recommendation**

This study examined foreign investors ‘response to various economic reforms in Nigeria since the return of civil rule in 1999. This was determined by looking at the quantum of foreign investments that have accrued to the country since 1999 and the causal relationship between these foreign capital inflows and economic growth in Nigeria during the sample period. The results from the analysis revealed that causal relationship exist between foreign capital inflows and economic growth in Nigeria, which supports the foreign capital inflows-led economic growth hypothesis. Besides, the dynamic interaction among foreign capital inflows and economic growth of the Nigerian economy was also analyzed using the Granger causality analysis. The result of the analysis supports the result of the cointegration analysis which showed that, causality runs from aid, remittance (RMC), and foreign direct investment (FDI) to real GDP (growth).

It is therefore recommended based on the foregoing that government should continue with vigor the various economic reforms embarked upon since the return to civil rule in 1999 and should accelerate the provision of infrastructural development in the country. Moreover, government

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should through appropriate policies promote stable macroeconomic environment to enable domestic and foreign investments to thrive in the country.

### References

- Acemoglu, D. S. & James, R. (2003), "An African Success Story: Botswana," in *In Search of Prosperity*, edited by Dani Rodrik, Princeton: Princeton University Press
- Adelegan, J.O. (2000), "Foreign direct investment and economic growth in Nigeria: A Seemingly Unrelated Model", *African Review of Money, Finance and Banking*, 3(3), 23-35
- Adeolu, B. A. (2007) FDI and Economic Growth: Evidence from Nigeria. African Economic Research Consortium (AERC) Paper 165Nairobi. April
- Akinkugbe, O. (2003). Flow of Foreign Direct Investment in Developing Countries: The openness hypothesis and policy implications. *The International Trade Journal*, 7:655 – 672.
- Akinlo, A.E. (2004), "Foreign direct investment and Growth in Nigeria: An empirical Investigation", *Journal of Policy Modeling*, 26, 627–39.
- Aluko, S. A. (1961) "Financial Economic Development in Nigeria", *The Nigerian Journal of Economic and Social Studies* 3(1):39-67.
- Anyanwu, J. C. (1998). "An Econometric Investigation of Determinants of Foreign Direct Investment in Nigeria". In *Investment in the Growth of Process: Proceedings of the Nigerian Economic Society Conference 1998*, Ibadan, Nigeria.
- Aurangzeb & A. UI Haq (2012), 'Impact of Foreign Capital Inflows on Economic Growth in Pakistan', *European Journal of Economics, Finance and Administrative Sciences*, 46(2), 45-77
- Ariyo, A. 1998. "Investment and Nigeria's Economic Growth" in *Investment in Growth Process Proceedings of Nigerian Economic Society Annual Conference*
- Ayashagba, G.I., & P.I. Abachi (2002) "The Impact of Foreign Direct Investment (FDI) On Economic Growth of the Less Developed Countries (LDCs): A Case of Nigeria (1980-1997)". *Journal of Economic and Social Research*, 1(1), 108-125.
- Ayanwale, A. B. (2007), "FDI and Economic Growth: Evidence from Nigeria", *AERC Research Paper 165*, African Economic Research Consortium, Nairobi.
- Balogun, E.D. (2003), Foreign direct investment in Nigeria's agricultural sector: performance and problems, In: Nnana, O.J., Okafor, C.M. and Odoko, F.O. (eds), *Foreign Direct Investment in Nigeria*. Proceedings of the 12th Annual Conference of the Regional Research Units of the Central Bank of Nigeria, held at Hamdala Hotel, Kaduna, Kaduna State.
- Barnett, S. & Ossowski, R. (2002), "Operational Aspects of Fiscal Policy in Oil- Producing Countries," Working Paper No. WP/02/177, Washington DC: International Monetary Fund

- Bleaney, M. & D. Greenaway, (2001), "The Impact of Terms of Trade and Real Exchange Rate Volatility on Investment and Growth in Sub-Saharan Africa," *Journal of Development Economics*, 65(2): 491-500
- Bowen, J.L. (1998), "Foreign Aid and Economic Growth: A Theoretical and Empirical Investigation", Aldershot, Asghate Publishing.
- Bureau of Public Enterprises, Nigeria (2011), Sectoral Information on Investment in Nigeria, Government Press, Abuja
- Burnside, C. & D. Dollar (2000), "Aid, Policies and Growth", *The American Economic Review*, 90(4), 847-868
- Central Bank of Nigeria (2010) Data and Statistics. Available at: <http://www.cenbank.org/rates>, retrieved from the internet on 3/08/2015.
- Central Bank of Nigeria (2011), Statistical Bulletin. Central Bank of Nigeria, Abuja, Nigeria.
- Central Bank of Nigeria (2012) Data and Statistics. Available at: <http://www.cenbank.org/rates>, retrieved from the internet on 3/08/2015.
- Chakraborty, C., & Nunnenkamp, P. (2006), "Economic Reforms, Foreign Direct Investment and Its Economic Effects in India", *Kiel working papers*, 12(2), 1-45.
- Chenery, H. B. & Stout, A. (1966), "Foreign Assistance and Economic Development", *The American Economic Review*, 55(2), 679-733
- Duasa, J. (2007). "Malaysian Foreign Direct Investment and Growth: Does Stability Matters?", *Journal of Economic Corporation*, 28 (2), 83-98.
- Engle, R.F & Granger, C. W (1987) "Cointegration and Error Correction: Representation, Estimation and Testing", *Econometrica*, 55: 251 – 276.
- Fatas Antonio & Ilian Mihov, (2003), "The Case for Restricting Fiscal Policy Discretion," *Quarterly Journal of Economics*, 118 (November): 1419-47
- Hameed, A., Ashraf, H., & Chaudhary, M. A. (2008), "External Debt and its Impact on Economic and Business Growth in Pakistan", *International Research Journal of Finance and Economics*, 1(20), 132-140.
- Gujarati, N. D. & Porter, H. (2004). Basic Econometrics (4th ed.). New Delhi: Tata McGraw-Hill, 748, 807
- Hansen, H & F. Tarp (2001), "Aid and Growth Regression", *Journal of development Economics*, 64(2), 567-570
- Herzer, D., Klasen, S., & Nowak-Lehmann, D. F. (2006), "In Search of FDI-Led Growth in Developing Countries: the Way Forward". Iber American Institute for Economic Research
- International Monetary Fund (2005), "Nigeria: Request for a Two-Year Policy Support Instrument", Washington DC: International Monetary Fund
- Ikhide S. I., & A. A. Alawode, (2002), "On the Sequencing of Financial Liberalization in Nigeria," *South African Journal of Economics*, 70(1): 95-127
- Jerome, A. & J. Ogunkola (2004), "Foreign Direct Investment in Nigeria: Magnitude, direction and prospects". Paper presented to the African Economic Research Consortium Special Seminar Series, Nairobi. April.
- Kaufmann, D. & Eliot, S. (2005), 'Nigeria in Numbers – the Governance Dimension: A Preliminary and brief review of recent trends on governance and corruption. Presentation for the President of Nigeria and his Economic Management Team', Mimeo

- 
- Malik, S., Hayat, M. U., & Hayat, M. K. (2010), "External Debt and Economic Growth: Empirical Evidence from Pakistan", *International Research Journal of Finance and Economics*, 4(4), 88-97.
- Matthew, A. (2008), The Impact of Public and Direct Sector Investment on Agricultural Productivity in Nigeria. In: *Indigenous Knowledge for Sustainable Development*. Proceedings of Indigenous Knowledge and Development Held of Kogi State University, Anyigba, Kogi State
- Miller, S. & F. Russek (1990), "Cointegration and Error Correction Models: The Temporal Causality between Government Taxes and Spending", *Southern Economic Journal*, 57, 221-229.
- Mohamed, S. E., & M.G. Sidiropoulos (2010), "Do Worker's Remittance Affect Growth: Evidence from Seven MENA Labor Exporting Countries", *International Research Journal of Finance and Economics*, I (46), 181-194
- Nnana, O.J., Okafor, C.M. & Odoko, F.O. (eds) (2003), *Foreign Direct Investment in Nigeria*. Proceedings of the 12th Annual Conference of the Regional Research Units of the Central Bank of Nigeria held at Hamdala Hotel, Kaduna, Kaduna State, September 1 – 5, 2006, 237 – 268.
- National Communication Commission (2010) "Nigeria Teledensity – The Fastest Growing in the World", Media Briefs (Mimeo), Abuja.
- National Planning Commission (2004), the National Economic Empowerment and Development Strategy (NEEDS), Abuja: National Planning Commission
- Odozi, V. A. (1995), "An Overview of Foreign Investment in Nigeria 1960 – 1995". *Occasional Paper*, No. 11, Research Department, Central Bank of Nigeria.
- Okogu, B. E. (1992), "Africa and Economic Structural Adjustment: Case Studies of Ghana, Nigeria and Zambia," OPEC Fund Monograph No. 29
- Okogu, B. E. (1999), "Understanding Nigeria's Economic Reform Experience: An Application of Negotiation Theory", in V. Kremenyuk and G. Sjostedt (eds.), *International Economic Negotiation: Models versus Reality*, Cheltenham, UK: Edward Elgar
- Okodua, H (2009), "Foreign Direct Investment and Economic Growth: Co-Integration and Causality Analysis of Nigeria", *The African Finance Journal*, 11(1), 23-38.
- Okuedo, O.E. (2003). Foreign Direct Investment in Nigeria's solid mineral sector in Nnana, O.J., Okafor, C.M. and Odoko, F.O. (eds), *Foreign Direct Investment in Nigeria*. Proceedings of the 12th Annual Conference of the Regional Research Units of the Central Bank of Nigeria, held at Hamdala Hotel, Kaduna, Kaduna State.
- Okpe, I.J. & Abu, G.A. (2009). Foreign Direct Investment and Poverty in Nigeria (1975 – 2003). *Journal of Social Science*, 19(3): 205 – 211.
- Okonjo-Iweala, N. & Osafo-Kwaako P. (2010) Nigeria's Economic Reforms – Progress and Challenges, Brookings Global Economy and Development.
- Oyinlola, O. (1995), "External Capital and Economic Development in Nigeria (1970–1991)", *The Nigerian Journal of Economic and Social Studies*, 37(2&3), 205–22.
- Papanek, G.F (1973), "Aid, Foreign Private Investment, Savings and Growth in LDC", *Journal of Political Economy*, 81(1), 120-130

- Razzaque, A. & N. Ahmed (2000), "A Re-examination of Domestic savings, Foreign aid, Relationship in the context of Bangladesh", *The Bangladesh Development Studies*, 26(4), 1-37
- Serven, L (2003), "Does Public Capital Crowd our Private Capital? Evidence from India" *Policy Research Working Paper 1613*, The World Bank Policy Research Department, Macroeconomics and Growth Division.
- Tiwari, A. K., & M. Mutascu (2011), "Economic Growth and FDI in Asia: A Panel Data Approach", *Economic Analysis and Policy*, 41 (2), 173-188
- Tokunbo, S. O. & Lloyd. A. (2011), "Foreign Private Investment and Economic Growth in Nigeria", *Review of Economic and Business Studies*, 3(4), 1-22
- UNCTAD (2011): World Investment Report, United Nations, New York
- World Bank, (2003), "Nigeria Policy Options for Growth and Stability", Report No. 26215-NGA, Washington DC: The World Bank
- World Trade Organization (2005), "Trade Policy Review of Nigeria", Geneva: World Trade Organization