# AIDS AND FOREIGN DIRECT INVESTMENT ON NIGERIA ECONOMY

USIFOH IRENOSEN REBECCA
SBS/6011840577

A PROJECT SUBMITTED TO THE DEPARTMENT OF ACCOUNTANCY, SCHOOL OF BUSINESS STUDIES, AUCHI POLYTECHNIC, AUCHI, EDO STATE.

IN PARTIAL FULFILMENT FOR THE REQUIREMENT FOR THE AWARD OF HIGHER NATIONAL DIPLOMA (HND) IN ACCOUNTANCY.

JANUARY, 2022

## CERTIFICATION

We the undersigned hereby certify that this project work titled "aids and foreign direct investment on Nigeria economy" was carried out by Usifoh Irenosen Rebecca with Matriculation SBS/6011840577. The project work has been found adequate in scope

and quality in partial fulfillment of the requirement for the award of Higher National Diploma (HND) in Accountancy.

…… ……

**Mr. Abumere D.I** Date
**Project Supervisor**

…… ……

**Mr. Abumere D.I** Date
**Head of Department**

## DEDICATION

I dedicate this project work to God Almighty the beginning and the end, the first and the last, my fortress, for seeing me through in the course of writing this project work.

## ACKNOWLEDGEMENTS

I sincerely express my profound gratitude to God, who through His abundant wisdom and knowledge made this project work possible.

I want to acknowledge my supervisor Mr. Abumere, D.I, for his patience and support towards my project work, may the Almighty God bless you.

My special thanks goes to my parents Mrs. Violet Osede for their support, encouragement, advice and care towards my Education.

My special thanks goes to the head of Department Mr. Abumere D.I., the programme coordinator Mrs. Momodu, W.O. and all the lecturers in the department of accountancy for their effort in making my academic dream a reality.

I will not fail to acknowledge my brother Pastor Micheal and sister Mrs. Abigail whose support had contributed to the success of this project work.

My special thanks goes to Nicholas Idenla for his support both physically and financially towards the success of my academic

Lastly I want acknowledge my friends Benjamin Mercy and Edobor Iyobor who has contributed positively to the success of this work, May God bless you all.

## Abstract

This study examines the liquidity and profitability of deposit money banks in Nigeria. The research design adopted for the study is a cross-sectional research design. The sample size of the study is 34 firms. The study used data acquired from secondary sources. The data were extracted from annual report and accounts of various deposit money banks in Nigeria from the Nigeria Stock Exchange fact book for the year 2010 to 2020. The study used regression analysis to investigate the impact of independent variables on dependent variable. A multiple linear regression model was used to establish the significance of the model. Data obtained from secondary source were analyzed using E-View 10 Computer Software. The study reveals that; Return on asset significantly affects liquidity in Nigerian deposit money banks; return on equity does not have significant effect on liquidity in Nigerian deposit money banks; bank size significantly affects liquidity in Nigeria deposit money banks. In line with the findings, the study recommended that; Deposit money banks in Nigeria should consider increasing their asset base as this will significantly affect their return asset; The deposit money bank should ensure guarantee of credits which would serve as a

shield against credit loss of customers fund; All deposit money banks should put size into consideration and expand when necessary so as to improve their profitability.

## *TABLE OF CONTENTS*

# CHAPTER ONE

# INTRODUCTION

## 1.1 Background to the Study

The role of aids and Foreign Direct Investment on nations economy has been vigorously debated in the literature. Some studies are of the view that aids and Foreign Direct Investment (FDI) contributes positively to the growth of the economy (Adeleke, Olowe and Fasesin, 2014; John, 2016; and Ali and Hussain, 2017), while some are of the view that aids and FDI only contributes a little and it is not significant

(Louzi & Abadi, 2011). However, the contribution of foreign aids and FDI to economy of the world cannot be over-emphasized. Aids is a foreign grant to a country to finance the donor area of interest while FDI refers to an investment made by an investor either corporate bodies or individuals in a country other than the domestic country of origin of the investor in creating business or buying an asset in the country. (John, 2016) posits that foreign direct investment is seen as a process of moving technology and capital from a nation either developed or developing countries to another nation. (Farrell, 2018) posits that foreign direct investment refers to the package of technology, capital, management, and entrepreneurship that firm uses to operate and provide goods and services in a foreign market. In Africa, Nigeria is the third host economy for FDI, behind Egypt and Ethiopia. Some of the investing countries in Nigeria are the USA, United Kingdom, China, the Netherlands and France (UNCTAD, 2018). Nigeria FDI flows in 2017 dropped by 21% to reach 3.5 billion USD which could be as a result of political instability, lack of transparency widespread corruption and poor quality of infrastructure (UNCTAD, 2018). However, this study tends to re-examine the impact of aids and foreign direct investment on Nigeria economy.

The relevance of FDI cannot be overemphasized. Its significant influence on the provision of new technologies, products, management skills and competitive business environment, overtime has been a strong impetus for economic growth. Many countries of the world, especially emerging economies favor policies that encourages the inflow of FDI because of it positive spillover associated with the provision of funds and expertise that could help smaller companies to expand and increase international sales and transfer of technology thus, forming new varieties of capital input (i.e. flow of services available for production from the stock of capital goods e.g.

equipment, structures, inventories etc.) that cannot be achieved through financial investments or trade in goods and services alone.

Nigeria is one of the economies with great demand for goods and services and has attracted many FDI over the years since the discovery of crude oil. According to the World Bank, from 1970 to 1979, Nigeria recorded an average ratio of FDI net inflow of about 1.579 to GDP while from 1980 to 1989, the average ratio of FDI net inflow to GDP recorded stood at 1.947. Thus, in 1994 and 1993, the country made a remarkable record of 8.28 and 6.3 respectively. Since 1993 and 1994, the record was not an issue to contend with. To the greatest dismay, from 1995 to 2010, FDI, net inflow as % of GDP in Nigeria has not gone beyond 4.0 except in 1996, 1997, 2005 and 2009 the country made a record of 4.51, 4.25, 4.44 and 5.08 respectively. World Bank research contained in global development finance 2008 shows that Thailand attracted $9.6 billion in 2007 while Nigeria attracted just about $6.03 billion. Also, CBN (2010) annual report also indicated that total FDI inflow into the Nigerian in 2010 was about $5.99 billion. The breakdown of the amount according to the report shows that FDI portion was just 12.2 percent or $668 million. This represents a 78.1 percent drop from $3.31 billion in 2009. In light of the above, many Nigerians are lost in guesses of the likely causes of the insignificant inflow of FDI into the country. This has been a source of worry to both policy makers and government authorities. Amidst, (Asiedu, 2005) asserted that the level of FDI attracted by Nigeria is indifferent compared with the resource based and potential need, taken into cognizance of the fact that Nigeria is the 8$^{th}$ ranked most populous nation and 32$^{nd}$ biggest economy in the world (CIA World fact book) with the endowment to do better than its counterpart South Africa as

the Africa biggest economy following the statement of investment giant Morgan Stanley.

### 1.2. Statement of the Problem

The Nigerian economy has long been in existence, it is as old as the nation itself. The value and quality of productive investments, especially since the early 1980s, raise concern, (Garba, 1958). As such, several governments in Nigeria have at one time or the other put forth different economic policies aimed at gaining economic independence through improved production capacity. Such policies include: Industrial Inspectorate Act 1970, National Industrial Property Act 1979, National office for technology Acquisition and Promotion (NOTAP) 1992 and so on.

In order for the government to achieve her aim of economic independence, the government thought it wish to encourage FDI into the country, although it has often been alleged that FDI brings along possible balance of payment (BOP) problem but their great potential for accelerating the pace of economic progress of developing countries (Nigeria included) cannot be over emphasized. For instance, FDI brings about capital, technological know-how and foreign exchange which this country lacks so much. However, among economists and policy makes a likes, there are disagreements as to the benefit of FDI in the developing countries while some fashion attest to its developmental role others see it otherwise.

### 1.3. Objectives of the Study

The broad objective of the study is to examine the impact of FDI and aids on Nigeria economy. The specific objectives are to:

i. To examine the impact of aids and Foreign Direct investment on Nigeria economy.

ii. To investigate the impact of Domestic Investment on the economy of Nigeria.

iii. To examine the contribution of FDI to the Nigerian economy.

### 1.4. Research Questions

The following questions are asked in guidance to the attainment of this research.

i. How does aids and Foreign Direct investment affect the Nigeria economy?

ii. What is the impact of Domestic Investment on the economy of Nigeria?

iii. How does FDI contribute to the Nigerian economy?

### 1.5. Statement of Hypotheses

The hypothesis of the study will be tested as follows:

**H01:** There is no significant relationship between FDI and Aids on Nigeria economy

**H02:** Domestic investment has no significant impact on Nigerian economy.

**H03:** Foreign Direct investment has no long run significant relationship Nigeria economy.

### 1.6. Scope of the Study

The study will center on the contribution that has been made to the Nigeria economy by the way of aids and FDI engulfing the period from 2010-2020. Annual time series data will be engaged using GDP as a proxy for economic growth and other variables such as aids, FDI, exports, foreign exchange and interest rate in Nigeria.

### 1.7. Significance of the Study

The finding of the study will increase knowledge of policy makers on how to boost the impact of FDI on economic growth. The research will also contribute to the literature of FDI and growth in the economy of developing countries. It will therefore

serve as a reference material to both researcher and academicians on FDI and its impact on the economy of Nigeria.

### 1.8 Limitations of the Study

The study certainly suffers from a number of limitations prominent among which include;

i. One of the limitation of this study is the time frame to which the research work covers, the research covers a period of eight years from 2010 to 2020 which is however too small to guarantee the reliability of the research.

ii. The depth to which information could have be gathered is limited for instance, it is inherit in human nature that some times what is being said is quite different from what is being done.

iii. Sizable quality of information obtain from papers were in fragmentations and sometimes complex.

## CHAPTER TWO

## REVIEW OF RELATED LITERATURE

### 2.1 Conceptual Framework

Foreign direct investment leads to increase in investment and advancement in technology which in turns increases productivity and efficiency in the host country. The increased productivity and efficiency results to high output production for both local consumption and export. The export of goods and services brings foreign exchange revenue to the host country which serves as an engine for economic growth.

### 2.2.1 Foreign Direct Investment

Foreign direct investment is an investment made by an individual or a company (investor) in a country which is not the country of origin of the investor, in the form of either establishing business or acquiring business assets in the country. FDI is the extra resource a country needs in order to achieve economic growth. It is a combination of technology, marketing, capital and management. It provides a firm with new markets, marketing channels, easy admittance to new technology, skills, product, financing and production facilities. Foreign direct investment can be defined as a foreign investment that is a part or share of GDP which grows rapidly, it is turning into the largest origin of capital moving from developed countries to developing countries.

### 2.1.2 Concept of Economic Growth

The concept of economic growth usually refers to the increase in the inflation-adjusted market value of goods and services produced by an economy over a period of time. It is measured as the percentage rate of increase in real GDP usually in per capita terms. Growth usually is calculated in real terms i.e. inflation-adjusted terms. Economic growth also means increased growth in the level of output produced by a country over time and it crucially measures the economic performance of a country.

### 2.1.3 Foreign Exchange

An escalation in the value of a country's currency will have a favourable effect on the economy. The higher the value of a country's currency the more foreigners would like to invest in that country and vice-versa.

### 2.1.4 Interest Rate

Higher interest increases the value of a given country's currency. In this sense, higher interest rates can attract foreign investment because foreign investors would be attracted to the higher interest rate because they will receive a better return on the investment that they will get from the local market.

### 2.1.5 Relationship between FDI and Economic Growth

There is an agreement which states that FDI has serve as an advantage to local firms by increasing growth which leads to productivity and efficiency. Developed nations have agreed that productivity has been the key to domestic firms. The FDI's importance in export promotion is said to be debatable and it relies on it solely for the purpose of investment. The main agreement is that FDI spill over depends on the capacity of the host country in order to absorb the type of investment nature and also foreign technology. The relationship between economic growth and FDI is tagged conditional depending on the country it is passing through. It has been asserted the extent to which FDI contributes to growth depends on economic and social conditions or in short the quality of the environment of the recipient country (Zhang, 2001).

Thus, employment opportunities are created through FDI in the hosting countries and this is done through direct employment in the domestic economy for operations, for forward and backward connections, leads to more employment creation in the economy due to growth. Growth can be generated through FDI and a steady state of growth over a period of time reduces poverty (Ajayi, 2006).

### 2.1.6 Brief background of the current state of Foreign Direct Investment in Nigeria

According to UNCATD (2019) report, Nigeria is the one of the popular economy for FDI in Africa. The nation is part of the encouraging bodies for growth in Africa and leads investors to the sector of hydrocarbon, energy, building, etc. the nation experiences impact of oil counter stun. UNCATD indicated that FDI streams Nigeria totalled USD 1.9billion in 2018 and demonstrated a decline when estimated to last years (USD 3.5 billion in 2017) under the effects of austerity measures. Estimated at USD 99.6billion in 2018, the total shock of FDI represents 25.1% of the country's GDP. The important countries that invest in Nigeria include China, USA, Netherlands, United Kingdom and France. Nigeria has the intention of the diversifying its economy by staying away from oil and building a competitive manufacturing sector which would encourage interaction into global value chains and productivity. The recent merging of trade, investment and industry under the scope of the federal ministry of industry, trade and investment mirrors Nigeria's aim to successfully manage between these three key areas to increase its trading and investment mirror Nigeria's aim to successfully manage between these three key areas to increase its trading and investment condition. A portion of the country's advantages are a partially privatised economy, a good taxation system, abundant natural resources and low cost of labor. Problems such as political instability, corruption, lack of transparency and poor quality of infrastructure are restricting the country's FDI potential. In 2019, business report published by world bank ranked Nigeria as the 146$^{th}$ once drop compared to 2018 report. However, Nigeria has been attracting strong inflows from big American companies like Uber, Facebook as well as emergent payments and Meltware group.

China has also been investing in the country especially in the aerospace, automobile and textile industries.

## 2.2 Theoretical Framework

Theoretical study on FDI have led to a better understanding of the economic mechanism and the behavior of economic agents, both at micro and macro level which allows the opening of new areas of study in economic theory. To understand FDI we have to identify and understand the main trends in FDI theory, how these theories were developed and their motivations. Theories of FDI may be classified under the following headings:

### 2.2.1 Classical Theory

In broad terms, the classical theory claims that FDI and multinational corporations (MNCs) contribute to the economic development of host countries through a number of channels. These include the transfer of capital, advanced technological equipment and skills, the improvement in balance of payment, expansion of tax base and foreign exchange earnings, creation of employment and the integration of the host economy into international markets. These claims about FDI has been amplified by the phenomenal economic growth of the newly industrialized countries like; Hong Kong, Taiwan, Singapore and South Korea especially in the 1980s and early 1990s (Muchlinski 1995 and Umar 1980) and more recently by china`s impressive growth.

With its emphasis on the importance of FDI and limited state role, the classical doctrine has been propagated in recent years by international institutions and organizations like the United Nations (UN), the World Bank and the International Monetary Fund (IMF).

### 2.2.2 The Dependency Theory

Drawing from the experience of Latin America, proponents of this theory argue that relations of free trade and foreign investment with the industrialized countries are the main causes of underdevelopment and exploitation of developing economies (Wilham

and Witter, (1998). This theory focuses largely on the relationship between center and periphery. Well developed and industrialized countries are deemed to constitute the center and the least developed countries the periphery. In this regard, FDI is seen as a conduit through which the center exploits the periphery and perpetuates the latter`s state of underdevelopment and dependence.

Instead of promoting economic development, foreign investment strangulates such development and perpetuates the domination of weaker states (Somarazah, 1994). MNCs are accused of being exploiters. These views are largely informed by the fact that multinationals have often been involved in the exploitation of natural resources with no corresponding benefits for host economies (UNCTAD, 1999). The dependency theory is very much a reaction against this "extractive nature" of FDI.

### 2.2.3 The Intervention/Integration/Middle Path Theory

The intervention or integrative school attempts to analyze FDI from the perspective of the host country as well as that of the investor. It incorporates arguments from both classical and dependency theorists. The theory posits that foreign investment must be protected but only to the extent of the benefit it brings the host state and the extent to which foreign investors have behaved as good corporate citizens in promoting the economic and social objectives of the host country. The theory calls for a mixture of intervention and openness in dealing with foreign investment and cautions against too much regulation or intervention (Seid, 2002). The theory recognizes that there are instances where the market is better placed to act and other instances where government intervention is necessary. What is needed therefore is a balancing act between those activities that can best be handled by the market and those that can be done by the government.

This theory represents a convergence between Adam Smith`s case of laissez-faire and Keynes`s argument in favor of government intervention.

Other theories include the production cycle theory of Vernon, internationalization theory, industrial organization approach and eclectic paradigm.

**2.3 Empirical Review**

A wide range of studies are available in literature on the impact of FDI on Nigeria's economic improvement and also on the determinant of FDI.

Ugochukwu, Okoro and Onoh (2013) in their study on the impact of FDI using the ordinary least square method and granger causality test reached a conclusion that FDI has a positive and significant impact on economic growth. Interest rate was found to be positive and insignificant while exchanged rate positively and significantly affect the growth of the Nigerian economy.

Ijeoma (2012) using ordinary least square regression technique ascertained that FDI positively impacts the growth of the Nigeria economy. Adeleke, Olowe and oluwafolakemi (2014) also using the same methodology reached the conclusion that economic growth is directly related to inflow of FDI.

Okon, Jacob and Chuku (2011) using single and simultaneous equation systems pointed out that foreign direct investment and economic growth are simultaneously determined in Nigeria and there is positive feedback from FDI to growth and from growth to FDI.

Anfofum, Gambo and Suleiman (2013) in their study on the impact of FDI in Nigeria using ordinary least square equation which was disaggregated into five equations, a co-integration and granger causality techniques concluded that foreign direct investment is a positive measure of economic growth.

Matthew and Johnson (2013) using ordinary least square (OLS) method in their paper "Accelerating Economic Growth in Nigeria, the Role of Foreign Direct Investment: A Reassessment" reached a result that foreign direct investment and domestic savings make significant contribution to the growth economy of Nigeria. In another study of theirs on the impact of FDI on employment generation in Nigeria also using ordinary least square regression, granger test, Dickey-Fuller and Augmented Dickey-Fuller (ADF) unit root test ascertained that FDI has a positive impact on employment generation.

Olumuyiwa (2013) in his study on the impact of FDI inflow on economic growth in a pre and post deregulated Nigeria economy covering the period 1970 to 2010 using Granger causality test ascertained that there is a causality relationship in the pre-deregulation era that is (1970-1986) from economic growth (GDP) to FDI inflow which means GDP causes FDI, but there is no causality relationship in the post-deregulation era that is (1986-2010) between economic growth (GDP) and FDI inflow which means GDP does not cause FDI. However, between 1970 to 2010 shows that there is a causality relationship between economic growth (GDP) and FDI inflow. That is, economic growth drives FDI inflow in the country and vice versa.

Onuoha and Oregwu (2013) using ordinary least square regression in their study on the determinant of FDI and the Nigerian economy reached a result that GDP does not bring about foreign direct investment. Transportation and communication exhibit positive relationship with FDI and the openness of trade is not significant.

Adaramolo and Obisesan (2015) in their study on the impact of FDI on the Nigerian capital market development using ordinary least square, ADF unit root test, and Johansen co-integration test reached a conclusion that Foreign Direct Investment impact positively and significantly on market capitalization.

Danja (2012) utilizing ordinary least square regression in his study on FDI revealed that FDI has a positive relationship with Gross Fixed Capital Formation and index of industrial production but FDI has not contributed much to the growth and development of the Nigerian economy.

Adebisi, Anogundade, Oluwakayado and Oyatoye (2011) on FDI, exports and economic growth in Nigeria resulted a positive relationship between foreign direct investment and gross domestic product and a positive relationship between foreign direct investment and export. This result was reached using ordinary least square regression. Akinlo (2004) investigates the impact of foreign direct investment on economic growth in Nigeria using data for the period 1970 to 2001. His error correction model (ECM) results show that both private capital and lagged foreign capital have small significant impact on export and economic growth.

Olokoye (2012) studied FDI and economic growth using Nigeria as the case study. She used ordinary least square (OLS) regression technique to test the time series from 1970 to 2007 and Cochrane-orcutt iterative method was used to correct for autocorrelation and the result evidently do not provide much support for the view of a robust link between FDI and economic growth in Nigeria. Though the result does not imply that FDI is unimportant, the analysis reduces the confidence in the belief that FDI has exerted an independent growth effect in Nigeria.

Njogu (2013) examined the determinants of FDI in pre and deregulated Nigerian economy using multiple regression model, unit root test, co-integration and granger causality test in her analysis revealed that, exchange rate, inflation, and degree of openness in pre deregulated Nigerian economy had a negative and non-significant impact on foreign direct investment. While market size had a positive and non-significant impact on foreign direct investment. In deregulated Nigerian economy,

exchange rate and degree of openness had a negative and non-significant impact on foreign direct investment. Inflation rate had a positive and non-significant impact and market size had a positive and significant impact on foreign direct investment in the Nigerian economy.

Osaghale and Amenkhieman (1987), investigates the relationship between FDI and economic growth in Nigeria and found out that there was increment in Nigeria's revenue from oil export between 1970 and 1982 and there was a substantial growth in her foreign debits and FDI. The results made it known that there was a positive relationship between FDI and GDP and the conclusion of the study was of the view that the economy would perform better with greater inflow of FDI and it also recommended that less developed countries should create more a conducive environment for FDI. Aromu (2003) observed that FDI can raise the level of capital formation, promote export and generate exchange. Indeed, the role of FDI in capital formation in Nigeria has been increasing over the years.

Isah (2012) examined the long term determinants of foreign direct investment in Nigeria covering a period of 1971 to 2009 using Vector Error Correction Mechanism (VECM). His results provided evidence which indicates that the size of Nigeria's domestic market, the liberalization policy and openness of the economy as well as stable domestic currency are significant in attracting FDI. He further recommended that Nigeria should strengthen its investment environment by reducing obstacles to doing business, improving Nigeria's economic management and export promotion schemes.

Nurudeen and Wafure (2010) detected on the determinants of foreign direct investment in Nigeria a result that revealed market size, deregulation, political

instability and exchange rate depreciation are the main determinants of foreign direct investment in Nigeria. They made use of the error correction technique to analyze the relationship between foreign direct investment and its determinants. They recommended that further deregulation of the economy through privatization and reduction of government interference and strengthening of the political institutions will promote foreign direct investment.

**2.4 Gaps in the Literature**

Foreign direct investment is becoming a very important area of research in Nigeria. Studies have been carried out on the impact of foreign direct investment on the Nigerian economy and also on the determinants of foreign direct investment. Having examined some literatures, it was to observed that certain aspects of FDI were not examined thoroughly by past researches.

Some of the findings from the literatures revealed that foreign direct investment has a positive impact on economic growth (see Ugochukuw, Okore and Onoh (2013); Ijeoma (2012); Chuku, Jacob and Umoh (2011); Anfofum, Gambo and Suleman (2013); Johnson and Mathew (2013); Adebisi, Arogundade, Oluwakayado and Oyatoye (2011), Osaghale and Amenkhieman (1987), while others revealed a negative or inconclusive impact (see Danja (2012); Olokoye (2012).

Different studies were done on the determinant of FDI and some of the variables revealed to have significant impact on FDI include Transport, Communication, Trade openness, Market size, stability of the current, deregulation and exchange rate (see Njogo (2013); Onuoha and Oregwu (2013), Isah (2012); Nurudeen (2010).

However, the impact of the risk component of country is yet to be explored. Most of the researches carried out made use of ordinary least square regression which is a weak methodology for the study of FDI because it fails to capture the interdependency

of macro-economic variables, hence the need to carry out this study which will analyze the impact of the risk component of the country and will also make use of a different technique of statistical analysis.

# CHAPTER THREE

# RESEARCH METHODOLOGY

## 3.1 Research Design

This study adopted a time series design capturing from 2010 to 2020. This method was adopted to enable the researcher elicit information from the relevant period under study and on the subject matter under the investigation.

## 3.2 Population of the Study

The target population of interest is the Nigerian economy from 2010 to 2020.

## 3.3 Sample and Sampling Techniques

A period of 11 years was sampled for the study from 2010 to 2020. This was done to ensure representativeness of study subjects. This study used purposive sampling technique. This method was reasonable for the purpose of the study as it consisted of specific variables within a defined period of time.

## 3.4 Sources of Data Collection

In order to avoid seasonal bias, annual data are used in this study. Time series data is the basis of data used in this study. They will be sourced mainly from the publications of the Central Bank of Nigeria (CBN) namely; CBN Statistical Bulletin, CBN Statement of Accounts and Annual Reports, and Bureau of Statistics publications. The variables for which data were sourced include: real Gross Domestic Product, Gross Domestic Investment, Foreign Direct Investment, Interest rate and Unemployment rate for the period chosen.

## 3.5 Method of Data Analysis

In order to achieve the objective of the study, standard time series econometrics techniques were adopted. For preliminary analysis, the Augmented Dickey Fuller unit root test was used to test for stationarity of the data, this is carried out in order to

ascertain if the data were stationary or not as it follows the assumptions of the classical linear regression model and also to determine the basis upon which further analysis of the data is carried out. The ARDL Bound testing was used to check for the existence of long run relationship between the variables. The Auto Regressive Distributed Lag (ARDL) bounds testing methodology as developed by Pesaran and Shin (1999) has been favoured above the co-integration analysis developed by Engle and Granger (1987) and Johansen and Juselius (1990) due to the low power problems associated with the co-integration analysis. It is used in cases of mixed integration (Shrestha & Chowdhury, 2007).

### 3.6. Model Specification

The specification of model involves the expression of the relationship between variables in mathematical form. In this study, it is assumed that the impact of foreign direct investment and domestic investment on economic growth is determined by another influential variable such as interest rate. The research model adopted for the study is a multiple regression model with three explanatory variables. Hence, economic growth as measured by gross domestic product (GDP) is assumed to be the dependent variable, which depends on the inflow of foreign direct investment (FDI), gross domestic investment (GDI) and the interest rate (INTR).

Thus, the model is specified in functional form as follows:

However, this research adopted the work of Hassan and Salim

$$GDP = F(FDI, GDI, INTR \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (3.1)$$

In linear form, equation (3.1) can be transformed as:

$$GDP = \beta_0 + \beta_1 FDI + \beta_2 GDI + \beta_3 INTR \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots 3.2$$

Equation 3.2 above is the mathematical form of the equation. The econometric form of the equation can thus be written as follows:

$$GDP = \beta_0 + \beta_1 FDI + \beta_2 GDI + \beta_3 INTR + \mu_t \quad \ldots\ldots\ldots \quad 3.3$$

In equation 3.3 the error term (μt) is a random variable that has well defined Probabilistic properties. It is assumed to capture other exogenous factors that are capable of influencing investment growth.

The log form of the model can hence be written as follows:

$$\log GDP_{t-1} = \beta_0 + \beta_1 \log FDI_{t-1} + \beta_2 \log GDI_{t-1} + \beta_3 \log INTR_{t-1} + \mu_{t-1} \quad \ldots\ldots\ldots \quad 3.4$$

The model (Equation3.4) was logged so as to break them into a smaller digits and to avoid problem of large numbers (outliers), to explain the result in terms of elasticity and to ensure the variables are measured using the same level of measurement. The t-1 is the past time period, hence the dependent variable, independent variables and the error term carry the t-1. Hence, the variables as depicted by the model are defined as follows:

=Log of Gross Domestic Product

$\log FDI$ =Log of Foreign Direct Investment
$\log GDI$ =Log of Gross Domestic Investment
$\log INTR$ =Log of Interest Rate
μt = Error Term
β0 = Intercept
β1, β2, and β3 = Slopes and also the coefficients of the independent variables.

From the above specified model, Log GDPt is regarded as the dependent variable which is expressed as a linear function of Log FDIt, Log GDIt and Log INTRt which are the explanatory variables. The a priori expectations are $\beta0 > 0$, $\beta1 > 0$, $\beta2 < 0$ and $\beta3 > 0$. Which means we expect a positive relationship between the dependent variable and the independent variables.

# CHAPTER FOUR

# DATA PRESENTATION AND ANALYSES OF RESULTS

## 4.1. Data Presentation

This section presents the data used upon which the analysis is based. The data collected are data on Economic growth as measured by the real Gross Domestic Product (GDP), Foreign direct investment, Domestic investment and Interest rate. The sample consists of 30 observations collected from the World Development Indicators (2019). The data is tabulated and presented in appendix I.

## 4.2. Data Analysis

### Unit Root Test

In order to examine (whether) the variables are stationary or not, the variables were individually subjected to unit root test using the Augmented-Dickey Fuller (ADF) test. The requirement is that for a variable to be stationary using the 5% level of significance, the value of the ADF test statistics must be less than test critical value to reject the null hypothesis of non-stationarity of the variable. The unit root test was conducted at constant and trend and the result of the test are reported at the 5% confidence level. The summary of the result as shown in Appendix II (A) is presented in the table 4.1.

**Table 1: Augmented Dickey Fuller Unit Root Test Trend and Intercept**

| **Variables** | **Levels: Intercept** | **Levels: Trend and intercept** | **1st Diff: Intercept** | **1st Diff: Trend and intercept** | **Decision** |
|---|---|---|---|---|---|
| **D(LGDP)** | -2.4508<br>(-2.9639) | -1.2676<br>(-3.5683) | -4.9467<br>(-2.9677) | -5.5651<br>(-3.5742) | I(1) |

| | | | | | |
|---|---|---|---|---|---|
| **D(LFDI)** | -2.4636<br>(-2.9718) | -4.6867<br>(-3.5742) | -8.3363<br>(-2.9718) | -8.1159<br>(-3.5806) | I(0) |
| **D(LGDI)** | -0.5392<br>(-2.9677) | -3.7858<br>(-3.5742) | -6.1730<br>(-2.9718) | -6.1262<br>(-3.5806) | I(0) |
| **D(LINTR)** | -0.8172<br>(-2.9639) | -2.4156<br>(-3.5683) | -5.3770<br>(-2.9677) | -5.4180<br>3.5806 | I(1) |

**Source: Researcher Computation using Eviews 9.0**

The estimated result in table 4.1 found foreign direct investment and domestic investment to be stationary at level as shown by their corresponding values of ADF test statistics and critical values respectively. While the other variables such as gross domestic product and interest rate are found to be stationary at first difference. Hence, foreign direct investment and domestic investment are integrated of order zero i.e. I (0) and gross domestic product and interest rate are integrated of order one i.e. I (1).

Having examined the stationarity state of the variables, it is imperative henceforth we conduct the Bound cointegration test since the variables are integrated in different orders, which is the basis for using ARDL approach.

**Bound Cointegration Test**

Considering the fact that the variables are of mixed order of integration as indicated by the ADF unit root test, thus, we employ the use of the Auto-regressive Distributed Lag (ARDL) Bound test to check for the existence of long run relationship between the variables. The summary of the test result which is shown in Appendix II(B) is presented in the table 4.2:

**Table 4.2 Cointegration Test: ARDL Bound test**

| **Computed F-Statistic** | **2.5%criticalboundvalue** | | **5%criticalboundvalue** | |
|---|---|---|---|---|
| | Lower bound (I0) | Upper bound (I1) | Lowerbound (I0) | Upper bound (I1) |
| **4.1527** | 3.69 | 4.89 | 3.23 | 4.35 |

Source: Author's computation

The decision rule is that if F-Statistic < Upper bound values (I0), we fail to reject the null hypothesis (i.e. there is no long run relationship). Also, if the F-Statistic > Upper bound values (I1) we reject the null hypothesis.

The upper bound is used here to avoid the zone of indecision. In table 4.2, the computed F-statistics is (7.1011), which is greater than the upper bound critical value at both the 5% and 2.5% confidence level. On the basis of this, the null hypothesis of no long run significance relationship between the independent variable(s) therefore rejected. And we infer that the variables are cointegrated.

In table 4.2, the computed F-statistics is less than the upper bound critical value at both the 5% and 2.5% confidence level. The decision rule is that if F-Statistic < Upper bound values (I0), we fail to reject the null hypothesis (i.e. there is no long run relationship). Also if the F-Statistic Upper bound values (I1) we reject the null hypothesis. On the basis of this, therefore, the null hypothesis of no long run relationship is not rejected and we infer that the variables are not cointegrated.

### 4.4. Auto regressive Distributed Lag Estimates (Short Run Result)

As observed in table 4.1, the variables were all found to be integrated in different order of integration, i.e. I (0) and I (1). And also table 4.2 shows the result of Bound Cointegration Test which shows that there is no cointegration among the variables. This therefore necessitates the use of the Auto Regressive Distributed Lag estimation to show the short run relationship among the variables. The results of the ARDL as summarized from Appendix II(C) are given in table 4.3.

**Table 4.3 Auto regressive Distributed Lag Estimate**

| **Dependent Variable: Log GDP** | | | |
|---|---|---|---|
| **Variable** | **Coefficient** | **t-statistics** | **Prob. Value** |
| **Constant** | 8.7601 | 2.8207 | 0.0097 |
| **LogFDI** | 0.0340 | 0.4699 | 0.6428 |
| **LogGDI** | -1.2756 | -3.3812 | 0.0026 |
| **LogINTR** | 0.0157 | 0.1366 | 0.8925 |
| **CointEq (-1)** | -2.2006 | -2.9330 | 0.0075 |
| **R-squared** | 0.9948 | Adjusted R-Squared | 0.9934 |

| | | | |
|---|---|---|---|
| **F-Statistic** | 737.98 | Prob(F-Statistic) | 0.0000 |

Source: Author's computation

In table 4.3, it is observed that the relationship between economic growth and investment in the short run ARDL model is negative and statistically significant. The finding therefore can be said to complement the works of Awolusi (2012), Iya (2014), Aminu (2015), Gandu & Yusha'u Ango (2017) and Oyedokun (2018), that the relationship between the growth of the economy and the rate of foreign direct investment and domestic investment is negative in the short run. Here, the short-run coefficient estimates show the dynamic adjustment of all variables. The short run coefficients for D (LGDI) is statistically significant at the 5% level. The coefficient of error correction term ecm (-1) estimated at -0.2006 is highly significant indicating that the foreign direct investment, domestic investment and interest rate are cointegrated. The estimated value of the coefficient indicates that about 20.06 percent of the disequilibrium in investment is offset by the short run adjustment in the same quarter.

LFDI has a coefficient of 0.034, this therefore suggests that in the short run, when foreign direct investment increases by a percentage, there will be an increase of 0.034 (3.4%) in the economic growth of Nigeria. The prob. Value of 0.642 associated with the foreign direct investment indicates no statistical significance at the 5% level of the explanatory variable (LFDI) in the model. Though the other explanatory variables are also depicted in the model, only the domestic investment is found to be statistically significant at the 5% level with a prob. Value of 0.0026 having a coefficient of -1.2756.

The R-squared value of 0.9948 signifies the variation in the dependent variable as explained by the independent variables. The R-squared measures the goodness of fit

of the model. Here, it can be said that only 99percent of change in economic growth is explained by the independent

variables. There are other factors that explain economic growth which are not important than those captured in the model.

### 4.4.1. Test of Hypothesis

This sub-section conducts test of hypothesis to validate or invalidate the earlier formulated hypotheses in section one of this study. The test was conducted using the prob. Value at the 5% level of significance. To carry out any meaningful test, the following decision rule is formulated to guide the testing process.

**Decision Rule:** If the calculated Prob. Value is less than 0.05 at the 5% confidence level, the alternative hypothesis (H1) of the study is accepted while the null hypothesis (H0) is rejected and vice versa. Thus, the null and the alternative hypotheses of the study as formally formulated are restated below:

**Hypothesis One**

**H01:** There is no significant relationship between FDI and Aids on Nigeria economy

.

From the results obtained as shown in table 4.3, the Prob. Value for the estimated regression of the leading explanatory variable was found to be greater than 0.05% (i.e. it is 0.6428) as such the study accept the null hypothesis and reject the alternative hypothesis and concluded that There is no significant relationship between FDI and Aids on Nigeria economy .

**Hypothesis Two**

**H02:** Domestic investment has no significant impact on Nigerian economy.

Results obtained from table 4.3, shows the Prob. Value for the estimated regression of the leading explanatory variable was found to be less than 0.05%( i.e. it is 0.0026) as such the

study rejects the null hypothesis and concluded that Domestic investment has a significant impact on Nigerian economy.

**Hypothesis Three**

**H03:** Foreign Direct investment has no long run significant relationship Nigeria economy.

The decision rule is that: if F-Statistic < Upper bound values I (1), we fail to reject the null hypothesis (i.e. there is no long run relationship). Also if the F-Statistic > Upper bound values I (1) we reject the null hypothesis. The upper bound is used here to avoid the zone of indecision

In table 4.2, the computed F-statistics is (4.1527), which is less than the upper bound critical value at both the 5% and 1% confidence level. On the basis of this, the null hypothesis of no long run significance relationship between the independent variable(s) therefore rejected. And we infer that the variables are cointegrated.

In table 4.2, the computed F-statistics is less than the upper bound critical value at both the 5% and 1% confidence level. The decision rule is that if F-Statistic < Lower bound values I (1), we fail to reject the null hypothesis (i.e. there is no long run relationship). Therefore, we infer that the variables are not cointegrated. The researcher concluded that Foreign Direct investment has a long run significant relationship Nigeria economy.

**4.3 Discussion of Findings**

The study examines the impact of Aids and foreign direct investment on Nigerian Economy. From the results obtained as shown in table 4.3, the Prob. Value for the estimated regression of the leading explanatory variable was found to be greater than 0.05% (i.e. it is 0.6428) as such the study accept the null hypothesis and reject the alternative hypothesis and concluded that There is no significant relationship between FDI and Aids on Nigeria economy .Results obtained from table 4.3, shows the Prob.

Value for the estimated regression of the leading explanatory variable was found to be less than 0.05%( i.e. it is 0.0026) as such the study rejects the null hypothesis and concluded that Domestic investment has a significant impact on Nigerian economy.
The decision rule is that: if F-Statistic < Upper bound values I (1), we fail to reject the null hypothesis (i.e. there is no long run relationship). Also if the F-Statistic > Upper bound values I (1) we reject the null hypothesis. The upper bound is used here to avoid the zone of indecision

In table 4.2, the computed F-statistics is (4.1527), which is less than the upper bound critical value at both the 5% and 1% confidence level. On the basis of this, the null hypothesis of no long run significance relationship between the independent variable(s) therefore rejected. And we infer that the variables are cointegrated.

In table 4.2, the computed F-statistics is less than the upper bound critical value at both the 5% and 1% confidence level. The decision rule is that if F-Statistic < Lower bound values I (1), we fail to reject the null hypothesis (i.e. there is no long run relationship). Therefore, we infer that the variables are not cointegrated. The researcher concluded that Foreign Direct investment has a long run significant relationship Nigeria economy.

# CHAPTER FIVE

# SUMMARY OF THE FINDINGS, CONCLUSION AND RECOMMENDATIONS

## 5.1. Summary of Findings

This study examined the effects of aids and foreign direct investment on Nigeria economy. Time series annual data is used covering the period of 2010 to 2020. Due to the nature of the data, stationarity test using the Augmented Dickey-Fuller (ADF) test is used to check for unit root in the data. Hence forth, ARDL bound test is used to test for cointegration, after concluding the presence of cointegration, the study found out that;

i. There is no significant relationship between FDI and Aids on Nigeria economy
ii. Domestic investment has a significant impact on Nigerian economy.
iii. Foreign Direct investment has a long run significant relationship Nigeria economy.

## 5.2. Conclusion

This study examined the effects of aids and foreign direct investment on Nigeria economy. The study employed the ADF-test to avoid unit root problems that are usually related with time series data; also, the Ordinary Least Square (OLS) technique and bound testing approach to co-integration to analyze the presence of long run relationship. The study used time series data spanning from 1988 through to 2018. The Auto Regressive Distributed Lag (ARDL) bounds testing methodology as developed by Pesaran and Shin (1999) has been favored above the co-integration analysis developed by Engle and Granger (1987) and Johansen and Juselius (1990). The result showed that there is no long run relationship between the variables in the

model. From the analysis of the results, the study shows that gross domestic Investment (GDI) has a significant impact in the gross domestic product in Nigeria, the study concluded that there is no significant impact on economic growth by foreign direct investment in Nigeria while the study observed that there is a negative relationship between interest rate and economic growth under the period. An important finding of this study is that FDI to Nigeria is majorly driven by natural resources, and that governments can play an important role in promoting and developing its natural resources to encourage more investments to Nigeria. From this research work conducted, it can be concluded that foreign direct investment no matter how large its form; may not necessarily have a relative impact on the growth of the Nigerian economy.

### 5.3. Recommendations

Based on the findings of this research work, it is pertinent to provide a set of policy

Recommendation that would be applicable to the Nigerian economy:

i. Government should improve the investment climate for existing domestic and foreign investors through infrastructure development; the availability of power especially would go a long way because it would reduce the cost on alternative power supply and reduce capital flight.

ii. Provision of services and changes in the regulatory framework relaxing laws on profit repatriation which will encourage investors to increase their investments and also attract new investors. However, these recommendations can be achieved through a holistic approach in tackling corruption which has been the rot in the Nigerian economy.

iii. FDI and exchange rate were found to have more influence on economic growth, thus, government and policy makers should focus on developing suitable and enabling policies towards attracting FDI in Nigeria.

## References


Adaramola, A.O., & Obisesan, O.G. (2015). Impact of Foreign Direct Investment on Nigerian Capital Market Development. *International Journal of Academic Research in Accounting, Finance and Management Sciences, 5*(1), 103 – 103

Adegbite, E.O. and Ayadi, F.S. (2011) The Role of Foreign Direct Investment in Economic Development: A Study of Nigeria. *World Journal of Entrepreneurship, Management and Sustainable Development*, 6, 133-14 https://doi.org/10.1108/20425961201000011

Adeleke, K.M., Olowe, S.O. and Fasesin, O.O. (2014) Impact of Foreign Direct Investment on Nigeria Economic Growth. *International Journal of Academic Research in Business and Social Sciences*, 4, 234-242. https://doi.org/10.6007/IJARBSS/v4-i8/1092

Ajayi S.I. (2006), "The determinant of foreign direct investment in Africa: A survey Evidence". *African Economic Research Consortium.*

Akinlo, A.E. (2004) Foreign Direct Investment and Growth in Nigeria: An Empirical Investigation. *Journal of Policy Modeling*, 26, 627-639

Ali, N. and Hussain, H. (2017) Impact of Foreign Direct Investment on the Economic Growth of Pakistan. *American Journal of Economics*, 7, 163-170.

Anfofum, A.A., Gambo S.J., & Suleiman, T.S. (2013). Estimating the impact of Foreign Direct Investment in Nigeria. *International Journal of Humanities and Social Science*, 3(17), 138 – 145

Danja, H.K. (2012). Foreign Direct Investment and the Nigerian Economy. *American Journal of Economics*, 2 (3), 33 – 40

Farrell, R. (2008) Japanese Investment in the World Economy: A Study of Strategic Themes in the Internationalization of Japanese Industry. Edward Elgar, Britain. https://doi.org/10.4337/9781848442825.

Isah, W. (2012). Determinants of Foreign Direct Investment in Nigeria: An empirical Investigation. (Unpublished Master's thesis). Eastern Mediterranean University, Gazimagusa, North Cyprus

John, E.I. (2016) Effect of Foreign Direct Investment on Economic Growth in Nigeria. *European Business & Management*, 2, 40-46.

Koojaroenprasit, B. (2012) The Impact of Foreign Direct Investment on Economic Growth: A Case Study of South Korea. International *Journal of Business and Social Science*, 3, 8-18. Louzi, B.M. and Abadi, A. (2011) The Impact of Foreign Direct Investment on Economic Growth in Jordan. IJRRAS, 8, 253-258.

Mathew, H.O., & Johnson, A.A. (2013). Accelerating Economic Growth in Nigeria, The Role of Foreign Direct Investment: *A Reassessment Current Research Journal of Economic Theory*, 5(4), 71 – 81.

Mathew, H.O., & Johnson, A.A. (2014). Impact of Foreign Direct Investment on Employment Generation in Nigeria: A Statistical Investigation. *Journal of Business and Managemen*t, 16 (3), 44 – 56

Njogo, B.O. (2013). Foreign Direct Investment Determinants in Pre-and Deregulated Nigerian Economy (Unpublished electoral dissertation). University of Nigeria Nsukka, Enugu, Nigeria.

Nurudeen, A., & Wafure, O.G. (2010). Determinants of Foreign Direct Investment: An Empirical Analysis. *Global Journal of Human Social Science.* 10(1), 26 – 34

Okon, J.U., Jacob, O.A., &Chuku, A.C. (2011). Foreign Direct Investment and Economic Growth in Nigeria: *An Analysis of the Endogenenous Efects*, 4(3), 53 – 66

Olumuyiwa, O. (2013). Impact of Foreign Direct Investment Inflow on Economic Growth in Pie and Post Deregulated Nigeria Economy. A Granger Causality Test. *European Scientific Journal*, 9(25), 335 – 356

Onu, J. C. (2012) Impact of Foreign Direct Investment on Economic Growth in Nigeria. *Interdisciplinary Journal of Contemporary Research in Business*, 4, 64-78.

Onuoha, C.B., & Orogwu, U.O. (2013). The Determinants of Foreign Direct Investment (FDI) and the Nigerian Economy. *American International Journal of Contemporary Research*, 3(11), 165 – 172

Oseghale, B.D & Amonkhienan, E.E (1987). Foreign Debe, Oil Export, Direct Foreign Investment (1960 – 1984). *The Nigerian Journal of Economic and Social Studies*, 29(3), 359 – 80

Ugochukwu, S.U., Okore, A.O., & Onoh, J.O (2013). The Impact of Foreign Direct Investment on the Nigerian Economy. *European Journal of Business and Management*, 5(2), 25 – 33

Zhang, K.H. (2001), “Does foreign direct investment promote economic growth? Evidence from East Asia and Latin America”. *Contemporary Economic Policy*, 19(2, April): 175–85.

# Appendices

## Appendix I: Data

| Year | GDP | FDI | GDI | INTR |
|---|---|---|---|---|
| | | | | |
| 2010 | 24,665,200,000,000 | 2.431643 | 19.897 | 15.48 |
| 2011 | 25,236,100,000,000 | 2.930908 | 22.04954 | 18.36 |
| 2012 | 55,469,400,000,000 | 1.658475 | 17.5621 | 17.59 |
| 2013 | 63,713,400,000,000 | 2.154611 | 16.36056 | 16.02 |
| 2014 | 72,599,600,000,000 | 1.53903 | 14.95883 | 16.79 |
| 2015 | 81,010,000,000,000 | 1.08024 | 14.90391 | 16.72 |
| 2016 | 90,137,000,000,000 | 0.818201 | 15.8027 | 16.55 |
| 2017 | 95,177,700,000,000 | 0.634336 | 15.4901 | 16.85 |
| 2018 | 102,575,000,000,000 | 1.098507 | 15.36674 | 6.7 |
| 2019 | 105,345,000,000,000 | 0.930745 | 15.47433 | 5.8 |
| 2020 | 107,346,555,000,000 | 0.656965 | 14.99714 | 7.2 |

**A: Unit Root Results**

Null Hypothesis: LFDI has a unit root

Exogenous: Constant

Lag Length: 0 (automatic – based on SIC, maxlag = 7)

| | T-Statistic | Prob.* |
|---|---|---|
| Augmented Dickey-Fuller test statistic | -3.118544 | 0.0358 |
| Test critical values: 1% level | -3.670170 | |
| 5% level | -2.963972 | |
| 10% level | -2.621007 | |

*MacKinnon (1996) one sided p-values.

Null Hypothesis: LFDI has a unit root

Exogenous: Constant, Linear Trend

Lag Length: 0 (Automatic – based on SIC, maxlag = 7)

| | T-Statistic | Prob.* |
|---|---|---|
| Augmented Dickey-Fuller test statistic | -4.576985 | 0.0052 |
| Test critical values: 1% level | -4.296729 | |
| 5% level | -3.568379 | |
| 10% level | -3.218382 | |

*MacKinnon (1996) one sided p-values.

Null Hypothesis: D(LFDI) has a unit root

Exogenous: Constant

Lag Length: 0 (Automatic – based on SIC, maxlag = 7)

| | T-Statistic | Prob.* |
|---|---|---|
| Augmented Dickey-Fuller test statistic | -9.771690 | 0.0000 |
| Test critical values: 1% level | -3.679322 | |
| 5% level | -2.967767 | |
| 10% level | -2.622989 | |

*MacKinnon (1996) one sided p-values.

Null Hypothesis: D(LFDI) has a unit root

Exogenous: Constant, Line Trend

Lag Length: 0 (Automatic – based on SIC, maxlag = 7)

| | T-Statistic | Prob.* |
|---|---|---|
| Augmented Dickey-Fuller test statistic | -9.608354 | 0.0000 |
| Test critical values: 1% level | -4.309824 | |
| 5% level | -3.574244 | |
| 10% level | -3.221728 | |

*MacKinnon (1996) one sided p-values.

Residual Diagnostics

I- Normality Test