ANALYSIS OF DETERMINANTS AND IMPACT OF FOREIGN DIRECT INVESTMENT ON NIGERIAN ECONOMY (1981-2013).

BY

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DECLARATION

I, ANAZA Isezuo Adinoyi hereby declare that this dissertation titled "Analysis of the Determinants and Impact of Foreign Direct Investment on the Nigerian Economy; 1981 – 2013, is original and is based on my research efforts under the supervision of Dr. Salamatu Isah and Dr. Peter P. Njiforti. It has not been earlier presented for award of a degree in any university or for any publication. All sources used have been duly acknowledged by way of referencing.

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ANAZA, Isezuo Adinoyi

CERTIFICATION

This is to certify that this dissertation is an original work written by ANAZA, Isezuo Adinoyi (MSC/SOC-SCI/1233/2009-2010) and has been examined and approved as meeting the requirement of the Department of Economics, Faculty of Social Sciences, Ahmadu Bello University, Zaria, for the award of Masters of Science, MSc. degree in Economics.

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DEDICATION

This dissertation is dedicated to God Almighty for His mercy over me and my entire family members.

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ABSTRACT

This work investigates the determinants and impact of Foreign Direct Investment (FDI) on Nigerian economy. FDI has become a debatable and topical issue across the globe because of its key role in bridging the savings gap in Least Developed Countries (LDCs). Theoretical argument that savings translate to investment is well documented in literature. Two fundamental issues concerning the potential importance of FDI in LDCs development process has remain unresolved. Firstly, does FDI really contribute to attainment of economic growth in host country as argued by the proponents of the modernization theory? Secondly, as the dependency theorists assert that FDI, although may spur short term economic growth, will generate and accelerate internal distortions that will it ultimately depress or even retard the host country's economic growth? Based on these arguments, the study investigated the determinants and impact of foreign direct investment on Nigerian economy by analyzing in addition the composition and trend of FDI inflow to Nigeria from 1981 to 2013. Using the dual gap and Solow growth models as theoretical framework, the quantile regression analysis was used to examine the behavior of the variables of interest; such as fiscal deficit, openness, investment in infrastructure, net foreign indebtedness and external reserve. From the result, using the two models; all the variables were statistically significant at upper quantiles which implies that high GDP motivates inflow of FDI to Nigeria at different levels (1%, 5% and 10%) except external reserve which is not statistically significant in q^{95} *with coefficient value of 2.530. In addition, on the impact of FDI, the result revealed that FDI is not statistically significant in q5,* q^{25}*,and* q^{50} *with coefficient values of 2.0351, 1.3403 and -0.9472 respectively. The result in the last two quantiles (q75 and q95) shows that FDI is statistically significant with coefficient values of -1.1307 and -8.0836 at 5% level of significance. Finally, it was found that FDI inflows are mainly in the mining and manufacturing sectors as shown by the composition and trend analysis, others sectors such as agriculture, building and constructions are yet to benefit from the FDI inflows significantly. Based on these key findings, it is therefore recommended that government should relax pre-investment laws and implement tax concession policy so as to attract FDI to these sectors.*

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CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Theoretical arguments abound on the role of foreign direct investment (FDI) in an economy which suggests that foreign direct investment provides an important source of foreign exchange earnings needed to augment inadequate finance (savings) for domestic investments. Also, FDI provides the import substitution that would help to reduce the import bills thereby conserving the foreign reserve while investment in export promotion industries will increase the country's foreign exchange earnings (Todaro, 1994).

According to the neoclassical school of thought, FDI fills the gap between targeted government revenue and locally raised taxes by taxing multinational corporations (MNC_S), government are able to realize financial resources for developmental purposes. Hansen and Rand (2006), stressing the role of FDI shows that it has been a good source of improving efficiency of the productive sector through stimulation of economic growth and job creation.

Flows of foreign capital to developed and developing nations have continued to be a topical issue in literature. However, given its key role as driver in fostering growth, such capital had almost dried up between 1972 and 1985 in Nigeria because of public policies introduced by government which were considered to be anti foreign direct investment. The policy drive resulted to debt crisis as government and private investors embarked on massive foreign loan (Anyanwu; 1998).

However with the introduction of SAP in 1986, Nigeria began to receive once more substantial flow of foreign investment capital. These flows are notable because of their magnitude and how they helped facilitate a break from the period of debt crisis for the country, (Anyanwu; 1998). Consequently, the rising trends raised important issues concerning the factors that motivate the inflow of FDI and their effects on the Nigerian economy. Thus, with this pattern, it is significant to examine and evaluate the nature FDI inflow has taken, whether the economy has been able to sustain the inflow and what is its effect.

This dissertation examines the pull and push factors that have continued to influence FDI inflow and will attempt to identify the relative importance of these factors for designing appropriate policies. It is worth-noting that FDI and other factors like exchange rate, openness of the economy, public sector investment etc. are major macroeconomic variables that drives economic growth. Hence, the ability of any government to sustain and maintain a balance among them is key to sustainable development. For example through reforms like the industrial development coordination committee (IDCC) that was vested with the authority to approve pre-investment agreements, fiscal incentives, employment permits for foreigners and foreign capital imports are policy guide to such development.

Between 1972 and 1985, government policy toward FDI became increasingly restrictive. The regulatory environment discouraged foreign participation resulting in an annual average FDI of only 0.8% of GDP between 1973 and 1988.

Agreeing with the theoretical arguments that foreign resources can bridge the gap between targeted savings and the needed investments to bring about growth and development, Nigeria has made several efforts towards improving the general investment climate through the adoption and implementation of foreign investment policies and programs. These include the industrial policy of 1988 which were quite different from the previous policy because of the attempts to create an

FDI policy framework that is more simplified, embracing and transparent. Fry (1983) stated that administrative procedures concerning investment are of utmost importance in determining FDI in LDC_S.

Generally, conducive environment for encouraging FDI in many countries is prerequisite for its sustainability. Other economic variables like exchange rate, openness of the economy, consistent policies and having a system of government that is adjudged to be politically stable have high prospect of attracting FDI. According to Krugman and Obstfield (2003), a good macroeconomic policy is one which guarantees an efficient allocation of resources (including foreign exchange), provides appropriate signals to producers in the productive sectors of the economy, and eliminates biases and distortions in investment and production. Also, Mwillima (2003) stated that a deregulated macroeconomic policy environment is desirable on account of its ability to allocate resources efficiently and promote rapid economic growth while a conducive macroeconomic environment for raising private foreign investment should be one characterized by stability and predictability.

FDI is crucial to Africa, as the saving rate of African countries is very low, the government of African countries revenue sources is quite limited and the share of Africa in world trade is very small (Asiedu, 2002). Over the past two decades, the governments of African countries had liberalized their FDI policies to attract FDI. FDI flows to Africa are significantly small compare to other developing regions. Africa's share in FDI flows decreased from 19% in the 1970_s to 8% in 2006 while Asia and Oceania increased from 33% to 62% over the same period (Solomon, 2008). Nigeria on her part through various reforms has taken an average of 10% of Africa's share of FDI since the introduction of SAP in 1986.

Prior to SAP successive Nigerian government viewed FDI as a vehicle for political and economic domination hence the thrust of government policy through the Nigerian Enterprises Promotion Decree (indigenization policy) was to regulate rather than promote FDI. This resulted to an annual average FDI of only 0.8% of GDP between 1973 and 1988. The Industrial Development and Coordination Decree No 36 of 1988 was to eradicate problems like uncertainty and confusion, conflicting information from bureaucrats, and numerous governmental agencies which foreign investors were compelled to deal with. This policy has been dramatically reversed in recent years, beginning in 1989 with the initiation of a debt-to-equity conversion scheme. The repealing of the Nigerian Enterprises Promotion Decree in 1995 and its replacement with the Nigerian Investment Promotion Commission Decree 16 of 1995, according to government, it was intended to attract foreign investment inflow and enhance capacity utilization in the productive sectors of the economy. This essentially threw open the door for foreign participation in Nigerian enterprises. It is clear, therefore, that whatever the FDI in Nigeria has been since 1972, the supply of available opportunities for FDI was severely limited until recently, Anyanwu (1998).

This dissertation attempts to examine the determinants and impact of Foreign Direct Investments in Nigeria between 1981 and2013 using quantile regression as technique of estimation.

1.2 Statement of the Problem

With the down-turn in oil boom of 1980, the Nigerian economy witnessed a number of problems: In the external sector, the problems like unsustainable balance of payments deficits, rapidly growing debt stock, and a high debt service burden emerged. Internally, the problems were very high fiscal deficits, rising unemployment and galloping inflation. In 1981 total domestic debt stood at N11, 192.60m while external debt stood at N2, 331.20m. External debt in particular was increasing rapidly until 1987 when the increase was more than double from N41, 452.40m in

1986 to N100, 789.10m. Again, same scenario continues until 2005 when Nigeria's external debt reached N2, 695, 072.20m. The debt relieve of 2006 reduced the debt burden to as low as N451, 461.70m. Since then the rising debt continue and reached N560, 900.00m in 2013 (CBN Statistical Bulletin, 2013). Above all, investment in manufacturing sector collapsed causing real output and per capita real income to fall (Adeolu, 2007). These problems have continued despite the implementation of the structural adjustment program (SAP) in 1986 and several polices towards attracting FDI. Could it be that the Nigeria's share of FDI is not enough to offset these problems or is it that what comes to Africa should have come to Nigeria in order to make significant impact? In the mid 1980_s, real GDP growth rate was negative in Nigeria falling from N205, 222.0b in1981 to N201, 036.27b in 1985 and a modest increase to N204806.54 in 1986. Real GDP maintain steady growth from 1988 till date i.e. N219875.63b in 1988 to 923,586.40b in 2013, (CBN Statistical Bulletin, 2013). The gap between domestic savings and investment is very wide in Nigeria due to low level of income.

Generally, economists recognized the importance of investments in the growth process and efforts are made to rekindle investment in Nigeria. The inadequate capital for financing developmental projects has been a stumbling block facing the country and has retarded economic growth in Nigeria. Savings in real term in Nigeria has been on steady increase being N14, 471.17m in 1981 and increase to N111, 112.31m in1992. This figure further increased to N878, 457.27m in 2000 and subsequently 11,034,940.93m in 2010. The saving size reached N17, 548,421.2m in 2013. Furthermore the reliance of Nigeria on mono-product export (oil) which is prone to price shock in international market has led to many years of instability in government revenue and has served as constraint to effective implementation of national development plans (Adewuyi and Adeoye, 2003). While FDI have been seen as very important source of capital that can bridge both the saving and trade gaps in Nigeria, little success has been achieved in attracting FDI despite reforms introduced by successive administrations in Nigeria. FDI inflows has been mainly in the mining sector while Agriculture, building and construction sectors has not attracted so much.

Attempts have been made by several researchers on this topic using different techniques of estimation to see factors that determine the inflow of FDI and its impact on Nigerian economy. This study attempt to use quantile regression to analyze the determinants and impact of FDI on Nigerian economy which is seen as better than OLS because it give better picture of changes that has taken place as one move from one quantile to the other. Clearly, an analysis of the determinants of foreign direct investment is needed to rekindle foreign investor's interest in Nigerian economy.

1.3 Research Questions

While the potential importance of FDI in least developed countries (LDC_S) development process is getting appreciated, two fundamental issues concerning FDI remain unresolved. Firstly, does FDI really contribute to the attainment of economic growth in the host country as argued by the proponents of the modernization approach? On the other hand as the dependency theorists assert that FDI, although may spur short-term economic growth, will generate and accelerate internal distortions that will ultimately depress or even retard the host country's economic growth. Base on the foregoing, a number of interesting questions come to mind such as:

(a) What are the determinants of FDI in Nigeria?

(b) What is the impact of FDI on Nigerian economy?

(c) What is the composition and trend of FDI in the Nigerian economic sectors?

1.4 Objectives of the Study

The broad objective of this study is:

(i) To analyze the determinants of FDI inflow in Nigeria.

The specific objectives include:

(ii) To determine the impact of FDI on economic growth in Nigeria.

(iii) To analyze the composition and trend in the inflow of FDI in Nigeria.

1.5 Research Hypothesis

The following hypothesis will be tested:

Ho: Macroeconomic variables do not determine the inflow of FDI into Nigerian economy.

H_1: Macroeconomic variables do determine the inflow of FDI into Nigerian economy.

Ho: FDI do not have significant impact on economic growth in Nigeria.

H_2: FDI have significant impact on economic growth in Nigeria

1.6 Justification of the Study

Economic growth and development in a market economy is expected to be private sector driven and be propelled by private investment. The keen interest in this study is explained by this fact. Hence, the relevance and timeliness of this thesis can hardly be in doubt. The strong positive correlation between investment/savings and growth has been well established in the literature. This work is anchored on the dual gap theory which provides adequate explanation on how saving and trade gaps can be filled by FDI. Many countries now see attracting FDI as an important element in their strategy for economic development. This is because FDI is seen as an amalgamation of capital, technology, marketing and management which is inadequate in LDC_S.

Sub-Saharan Africa as a region has to depend very much on FDI for so many reasons, like technological spill over, creation of employment opportunities, improvement in balance of payment position, and management skills as emphasized by Asiedu (2002). The preference for FDI stems from its acknowledged advantages (Sjoholm, 1999, Obwona, 2001, 2004). In fact, one of the pillars on which the New Partnership for Africa's Development (NEPAD) was launched was to increase available capital to US $64 billion through a combination of reforms, resource mobilization and conducive environment for FDI (Funke and Nsouli, 2003). Attempts will be made to use quantile regression to estimate result and base on results, recommendation will be made.

This study is justified based on the technique of estimation which is different from ones used by other studies on determinants and impact on economic growth in Nigeria. The country has set year 2020 in which it intends to be one of the twenty (20) largest economies in the world. This is the right time to eradicate these economic problems. Hence the starting point is to get the right policy framework in order to get there.

1.7 Scope and Limitations

The period to be covered by this research thesis is from 1981 and 2013. The choice of this period is to critically examine what happened before and after the introduction of SAP policy. IMF and World Bank structural adjustment program was adopted in 1986 with the aim of reducing the dominance of the public sector, improve its efficiency and to tap the growth potentials of the private sector. Successive government has tried to put in place measures that would attract the much needed foreign direct investment. The fundamental limitation of this research work is the poor quality and inadequacy of data. Therefore it would be important to point out that some of the information supplied by the Central Bank of Nigeria, World Bank reports and the National Bureau of statistics are sometimes conflicting. Also, the issue of non macroeconomic variable such as corporate governance which deals mainly with the country's corruption record is another important factor that determines the inflow of FDI. However, the impact and the effect on FDI has been done subject to these limitations.

1.8 Organization of the Chapters

This dissertation contains five chapters. Chapter one which is the introductory chapter shall cover background to the study, statement of the research problem, objectives of the study, research hypothesis, justification of the study and scope and limitation as well as organization of the chapters.

Chapter two contains the review of literature. The various sections are the conceptual literature, theoretical literature, empirical literature and an overview of foreign direct investment in Nigeria. The methodology for the thesis is presented in chapter three. The model specification and estimation techniques are in this chapter.

Chapter four focuses on data presentation, estimation and interpretation (analysis) of empirical results.

Chapter five contains the summary, conclusion and recommendations.

CHAPTER TWO

LITERATURE REVIEW

2.1 Conceptual Literature

There is no doubt that the appropriate growth strategy has remained an unresolved economic problem in the literature. However, economists generally recognized the importance of investments in the growth process and efforts are made to rekindle investment. Several models of economic growth exist and the role of investment has been stressed. Also, the domain of discussions has been on the issues concerning the source of investment finance, the determinants of investment behavior as well as impact of investment. All these are necessary to show if an economy is likely to grow or stagnate.

2.1.1 Foreign Direct Investment and Economic Growth

Foreign direct investment is not just a capital movement. Devrim (2009), In addition to capital, a controlled subsidiary often receives direct input of managerial skills, technology, and other tangible and intangible assets. Unlike portfolio investors, foreign direct investors have substantial control over the management of foreign subsidiary. According to Thomas and Peter (2000) FDI is any flow of lending to, or purchase of ownership in a foreign enterprise that is largely owned by the residents of the investing country. Also, FDI has been described as investment so as to acquire a lasting management interest (for instance 10% of voting stocks) and at least 10% of equity shares in an enterprise operating in another country other than that of investors' country (Nwillima, 2003; World Bank, 2007).

According to Ndiyo and Ebong (2003), foreign direct investment is an inflow of foreign resources in the form of capital, technology, management skills and marketing enterprises into the host country.

According to CIA reports (2010), “FDI is the sum of equity capital, other long term capital as shown in the balance of payment and that there are two types of FDI: inward and outward, resulting in a net FDI inflow (positive or negative) and stock of foreign direct investment”, which is the cumulative number for a given period.

According to Guide-whois (2010), FDI can be classified into horizontal and vertical FDI. Horizontal FDI arises when a firm duplicates its home country- based activities at the same value chain stage in a host country through FDI. While vertical FDI takes place when a firm through FDI moves upstream or downstream in different value chains, i.e. when firms perform value adding activities stage by stage in a vertical fashion in a host country.

According to World Bank (2010) foreign direct investment has many forms. These include Greenfield investment, Cross border merger and acquisition, and reinvested earnings. Greenfield investment refers to the establishment of a new firm that in turn enables to create productive assets in a host country. A transfer of ownership of local productive assets to foreign investors is referred to international or cross border merger and acquisition. Reinvested earnings mean part or all of the profit that is not repatriated to the investor’s country.

Interest in the study of economic growth has experienced remarkable ups and downs in the history of economics. Economic growth is commonly measured as the annual rate of increase in a country’s gross domestic product (GDP). In other words, economic growth is defined as long term expansion of the productive potential of the economy. According to the neoclassical point of view, economic growth is entirely driven by the accumulation of input factors and technical progress while Endogenous growth approaches stress the role of entrepreneurship and innovations. Kuznet defined economic growth as a long term rise in the capacity to supply increasingly diverse economic goods for the country's population.

Economic growth depends on the rate of investment which in turn largely depends on savings. However, gross domestic savings are very low in least developed countries (LDC_S). Foreign direct investment is an alternative source to fill the gap between savings and the required investments. Todaro (1992) argue that foreign firms bring not only financial capital but also managerial, entrepreneurial, and technological skills that lack in LDC_S and these skills can be transferred to domestic firms through different channels. Also government's budget deficit can be filled by tax on profit that may be collected from transnational companies

The total amount of foreign exchange that can be obtained from export and foreign aid falls short of foreign exchange that is required by LDC_S. Todaro (1992) FDI can help to fill the gap by reducing part or the entire deficit in the balance of payments. Moreover, multinational companies products that can be exported can generate net positive export earnings. The Organization for Economic Cooperation and Development, OECD (2002) reports stated that FDI can play important role by creating employment opportunities, other economic benefits and by integrating the host country economy into the global economy.

Todaro (1994) summarizes the benefits of FDI under four contributions as:

(i) FDI fills the resource gap between desired investment and locally mobilized savings.

(ii) FDI fills gap between targeted foreign exchange requirement and those derived from net export earnings plus net public foreign aid.

(iii) FDI fills the gap between targeted government tax revenues and locally raised taxes.

(iv) FDI helps to fill the perceived management, entrepreneurial, technological and skill acquisition gaps by the local operations of private firms. Having identified the benefits of FDI, Todaro (1994) also presented his argument against FDI activities of MNCs as:

a. Multinational corporations most times use their economic power to influence government policies in direction that is unfavorable to the development of their host economies.

b. The contributions of MNCs to public revenues in the form of corporate taxes is likely to be less than anticipated due to liberal tax concessions, disguised public subsidies and tariff protection provided by the host government.

c. Multinational corporations can cause balance of payment crisis as a result of substantial importation of intermediate products and capital goods, and the overseas repatriations of profits, interest, royalties, management fees and other funds.

d. They may lower domestic savings and investment rates by stifling competition through exclusive production right agreements with the host government failing to plough back much of their profits and generating domestic incomes from groups with lower saving propensity.

e. Multinational corporations most times reinforce domestic economic structure and cause income inequality.

The best way to assess the role and impact of FDI in developing countries is to study the objectives of foreign investment and host economies. If FDI is to be truly a win-win game for both parties, cost and benefits should be weighed carefully by host countries that are searching for economic growth and development, Asiedu (2003).

2.1.2 Economic Growth Models and Their Relevance to LDC_S

(i) Harod-Domar Growth Model

According to Chenery and Strout (1966) foreign resources are considered necessary for growth in developing countries. Some growth theories assume that some gaps can only be filled by transfer of resources from abroad. Growth models such as that of Harod – Domar which emphasized capital shortage argues that the infusion of foreign capital would lead to growth. Specifically, foreign resources are capable of replenishing the inadequate domestic savings in developing countries. While a particular size of saving or investment is required to attain a target rate of growth, there is always a difference between planned investment (Ip) and planned savings (Sp).

The saving gap (Sg) is taken as an indication of the size of foreign resources to achieve a planned growth rate. This can be expressed as

$$FR = Sg = Sp - Ip$$

Where $Sp < Ip$, which implies insufficient domestic resources are available to support required level of investment.

The above situation implies that given the required foreign resources such as foreign capital, a developing country may tend to achieve its planned rate of growth on assumption that all foreign resources are invested. The basic assumptions of the model are:

(a) The model assumes a closed economy and without government intervention.

(b) The model also assumes that for equilibrium to be achieved, planned investments should equal planned savings.

(c) Assumption of labor and capital as factors of production and without technical progress.

(d) The model assumes a constant return to scale.

(e) The model also assumes homogeneity of labor which grows at a natural constant rate.

(ii) The Endogenous Growth Theory

Endogenous growth theory was advanced by Romer and Lucas (1988). Unsatisfied with Solow's explanation, economists worked to indigenize technology in the 1980_s. They developed the endogenous growth theory that includes a mathematical explanation of technological advancement. This model also incorporated a new concept of human capital, the skills and knowledge that make workers productive. Unlike physical capital, human capital has increasing rate of return. Therefore, on the whole, there are constant returns to capital, and economies never reach a steady state. Growth does not slow as capital accumulates, but the rate of growth depends on the type of capital a country invest in.

The emphasis of this model is on technological progress and human capital development as its core value makes the model a good one for Nigeria and other developing economies. These are major areas that are short in supply if not lacking in developing countries which has tremendously retarded its economic growth.

(iii) The Unified Growth Theory

Unified growth theory was developed by Galor to address the inability of endogenous growth theory to explain key empirical regularities in the growth process of individual economies and the world economy as a whole. Endogenous growth theory was satisfied with accounting for empirical regularities in the growth process of developed economies over the last hundred years. As a consequence, it was not able to explain the qualitatively different empirical regularities that characterized the growth process over longer time horizons in both developed and less developed economies. Unified growth theories are consistent with the entire process of development, and in particular the transition from the epoch of Malthusian stagnation that had characterized most of the process of development to the contemporary era of sustained economic growth.

The applicability of the unified growth model in developing countries raised a fundamental question of the need to take records of all empirical regularities in the growth process so that the attained economic growth can be sustained. It is therefore relevant to take stock of empirical regularities if developing countries don't want to go back to the Malthusian stagnation.

(iv) The Schumpeterian Growth Theory

This is an economic growth theory named after the 20th century Austrian economist, Joseph Schumpeter. Unlike other economic growth theories, his approach explains growth by innovation as a process of creative destruction, which captures the dual nature of technological progress in terms of creation. Entrepreneurs introduce new products or process in the hope that they will enjoy temporary monopoly. In doing so, they make old technologies or product obsolete, this is the destruction referred to by Schumpeter. This could also be referred to as the annulment of previous technologies which makes them obsolete and which destroys the rents generated by previous innovations.

The theory mainly emphasized on retaining old technologies without regards to innovation. The weak point of this economic model is that it does not take into cognizance that world population is growing at a faster rate and it can only be matched with continuous innovation and invention in technology for increased output to meet the increasing demand.

(v) The Solow Growth Model

The positive correlation between FDI and economic growth is situated in this growth theory that emphasizes the role of improved technology, efficiency and productivity in promoting growth

(Lim, 2001). The potential contribution of FDI to economic growth depends strictly on the circumstances in recipient countries. The Solow growth model shows how the growth in capital stock, growth in labor force and advance in technology interact and how they affect output.

The supply and demand for goods play a central role in the Solow model. The supply of goods determines how much output is produced at any given time and the demand determines how this output is allocated among alternative uses.

Solow growth model emphasized that an improved technology and efficiency of labour which accelerate economic growth while, the recipient countries provide conducive investment climate. Developing countries that wish to grow economically will have to put in place factors that can attract FDI. This model is therefore relevant for economic growth in Nigeria and other developing countries.

2.1.3 Theoretical Issues as Related to FDI

Theories of FDI can be grouped into two: micro-level theories of FDI and macro-level theories of FDI. The micro-level theories of FDI try to provide answers to the questions why MNCs prefer opening subsidiaries in foreign countries rather than exporting or licensing their products, how MNCs choose their investment locations and why they invest where they do.

The macro-level theories deal with the host country's situations that determine the inflow of FDI, like the economic growth rate, GDP, infrastructure, natural resources, the political situation etc. GDP and per capita income (PCI) as well as the population size are common indicators to measure the size of local market. However, if a firm is export-oriented and not market seeking, the size of domestic market will not be an important determinant of FDI (Root and Ahmed, 1979). Also, in today's globally business environment, absence of efficient infrastructure means not only high cost of doing business for those that are already in business but also a barrier to entry for new firms. Infrastructure development has high importance for inflow of FDI because efficient and adequate infrastructure implies easy access to natural resources and increase profitability. Likewise, the economic progress of a country and in particular the inflow of FDI into a country can be affected by unsettled political disputes. Without stable political situation, whatever the economic environment may be, a country's effort to attract FDI cannot be fruitful.

2.1.4 Micro-level Theories of FDI

(i) The Internalization Theory of FDI

Buckley and Casson (1976) coined the notion of internalization itself, based on the application of the market imperfections approach in an international context. In the theory, Buckley and Casson suggest that firms try to maximize profits under the imperfect condition existing in intermediate products by internalizing the key intermediate products such as knowledge, marketing, human capital and management expertise. They think the markets for key intermediate products are imperfect. Under the imperfect market conditions in intermediate products, firms link different activities through markets under common ownership and control. The linking of different activities through these markets, however involves significant time lag and transaction costs.

Thus, firms want to bypass the external markets in intermediate products by creating internal markets in order to avoid the significant time lag and transaction costs. In other words, firms are encouraged to replace these external markets with their own internal markets for these products to avoid the above mentioned difficulties.

For reason of increase in profit, some transactions should be carried out within a firm rather than between firms. In other words, some transactions should be internalized to reduce transaction cost and hence increase profitability. There are technologies that are embodied in the mind of a group of individuals and not possible to sell to other parties. This difficulty of marketing and pricing know-how forces multinational corporations to open a new subsidiary in a foreign country instead of selling the technology. Also a number of problems may arise if an output of a firm is an input to other firm in another country. For instance if each has a monopoly power, they may try to hold the price down while the firm that produces the input tries to raise price. Hence this problem can be avoided by integrating various activities within a firm rather than subcontracting the activities (Krugman and Obstfeld, 2003).

Petrochilos (1989) suggests that investors reduces cost by using administrative or internal prices, and controls the production and marketing of intermediate products through vertical integration.

However, the internalization has the following limitations:

(i) It is not certain that the motive for internalization is the external markets inefficiency in term of high transaction costs and longer time lags (Petrochilos, 1989).

(ii) The empirical evidence regarding the internalization hypothesis is not very strong (Agarwal, 1980).

(iii) The theory cannot explain FDI in the short run, especially the FDI by smaller firms operating in one or two foreign countries (Agarwal, 1980).

(ii) The Product Life cycle Theory of FDI

This theory was developed by Vernon in 1970. At the early stage, a new product is first produced and sold in home market. When the home market is saturated, the product will be exported to other countries. The firm starts to open subsidiaries in locations where cost of production is lower when the competition from the rival firms become intense and the product reach its maturity. This theory was for a set of studies that regarded the spreading of multinational firms as being sequential, taking place in stages. The firm would initially supply the export markets, then establish trade representatives abroad, and eventually end up setting up production outfit in target markets by way of subsidiaries.

Agarwal (1980) explains very well the original version that in its original version, the product life cycle is conceived in three stages. In the first stage when the product is new it is produced by the innovating firm in its home market, because of the greater need for efficient co-ordination between research and development (R & D) and the production units as well as the availability of demand for it there.

The second stage is marked by the maturity and export of the product to countries having high level of income. Expansion of demand and growing competition in these markets lead eventually to FDI of the innovator into these countries for local production of the product.

The third stage is characterized by a complete standardization of the product as well as its production technique which is no longer an exclusive possession of its innovator. Price competitions from other producers forces innovator to now invest in developing countries to seek cost advantages, especially labor costs and other factor costs such as land and materials.

The limitation of the theory is that it is not comprehensive enough to cover all kinds of FDI since it does not provide the new phenomenon of investment by LDC firms in DC markets. Furthermore, the firm-specific advantages contained in the model only arose because of the high technology characteristics of the products and product process implying significant savings of labor and which meet the needs of high income consumers in the home country.

(iii) The Eclectic Theory of FDI

Dunning (1958) developed an eclectic theory of FDI which is called OLI paradigm. O, L and I refer to ownership advantage, location advantage and internalization advantage respectively. The theory emphasized that operating in a foreign country has many cost and these cost include a failure of knowledge about local market, cultural, legal and many others. Therefore, foreign firm should have some advantages that can offset these costs. Ownership advantage is the specific advantage that gives power to firms over their competitors. These include advantage in technology, in management techniques, easy access to finance, economies of scale and capacity to coordinate activities. Location advantages on the other hand, are advantages firms take in order to reap the benefit of specific advantages. These include accessibility and low cost of internal resources, adequate infrastructure, political and macroeconomic stability. Therefore, the location advantage of a host country is one essential factor that determines the investment decisions of TNCs. Internalization is the ability of the firm to internalize some activities to protect their exclusive right on tangible and intangible assets, and defend their competitive advantage from rival firms. Accordingly, all the three conditions must be met before firms open subsidiaries in a foreign country (Soderstein, 1992; Laar, 2004).

Dunning (1981) summarizes that firm must possess net ownership advantages over firms of other nationalities, which are exclusive or firm-specific proprietary rights, such as patents. Within the imperfectly competitive environment, firms are able to develop new products or processes; skills in marketing, organization or finance; expertise in differentiating products, and so forth. These advantages are to offset the additional costs of operating in an unfamiliar foreign environment.

Secondly, it must be advantageous for the firm to exploit its unique assets through production outside its home country rather than through exports. This condition will be met when there are either positive or negative factors deterring production at home or encouraging production abroad.

Lastly, it must be more beneficial to the firm possessing these assets to use them itself through FDI, rather than to sell or lease the rights to foreign firms, through licensing agreements, management contracts. That is, taking account of both the costs and the returns from internalization, it must be more profitable to use an internal market than to externalize the property rights

However, the most popular and comprehensive eclectic theory of international production falls short of being a general theory of FDI because of the following limitations

(i) The eclectic theory is not an operational model that can be used in explaining all FDI at firm, industry, and country levels. Petrochilos (1989) stated that advantages due to ownership, location and internalization may change over time and accepts that if country-specific characteristics are important of FDI it may be invalid to generalize from one country's experience to another.

(ii) It is difficult to verify this theory in its existing form by means of empirical tests, even though the theory offer plausible explanations why and where FDI is most likely to flow (Clegg, 1987).

2.1.5 Macro-level Theories of FDI

(i) The International Trade Tradition

It is certainly no surprise that International Trade economists were among the first to study the FDI phenomenon. Foreign production can be a substitute for exports, as it can influence the terms of trade (TOT) and thus change the whole pattern of specialization. However, in the neo-classical world of the Heckscher-Ohlin tradition there is no space for foreign direct investment. Any disequilibrium in the prices of goods or factors across countries brought about by different factor endowments would be immediately corrected by international movements of goods (the Samuelson theorem).

Mundell (1957) used an extension of the basic model to show that trade and capital movements can be substitutes, namely, that the introduction of tariffs would induce a flow of FDI towards the country where tariffs are imposed. That is, the same way that restrictions to international movements of factors can be substituted by trade (the original H-O model) restrictions to trade can be replaced by international movements of factors, in particular capital given the intrinsic imperfect mobility of labor. In a way, these hypotheses based on the Heckscher-Ohlin model are not very different from those based on capital movements. As Taveira (1984) point out, in both cases "FDI was analyzed as a re-equilibrium device within a generally perfectly competitive economy", a major limitation of the explanatory potential of both approaches.

(iii) The Kojima's Macroeconomic Approach

The main thrust of this theory is that "Foreign Direct Investment should originate in investing country's comparatively disadvantaged industry, which is potentially a comparatively advantaged industry in the host country" (Kojima, 1982). If this is the case, Kojima argues that FDI and international trade are complementary and lead to a dynamic reorganization in the international division of trade and the associated gains for all countries involved.

The role of FDI can thus be seen as to exploit the home country's comparative advantages in intermediate inputs that are embodied in products whose final stages of production give a comparative advantage to the host country (Dunning, 1993). Some factors endowment generates comparative advantages that are better exploited abroad.

According to Kojima (1978) FDI by Japanese firms are mainly made in established industries in which the home countries are losing a comparative advantage and in turn host countries are gaining it. These industries are mainly labor intensive industries such as textile and component assembly. The theory also suggests that the direction of Japanese FDI is dictated by the need to exploit natural resources which are not available or not producing sufficient quantity domestically (oil, fuel, food etc), and the other to switch labor intensive-activities from Japan where labor cost is high to low labor cost location such as south-east Asia (Petrochilos, 1989).

Kojima theory explains very well how important the role of the structure of a country's comparative advantage in trade such as resource and factor endowment and firm-specific advantages, is in determining the flow of FDI (Pangestu, 1983).

Kojima theory, however, has the following limitations:

(i) The distinction between transferring a comparative advantage and creating a new one and between trade-oriented Japanese and anti-trade-oriented U.S foreign investment is by no means clear (Young, 1982).

(ii) Kojima theory fails to consider vertical specialization within industrial sectors (Dunning, 1977).

(iii) The theory does not say about the motives for FDI.

(iv) Kojima theory has a lack of required condition to be a theory (Petrochilos, 1989).

(iv) The Capital Theory Approach

Until the 1950s, foreign direct investment was explained within the traditional theory of international movements. Foreign direct investment was seen as a response to differences in the rate of returns on capital between countries. This suggestion was strengthened by the empirical observation that American firms (the major source of FDI in the 50s) obtained a higher rate of return from their European investment than at home (Mundell, 1960)

Hymer (1960) was the first to expose the deficiencies of this approach. He claimed that rate of returns on capital is not the only reason but also risk. He however maintained that the movement of capital is not unidirectional. Capital moves from countries where returns on capital are high to countries where returns on capital is low and vice versa. This is because under perfect market an increase in the short run profit of firms in one country will not induce international investment. Instead, it will attract new entrants that will eliminate any excess profit. Hence, an international difference in expected return is not sufficient to induce FDI (Caves, 1996).

2.2 Types and Rationales for Foreign Direct Investment

(i) Resource Seeking FDI

A resource seeking FDI is attracted by availability of low-cost skilled and unskilled labor, strategic natural resources and raw material that would be readily available at reduced cost. This will no doubt reduce production cost and increase profit margin. It will also allow room for expansion of firm’s activities in the long-run. FDI in this category are motivated by availability of major raw materials in abundance in the host country which makes it cheaper to engage in FDI rather than importing the raw material from abroad.

All the FDI frontrunners are oil exporting African countries (Nigeria, Angola, Algeria and Equatorial Guinea). Their proved oil reserves are almost 6 times greater than European Union's reserve (CIA, 2012). Although, there is no data on FDI flows by sector for the countries mentioned above, the oil sector in Nigeria which is one of the natural resources that is in abundant in the country has more FDI than any sector. The oil companies such as Shell, Chevron, Mobil, Texaco, Total etc. are all in exploration and exploitation for oil in the Niger Delta region of the country which account for more than 80% of the government revenue (Adeolu, 2007).

As noted by neo-classical economists, labor cost is one of the factors that affect investment decision of foreign investors. UNCTAD (2004) reported that availability of cheap labor in China is taking jobs from Europe and United States. Nigeria with population of over 150 million according 2006 national census is one of the major recipient of FDI in Africa because of cheap labor that is in abundant.

(ii) Market Seeking FDI

A market seeking FDI is highly determined by the growth potential and the size of national market, access to regional and global markets taking into account the country-specific consumer preferences. In this case the foreign direct investor will take into cognizance the level of openness of the economy which will determine the ease at which its products can be exported to other countries. Most FDI in Nigeria are attracted by the size of the domestic market which has capacity to provide the needed demand for the firm's products.

A market seeking FDI is highly determined by the domestic market size of the recipient countries. Many researchers used GDP as a proxy for market size (e.g Morisset, 2000 and Asiedu, 2002). Nigeria, South-Africa, and Angola which accounted for more than 46% of the

GDP of the continent had about 50% of market-seeking FDI (UNCTAD, 2010). This clearly shows that local market size is an important determinant of FDI flows to Africa. Worldwide, globalization and regional economic integration have decreased the importance the size of local market as a determinant of FDI (UNCTAD, 2010). However, there is no strong regional market in Africa (World Economic forum, 2010). As a result of this, the size of domestic market is still an important determinant of FDI flows into Africa.

(iv) Efficiency Seeking FDI

According to UNCTAD (1998) an efficiency seeking FDI is significantly determined by productivity of labor resource, cost of inputs and intermediate goods. This is measured by quality educational institutions that will produce the needed manpower. These types of FDI also, ensure the availability of well developed legal institutions that will guarantee due process and rule of law. Another important factor that motivates inflow of FDI is political stability that guarantees quick administrative procedure concerning FDI. Firms in this category chose advanced countries as their destinations where there is availability of sound legal, administrative, and educational institutions conducive for research and development which are prerequisite for efficiency in FDI operations. FDI under this category chose their investment destinations taking into consideration the availability of highly skilled manpower.

(iv) Strategic Asset Seeking FDI

Strategic asset seeking FDI embraces the mode of expansion by established foreign investors. Wendt (1993) stated that strategic asset seeking FDI is the most expeditious way of acquiring competitive advantage. The FDI has the task of linking into foreign network of asset owners. They are well established FDI that are oligopolistic in activities which has the potential of preventing new entrants due to strategic advantages that are in their control. FDI in this category have capacity to rationalize its products to exploit and economies of scale to reduce production costs. These advantages will allow easy access to regional and global markets at the expense of new FDI. They have capacity to capture all market outlets thereby preventing new entrants. Companies such as Toyota, Honda, and Mercedes all in automotive industry is a good example of strategic asset seeking FDI.

Table 1 below summarizes the types of FDI commonly found in most countries especially Sub-Sahara Africa. The most common types found in Nigeria are resource seeking and market seeking because African countries are blessed with so many natural resources such as crude oil and favourable weather condition for cash crops such cocoa, groundnut, rice etc. Also the market seeking FDI are many because of large population size. Most firms are sited in Lagos in Nigeria because of high population that resident there.

Table 2.2 Type and Rationales for Foreign Direct Investment (FDI)

1. Natural Resource seeking a Physical Resources b Human Resources	Motives for initial Foreign Direct Investment
2. Market Seeking a Domestic Market b Adjacent (e.g Regional) markets	
3. Efficient Seeking a Rationalization of production to exploit b Economics of specialization and scope c Across value chains (product specialization) d Along value chains (process specialization)	Motives for sequential Foreign Direct investment
4.Strategic Asset Seeking a To advance regional or global strategy b To link into foreign network of created assets c Technology and innovation d Organization capabilities and sustenance e Markets i.e. global market dominance	

Source: John C. Anyanwu *"An econometric investigation of the determinants of foreign direct investment in Nigeria" in the proceedings of 1998 Annual conference of the Nigeria Economic Society.*

2.3 Overview and Trend of FDI Inflow to Nigeria and its Impact

It is widely accepted that foreign direct investment is an important aspect of the recent waves of globalization. UNCTAD (2001), noted that FDI in the world increased from $57 billion in 1982 to $1,271 billion in 2000. Africa as a whole and sub-Saharan Africa (SSA) in particular has not benefited much from the FDI boom. FDI inflows into Africa have increased only modestly, from an annual average of about $1.9 billion in 1983 – 87 to $3.1 billion in 1988 – 1992 and $10.67 billion in 1991 – 1997.

Although UNCTAD's world investment Report 2004, reported that Africa's outlook for FDI is promising, but the expected surge is yet to manifest. FDI is still concentrated in only a few countries for many reasons, ranging from negative image of the region to poor infrastructure, corruption and foreign exchange shortages, as well as unfriendly macroeconomic policy environment, among others.

Nigeria is one of the few countries that have consistently benefited from the FDI inflow to Africa as reflected in table 1 below: Nigeria's share of FDI inflow to Africa averaged around 10% from 24.19% in 1990 to a low level of 5.8% in 2001, up to 11.65% in 2002. UNCTAD (2003) showed Nigeria as the continent's second top FDI recipient after Angola in 2001 and 2002. Solomon (2008), Nigeria, the most populous country in Africa, was the recipient of more than 70% of the flows into West-Africa in 2003 to 2006.

Table 2.4: Nigeria share of FDI inflow (US $ million) to Africa

Year	Africa	Nigeria	Percent of Africa
1980	392	-188.52	
1990	2430	588	24.19
1995	5119	1079	21.07
1997	10667	1539	14.43
1998	8928	1051	11.77
1999	12231	1005	8.22
2000	8489	930	10.96
2001	18769	1104	5.88
2002	10998	1281	11.65
2003	15033	1200	7.98
2004	28793	3351.6	11.64
2005	25297.5	2593.0	10.25
2006	21903.7	2962.2	12.22
2007	19871	1637	8.24
2008	20706	1931	9.33
2009	22249	3519	15.82
2010	20806	2124.3	10.21
2011	33732.4	3103.38	9.22
2012	44876.6	5564.70	12.4
2013	47328.4	5490.10	11.6

Source: UNCTAD (www.unctad.org/fdi statistics)

The details of FDI inflow into Nigeria for the period 1981 to 2013 are shown in appendix. The real FDI inflow ranged from ₦334.7 million in 1981 to ₦434.1 million in 1985 and N115.952 billion in 2000. This was an increase in real term from the decline of the 1980s. FDI forms a small percentage of the nations GDP, however making up 2.47% in 1970, - 0.81% in 1980, 5.86% in 1989 and 57.74% in 2002, and the highest on the whole, it formed about 2.1% of the

GDP over the whole period considered. Prior to the early 1970s, foreign investment played a major role in the Nigerian economy. Until 1972, for example, much of the non-agricultural sector was controlled by large foreign owned trading companies that had a monopoly on the distribution of imported goods between 1963 and 1972; average of 65% of total capital was in foreign hands (Jerome and Ogunkoya, 2004).

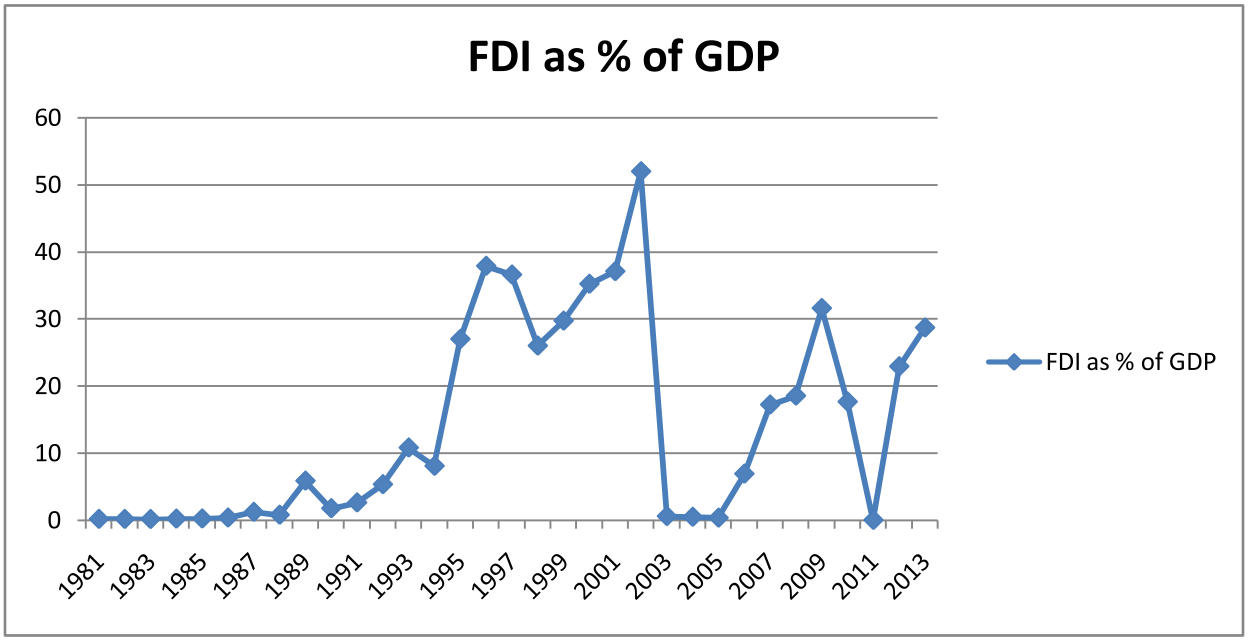


Fig 2.3

The trend of FDI inflow into Nigeria from 1981 to 2013 as a percentage of GDP is clearly shown by the FDI as percentage of GDP as illustrated in the appendix. The table clearly shows the changing nature of FDI inflow in the aftermath of the official restrictive policy manifested in the Nigeria enterprises promotion decree of early 1980s. These decrees ensured that the FDI inflow was kept to the barest minimum of below 2 percent of GDP. The crash of world oil prices in 1980 caused a massive divestment from the nation and the low level of inflow obtained until 1986.

The adoption of the macroeconomic program embedded in the SAP started the process of gradual increase in the FDI inflow. The SAP polices such as the industrial development coordination committee (IDCC), the companies allied matters decree 1990, financial liberalization and the debt equity swap were successful but the FDI inflow was not sustainable. The period 1990-1993 witnessed a drop in the rate of inflow largely due to a protracted political impasse that disrupted productive activities created a regime of uncertainty, which subsequently encouraged capital flight.

2.4 Overview of Government Polices on FDI in Nigeria

The history of foreign investment can be broken into four distinct phases, namely, the colonial period, the post independence era, the indigenization era and the structural adjustment program (SAP) era.

2.4.1 The Colonial Era

Few years before independence, the concern of the colonial administration was to promote the interest of British industries and to this end, emphasis was placed on the production of raw materials for the home market which required them to feed their industries. This was to the detriment of manufacturing industries. The neglect of this sector contributed to the agitations for independence in the belief that only a government formed by Nigerian could be relied upon to develop the country industrially. The experience after independence revealed however, that political independence in a nation whose economy was dominated by foreigners meant very little and that true independence could only be attained when Nigerians take over the “commanding heights” of the economy. This led to transfer of ownership of enterprises from foreign investors to Nigerians.

2.4.2 The Nigerian Enterprise Promotion Decree of 1972

The Nigerian Enterprise promotion Decree was introduced in 1972. It gives full or partial transfer of equity of enterprises from foreigners to Nigerians. The 1972 Decree was improved upon by the 1977. Decree of the same title which was meant to solve some of the challenges in the earlier Decree now exhaustively classified all enterprises in Nigeria into three schedules.

Schedule (1) Enterprises were reserved exclusively for Nigerians while schedule (2) Enterprises required at least 60% ownership by Nigerians and schedule (3) Enterprise required a mandatory 40% minimum participation by Nigerians. The Nigerian Enterprises promotion Decree (later Act) of 1972 and 1977 popularly referred to as the indigenization Act "more than other statute, influenced the pattern of Foreign Direct Investment in Nigeria.

2.4.3 The Structural Adjustment Program (SAP) of 1986

Since 1986 however, government policies and legislations have signaled the end of the indigenization policy in Nigeria. The factor responsible for the change of attitude by government toward Foreign Direct Investment has been the world economic recession which started in 1981.

The economic recession created a glut in the world market for crude oil upon which Nigeria completely depended on for the foreign exchange earnings. The sustained deliberate effort to attract foreign investment have been in recognition of the fact that the attitude adopted in the era of indigenization was not helpful, but tended to be counterproductive. The objective of increasing the level of Nigerian ownership and control of business enterprises through indigenization was misleading. These perceptions negatively affect the inflow of new investment and even led to certain degree of capital flight. This attitude coupled with the burden of foreign debt and low international credit rating culminated into seizure in the flow of new investment into the country (Anyanwu, 1998).

The structural adjustment program was set out to tackle this crisis in three ways:

There were measures to remove some of the bottle necks that had shown to be a major impediment to genuine foreign investors. These include the abolition of the imports licensing system and liberalized access to foreign exchange both of which were source for massive corruption and a major source of headache and annoyance to genuine investors.

The second major measure of SAP for attracting foreign investment was through government efforts to improve on the bilateral trade links with friendly countries.

The third measure and a far reaching one was the repeal of the Nigerian Enterprises promotion Act 1977 and its replacement with the Nigerian Enterprises promotion Decree No. 54, 1989.

2.4.4 The Industrial Development Coordination Decree No 36 of 1988

A major source of challenge and frustration experienced by foreign investors in the past was the uncertainty and confusion which they had to contend with arising from the numerous governmental agencies which they were compelled to deal with. Often, a foreign investor would be confronted with conflicting information from bureaucrats who would render services to an investor only after he had offered a gratification. The inauguration of the industrial development co-ordination committee (IDCC) by decree 36 was to eradicate some of these problems especially those arising from the duplication of government agencies or departments.

In order to ensure that the IDCC does not constitute a bottle-neck of its own, it was provided that the committee must fix a minimum period not exceeding 30 days within which applications submitted to it must be dealt with and the applicant notified. Any period so fixed by the committee must be displayed conspicuously in those parts of the secretariat to which members of the public has access.

2.4.5 The Nigerian Enterprises Promotion Decree No. 54 of 1989

The first indication of an impending amendment of NEP Act, 1977 was when the new industrial policy of Nigeria was published in January, 1989. It was stated there in that as part of government's strategy for attracting foreign capitals "amendment" had been made to the NEP Act, 1977. Thus, schedule (2) now permits 80% foreign ownership as against 60% previously allowed. Elsewhere, the document stated: "in order to ensure greater Nigerian participation in industry should proceed simultaneously with attracting foreign investments on mutually beneficial terms, the Nigerian enterprises promotion of 1977 has been amended and it is now permissible for foreigners to own up to 80% equity interest in schedule (3) enterprises. In addition, companies with 51% (and above) Nigerian ownership are hence forth considered as indigenous companies and can therefore invest or form partnership for schedule 2. This was to further open up the economy for foreign participation.

It was not until 29th December 1989, that the NEP Decree was promulgated into law. The changes it introduced differ in significant respect from those anticipated by the industrial policy analysts, but the essential objective of making the country's legal environment for foreign investment more attractive was unmistakable.

Other incentives include effective protection of local industries through import tariff, government's encouragement of export promotion, facilitation of international trade as well as liberalized repatriation of capital, dividends, royalties and fees. The enthusiasm towards creation of export free zones in parts of the country was meant to boost the operation of import-dependent manufacturing industries. It is equally meant to strengthen the non-oil export sectors of the economy and to reduce our over dependence on crude oil.

2.4.6 The Nigeria Investment Promotion Commission of 1995

The commission was established to liberalize the investment climate. The commission took over from the IDCC as a one-step agency to facilitate and encourage foreign investors into the country. The aftermath of the promulgation of the commission was appreciable increase in the inflow of FDI inflow into the country especially into the non-oil sectors. Additional policy measures included guided deregulation, foreign exchange (monitoring and miscellaneous provisions) Decree of 1999, and the establishment of export processing zones, all aimed at improving the business environment of the country.

Adeolu (2007), hinted that the current sustained upward trend in the FDI inflow is due largely to the privatization and commercialization programme of the government whereby public enterprises are put up for sale to the investing public. This exercise attracted considerable inflow of FDI since 1999. The deregulation of the telecommunication sector for instance by granting licenses for global system for mobile communications (GSM) operators in 1999 caused the FDI in the telecommunication sector to increase from US$50million at the end of 1999 to about US$2.1bilion by the end of 2002 (Adeolu, 2007).

2.5 Sect oral Analysis of FDI Inflow to Nigeria

FDI in Nigeria has traditionally been concentrated in the extractive industries. The below table show the sector composition of FDI in Nigeria from 1970-2013

Table 2.6 Sector Analysis of FDI Inflow to Nigeria (%)

Year	mining a quarrying	Manufacturing	Agriculture	transport & comm	Building & construction	Trading & business	Misc Services
1970-1974	51.2	25.1	0.9	1.0	2.2	16.9	2.7
1975-1979	30.8	32.4	2.5	1.4	6.4	20.4	6.1
1980-1984	14.1	38.3	2.6	1.4	7.9	29.2	6.5
1985-1989	19.3	35.3	1.4	1.1	5.1	32.6	5.2
1990-1994	22.9	43.7	2.3	1.7	5.7	8.3	15.4
1995-1999	43.5	23.6	0.9	0.4	1.8	4.5	25.3
2000-2001	30.7	18.9	0.6	0.4	2.0	25.8	21.5
2002-2007	30.3	32.2	1.7	1.1	4.7	19.1	10.9
2008-2011	31.4	30.1	2.8	1.3	5.8	20.1	8.5
2012-2013	28.6	29.2	2.7	3.2	5.5	23.5	7.3

Source :CBN Statistical Bulletin, 2013

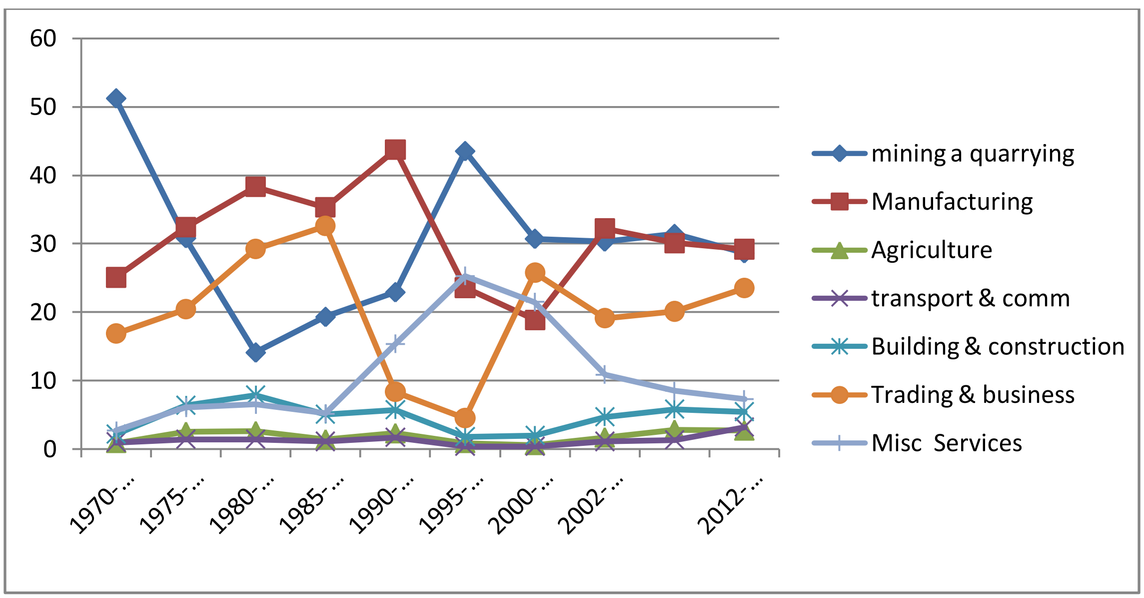


Fig 2.5

Data from the table shows a diminishing attention to the mining and quarrying sector from about 51% in 1970 to 30.7 in 2000-2010 and slides to 29.5% in 2013.

On the average FDI in the manufacturing sector over the period competes favorably with the mining and quarrying sector with an average of 32%. The stock of FDI in trading and business services rose from 16.9% in 1970-1974 to 32.6% in 1985-1989 before nose-diving to 8.3% in 1990 1994. However, it subsequently rose to 25.8% in 2000-2010 and 22% in 2012-2013.

Agriculture, transport and communications, and building and construction remained the least attractive to FDI in Nigeria. According to (CBN 2004), transport and communication sector have succeeded in attracting the interest of foreign investors, especially the telecommunication sector. CBN (2010) Nigeria is currently described as one of the fastest growing mobile phone market in the world. The four operators – MTN, GLO, Airtel and Etisalat are currently engaged in healthy completion. The effect of this development is yet to be translated to the rest sectors of the economy.

The hostile macroeconomic environment that encouraged capital flight, coupled with the ineffective operations of refineries, which occasioned large reliance on imported refined petroleum products, were responsible for the downward spiral of the oil FDI in the early 1990s. The process of privatizing and commercializing public enterprises by which the Nigeria national petroleum corporation and its subsidiaries were put up for sale was responsible for the sharp upward inflow into the oil sector between 1993 and 1995. The upward trend was pushed further by the promulgation of the NIPC decree in 1995. Further, deregulation of the downstream sector of the industry opened up the sector to more FDI inflow after the inception of the civilian administration in 1999.

The inflow of FDI into the communications sector remained low until 1995 when the NIPC decree came into operation. As part of the privatization/deregulation exercise, the federal

Government established the Nigerian communications commission in 1993 to regulate and encourage private sector participation and issue license to private companies wishing to undertake telecommunication services. In 1999, the government began the complete deregulation of the telecommunication sector by licensing GSM service providers.

2.6 Trend Analysis of Macroeconomic Variables in the Study

Fiscal Deficit

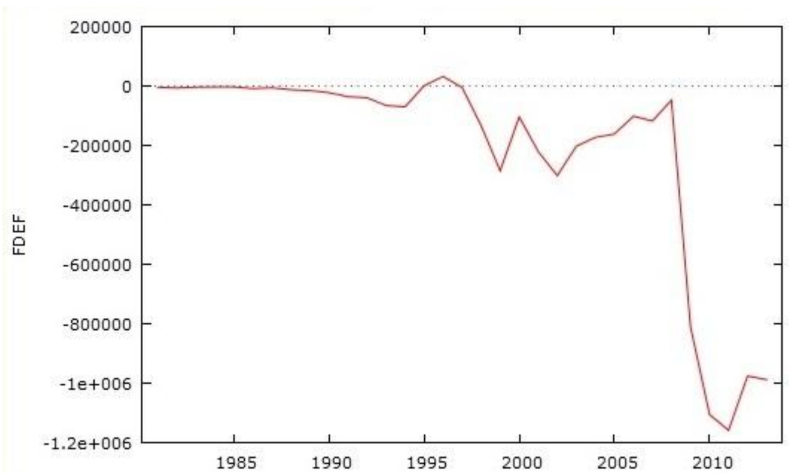


Fig 2.6.1 Fiscal Deficit

Nigeria maintains balanced budget stability till 1987 and start experiencing deficit financing until 1996. This could be attributed to reckless borrowing by successive government and its use to finance white elephant projects such as the Ajaokuta Steel Company Project couple with movement of federal capital from Lagos to Abuja at the same time. Statistics shows that between 1987 and 1999 Nigeria's external debt increase from 100,789.10m to 2,557,374.40m while domestic debt increases from 36,789.10m to 794,806.60m over the same period. Since then the country has been on the trend and recorded its worst scenario in 2011 through 2013 when fiscal deficit reached 987,774.00m.

Investment in Infrastructure

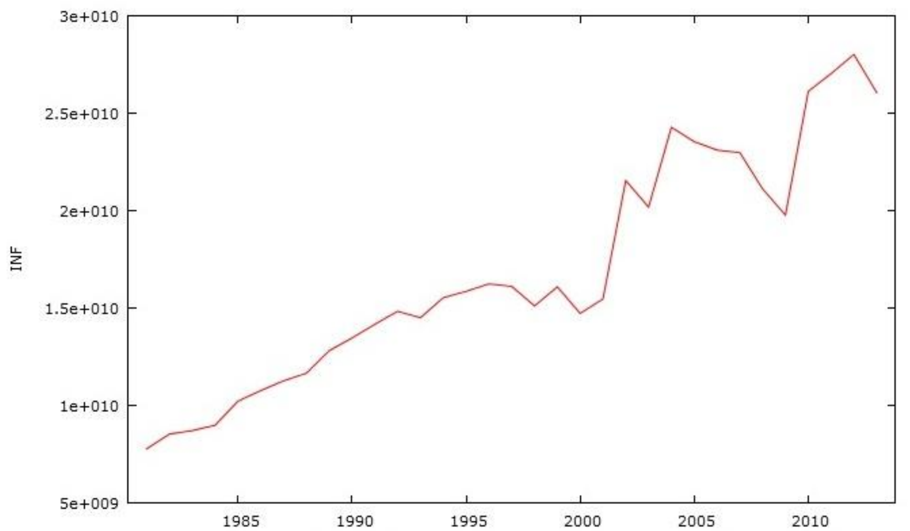


Fig 2.6.2 Investment in Infrastructure

The country's investments in infrastructure have been very low but, maintain an upward trend throughout. Even though the result of the trend analysis has been fluctuating, the trend shows that huge amount are usually budgeted and allocated to the sector but it has not really reflected by way of implementation.

External Reserve

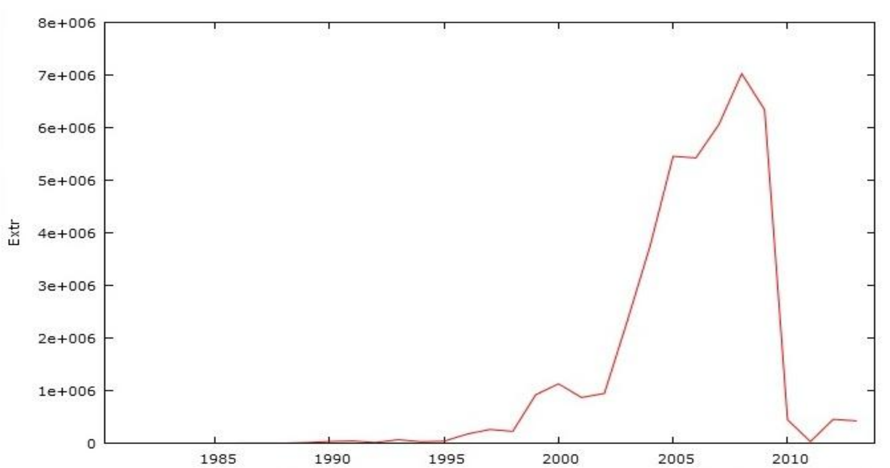


Fig 2.6.3 External Reserve

From the trend above, Nigeria's external reserve has remained low (almost zero) till 1995 when it starts to appreciate. It attained its peak in 2007 and then drops to zero in 2011. The size immediately rises modestly till 2012 and stabilizes till 2013.

Net Foreign Indebtedness

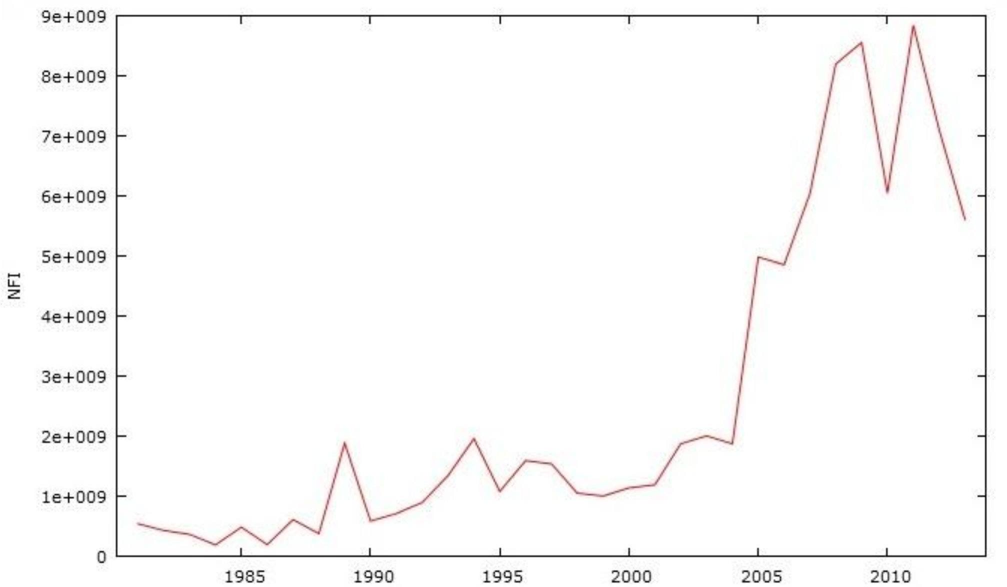


Fig 2.6.4 Net Foreign Indebtedness

Nigeria's foreign debt has been very low in the 80_s but took a new dimension prior to 1990 and since then it has been fluctuating but on the rising side due to reckless borrowing by successive government. The foreign debt size reaches its peak in 2006 and drop drastically till 2010. This could be attributed to debt forgiveness the country benefited from in 2006. From 2011 till 2013 foreign has been on downward trend.

Openness

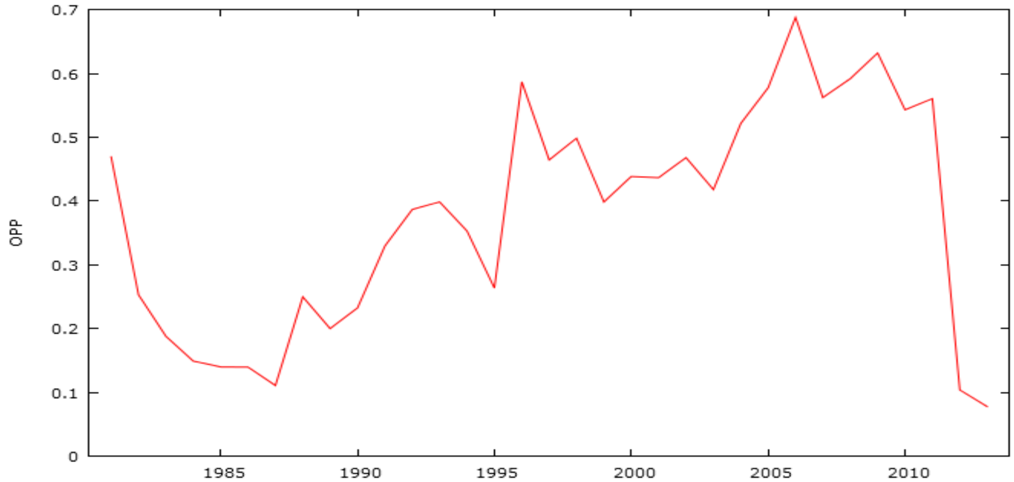


Fig 2.6.5 Openness

This variable which is measured by import + export/gdp as explained by the trend has been on downward trend till 1985. Prior to 80_s Nigeria's policy was not openness oriented. The SAP policy of 1986 returned the economy to openness oriented policy which allows foreign investors to bring in their capital to fill the saving and foreign exchange gaps and gives leverage to foreign investors to repatriate profits to their home countries. The trend has been fluctuating but on the increase till 2010 when the trend drop sharply to 0.1 point. It maintained the downward trend till 2013.

2.7 Empirical Literature

2.7.1 Determinants of Foreign Direct Investment

Linda and Said (2007) have examined political, economic social and policy variables as factors influencing inflow of foreign direct investment. Their conclusions were that the principal determinants of foreign direct investment were the economic and political features of each particular country.

James and Jiangyan (2010) using a dataset which breaks down FDI flows to primary, secondary, and tertiary sector investments and a GMM dynamic approach to address concerns about endogeneity, the study analyzes various macroeconomic, developmental, and institutional / qualitative determinants of FDI in a sample of emerging markets and developed economies. The study reveals that while FDI flows into the primary sector show little dependence on any of these variables, secondary and tertiary sector investments are affected in different ways by countries income levels and exchange rate valuation, as well as development indicators such as judicial independence and labor market flexibility. They also find that the effect of these factors often differs between advanced and emerging economies. The study concludes that primary sector FDI has no strong linkages to either macroeconomic stability, level of development, or institutional quality, though like other forms of FDI, clustering appear important, with larger stock attracting additional inflows.

Khondoker and Kaliappa (2010) using panel data from 68 low-income and lower-middle income developing countries strive to identify the factors that determine FDI inflows to the developing countries. Based on a comparative discussion focusing on why some countries are successful while others are not, the study demonstrates that countries with larger GDP and high GDP growth rate, higher proportion of international trade and with more business friendly environment are more successful in attracting FDI. Also, the finding shows that foreign aid significantly and positively affects inflow of FDI to developing countries and the finding is robust. He said the result support the findings of Kimura and Todo (2010) who using disaggregated data shows that Japanese aid enhances FDI inflow to the aid receiving countries.

Narayanamurthy et al (2010) studied the inflow of FDI in BRICS countries using annual dataset from the period 1975 to 2007. The study employs Panel data analysis to investigate the factors determining FDI inflow in BRICS countries using FDI, GDP, Industrial production index, Inflation rate, compensation to employees, and infrastructure index for the countries as variables.

The study finds that the selected variables Market size, Labor cost, Infrastructure, Currency value and Gross Capital formation are the potential determinants of FDI inflows of BRICS countries. Economic Stability and Growth prospects (measured by inflation rate and Industrial production respectively), Trade openness (measured by the ratio of total trade to GDP) seems to be insignificant determinants of FDI inflows of the BRICS countries. The empirical results are robust in general for alternative variables determining FDI flows.

Bruce and Jeremy (2011) analyzing the factors determining the activities of FDI across countries, used Bayesian statistical techniques to investigate determinant of FDI. The variables with consistently high inclusion probabilities are traditional gravity variables, cultural distance factor, and parent country per capita GDP, relative labor endowment, and regional trade agreement for modeling FDI. Variables with little support for inclusion are multilateral trade openness, host country business cost, host country infrastructure, and host country institutions. Their result does not support the inclusion of many variables found in prior FDI studies, and suggest that the statistical importance of the main focus variables in many prior studies is not robust to considering a much wider set of covariates. However, they cautioned that exogeneity of these variables may be more in doubt than many of other covariates they consider.

George et al (2006) by examining panel data evidence concerning empirical relevance between Foreign Direct Investment (FDI) attraction and its determinative effects for a sample consisting of 20 OECD countries for 23 years (1975-1997). George et al (2006) estimated their equation using variables such as (FDI/Y) which denotes the share of FDI to GDP for each country; so obviously Y is real GDP, GY denotes real GDP growth and y is GDP per capita (both introduced as indicators showing the level of development, the size of the market, and the growth potential of each country), lagged share of FDI is introduced to take into consideration the existence of agglomeration effects. Moreover, the implications of this variable are not only confined to agglomerations but also signal the absorbing capability of a host country. We expect a positive influence of this variable. The role of policy measures is captured by Gexp, which denotes government expenditures. The Openness of the economy (trade regime) is captured by the variable which is defined as the ratio of trade flows (exports plus imports) over GDP (macroeconomic variables that are expected to have effect on the location of FDI). They consider the set of skills possessed by the workers in the economy, i.e. human capital proxies in our equations. Hence, h denotes the level of human capital measured as the ratio of pupils enrolled on secondary education over the total active population (aged between 15-65). Finally, road (percentage of roads paved) and rail (railway network proxy) are variables measuring the physical infrastructure of each country. Their findings suggest that certain variables such as human capital and trade regime, as well as, the density of infrastructure appear to be robust under different specifications. Positive significance of the agglomeration factor is also observed, confirming the relevant theoretical propositions. However certain deferential variables, such as the governmental policy effect, could not be fully captured due to the statistical homogeneity of the sample.

Erdal and Mahmut (2008) investigated the determining factors of foreign direct investment (FDI) inflows in developing countries over the period of 2000-2004. The study is based on a sample of cross-sectional data on 38 developing countries. They have used average value of all data for the 2000-2004 period and also use variables such as fdi which denotes FDI net inflows as a percentage of Gross Domestic Product (GDP); gro denotes growth rate of per capita GDP, which is a proxy for market size; inf denotes the rate of inflation measured by annual percentage change of consumer prices, which is a proxy for economic stability; logtel shows telephone main lines *per* 1,000 people measured in logs, which is a proxy for infrastructure; logcost which is a proxy for wage denotes labor cost per worker in manufacturing measured in logs, denominated by dollar per year; op indicates the degree of openness which is computed as the sum of nominal export and import divided by the nominal GDP; risk denotes composite risk rating (0=highest risk to 100= lowest); tax denotes corporate top tax rate.

According to the econometric results, growth rate of per capita, telephone main lines and degree of openness have positive sign and are statistically significant. Inflation rate and tax rate present negative sign and are statistically significant. Labor cost has positive sign and risk has negative sign. However, both are not significant.

Devrim (2009) in trying to empirically verify the argument that institutional factors such as enforcement mechanisms, political and economic stability, stable and reliable, transparent legal and regulatory framework and corruption are critical in explaining the behavior of the foreign direct investment inflows in Turkey, carried out a study on the analysis of the determinants of foreign direct investment in Turkey with emphasis on the role of institution. By focusing on the results of a questionnaire applied to the executives of 52 multinational corporations operating in Turkey. The results show that the effect of macroeconomic indicators such as market size, growth rate, GDP per capita on FDI is positive. In addition, what this study suggests is that institutional variables such as low level of corruption, government stability, enforcement of contract law, functioning of judicial system, transparent, legal and regulatory framework, political and economic stability, intellectual property rights, efficiency of justice and prudential standards have also significant impact on FDI in Turkey.

2.7.2 Impact of Foreign Direct Investment on Economic Growth

Sajid and Nguyen (2006) using panel dataset that covers 61 provinces of Vietnam from 1996–2005, examines the link between foreign direct investment and economic growth using FDI, GDP, Exports and Money supply as variables, there analysis which is based on simultaneous equations model reveals that in overall terms a mutually reinforcing two-way linkage between FDI and economic growth exists in Vietnam. However, this is not the case for each and every region of Vietnam. The results of their study suggest that the impact of foreign direct investment on economic growth in Vietnam will be larger if more resources are invested in education and training, financial market development and in reducing the technology gap between the foreign and local firms.

While a large amount of existing literature discusses the relationship between Foreign Direct Investment (FDI) and economic growth, very few empirical studies have been carried out for Vietnam, one of the fastest growing economies in the world.

Veramini (2007) using OLS reviews the experience of Vietnam in attracting FDI and examines the relationship between economic growth and FDI, utilizing data on FDI inflows, GDP, Export and Money Supply of Vietnam during the last two decades, the results suggest that FDI is an important factor for the growth of the Vietnam's economy.

Sveltlana and Linden (2006) using the Arellano-Bond GMM-DIFF methodology, developed for dynamic panel data models, investigated the relationship between foreign direct investment and economic growth with empirical evidence from Russian region. Results imply that in general FDI (or related investment components) do not contribute significantly to economic growth in Russia in the analyzed period. Regional growth in 1996-2003 is explained by the initial level of region's economic development, the 1998 financial crisis, domestic investments, and exports. However some evidence of positive aggregate FDI effects in higher-income regions is relevant. Another interesting result of the work is that natural resource availability seems to be growth-inducing in rich regions, while in poor regions it is not significant. They also found convergence between poor and rich regions in Russia. However FDI seems not to play any significant role in the recent growth convergence process among Russian regions.

Levine (2005) uses selected variables of the Boston Housing dataset which comprised of 506 observations using five variables from the Boston metropolitan areas. The analysis utilizes as the dependent variable the median value of owner occupied homes, H and investigates the effects of four independent variables. These variables include (H) owner occupied homes which is the dependent variable, (T) is non retail business acres, (O) number of rooms, (A) is age, (P) ratio of pupil to teachers. He concludes that house prices go up when the proportion of non retail business [T] goes up in the case low quantile [0,1] but for the [0,7th] and [0,9th] quantiles the effect seems to be reversed. The result shows that the house price is negatively influenced by an increase of non retail business. He concludes that the general recommendation from OLS that if the proportion of non retail business acres [T] increases, the house prices [H] would increase can obviously not be generalized. A policy recommendation based on the OLS estimates could therefore, be grossly misleading.

2.7.3 Related Studies on FDI in Nigeria

Renewed research interest in FDI stems from the change of perspective among policy makers from “hostility” to “conscious encouragement” especially among developing countries for export promotion until recently. However, Bende-Naben de and Ford (1998) submit that the wide externalities in respect of the technology transfer, the development of human capital, and opening up of the economy to international forces, among other factors, have served to change the former image.

Okon et al (2012) empirically investigate the relationship between foreign direct investment and economic growth in Nigeria between 1970 and 2008. Single and simultaneous equation systems are employed to examine if there is any sort of feed-back relationship between FDI and economic growth in Nigeria. The results obtained show that FDI and economic growth are jointly determined in Nigeria and there is positive feedback from FDI to growth and from growth to FDI. The overall policy implication of the result is that policies that attract more foreign direct investments to the economy, greater openness and increased private participation will need to be pursued and reinforced to ensure that the domestic economy captures greater spillovers from FDI inflows and attains higher economic growth rates.

Egwaikhide (2012) investigates the relationship between foreign direct investment (FDI) and economic growth in Nigeria between 1980-2009 through the application of Johansen Co-integration technique and Vector Error Correction Methodology in which FDI is disaggregated into various components. Similarly, it examines the determinants of FDI in Nigeria in which variables such as Y which denote Gross Domestic Product, L is the Labor force proxy by population, K is the Ratio of Gross Domestic Fixed Capital Formation to GDP, FDIAg is FDI in Agricultural Sector, FDIMin is FDI in Mining Sector, FDIPet is FDI in Petroleum Sector, FDIMan is FDI in Manufacturing sector, FDITel= FDI in Telecom sector, DOP is Degree of openness (export + import) to GDP.

The Johansen Co-integration result establishes that the impact of the disaggregated FDI on real growth in Nigeria namely: agriculture, mining, manufacturing and petroleum sectors is very little with the exception of the telecom sector which has a good and promising future, especially in the long run. Furthermore, past level of FDI and level of infrastructures are FDI enhancing. In the light of the above, the paper recommends, among other things, the creation of enabling investment climate in Nigeria through the overhauling of the security system which will help in no small measure in boosting investors' confidence as instability scare way prospective investors.

Harrison (2012) focused on the impact of pull factors on capital movement in Nigeria. The empirical analysis addresses the role of key domestic macroeconomic variables on Foreign Direct Investment (FDI) in Nigeria using the Ordinary Least Square (OLS) estimation technique using variables such as FDI which represents Foreign Direct Investment is the total value of foreign investments in tangibles assets in the economy, RGDP is Real Gross Domestic Product is used to measure the market size of the economy, INF is Inflation rate is the prevailing change in the consumer's price level in an economy over time, INT: Interest rate is the users cost of capital, NETEXP is Net-export is the difference between total export and total import in the economy, REXCH is Real exchange rate is the value of the domestic currency relative to the foreign currency (dollar). The result shows that real gross domestic product, interest rate, and real exchange rate are key determinants of foreign direct investment in Nigeria. The result suggests that these domestic macroeconomic variables are critical to FDI inflow.

Uwubanwmwen and Ajao (2012) examine the determinants and impact of FDI in Nigeria from 1970 through 2009. The study utilizes the Vector Error Correction Model (VECM). Granger causality methodology was used to analyze and establish the nature of relationship (if any) between FDI and its determinants on one side and economic development on the other. The used variables such as Foreign Direct Investment (FDI), Real Gross Domestic Product (RGDP), Government Size (GOVSIZ), Trade Openness (OPN), Exchange Rate (EXR), Inflation Rate (INF) and Interest Rate (INTR). The empirical analysis reveals that macroeconomic variables (exchange rate, interest rate, inflation) and openness of the economy are among the major and important factors that determine the inflow of FDI into Nigeria during these periods. The GDP and government size exhibited positive but insignificant influence on FDI.

In his study, Akinmulegun (2012) examined the relationship between foreign direct investment and standard of living measured by per capita income (PCI) in Nigeria over 1986 – 2009 period using time series data. The study employed Vector Auto-regression (VAR) model. Test involving Impulse Response Analysis and Variance Decomposition reveal that the relationship between FDI and standard of living is insignificant. Thus, the past values of FDI could be used to predict the future behavior of standard of living in Nigeria only to a lesser extent.

Adeogun (2011) in his work on foreign direct investment and economic growth in Nigeria, utilized a disaggregated approach to investigate the relationship between FDI and economic growth in Nigeria using variables such as size of FDI in mining sector, petroleum sector manufacturing sector, telecommunication sector, and agricultural sector.

The result shows that a positive relationship exists between growth rate and FDI in petroleum sector. Only the previous RGDP is significant in explaining the current real growth. The empirical findings revealed that the impact of FDI disaggregated into several component namely agric, mining, telecom etc are very little with exception of the telecomm sector, it was also found that the level of infrastructural development in Nigeria were viewed with caution which may have been influenced with the nature of data employed. The study concluded that Nigeria is yet to fully reap the benefits of FDI as its impact on growth at the moment is very low.

Going by results of most studies conducted in Nigeria, majority point to natural resource endowment, market size and policy shift as an important factor that draws FDI to Nigeria. Solomon (2008), in his study points out that Nigeria, the most populous country in Africa, was the recipient of more than 70% of the flows into the sub-region in 2003 and 2006. UNCTAD (2007) reported that petroleum and market size are the major determinants of FDI inflows into Nigeria.

Table 2.8 Summary of Empirical Literature on Determinants and Impact of FDI

Year	Author	Study type of Determinant	Objectives	Method	Major Findings	Conclusion
2008	Erdal, D. and Mahmut, M.	Determinants of inflow of FDI in developing countries.	To investigate factors that that determine FDI.	Cross sectional data from 38 countries.	PCGDP, tel. lines, and OPP. have positive sign.	Both labor cost and risk are not significant determinants.
2009	Devrim, D	Role of institutions in determining FDI in Turkey.	To investigate obstacles to inflow of FDI.	Questionnaires to 52 CEO of $MNC_{S.}$	Political and Economic inst. are important.	Low level of corruption, pol. Stability and judicial system are significant.
2010	Narayana murthy etal.	Determinants of FDI inflows of BRICS countries	To examine factors determining FDI in BRICS.	Panel data analysis	Market size, labor cost, infrastructure and currency value are important.	Results are robust for all variables.
2010	James, P and Jiangyan, y.	Determinants of FDI: A sectoral and institutional approach.	To investigate determinants of FDI in selected emerging developed economies	GMM dynamic approach.	Labor market and financial depth are impotant for emerging economies. Macroeconomic variables are important for developed economies.	Low inflation, strong GDP,and openness lead to more FDI
2010	Khondoker, A. M.	Determinants of FDI in developing countries.	To identify factors determining FDI inflows to developing countries.	A comparative analysis technique	High GDP, high inter. trade, and friendly environment attract FDI.	Business friendly environment will attract more FDI to developing countries.
2011	Bruce, A. B. and Jerremy, P	Determinants of FDI activities	To study the modeling of FDI activities	Bayesian model averaging	Gravity variables are parsimonious.	Cultural factor, parent country PCGDP, and regional agreement are significant in modeling FDI

2011	Adeogun, E. S.	FDI and economic growth in Nigeria.	To analyze the role of FDI in Nigeria.	A disaggregated approach	Positive relationship between FDI and growth.	Nigeria is yet to reap the full benefits of FDI.
2012	Egwaikhde, C. H.	Relationship between FDI and growth in Nigeria.	To examine the determinants of FDI in Nigeria.	Johanson co-integration and VEC methodology.	Past level of FDI and infrastructure attract FDI.	Only telecom sector is significant.
2012	Harrison, O.	Impact of pull factors on capital movement in Nigeria.	To determine the role of key macroeconomic variables on FDI.	OLS estimation technique.	RGDP, interest rate, and exchange rate are significant determinants.	Macroeconomic variables are critical to FDI inflow in Nigeria.
2012	Okon, J. etal	Relationship btw FDI and economic growth in Nigeria.	To examine the feedback mechanism between FDI and growth.	Simultaneous equation	FDI and growth are jointly determine	Positive feedback exist between FDI and growth.
2012	Uwubanmwen, A. and Ajao, M.	Determinants and impact of FDI in Nigeria.	To examine FDI and its determinants and its impact.	Granger causality methodology.	GDP, and government size are positive.	Exchange rate, interest rate, and inflation are important determinants.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Theoretical Framework

For purpose of this study, the theoretical framework is anchored on the dual gap model which provides adequate explanation on how FDI can close both the saving and trade gaps. The saving gap (s_g) is taken as an indication of the size of foreign resources required to achieve a planned growth rate. This can be expressed as:

$$FR = S_g = S_p - I_p$$

Where $S_p < I_p$, which implies insufficient resources to achieve required level of investment. Another dimension to this problem is the co-existence of savings gap and foreign exchange or trade gap (T_g). The trade gap exists when the import requirements exceed the import capacity. This may be expressed as:

$$T_g = X - M$$

Where $X < M$, implying balance of payment deficit.

We shall in addition adapt the augmented Solow production function (Solow 1956) that makes output a function of stock of capital, labor, human capital and productivity.

The supply and demand for goods play a central role in the Solow model. The supply of goods determines how much output is produced at any given time and the demand determines how this output is allocated among alternative uses. The supply of goods in the model is based on the familiar Cob-Douglas production function:

$y_t = A\, K_{dt}^{\alpha} K_{ft}^{\beta} L_t^{\lambda} H_t^{\gamma}$ -- (3.1.1)

Where y is the output, K_{dt} K_{ft} represents the domestic and foreign owned capital stock respectively, L is the labor, H is the human skills and A is the total factor productivity, which explains the output growth that is not accounted for by the growth in factors of production specified.

Taking logs and differentiating equation (3.1.1) with respect to time, we obtain the familiar growth equation:

$y_t = a_t + \alpha K_{dt} + \lambda K_{ft} + \beta l_t + \gamma h_t$ ……………………….. (3.1.2)

where lower case letters represent the growth rates of output, domestic capital stock, foreign capital stock, and labor and human capital and a, l, k and h represents the elasticity of output, domestic capital stock, foreign capital stock labor and human skills capital respectively.

The use of rate of investment is hinged on the assumption of a steady state situation or linearization around a steady state. The final form of equation (3.1.2) therefore is:

$Y_{it} = a + \alpha k_{dit} + \lambda k_{fit} + \gamma h_{it} + \varepsilon_{it}$ ……………………… (3.1.3)

Where,

ε_{it} is the error term.

Equation 3.1.3 therefore is the basis for the empirical model estimation in this study.

3.2 Empirical Framework

Empirical studies (Balasubramanyam *et al*., 1996; Borensztein *et al*., 1998; Alfaro *et al*., 2004; Durham, 2004) on assessing the growth effect of FDI commonly use the following econometric framework;

$$G_i = \alpha F_i + \beta X_i + \varepsilon_i \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (3.2.1)$$

Where

G_i is the growth rate of GDP, F_i is the FDI inflows; Xi represents a set of conditional variables, and ε_i is the error term. For reason of endogeneity that could be bias on FDI's estimated coefficient and our error term, they specify equation for FDI as;

$$F_i = \gamma Z_i + \delta X_i + \varepsilon_i \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (3.2.2)$$

Where,

F_i is the FDI, Z is the market size, X_i represents macroeconomic variables, and ε_i is the error term.

In contrast with studies that use OLS to investigate the effect of FDI on growth rate, this study examines the determinant of FDI and its effects at different quantiles of the distribution on economic growth.

Quantile regression is a useful method for estimating the impact of explanatory variables on the conditional distribution of the outcome (Koenker, 1978). Therefore, the linear quantile regression can be written as:

$$G_i = \alpha(q) F_i + \beta(q) X_i + \varepsilon_i(q) \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (3.3.3)$$

Where,

$\alpha(q)$ and $\beta(q)$ are unknown parameter associated with the q^{th} quantile, q can take the value between 0 and 1. Assume q^{th} quantile of the error term is zero,

Q(q|F,x) = 0. This means as q increase from 0 to 1 we can find the influence of regressors (F_i, X_i) on G.

3.3 Model Specification

Specifically the model in the case of Nigeria base on the objective which the study intends to achieve is stated as below:

Model 1

The study adapted the model of Yen Li Chi (2010) which gave clear understanding of the relationship between FDI and growth relative to other sources of foreign capital. The Yen Li Chi (2010) equation is shown below:

$$\mathbf{GDP = \beta_O+\beta_1FDI+\beta_2SCH+\beta_3GEXP+\beta_4POP+\beta_5INF+\beta_6BMP +\beta_7OP+ \varepsilon_0 .. (3.3.1)}$$

Where,

FDI represent size of foreign direct investment, SCH is schooling, GEXP is government expenditure, POP is population, INF is inflation, BMP is black market premium, and OP is openness**.** The above model is modified to suit the objective which the study intends to achieve as:

$$\mathbf{GDP = \alpha_0 + \alpha_1FDI + \alpha_2IHC + \alpha_3TOT + \alpha_4OR +\alpha_5OPP + \mu \ldots\ldots\ldots\ldots\ldots\ldots (3.3.2)}$$

Where,

GDP is the growth rate, FDI is the size of foreign direct investment, IHC is the investment in human capital, TOT is terms of trade, OR is official remittance, and OPP is openness of the economy.

Model 2

In the literature, it is important to understand that macroeconomic variables are the major determinants of FDI inflow. This means that FDI are drawn by available infrastructure, exchange rate, interest rate, external reserve etc. Hence, we state our FDI model as:

$$\mathbf{FDI = \beta o + \beta_1 OPP + \beta_2 FDEF + \beta_3 EXTR. + \beta_4 NFI + \beta_5 INF + \mu \ldots\ldots\ldots..(3.3.3)}$$

Where,

FDI	=	Foreign direct investment
OR	=	Official remittance
GDP	=	Gross domestic product
OPP	=	Openness of the economy
EXTR	=	External reserves
NFI	=	Net foreign indebtedness
FDEF	=	Fiscal deficit
TOT	=	Terms of trade
IHC	=	Investment in human capital proxy as government expenditure in health and education.
INF	=	Level of infrastructure proxy as power generation capacity.

The signs of the variables (positive or negative), expresses apriori expectations. It is possible that

Openness, external reserves, net foreign indebtedness and terms of trade exhibit unpredictable movement depending on their levels. (Anyanwu, 1998), described an economy as being liberalized if it is influenced by factors such as strength of the domestic economy, the competiveness of the external sector, and external account balance, among other factors.

Therefore equation (3.3.3) shall be our basis for estimating our quantile regression (QR) to know whether infrastructure provisions proxy as government expenditure, external reserve, fiscal deficit, and openness of the economy and political stability as our dummy can capture the absorptive capacity of Nigeria to harness FDI toward economic growth. We allow for different growth effect of FDI at different quantiles i.e q_{5}, q_{25}, q_{50}, q_{75}, q_{95}.

3.4 Technique of Estimation

Quantile Regression as introduced by Koenker and Bassett [1978] seeks to complement classical linear regression analysis. In ordinary least squares [OLS], the primary goal is to determine the conditional mean of random variable Y, given some explanatory variable x_1, reaching the expected value $E[Y/x_1]$. While Quantile Regression transforms a conditional function into a quantile function by slicing it into segments. These segments describe the cumulative distribution of conditional dependent variable Y given the explanatory variable X_i with the use of quantile.

Gilchrist [2001] describes a quantile as the value that corresponds to a specified proportion of a sample of a population. For instance, a very commonly used quantile is the median, M, which is equal to a proportion of 0.5 of the ordered data. This corresponds to a quantile with a probability of 0.5 occurrences.

Quantile Regression overcomes various problems that OLS is confronted with. Frequently, error terms are not constant across a distribution, thereby violating the axiom of homoscedasticity.

Also, by focusing on the mean as a measure of location, information about the tails of a distribution is lost. And last but not the least; OLS is sensitive to extreme outliers, which can distort the result significantly. A policy based upon an OLS analysis might not yield the desired result as certain subsection of the population does not react as strongly to this policy or even worse, responds in a negative way, which cannot be indicated by OLS.

The basic quantile regression model specifies conditional quantile as a linear function of explanatory variables and is given by

$Y = X'\beta + \varepsilon$…………………………………………………..(3.4.1)

$Q_\theta (Y/X = x) = X'\beta (\theta)$ and $0<\theta<1$………………………….(3.4.2)

Where Y is a dependent variable, X is a set of explanatory variables, ε is the error term and $Q_\theta (Y/X = x)$ denotes the θ^{th} quantile conditional on X=x. The distribution of the error term ε is left unspecified. Since it is assumed that

$Q_\theta (\varepsilon/X = x) = 0$……………………………………………….(3.4.3)

If $\theta = 0.5$, the procedure leads to minimizing the sum of absolute deviations, also known as median regression. Since the median is the 50^{th} quantille, one can apply the same procedure for other quantiles. By changing θ continuously from 0 to 1, this enable us to trace the distribution of Y, conditional on X, and obtain a much more complete view of the effects of explanatory variables on the dependent variables. Differencing (or demeaning) the data, as one would do under an OLS framework is not appropriate under quantile regression, as outlined by Arias et al (2001).

3.5 Sources of Data

The study utilized time series data to ascertain the determinants of FDI and its impact on growth within the period under consideration. The major sources of data are the publications of Central Bank of Nigeria, National Bureau of Statistics (NBS), World Bank Reports, International Financial Statistics (IFS) and Federal Ministry of finance.

CHAPTER FOUR

PRESENTATION OF RESULT AND DISCUSSIONS

To achieve both broad and specific objectives of the study, this chapter is devoted for presentation and analysis of the data used in the study. Here, we estimates both the OLS and quantile regression for the determinants and impact of FDI on Nigerian economy.

4.1 Empirical Result of Determinants of FDI in Nigeria

$FDI = \beta o + \beta_1 OPEN + \beta_2 FDEF + \beta_3 EXTR. + \beta_4 NFI + \beta_5 INF + \mu$………………….4.1.1

Table 4.1: OLS and Quantile Regression of FDI

	OLS	**Quantile Regression Result**				
		q5 (81-87)	**q25 (88-94)**	**q50 (95-01)**	**q75 (02-08)**	**q95 (09-13)**
C	-1.02218 (1.47830)	-2.5718*** (-7.4534)	-2.5294*** (-18.3737)	-1.98032** (4.6e-009)	-101558 (6.26748)	-106982* (19707.1)
FDEF	4.0542e-06* (2,36e-06)	8.4e-006** (5.5e-007)	7.41e-006** (2.20e-007)	4.61e-006** (7.38e-015)	5.43e-006** (6.84e-007)	2.58e-006** (5.62e-007)
INF	0.06359*** (0.0207)	0.0088 (0.0048)	0.0072* (0.0019)	0.0144* (6.46e-011)	0.0966* (0.0059)	0.1259** (0.0049)
EXTR	2.610e-07 (3.23e-07)	-7.94e-007 (7.55e-008)	-6.39e-007* (3.01e-008)	-3.32e-007* (1.01e-015)	-5.61e-007* (9.37e-008)	2.53e-008 (7.70e-008)
NFI	9.49e-010** (4.48e-010)	8.64e-010 (1.04e-010)	6.26e-010* (4.18e-011)	2.70e-010* (1.40e-018)	1.67e-009* (1.30e-010)	1.11e-009* (1.06e-010)
OPEN	3.8950 (2.4387)	1.3704 (0.9692)	1.9294* (0.2271)	3.3506* (7.61e-009)	4.7013* (0.7062)	2.9435* (0.5803)

R^2 = 0.52,

F(7,25) = 3.82 (0.005)

D-W = 2.19

Note: Result of the OLS and result for selected quartiles of the quantile regression. Dependent variables: FDI. *** (**, *) indicates 1% (5%, 10%). Standard errors of the quantile regression are asymptotic standard errors assuming IID errors.

4.2 Empirical Result of Impact of FDI on Growth on Nigerian Economy

$$GDP = \beta_O + \beta_1 FDI + \beta_2 OR + \beta_3 IHC + \beta_4 TOT + \beta_5 OPEN + \varepsilon_o \ldots\ldots 4.2.1$$

Table 4.2: OLS and Quantile Regression of GDP growth rate

	OLS	**Quantile Regression**				
		q5 (81-87)	**q25 (88-94)**	**q50 (95-01)**	**q75 (02-08)**	**q95 (09-13)**
C	15.8697 (16.9066)	-18.2944** (4.4002)	-13.1683 (16.1395)	25.1800* (3.9257)	28.2483* (1.0894)	197.668* (13.2060)
InTOT	2.6113 (5.4390)	1.79310 (1.4156)	-0.0662 (5.1922)	0.7887 (1.2629)	1.3465** (0.3504)	15.8290*** (4.2484)
InOR	2.0517* (1.1149)	-0.3828 (0.2901)	-0.4184 (1.0643)	-1.8503*** (0.2589)	-2.5625*** (0.0718)	-13.7739*** (0.8709)
InIHC	3.3030*** (1.1209)	2.3890* (0.2917)	2.2578** (1.0700)	2.3992** (0.2602)	3.5390** (0.0722)	13.3954** (0.8755)
InFDI	0.3128 (2.1662)	2.0351 (1.I638)	1.3403 (2.0679)	-0.9472 (0.5030)	-1.1307** (0.1395)	-8.0836** (1.6921)
InOPEN	4.1042 (3.0127)	0.2835 (0.7841)	1.3328 (2.8760)	6.2247*** (0.6995)	4.0995*** (0.1941)	17.0740*** (2.3533)
R^2 = 0.50 F(5, 27) 3.122 (0.0237) D-W = 1.94		Note: Result of the OLS and result for selected quartiles of the quantile regression. Dependent variables: GDPGR. *** (**, *) indicates 1% (5%, 10%). Standard errors of the quantile regression are asymptotic standard errors assuming IID errors				

.

The OLS and quantile regression estimate is presented in table 4.1 and 4.2. The models are estimated at the 5th, 25th, 50th, 75th and 95th quantile. The standard errors of the quantile regression are asymptotic standard errors assuming IID errors. The asterisks indicates the significance at 1%, 5% and10% level. From the result it is evident that there are variables that have insignificant coefficient in the OLS regression, but have statistically significant coefficient at various quantiles. The segmentation of the quantiles represent the following periods: 1981-1987, 1988-1994, 1995-2001, 2002-2008, 2009-2013.

To achieve our objectives we shall break our analysis under sections 4.1 and 4.2 as shown below:

4.3 Interpretation of Results on Determinants of FDI in the Model

i. The OLS result shows that fiscal deficit is statistically significant and positively affects FDI inflows within the study period. This means if the excessive government expenditure is used in the provision of infrastructure such as more roads electricity supply, more FDI will be drawn into the country. This agrees with the result of level of infrastructure that is positive and significant. Also, the Net Foreign Indebtedness (NFI) is significant and positively affects FDI inflows. External reserve coefficient is high and positive but insignificant. It means external reserve cannot draw FDI in isolation. The openness variable is insignificant implying that there is still some degree of trade restriction which hampers FDI inflow.

The result for the 5^{th} quantile characterize the period before trade liberation policy (1981 - 1987). However, within this period fiscal deficit is significant and positively affect FDI inflow. The level of infrastructure is positive and insignificant which implies that public investment in infrastructure was not appreciable. This result is not surprising because of financial crisis that characterized this period following crash in oil price international market and the subsequent structural adjustment program. Also in the 5^{th} quantile external reserve (EXTR) is negative and insignificant which implies phenomenon of capital flight and excessive imports that characterized the period of 1981-1987. Also, net foreign indebtedness is insignificant during these periods. Openness variable is positive and insignificant which implies that the high degree of trade restriction does not encourage the inflow of FDI.

ii The result for the q25th quantile (1988 - 1994) which characterize the period of liberalization shows that huge fiscal deficit encourage FDI inflows. Also. government investment in infrastructure (INF) is positive and insignificantly affect inflow of FDI into the country. The external reserve variable is significant and negative which implies that FDI does not precipitate inflow of capital as to affect the reserve positively. Openness variable is positive and significant which shows that trade liberalization encourage the inflow of FDI.

iii In the q50th quantile which characterized the period between 1995 – 2001. Fiscal deficit (FDEF) and level of infrastructure, positively affect FDI inflows although external reserve variable remains negative and significant which implies that external reserve does not contribute to increase in FDI inflow. Net foreign indebtedness is positive and significant which implies that NFI contribute to FDI inflow to the Nigerian economy. This agree with notion that donor countries can bring their capital for investment instead of aid and grants. Openness is positive and significant implying an improvement in the business climate which allow investors to bring in their capital for investment.

iv The period between 2002 – 2008 constitutes the q75th quantile, FDEF and INF are positive and significantly affect FDI inflow. External reserve is significant and negative implying that it does not lead to increase in inflow of FDI. NFI is positive and significant as well as openness variable which encourage FDI inflows into the country.

v The 95th quantile represent the period 2009 – 2013 FDEF, level of infrastructure, Net foreign indebtedness all positively and significantly affect foreign direct investment inflows. External reserve has high and positive coefficient but not statistically significant implying that increase in external reserve is not sufficient to draw in more FDI into the country.

OLS result for model 2 shows the growth effect of FDI. All variables in this model are converted to natural logarithm except the dependent variable which is growth rate of GDP. From the result, official remittance and investment in human capital (IHC) contributes positively and significantly to the growth rate of GDP while terms of trade, FDI and openness do not contribute to growth rate GDP. The diagnostic test shows that the regression model is significant as indicated by F statistics with probability value of less than 0.05, the Durbin Watson statistics shows that our model does not suffer from serial correlations problem and an R^2 of 50 percent shows that the model has a good fit.

4.4 Interpretation of Result on Impact of FDI

4.4.1 1981-1987 (The Indigenization Policy)

Until 1986, the Nigerian Enterprise Promotion Decree otherwise known as indigenization policy that was introduced in 1972 was still in force. The aim of the policy was to give full or partial transfer of equity of enterprises from foreigners to Nigerians. The period witnessed reduced inflow of FDI into Nigeria which in turn reduced the country's GDP growth rate. Foreign investors were withdrawing their capitals because of the indigenization policy of the government. Though evidence from the empirical result of FDI on economic growth shows high and positive coefficient of 2.0351, it is not statistically significant within the sample period. The implication of this outcome is that the policy is considered anti FDI inflow. Instead of attracting investors, they were rather withdrawing their capitals.

4.4.2 1988-1994 (The Period of SAP Policy)

Considering the negative effects of indigenization policy on Nigerian economy the adoption of macroeconomic programme embedded in the SAP of 1986, there was gradual increase in the FDI inflow. Among the details of the SAP policy measures were the inauguration of the Industrial Development Coordination Committee (IDCC), the Companies and Allied Matters Decree of

1990, financial liberalization and the debt equity swap programmes. These steps were targeted at encouraging FDI inflow. Even though the empirical result of FDI on economic growth shows low and positive coefficient of 1.3403, it is not statistically significant. This could be attributed to time lag required by foreign investors to study the content as well as adherence and sustenance of the policy by the government. Also the system of governance (military dictatorship) that was considered unpopular was another reason foreign investors did not respond promptly in bringing their capital to the country for investment. The period 1990-1993 for example witnessed a significant drop in the FDI inflow due to protracted political impasse which created a regime of uncertainty which subsequently encouraged capital flight.

4.4.3 1995-2001 (Nigeria Investment Promotion Commission)

In order to liberalize the investment climate in the country, the federal government in 1995 established the Nigerian Investment Promotion Commission (NIPC) to facilitate and encourage foreign investors in the country. Additional policy measures included guided deregulation, Foreign Exchange (Monitoring and Miscellaneous Provisions) decree of 1999. And the establishment of export processing zones (EPZ), all aimed at improving investment climate of the country. The impact of these measures on the economy was not felt immediately due to long period of political uncertainty that existed in the country. Hence the low and negative coefficient of -0.9472 from our empirical result of the sample period shows that some foreign investors were relocating e.g. Michelline Tyre Company and Volkswagen Assembling Company relocated within this period.

4.4.4 2002-2008 (Privatization and Commercialization Exercise)

The current upward trend in the FDI inflow is largely due to the privatization and commercialization exercise of the government whereby public enterprises are put up for sale to the investing public. This exercise has attracted considerable inflow since 2000. For example, the deregulation of the telecommunication sector by granting licenses for global system for mobile communication (GSM) operators in 2001 caused the FDI in the telecommunication sector to increase from US$50 million at the end 2000 to about US$2.1billion by the end of 2002. From our empirical result of negative but high coefficient of -1.1307 is statistically significant at 5% meaning the government ought to have handle the privatization/commercialization of public enterprises with caution so as not to give room for excessive capital flight in return for the capital invested.

4.4.5 2009-2013 (Privatization and Commercialization Exercise Continue)

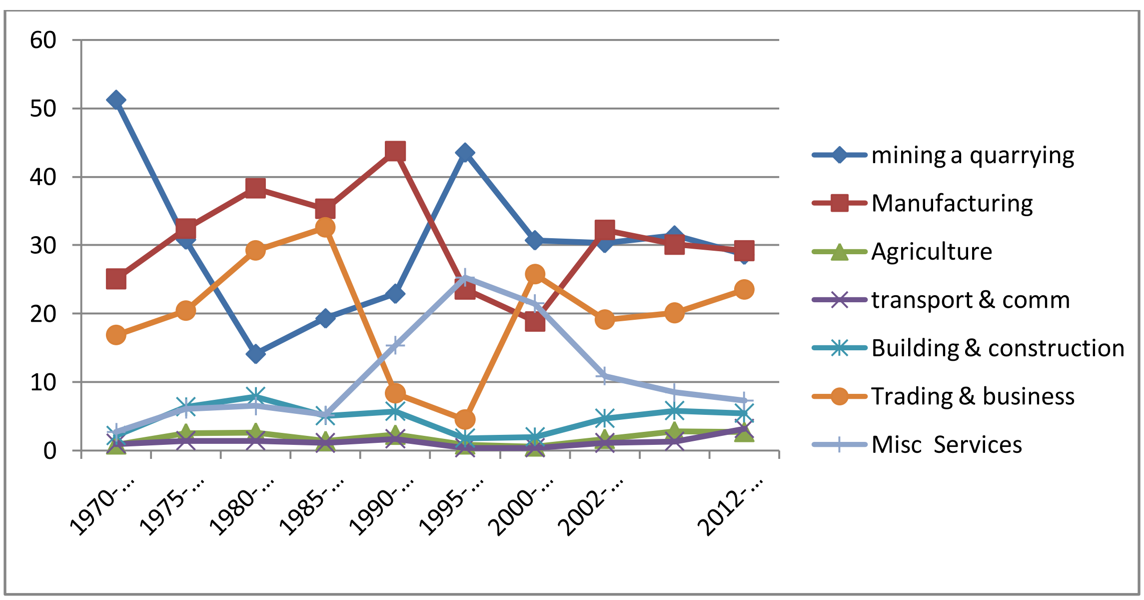
Following the successes achieved from the deregulation of the telecommunication sector, the federal government in early 2013 commenced the deregulation of the power sector to allow distribution companies take charge of electricity distribution to consumers in the country while government now restrict self to generation and transmission of electricity. The empirical result generated within the sample period shows negative and high coefficient of -8.0836 which is statistically significant at 5%. The implication of the result in the previous and this quantiles is that the privatization exercise was handled in a shoddy way, i.e. the public enterprises were corruptly undervalued.

4.5 Composition and Trend of FDI Inflow to Nigeria

Table 4.5: Showing Trend and Pattern of FDI inflow to Nigeria in Percent (%)

Year	mining a quarrying	Manufacturing	Agriculture	transport & comm.	Building & construction	Trading & business	Misc Services
1970-1974	51.2	25.1	0.9	1.0	2.2	16.9	2.7
1975-1979	30.8	32.4	2.5	1.4	6.4	20.4	6.1
1980-1984	14.1	38.3	2.6	1.4	7.9	29.2	6.5
1985-1989	19.3	35.3	1.4	1.1	5.1	32.6	5.2
1990-1994	22.9	43.7	2.3	1.7	5.7	8.3	15.4
1995-1999	43.5	23.6	0.9	0.4	1.8	4.5	25.3
2000-2001	30.7	18.9	0.6	0.4	2.0	25.8	21.5
2002-2007	30.3	32.2	1.7	1.1	4.7	19.1	10.9
2008-2011	31.4	30.1	2.8	1.3	5.8	20.1	8.5
2012-2013	28.6	29.2	2.7	3.2	5.5	23.5	7.3

Source: CBN Statistical Bulletin, 2013



Data from table 4.5 above shows an increasing inflow of FDI to the mining and quarrying sector where oil takes command from 14.1% in 1984 to 43.5% in 1999 and has been on gradual decline to 28.6% in 2012-2013 due to diversification campaign by Nigerian Investment Promotion Commission coupled with the activities of militants in the Niger-Delta areas.

The manufacturing sector took an upward trend in 1994 as a result of adoption of SAP that was introduced in 1986. Also efforts by the government to create a favorable business environment through the provision of infrastructure facilities, restriction on imports and the privatization and commercialization programme encouraged FDI inflow into the sector.

The gradual increase of FDI in the agricultural sector could be attributed to subsidy on fertilizer procurement as well as credit facilities provided to various farmers associations, all aimed at increasing agricultural products

Transport and telecommunication sector witnessed gradual increase in the flow of FDI from 1984 till 2013 due to successful deregulation of the telecommunication sector. The significant increase started in 2002 from 1.1% to 3.2% in 2013 following the complete deregulation of the telecommunication sector by licensing GSM service providers.

The building and construction sector witnessed ups and down between 1984 and 2013. This could be attributed to the size of budget voted for capital projects in the country by successive government. The highest inflow of FDI was 7.9% in 1984 while the lower of 2.0% was recorded in2001.

Trading and Business sector was on the increase from 29.2% in 1984 to 32.6% in 1989 and sharp drop to 8.3% in 1994 and further drop to 4.5% in 1999. This was caused by government restriction on imports to encourage local production of imported goods. The policy is still in force till date.

4.6 Summary of Key Findings

The quantile regression result of FDI shows that all the variables included in the model are statistically significant at upper quantiles when compare to their behaviour at lower quantiles explaining that FDI inflows are attracted by high GDP with conducive investment climate. This means that reforms introduced between 1994 and 2013 significantly determine the inflow of FDI into Nigeria. In the same vein, the impact of FDI is much felt in the upper quantiles i.e. variables are all statistically significant showing that the impact of FDI is much felt when the country's absorptive capacity is high. Absorptive capacity is measured by the per-capita income level of the country's population i.e. the higher the per-capita income, the higher the absorptive capacity of the economy. For example if you look at the GDP size of Nigeria over the period under review as shown in the appendix, values has been on steady increase throughout. Hence, the results verify the stated hypothesis.

Fiscal deficit is statistically significant in all quantiles, implying that if much of government expenditure is channeled into provision of infrastructure, it will attract more FDI into the country.

Finally, openness variable is statistically significant in both determinants and impact models across all quantiles. It is discovered that FDI inflows are mostly in the mining and manufacturing sectors.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

The primary intent of this dissertation is to test the popular hypothesis of determinants of FDI and its impact on economic growth in Nigeria using quantile regression. The emphasis on QR is to get a much more subtle inference when compared to the use of OLS analysis. The use of quantile regression allows one to overcome problems usually encountered when using OLS such as constancy of error terms across a distribution, sensitivity to extreme outliers, and loss of information about the tails.

The empirical result of the quantile regression shows that FDI has significantly negative relationship at the 5^{th} and 25^{th} quantiles and significantly positive coefficient at the 75^{th} and 95^{th} quantiles.

The Quantile Regression estimates for the determinants of FDI shows that there are variables that have significant coefficient at different quantiles e.g. external reserve (EXTR), openness (OPEN) and fiscal deficit (FDEF).

Official remittance (OR) enters the OLS regression with significant and negative coefficient across all quantiles (5^{th}, 25^{th}, 50^{th}, 75^{th}, and 95^{th}).

FDI does not exert positive and significant impact on economic growth in the OLS regression. This result is consistent with Carkovit and Levine (2005). For the quantile regression, the empirical result shows high and positive coefficient at q^5 of 2.0352 and q^{25} of 1.3403 but not statistically significant, it shows a low and negative coefficient in the median quantile but statistically significant but negative at q^{75} and q^{95} which corresponds to the period of privatization and commercialization of public enterprises in the country. The high and negative coefficients but statistically significant result shows that the privatization/commercialization policy was poorly carried out.

Finally the composition and trend table shows that FDI inflows are mainly in the mining and manufacturing sectors. The table also shows significant improvement in the transport and communication sector in recent time. This is not unconnected with the complete deregulation of the sector.

5.2 Conclusion

The study investigates the determinants of FDI and its impact on Nigerian economy. The role of FDI in host country's economy has remained controversial. Firstly, are there factors under the control of the host country that can be manipulated to attract FDI? Some researchers claim that, by and large, LDC_S have fewer roles to play in determining the direction and size of FDI (Pan-Long 1987). Secondly, does FDI really contribute to attaining the object of economic growth in the host country as argued by the proponent of the modernization approach? On the other hand, the dependency theorists argued that FDI may spur short-term economic growth, but will eventually generate and accelerate internal distortions that will ultimately depress or retard host country's economic growth.

Given the practical importance of these two issues in terms of policy formulation and implementation, empirical works about the determinants of FDI and its impact on Nigerian economy is carried out using quantile regression so as to get much more subtle inference than using OLS framework alone. The study also investigates the trend and pattern of FDI inflow into

Nigerian economic sector. The study reveals that most FDI are resource seeking and market seeking FDI as most of them are in mining and quarrying and manufacturing.

Going by the result from the study, openness of the economy has high statistical coefficient value but insignificant in determining the inflow of FDI into Nigeria using OLS. This contradicts the result estimates of positive and statistically significant result at 10% level of significance in q^{25}, q^{50}, q^{75}, and q^{95}. This shows that openness of the economy draws in more FDI into the country. Fiscal deficit if use in the provision infrastructure such as roads, railways and stable power supply it will draw in more FDI as the result estimates of both OLS and quantile regression are positive and statistically significant in all quantiles. Also, investment in infrastructure is statistically significant in OLS and all quantiles except q^5. This draws in more FDI as it will reduce cost of production and increase profitability.

Going by our result on the impact of FDI on economic growth, the coefficient of 0.3128 is low and statistically not significant in the OLS. By our quantile regression, it has high and positive coefficient but not statistically significant in the q^5 and q^{25}. It is even negative in the median (q^{50}) quantile. The result is different in the last two quantiles as FDI exhibit high and negative coefficient but statistically significant at 5% level of significance. This result shows that FDI alone cannot lead economic growth without other variables such as macroeconomic, political stability and addressing the problem of corporate governance.

For the QR result, it shows a high and positive relationship at the 5th and 25th quantile and negatively significant coefficient at 75th and 95th quantiles.

In the light of the above, attention should be paid by policy makers on policies that can make Nigeria harness the economic gains of FDI. The policy on openness should be pursued with caution as one without some level of restriction can be counterproductive. This way, the problem of unemployment and high level of poverty in the country can be reduced to the barest minimum. In fact, one of the pillars on which New Partnership for Africa's Development (NEPAD) was launched was to create conducive environment for FDI (Funke and Nsouli, 2003).

5.3 Recommendations

Base on the research objectives and findings, the following recommendations are proffered:

To encourage FDI inflows much of government expenditure should be used in financing capital projects such good road networks, rail lines across the country and stable power supply which are not for current consumption. This will no doubt reduce the cost of doing business in Nigeria and increase profitability. From our result, FDI alone cannot lead to economic growth, with the availability of other factor such conducive environment and simplified pre-investment procedures, more FDI will be attracted to key economic sectors and contribute to economic growth.

Also, the privatization exercise of the government should be handled in a transparent manner. This will convince foreign investors that their money will not go down the drain. If the approach and zeal exhibited in the deregulation process of telecommunication sector is extended to the power sector, similar success will be achieved. This will lower the cost of doing business in Nigeria and allow manufacturing FDI to contribute significantly to economic growth.

Institutions such as the anti-graft agencies of the government (EFCC and ICPC) should be strengthen in order to give more bites in their war against corruption. This will redeem the image of the country before the outside world.

The policy of openness should be sustained but must well guided as unguided one can lead to massive importation of intermediate goods which can seriously affect the balance of payment position of the country. Other factors like investment in human capital (IHC) which contributed positively to growth rate at both lower and upper quantile could be improved upon which could further increase growth rate of GDP. There is need for government to invest more in education for the country's population and routine training of the country's work force. This will enhance productivity and increase growth.

Finally, the Nigeria Investment Promotion Commission can still do more by showing foreign investors the potentials that abound in other sectors so as to give room for diversification of the economy.

5.4 Contribution to Knowledge

This research work shows the analysis of determinants and impact of foreign direct investments on economic growth in Nigeria using quantile regression approach. This approach enable us to trace the distribution of Y, conditional on X, and obtain a much more complete view of the effects of explanatory variables on the dependent variables at different quantiles as opposed to other methodologies employed in understanding the relationship between FDI and economic growth in Nigeria. Areas of further research in understanding the nexus between FDI cum economic growth in Nigeria is to capture the effect of endogeneity through the use of instrumental variables, a method known as instrumental variable quantile regression (IVQR).

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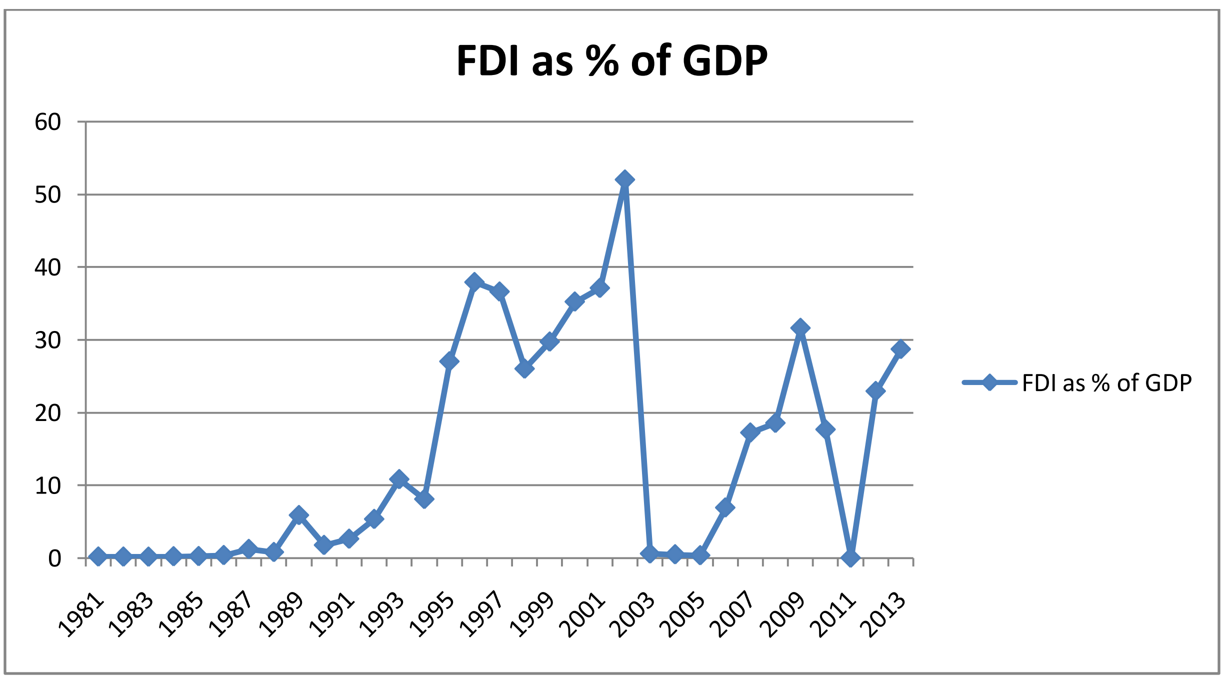
APPENDIX

Table 2.4.2 Nigeria's foreign direct investment 1981-2013 (N million)

Year	Real FDI	Real GDP	FDI as % of GDP
1981	334.7	205222.06	0.16
1982	290.0	199685.25	0.15
1983	264.3	185598.14	0.14
1984	360.4	183562.92	0.20
1985	434.1	201036.27	0.22
1986	735.8	205971.44	0.36
1987	2452.8	204806.54	1.20
1988	1718.2	219875.63	0.78
1989	13877.4	236729.58	5.86
1990	4686	276549.99	1.75
1991	6916.1	265379.14	2.61
1992	14463.1	271365.52	5.33
1993	29660.3	274833.29	10.80
1994	22229.2	275450.56	8.07
1995	75940.9	281407.40	27.0
1996	111290.9	293745.38	37.90
1997	110452.7	302022.48	36.60
1998	80749.0	310890.05	26.0
1999	92792.5	312183.48	29.72
2000	115952.2	329178.74	35.22
2001	132433.7	356994.26	37.10
2002	225224.8	433203.51	52.00
2003	258,388.6	447532.98	57.74%

Year	Real FDI	Real GDP	FDI as % of GDP
2004	248,224.6	527576.04	47.1%
2005	1,921.21	561931.39	0.34
2006	41119.49	595821.61	6.90
2007	109161.26	634251.14	17.21
2008	124,645.02	67220255	18.54
2009	227093.29	718977.33	31.60
2010	137053.2	776332.21	17.65
2011	184683.2	833765.7	22,15
2012	207347.1	904642.3	22.92
2013	265586.3	923586.4	28.7

Source: CBN Annual Report and Statement of Account 2013 (Author's Computation)



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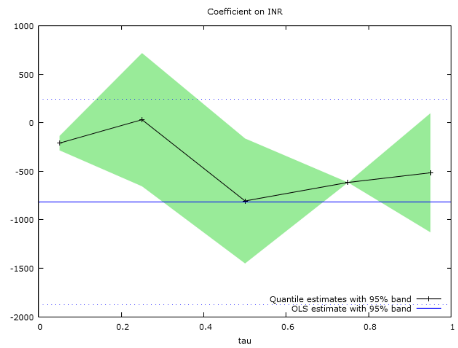


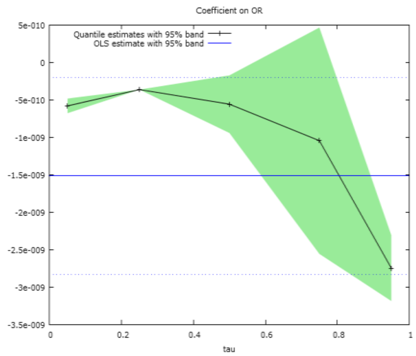
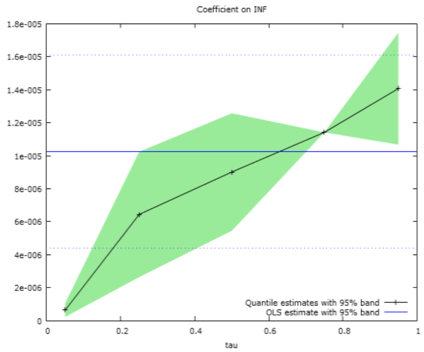


Fig. 3

Fig. 2



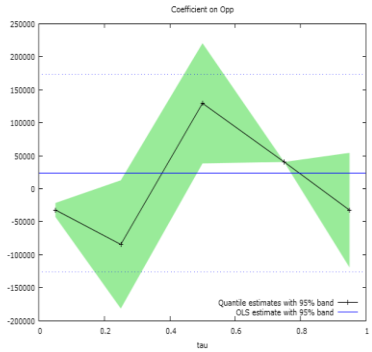
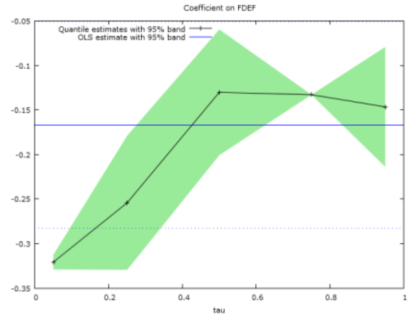


Fig. 5

Fig. 4



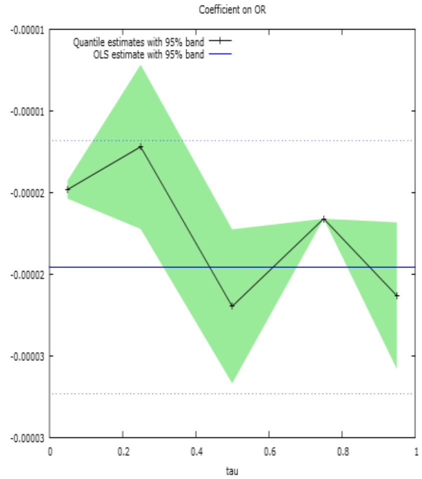
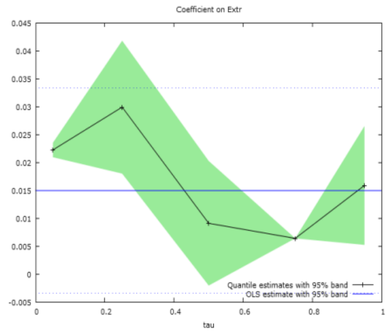
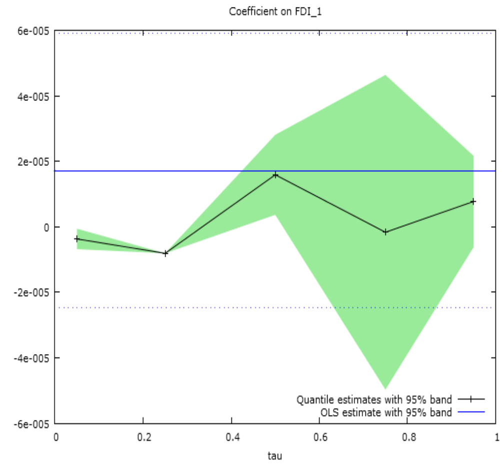


Fig. 7

Fig. 6

Fig.8





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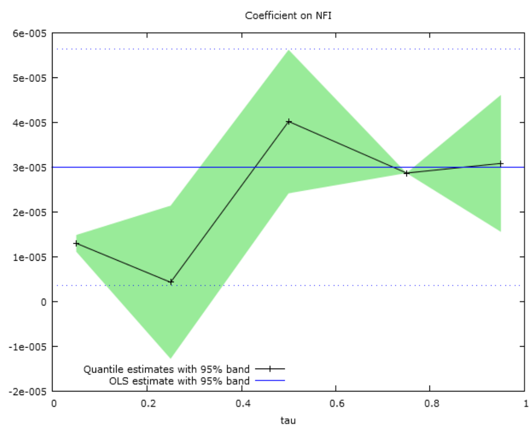

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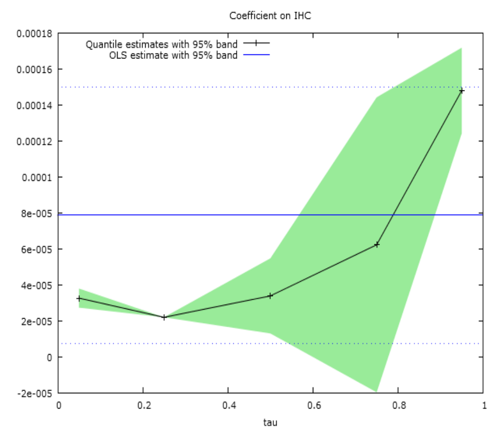

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