Foreign Direct Investment, Financial Development and Economic Growth in Nigeria

Olusegun Johnson BOLAJI
LCU/PG/000761

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Certification

This is to certify that Olusegun Johnson B0LAJI with Matriculation Number LCU/PG/000761 carried out this research work titled "Foreign Direct Investment, Financial Development and Economic Growth in Nigeria" in theDepartment of Economics, Faculty of Management and Social Sciences, Lead City University, Ibadan, Oyo State Nigeria, for the award of Master of Science Degree (M.Sc) in Economics and that this has not been previously submitted.

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Dr. Emiola T.O [Co-supervisor] Date

…… ……

Prof. W.O, Akerele Date

(Supervisor)

…… ……

Dr. O. O. Ogunjinmi Date

(Head of Department)

Dedication

This research work is dedicated to Almighty God who by his mercy made it possible for me to conclude this programme successfully despite all the shortcomings.

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Abstract

The study explores how FDI inflows impact the Nigerian economy and the interplay between FDI, financial development, and economic growth using secondary annual time series data from 1981 to 2021. The ARDL was used as the estimation method. The findings showthat FDI has a negative and significant impact on economic growth in the short run, while the long run reflects a positive and significant effect. Among financial development indicators, it was found that in the short run the first lag of financial access has a positive significant effect on FDI inflows, financial stability has a negative and statistically significant effect, the first lag of financial depth has a negative and significant effect, while financial efficiency (BLD) has a positive and significant effect on FDI inflows in Nigeria. In the long run however, only financial efficiency and financial stability were found to have a positive and negative significant effect respectively on FDI inflows in Nigeria. Assessing the interaction of these financial development indicators interact with FDI, it was found that the effect of the interaction of Financial depth and FDI on economic growth is positive both in the long run and short run, while that of Financial access and FDI revealed a positive effect on economic growth which is similar to the interaction of Financial stability and FDI on economic growth which was also found to be positive in the short run. Meanwhile, in the long run, the interaction of financial efficiency and FDI on economic growth was found to be negative. It was therefore concluded that FDI has a positive impact on economic growth and that financial development indicators are critical factors that affect economic growth in Nigeria. The study suggest that policymakers should focus on enhancing financial development indicators to complement FDI and boost economic growth.

Keywords: Financial Development, Foreign Direct Investment, Economic Growth

Word Count: 300

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Chapter One

Introduction

1.1 Background to the Study

Foreign investment plays a crucial role in boosting economic growth in countries, especially in the developing countries by mobilizing savings, diversifying risks and promoting economic liberalization. The international flow of financial resources takes the form of private foreign investment and public development assistance, with foreign direct investment (FDI) being the major form of private foreign investment. MNCs are the major players in FDI and bring ownership and direct control of firms in the host country[1]. The era of globalization has led to a significant increase in capital inflows across the world due to the increased globalization of investors seeking higher returns and the opportunity to diversify risk globally. Many economies have encouraged foreign investment by removing restrictions on foreign direct investment and improving their economic environment[2].

The attraction of foreign capital flows is a priority for all stakeholders globally, including less developed countries where the lack of capital is a major constraint to economic growth and prosperity. However, the share of credit to the private sector in West Africa has declined over the years, resulting in staggered growth rates. Despite the relative improvement in financial development from 2005 to 2012, there was a sharp decline after 2012. Similarly, the inflow of FDI into the West African economy increased until 2014, but has declined sharply since then[3].

The preference for FDI emanates from the numerous benefits it offers. An important one is that, FDI is considered less prone to crisis due to the fact that investors usually have a better investment arrangement and understand the economic dynamics of the

host country. Hence, stakeholders in emerging and developing economies usually anticipate that FDI inflow will bring the much-needed capital, new technologies, marketing techniques and management skills[4].

In addition, there have been inflows of Foreign Direct Investment (FDI) and increase in the level of domestic investment in developing economies. The foreign direct investment inflows to developing countries have also increased during the last four decades. But statistics have shown that FDI inflows to Africa declined from US $50.4 billion in 2016 to US $42 billion in 2017 (a 21% drop)[5].

Foreign direct investment is seen as a process of moving technology and capital from a nation either developed or developing countries to another nation[6]. Foreign direct investment (FDI) is recognized as a powerful engine for economic growth. It enables countries to build up physical capital, create employment opportunities, develop productive capacity, enhance skills of local labour through transfer of technology and managerial know-how, and help integrate the domestic economy with the global economy. Foreign Direct Investment (FDI) could be explained as investment that is made to acquire a lasting interest in an enterprise operating in an economy other than that of the investor, the investors purpose being to acquire a lasting interest and have an effective control in management of the enterprise which is long- term in nature.

Foreign Direct Investment (FDI) became the largest single source of external finance for developing countries, relative to other sources of private capital inflows, which led to the virtual disappearance of commercial bank lending in 1980s, policy makers in emerging markets eased restrictions on incoming foreign investment. Many of these countries offer special incentives to foreign enterprises including lower income taxes or income tax holidays and import duty exemptions. In some cases, domestic firms may increase productivity simply by observing the business methods of the foreign

firms and the mix of their supply and demand[1]. Foreign Direct Investment (FDI) has increased tenfold over the last 20 years in developing nations. This kind of investment brings private overseas funds into a country for investments in manufacturing or services. FDI has spread to become a truly global phenomenon, no longer the exclusive preserve of Organization for Economic Cooperation and Development (OECD) countries. FDI has grown in importance in the global economy with FDI Stock now constituting over 20% of global GDP. In the last few years, the emerging market countries such as China and India have become the most favoured destinations for FDI and investor confidence in these countries has soared. By 2021, as per the FDI Confidence Index compiled, China and India hold the first and second position respectively, whereas United States has slipped to the third position[5].

The African economies rely on FDI inflows from the developed countries to attain the much-desired sustainable growth and development in the region. Though the region has recorded some impressive growth in recent times, its ability to sustain it calls for concern. This is because one of the growth-enhancing factors in the region[Power[has not been fixed over the years. Available statistics revealed that most of the countries in Africa have been unable to attract adequate FDI in recent years[7]. In Africa, Nigeria is the third host economy for FDI, behind South Africa and Egypt. Some of the investing countries in Nigeria are the USA, United Kingdom, China, the Netherlands and France[8].So many countries including Nigeria have significantly benefited from the inflow of foreign direct investment (FDI) into their respective economies[9].

In Nigeria, the performance of the FDI has been low, this is as a result of the weak macroeconomic framework in Nigeria. The success of foreign investments in the country mainly is determined by the market size, human capital, and stable

macroeconomic environment. FDI has a positive influence on output, but not significant, suggesting the poor performance of FDI on economic growth in Nigeria. The country's share of the global FDI is insignificant regardless of the various reforms[10]. The declined inflows of FDI into the country was due to the COVID 19 pandemic which triggered a flight to safety among international investors and a slump in the price of crude oil which accounted for 90 percent of Nigeria dollar earnings. Also Scarcity of dollars due to decline in dollars earnings and limited dollar injection by the CBN in its bid to conserve external reserves and the high inflation rate in Nigeria compared to what obtains in other countries, also played a role as it reduced the country attractiveness to foreign investors.

Many countries and continents (especially developing country like Nigeria) now see attracting FDI as an important element in their strategy for economic development. This is most probably because FDI is seen as an amalgamation of capital, technology, marketing and management. It is often argued that FDI is an important source of capital; that it complements domestic investment, creates new jobs opportunities and in most cases, related to the enhancement of technology transfer, which of course boosts economic growth. While the positive FDI-Growth linkage is still a subject of debate, macroeconomic studies nevertheless support a positive role for FDI especially in a particular environment[11].

Nigeria has a dual economy with a modern segment dependent on oil earnings, overlaid by a traditional agriculture and service economy. At independence in 1960, agriculture accounted for well over half of GDP, and was the main source of export earnings and public revenue. The oil sector, which emerged in the 1960's and was firmly established during the 1970s, is now of overwhelming importance to the point of over-dependence. Undoubtedly, Africa and indeed Nigeria is facing an economic

crises situation featured by inadequate resources for long-term development, high poverty level, low capacity utilization, high level of unemployment and other Sustainable Development Goals (SDG) has been difficult to achieve in 2020 as projected.

This has brought about several changes in policy and regulations in order to encourage foreign investor to invest in the country. Other measures include – the liberalization of the foreign investment regime to allow major foreign ownership, lifting foreign exchange controls and the privatization of Nigeria's public enterprises. This research is aimed at taking an in-depth analysis of the major private capital inflow - foreign direct investment to a growing economy like Nigeria.

1.2 Statement of the Problem

The effect of foreign direct investment |FDI| on economic growth is widely believed to be contingent on the development of financial sector. Many studies have only focused on FDI at the expense of financial development, some have explored whether the level of financial development encourages growth while ignoring FDI. They have not taken into account the interaction between FDI and financial development, though recent research pertaining to the connections among FDI, financial development and economic growth have made great stride. It is well known that FDI and domestic financial markets are important sources of capital investment funds for manufacturers, and because the substitutable or complementary relations between them are very important. Foreign direct investment FDI and its possible effect on economic growth in Nigeria is not only convincing but too important to be ignored. Nigeria being the most populous black nation in the world and officially the most populated country in Africa with over 200 millions people, has the largest market size in the continent of Africa with a nominal domestic product of over $478.9 billion in 2020[10]. However

she has a low per capital income of $2,097, a 5.9% decline from 2019 which stood at $2,229.86 and is about 9.97% increase from 2018. Comparing this to similar top emerging economies in Africa and Asian countries in the world such as South Africa with $6,001.4, Brazil $8,717.19, China with $10,261.68 and Russia $11,585.0 respectively. The economy of Nigeria suffers from different types of deficiency which brought so many limitations for growth sustainability and poverty reduction[11].

One of the problems is partial diversification of production, exports and budget revenue. Infrastructure deficit is also prevalent in the country. The huge debt and financial crises faced by Nigeria have constituted much burden to the economy, making it difficult to improve domestic savings. And for a country to be able to have an increased level of investment, it must be able to increase its savings rate[10]. Nigeria also faces the problem of macroeconomic instability, high incidence of currency crashes, double-digit inflation and excessive budget deficits. Countries with high inflation tend to attract less FDI. Lack of policy transparency and problem of economic policy inconsistency is also of great concern because they increase transaction costs, thereby reducing the incentives for foreign investment.

During the 1980s, a number of interesting studies in the role of foreign direct investment in stimulating economic growth appeared. Several authors have observed that the major reason for increased effort in attracting more FDI has been stemmed from the belief that FDI has several positive effects. In contributing to the importance of FDI, it has also been shown that FDI is three times more efficient than domestic investment. Available evidence for developed countries seems to support the idea that productivity of domestic firms is positively related to the presence of foreign firms. The result for developing countries is not clear, with some finding positive spillover and others reporting limited evidence.

The Nigerian government has recognized the importance of FDI in enhancing economic growth and development. And various strategies involving incentive policies and regulatory measures have been put in place to promote the inflow of FDI to the country In addition, some of the problems of inflow of FDI in Nigeria are the frequent electricity shortages, the high cost of transportation and lack of financing. Transport cost is more in Nigeria than in other regions like East Asia. Labour cost is also higher than the other regions at the same GDP level. The linkage between FDI and economic growth has been the subject of controversy and considerable research for many decades. Interest in the area has been revived in recent years largely due to the globalization of the world economy and to the recognition that multinational corporations play an increasingly important role in trade, capital accumulation and economic growth in developing countries.

Despite the numerous empirical studies on the growth effect of FDI literature on the FDI-Growth nexus seems to have ignored the importance of the role not only of the financial development but also other factors, such as inflation and exchange rate. The level of financial development is crucial because a lack of strong financial market might be preventing the foreign and domestic investors from accessing the financial resources required. The study will investigate the effect of FDI inflow on Nigeria economy and also determine the effect of the interaction of FDI inflows and financial development on economic growth in Nigeria.

1.3 Aim and Objectives of the Study

The primary aim of this study is to examine the relationship among Foreign Direct Investment Inflows, Financial Development and Economic Growth in Nigeria. The specific objectives are to;

i. Investigate the effect of FDI inflow on economic growth in Nigeria.

ii. Examine the effect of financial development on FDI inflow in Nigeria.

iii. Analyse the effect of financial development on the relationship between FDI and economicgrowth in Nigeria.**1.4.Research Questions**

This study provides answers to the following research questions:

1. How does FDI influence economic growth in Nigerian?

2. What is the effect of financial development on economic growth in Nigeria?

3. What is the effect of financial development on the relationship between FDI and economic growth in Nigeria?

1.5 Hypotheses

Ho1: There is no significant effect of FDI inflow on economic growth in Nigeria.

Ho2: There is no significant effect of financial development on FDI inflow in Nigeria.

Ho3: There is no significant effect of financial development on the relationship between FDI and economic growth in Nigeria.

1.6 Significance of the Study

Finding from the study will be of immense benefits in a number of ways to both academic and policy makers. The expected outcome shall serve as a useful guide for future policies as it relates to factors stimulating growth within the economy. It

would help the policy makers to understand that there is need to formulate policies that would enable foreign investors to invest, build companies and put in place adequate measures that would create an enabling environment that will allow businesses to thrive. Also, measures aimed at controlling inflation rate and ensure that exchange rate of Naira is highly competitive in international market will be identified which will serve as guide to policy makers in making policies that will enhance economic stability.

This study would also enable government to understand the need to create an enabling environment for foreign investors to invest in the country, provide adequate security for lives and properties and ensure a stable macroeconomic environment. This study will be of immense benefit to stake holders as it will inform them on the need for foreign investment in the country. The study will also add to the existing knowledge on FDI inflow and economic growth and how the interaction of financial development with FDI influence the growth of the Nigerian economy.

1.7 Scope of Study

The study will examine the effect of foreign direct investment FDI inflows on the Nigerian economy. It will look at the roles of financial development in attracting FDI into the country and will cover the period between 1981 -2021. This time frame was chosen as it encompasses the implementation of several economic reform programs in Nigeria's history. These reforms included the Structural Adjustment Program (SAP) of 1986, the National Economic Empowerment and Development Strategy (NEEDS) of 2004,the 2011 Transformation Agenda, and Economic Recovery and Growth Plan (ERGP) 2017-2020.

1.8 Limitation of the Study

Getting data primarily by the researchers always require lots of funding and time. Therefore, the major limitation of this study is unreliable nature of data on Foreign Direct Investment, measures of Financial Development, Economic Growth and other macroeconomic variables used in the study, as there are different conflicting figures on the same variables from different sources. Again, funding and time present a limitation to the study as the research is self-funded with a limited time of execution.

1.9 Operational Definition of Terms

Economy: This is a state of a country or region in terms of the production and consumption of goods and services and the supply of money.

Economic Growth: an increase in the amount of goods and services produced per head of the population over a period of time.

Financial Development: This is a system through which financial instruments, markets and intermediaries ease the effects of information, enforcement and transactions.

Foreign Direct Investments (FDI): This is defined as investment that is made to acquire a lasting interest in an enterprise operating in an economy other than that of the investor, the investors purpose being to acquire a lasting interest and have an effective control in management of the enterprise which is long- term in nature.

Gross Domestic Product (GDP): This measures the monetary value of final goods and services over a period of time usually one year. .It is one of the primary instruments used to gauge the health of a country's economy.

Endnotes

1. H. Kukaj & F.B. Ahmeti. *The importance of foreign direct investments on economic development in transitional countries: a case study of Kosovo*. **European Scientific Journal**, 12(7), 2016. 288-305. https://doi.org/10.19044/esj.2016.v12n7

2. B. A. Giwa, E. O. George, H. Okodua & O. S. Adediran. *Empirical analysis of the effects of foreign direct investment inflows on Nigerian real economic growth: Implications for sustainable development goal-17,***Cogent Social Sciences**, 6(1), 2020 1727621, DOI: 10.1080/23311886.2020.1727621.

3. O. Adediran, E. George, P. Alege & O. Obasaju. *Is there any relationship between monetary policy tools and external credit-growth nexus in Nigeria?* **Cogent Economics & Finance**, 7, 2019. 1625100. doi:10.1080/ 23322039.2019.1625100.

4. E.O. Amoo. *Introduction to special edition on Covenant University's perspectives on Nigeria demography and achievement of SDGs-2030*. Africa Population Studies**,** 32(1).2018. http://aps.journals.ac.za/ pub/article/view/1170.

5. United Nations Conference on Trade and Development-UNCTAD .*WIR-Foreign direct investment to Africa fell by 21% in 2017, says United Nations report, Switzerland*.2017 Retrieved from https://unctad.org/en/pages/PressRelease.aspx?

6. S.A. Alphonsus. *Effect of Foreign Direct Investment on Economic Growth in Nigeria*.Journal of Accounting and Financial Management, 5(2), 2019, E-ISSN 2504-8856.

7. O.F. Osemene, K.D Kolawole & I. D Olanipekun. Deterninants of Foreign Direct Investment and its Causal Effect on Economic Growth in Nigeria. KJBM, 8(1) 2019.

8. UNCTAD United Nations Conference on Trade and Development. *World Investment Report*. (2018) https://unctad.org/en/PublicationsLibrary/wir2018_en.pdf

9. A.M. Acquah & M. Ibrahim. *Foreign direct investment, economic growth and financial sector development in Africa.* Journal of Sustainable Finance and Investment, 10(4) 2020: 315-334. https://doi.org/10.1080/20430795.2019.1683504

10. K.B. Oyero. *Foreign Direct Investment Trends and Economic Growth in Africa: Nigeria Experience in Pre Recession Era. International*Journal of Academic Accounting, Finance & Management Research, 3(2), 2019, 1-7.

11. A. Orji, G. U. Nwagu, J. E. Ogbuabor & O. I. Anthony-Orji. *Foreign Direct Investment and Growth Nexus: Further Evidence from Africa's Largest Economy.* Journal of Infrastructure Development 13(1) 2021 65–78, India Development Foundation Reprints and permissions: in.sagepub.com/journals-permissions-India DOI: 10.1177/09749306211024433 journals.sagepub.com/home/joi (2021).

Chapter Two

Literature Review

This chapter presents a review of past literature focusing on concepts, theories and the findings of scholars in related studies. The summary of gaps found in literature is also presented along with the theoretical framework of the study.

2.1 Conceptual Review

2.1.1 Foreign Direct Investment

Foreign direct investment (FDI) is viewed as an investment in the form of a controlling ownership in a business in a specific nation by an individual or organization situated in another nation. FDI involves mergers and acquisitions, building new facilities, reinvesting benefits earned from abroad tasks and intercompany loans[1]. Foreign direct investments consist of external resources, including technology, managerial and marketing expertise and capital. All these generate a considerable impact on host nation's production capabilities. Foreign direct investment occurs when an investor based in one country, home country, acquire an asset in another country the host country with the intent to manage the asset. A direct investor may be an incorporated or unincorporated private or public enterprise, an individual or a group of related individuals, a government, or a group of related incorporated and/or unincorporated enterprises which have a direct investment enterprise[2].

Conversely, a direct investment enterprise is an incorporated or unincorporated enterprise in which a foreign investor has economic interests in the incorporated/unincorporated enterprise. Foreign direct investments are the inflows of investments to acquire lasting management interest in an enterprise operating in an

economy other than that of the investor[3]. The interest should be 10% or more of voting stock totaling of equity capital, reinvestment of earnings, other long-term capital, and short-term capital as shown in the balance of payments. FDI are classified into horizontal and vertical. Horizontal FDI which is often a market expansion strategy of the investing company into potentially high growth economies is an investment made to carry out similar business operations as already operated by the foreign investor in other countries. Vertical FDI is the disintegration of the production process vertically by contracting out some production stages with different input requirements with the intention of maximizing profit margins. In this case, goods are not produced for sale to the country receiving FDI, but for export purposes. Vertical integration at times entails that the foreign associates source inputs and materials from the parent company[4].

FDI is always undertaken by domestic firms which have accumulated some benefits in the local market such benefits includes patents and know-how that bestowed on them when they enter into foreign markets. Foreign direct investment generates investments that may not be possible with the local resources only. Working with large firms linked to the global market, FDI promotes workers and management training; provide advanced technology that is not easily transferable outside the firms and already in use by foreign firms. Finally, it generates higher paying jobs and links the recipient economy into the world economy in a way that would be difficult to achieve by new firms of a local origin[6].

FDI can bring impressive growth, as in China's coastal provinces, but also instability and economic distress, as during the 1997-98 Asian financial crises. Governments of many poor countries see foreign capital as a means of economic growth, and they have taken steps to attract it. These steps often include minimizing business regulation and weakening codes for labor, health, and the environment. Such governments may also try to improve the investment climate by using violence to silence opposition parties and

movements. Rich countries, for their part, have sought legal protection for investors, and have used the World Bank and the IMF to impose new arrangements in this field. Bilateral and multilateral agreements, such as the North American Free Trade Area, protect investments at the expense of environmental and health regulations[7, 8].

This scenario makes one wonder if Nigeria has put in place proper regulations to protect its citizens, businesses and investors from undue influence. Policy measures other than the ones concerning entry and ownership were also used to control the activities of Trans National Corporations (TNCs) in accordance with national developmental goals. Firstly, there were measures to ensure that the "right" kinds of technology were acquired in the "right" terms. The technology that were to be brought in by the investing TNCs was carefully screened and checked whether they were not overly obsolete or whether the royalties charged on the local subsidiaries, if any, were not excessive. Secondly, those investors who were more willing to transfer technologies were selected over the others that were not, unless they were too far behind in terms of technology. Thirdly, local content requirements were quite strictly imposed in order to maximize technological spillovers from TNC presence. One thing to note, however, is that the targets for localization was set realistically, so that they would not seriously hurt export competitiveness of the country – in some industries they were more strictly applied to the products destined for the domestic market[5, 6, 9].

2.1.1.1 Determinants of FDI

Inflation

Inflation occurs when there is an increase in the price of goods and services. This increase in price is seen as inflation when it is persistent and above the specified benchmark. For

instance, an increase in the money supply can gravitate to a higher price level in a matter of time. There are various types of inflation known in the literature, some of these types are: demand-pull, which arises as a result of an increase in aggregate demand without a corresponding increase in supply, supply push or cost push inflation happens when a reduction in supply caused by an increase in the cost/price of the commodity produced[10].

Inflation is the increase in the general price level in the economy over a given period of time. It is regarded as one of the determinants of government spending in Nigeria[4]. Inflation as the general price increase levels by definition is introduced to take into account the general increase in commodity prices. The ability of monetary authorities to maintain single-digit inflation would increase the capacity to accelerate economic growth. However, the reverse is the case for Nigeria. Available data on the trend of inflation indicate that the inflationary situation in the country has become alarming since 1980 until 2018[6]. The inflationary trend shows that Nigeria had only maintained single-digit inflation for fourteen years in the past thirty-eight years. However, the persistent increase in the inflation rate in Nigeria is evidence of the failure of both monetary and fiscal policies. The inflationary situation in Nigeria has become a threat to the economy and closely related to the persistent increase in the price of oil over the years, which began in the early 1980s when the petrol price increased from 9.5k per liter to 15.4k per liter. This increase directly or indirectly affects the economic activities of the country, the transportation cost, the cost of locally produced goods, rents, foodstuffs, among others. Also, 2012 witnessed another increase in the price of petrol to N97.00 per liter and on assuming to the office by the present administration, also moves the price to N145 per liter in 2016. This eventually made the price of goods and services skyrocket [11].

Inflation is one of the most crucial macro-economic problems facing most countries of the world especially the underdeveloped and developing countries. Some of the adverse

effects include decreasing purchasing power of the country's currency, unemployment and uneven distribution of income. The problem of inflation has been on the increase in the Less Developed Countries (LDCs) of the world over decades with Nigeria inclusive.

Exchange Rate

An exchange rate is the rate at which one currency will be exchanged for another. Exchange rate is known as the price of one currency against another[12] . It is also regarded as the value of one country's currency in relation to another currency. Exchange rates are determined in the foreign exchange market, which is open to a wide range of different types of buyers and sellers, and where currency trading is continuous: 24 hours a day except weekends..

In recent times, Nigeria's rising spate of poverty, unstable growth and increasing rate of unemployment have been provoked by series of policy failures, poor technical expertise, weak manufacturing sector, neglect of the Agricultural sector and over-dependence of crude oil for foreign exchange earnings. The volatility in the global oil market and the inability of the country to produce the required volume of exports to douse the foreign currency demand tension, remain a key challenge in the realization of internal and external sector stability objectives. Having implemented a number of financial sector reforms such as the adoption of different types of exchange rate policies for decades and the adoption of the recent Dutch Auction System (DAS), exchange rate in Nigeria is yet to gain both internal and external balance. For instance, statistical report from the Central Bank of Nigeria revealed that between 1981 and 1985, the Naira was relatively stable against the US dollar and a number of foreign currencies like the Pound Sterling, Franc etc. Specifically, about N0.61 and N0.89 was exchanged for 1 USD as of 1981 and 1985 respectively. In 1989, major deterioration in the domestic currency set in when the rate of exchange rose to about N7.39. The situation has remained on a worsening note to the

extent that, about N133.15 and N192.44 was traded for 1 USD in 2004 and 2015 respectively. The situation became highly horrendous that the figure further rose to about N305.1 in 2017[11, 13].

Unfortunately, the Nigeria financial system has remained highly volatile, notwithstanding the series of reform efforts to stabilize the system. In the early phase of 2019, it was anticipated that the Foreign Exchange (FOREX) market would remain largely stable. Nevertheless, the precariousness in the global oil market was adduced the principal cause of the exchange rate depreciation of about N390 to N415 per US$ recorded at the end of year 2019[14]. The Central Bank of Nigeria (CBN), in its efforts to maintain its policy of exchange rate stability, raised the amount of dollar injections into the foreign exchange market to $40 billion in 2018. This figure represents about 87 percent increase in the volume of dollars that was released by the monetary authority with a view to stabilizing the Nigerian financial system. Essentially, Nigeria's huge labour base, large market, strategic geographical setting and prospects ought to make the country a major hub for industrial development in Africa. Nevertheless, factors like weak policies, poor forecasting, corruption, lack of appropriate monitoring design and quite a lot of other factors weaken the efficient utilization of these enormous opportunities in the country[15].

Consequently, the premium between the official and parallel market remained wide throughout the period. Given the import dependent nature of the Nigerian industrial sector, the continued depreciation of the naira exchange rate vis-à-vis the currencies of other major trading partners, meant that more resource would be needed to increase domestic output. A depreciating exchange rate in the absence of domestic sources for input and inadequate infrastructure will raise the cost of production, which will in turn make locally produced goods less competitive compared to the imported counterparts, thus, reversing the benefit of cheaper exports expected from depreciation of any currency. Similarly, the

over-dependence of the economy on imported capital goods implies that a depreciating exchange rate would crowd out marginal investment as a result of high investment cost[2].

Human Capital

Human capital is seen as a component of intellectual capital. It represents the investments made on humans and encompasses human-related factors like knowledge, skills, experience, sufficiency, business quality, employee relations, emotional intelligence, entrepreneurship, flexibility, employee loyalty, employee satisfaction, education, and creativity[16]. Human capital can be described as any contribution made by the individuals through their knowledge, skills and experience gained which would lead to the good economic performance of a country. Human development as the process that involves the gathering and ensuring that the total number of people that possess the skill, education, experience which are necessary for both economic and political development of a country is increasing[17]. The development of human capital is vital to the development of the education and health of a country. Also, it plays a crucial role in the socioeconomic development of a country as well as in employment.

Investment in human capital development is however indispensable as it focuses on the enhancement of productivity, knowledge, skill, and health of a country's human resources for effective exploitation and utilization of the available resources to promote growth and development. Nonetheless, it is not feasible for any country to achieve sustainable economic growth and development without adequate investment in human capital. The concept of human capital has shifted the focus of economic development theorists to generally agree that the quality of human capital has a substantial effect on economic development as well as economic growth[13]. The quality of human capital in developing countries is deficient compared to developed countries. This can be linked to the lack of insufficient investment in human capital. The United Nations recommends that 26 percent

of the total expenditure must be devoted to education but in Nigeria between 1986 to 1990 only 5.64% of total GDP was devoted to education and 5.84% between 1999 and 2003, between 2015-2020 the expenditure on education in Nigeria amounted to 6.7 percent of the total federal budget, within these periods , the share of federal budget invested in education fluctuated. Overall, the highest figure was reached in 2015, when over 10% of the national budget was allocated to the sector. Lack of investment in human capital will lead to inefficiency of the labour force, which results in low productivity. The concept of human capital could be related to other forms of capital. Investments in human capital yield income and other benefits over a long-time[18]. Hence, the concept of human capital is said to be the skills and efforts of human resources in any given economy that is geared towards attaining economic growth. Notably, human capital can be improved over time, through either informal or formal skill acquisition, as well as other social investment that enhances productive capacities of labour[15].

2.1.1.2 Types of FDI

Greenfield Investments

Greenfield investments are made when foreign companies expand the bulk of investment or establish new production capacities in the host country. Greenfield investments are a most welcomed foreign investment for host countries, especially when the main goal is to decrease high unemployment. Greenfield investments are the primary target of a host nation's promotional efforts because they create new production capacity, jobs, transfer technology and know-how, and can lead to linkages to the global marketplace[17]. In terms of human capital, greenfield FDI usually creates new jobs and increases the productivity. Though greenfield investments are welcomed in the host country, one should note that this might crowd out local companies and some specific industries (particularly those dependent upon technology). While the profit of local companies flows back into the

domestic market, this is not always the case with foreign companies that undertake greenfield investments. Because of high unemployment, in case of Kosovo, this type of FDI or similar sub-types are most welcomed[17].

Mergers and Acquisitions

Mergers and acquisitions (M&A) usually are undertaken when a transfer of existing assets from local firms to foreign firms takes place. In other words, assets and operation of firms from different countries are combined to establish a new legal entity. It is assumed that in countries with lower levels of development there are fewer opportunities for M&A behavior that exist. Based on annual Study on Perception of FDI, compared to greenfield investment "M&A provide no long term benefits to the local economy, because in most deals the owners of the local firm are paid in stock from the acquiring firm, meaning that the money from the sale could never reach the local economy"[19]. The most emphasized benefit from this type of FDI is increased productivity of the workforce, but not much can be proved in terms of increased employment. Empirical studies in this line are inconclusive and contradictory.

Joint Ventures

Joint ventures can involve a local company, government or a foreign company operating in the host country. Cross-border joint venture is one in which economic entities from at least two countries are involved. One positive spillover in terms of human capital is technical spillover especially when there is a combination of foreign and local company. One of the main factors "influencing the viability and success of cross-border joint ventures concerns the choice of partner and reciprocal trust between partners" 16. Rather than profit gain, there are different factors and motives behind joint ventures. Formation of joint ventures has nine factors such as: economies of scale, market size, economies of

scope, technological uncertainty, technological change, cultural difference, interest rates, protection of autonomy and missing patent rights[20]. The significance of human capital development in joint ventures varies in developed countries compared to transition and underdeveloped countries.

2.1.1.3 FDI as an Economic Growth Indicator

Economic growth is an important factor in reducing poverty and generating the resources necessary for human development and environmental protection. There is a strong correlation between gross domestic product (GDP) per capita and indicators of development such as life expectancy, infant mortality, adult literacy, political and civil rights, and some indicators of environmental quality. However, economic growth alone does not guarantee human development. Well-functioning civil institutions, secure individual and property rights, and broad-based health and educational services are also vital to raising overall living standards[21]. Despite its shortcomings, though, GDP remains a useful proxy measure of human well-being.

World economy has grown approximately fivefold since 1950, an unprecedented rate of increase. The industrialized economies still dominate economic activity, accounting for US$22.5 trillion of the US$27.7 trillion global GDP in 1993[22]. Yet, a remarkable trend over the past 25 years has been the burgeoning role played by developing countries, in particular the populous economies of east and south Asia. A major factor in this development has been the steady integration of the global economy. Since the Second World War, international trade has grown consistently faster than output and now accounts for approximately 25 percent of world GDP. Other measures of globalization include the enormous expansion of international financial markets, the spread of new technologies that have revolutionized international communications and encouraged the development of transnational patterns of production and consumption, and the fourfold

increase in foreign direct investment flowing to developing and transition economies over the past decade[21, 22].

However, this overall picture masks large, growing disparities among the developing countries; not all countries have been able to take advantage of the benefits of globalization. Since about 1980, the fastest-growing economies of Asia and Latin America have been characterized by high rates of domestic savings, declining dependence on agriculture, and rapid growth in trade, especially of manufactured exports. The emerging economies of the developing world -- such as Brazil, China, Indonesia, and Mexico -- have been increasingly attractive to private finance; two thirds of the US$95.5 billion foreign direct investment flows in 1995 went to just six developing countries, Nigeria inclusive. The effects of FDI can sometimes barely be perceived, while other times they can be absolutely transformative[22]. While FDI's impact depends on many conditions, well-developed and implemented policies can help maximize its gains. Some of the gains of FDI can be maximized by the following: Research has shown that an increase in FDI leads to higher growth rates in financially developed countries compared to rates observed in less developed countries. Local conditions, such as the development of financial markets and the educational level of a country, affect the impact of FDI on economic growth. This realization was one of the catalysts for the recent sanitization of the Nigerian financial institutions like the bank.

Policy makers should exercise caution when trying to attract FDI that is complementary to local production. The best connections are between final and intermediate industry sectors, not necessarily between domestic and foreign final goods producers. Human capital plays a critical role in achieving growth benefits from FDI. Low-wage labor and urbanization are attractive to FDI. The fact that Nigerian population is teeming with low wage earners has attracted FDI and this has in turn improved the job turnover of these low

wage earners thereby improving their economic wellbeing. FDI has positive effects on social modernization, employment, and urban-rural differentials in the middle-income countries like Nigeria. Although there is considerable evidence on the link between FDI and economic growth in developing countries, causal patterns of the two variables have not been investigated yet with a reliable procedure. Although FDI is expected to boost host economic growth, it is shown that the extent to which FDI is growth-enhancing appears to depend on country-specific characteristics. Particularly, FDI tends to be more likely to promote economic growth when host countries adopt liberalized trade regime, improve education and thereby human capital conditions, encourage export-oriented FDI, and maintain macroeconomic stability. Since the laws governing investment in Nigeria has been made investment friendly, the country is on the right track[23].

2.1.1.4 Better FDI Regulatory Framework

The great majority of countries have substantially improved their FDI regulatory frameworks. Many more countries now allow profits to be repatriated freely or offer tax incentives and similar inducements to foreign investors. Many African countries have investment promotion agencies (IPAs), to assist these investors. At the international level, 37 African States are members of the Convention Establishing the Multilateral Investment Guarantee Agency (and seven are in the process of fulfilling their membership obligations), 42 are signatories to the Convention on Investment Disputes between States and Nationals of Other States, and 26 to the Convention on Recognition and Enforcement of Foreign Arbitral Awards. Fifty countries have concluded bilateral investment treaties aimed at protecting and promoting FDI, and 41 have signed double taxation treaties[24].

The importance of FDI to economic growth has become glaring to the global economy. Attracting foreign direct investment has become a key part of national development strategies for many countries. They see such investments as bolstering domestic capital,

productivity, and employment, all of which are crucial to jump-starting economic growth. While many highlight FDI's positive effects, others blame FDI for "crowding out" domestic investment and lowering certain regulatory standards. The effects of FDI can sometimes barely be perceived, while other times they can be absolutely transformative[25]. While FDI's impact depends on many conditions, well-developed and implemented policies can help maximize its gains.

The gains of FDI can be in the form of:

i. Economic Growth

ii. Trade

iii. Employment and skills level

iv. Technology diffusion and knowledge transfer and

v. Linkages and spillover to domestic firms

Foreign direct investment (FDI) fuels development as it fuels trade. When FDI creates a new facility in a developing country, effects cascade: FDI first creates jobs as the facility is built; it creates new jobs as the facility operates; it increases the capacity of the foreign country to produce goods in a given sector as well as its capacity to export; new incomes generated by the investment will boost the country's spending on imports, many of which will come from trade linkages established by the original investment[26].

The sources, types, main host countries, and organizational forms of FDI have changed dramatically over the past several decades[15]. To them, the chief types of FDI are no longer only market seeking and natural resource seeking but rather, efficiency- seeking and strategic asset- seeking investments, which are now also important. They also pointed out that while joint ventures are still common, companies use a variety of other

arrangements such as strategic alliances, networks, and non-equity arrangements, mergers and acquisitions, which are all important forms of FDI.

2.1.1.5 Factors Militating Against FDI Inflow to Nigeria

Many obstacles to trade remain, especially for low-income economies like Nigeria. Trade-supporting infrastructure is essential and is improving due to more efficient communication and transportation technology. But landlocked economies and those lacking suitable seaports remain at a disadvantage. For those that have these seaports, like Nigeria, undue delays in clearing procedures, corruption of customs officials and clearing agents and high duty on imports has remained a barrier to FDI. Poor roads and high inland transportation costs have kept many people from trading with the outside world[27].

Other obstacles include an unfriendly business environment and inadequate policies and institutions. For example, in Sub-Saharan Africa it takes twice as long to comply with the procedures required to export or import goods as it does in East Asia and Pacific and four times as long as in high-income countries. Lack of access to capital and a small entrepreneurial class willing or able to take risks also impede the growth of trade[28].

But the greatest barriers are those erected by high-income economies. Even in an era of falling tariffs, developing countries have a hard time reaching high-value markets. Tariff escalation is one of the rich countries' protectionist strategies. EU tariffs are almost zero for cocoa beans but rise to about 10 percent for semi processed cocoa and about 30 percent for chocolate. So tariff escalation penalizes producers when they add value[27].

Although regional agreements have proliferated, significant barriers to trade remain because of imperfect implementation of agreements, high border and behind the- border costs, absence of common standards, restrictive rules of origin even within customs

unions, and inconsistent (and inconsistently applied) tax policies. In Nigeria, FDI inflow has been hindered by a number of factors among which are enumerated below[27]:

1. Limited diversification of industry structure. The heavy dependence on natural resources implies that the industry structure is not diversified – a phenomenon, which further reduces the attractiveness of Nigeria to foreign investors. Small or limited local advantages also do little to attract FDI.

2. Inadequate Policy considerations: The overall policy requirement for host governments seeking substantial inflows of FDI or other forms of foreign participation is the creation of an attractive climate for investors through macroeconomic stability, consistent policies and adequate institutional support. Although Nigeria has taken substantial steps in this direction in recent years, but there remain considerable adjustment and variations in national policies and approaches to encourage FDI inflow. In this connection, it is important to take into account the main broad objectives of foreign firms engaged in FDI so as to be able to design an appropriate policy mix.

3. Inadequate Overall regulatory framework: A healthy investment climate requires a general legal framework that is conducive to facilitating business. In this respect, business and commercial legislation is particularly important. Complex or confusing legislation in this area poses problems for investors. Indeed, several European firms interviewed in a survey (UNCTAD and European Commission, 1996) regarded certain legal practices as a deterrent to their activities. Although the situation differs, of course, from country to country, it was pointed out that traditional ways of doing business could be very different from those prevailing in developed countries. Of course, legal certainty does not obviate the need for foreign investors to adapt to local market conditions. Overall, foreign investment, like any economic activity, thrives

best in a stable, predictable and transparent environment. In this respect, policy transparency, bilateral investment treaties or sectoral agreements contribute to the creation of an environment conducive to investment. The Nigerian government can do more in this area by putting in place a monitoring system that would ensure compliance with laid down laws and regulations especially as it affects foreign investors. An overall legal infrastructure for private business activity -- for national and foreign investors alike -- consisting of laws, which provide for the creation of business entities, enforcement of contracts, private ownership and transfers of property, assessment and payment of taxes, foreign exchange dealings etc., is a prerequisite. The NIPC has been proactive in the regard especially with the advent of the One Stop Investment Center (OSIC), which has brought to light the need for proper administration of investment incentives.

4. Lack of Policy coherence: An appropriate regulatory framework needs to reduce, if not to eliminate, the risk that private enterprises, including foreign firms, perceive, objectively or subjectively, as arising from macroeconomic instability, lack of consistency in policy implementation, long records, if any, of unwarranted government interference in business, and the threat of civil strife. While the federal government, have clearly improved policies in general, and policies specifically related to FDI in particular, there is still need in some cases to enhance the image of policy coherence both with foreign investors and with the national private sector.

5. Limited Authorization procedures: Authorization procedures have been the subject of attention in all reforms relating to investment. The main objective of the reforms has been to respond to the criticism that the process is usually excessively tedious and cumbersome and that bureaucratic delays lead to significant cost increases for investors. In response to such criticism, most investment codes have sanctioned the

establishment of 'one-stop shops' to process and facilitate the approval of investment proposals. However, studies indicate that shortcomings still exist. First, in a number of cases, the one-stop shop has become simply an additional stop on a route that still involves a wide range of government departments, several of which may have different perceptions of a given project. Second, in a few cases, the one-stop shops go beyond the traditional screening for compliance with legal requirements or incentives qualification, and go so far as to involve themselves in screening potential investments for financial viability. It should be mentioned that the screening of foreign investment applications in order to establish their viability is a complex process. It requires considerable expertise and is a time consuming exercise.

6. Inadequate implementation of Incentive mechanisms: Incentives may be granted conditionally or unconditionally. Those granted conditionally may be linked to performance requirements, which in some cases can have a disincentive effect on the investment (incentives are then used to compensate for this disincentive). They can be granted, financed and/or administered at all levels of government, i.e. at the supranational, national, regional and local levels. Incentives may be granted automatically (upon compliance with certain qualifying conditions), or there may be varying degrees of discretion on the part of the administering authority to decide on the awards. Also, awards may be granted before the conditioning element has come into existence, or retroactively, after the condition has been met (obviously, the choice between ex ante and ex post facto awards is very much dependent on the type of incentives chosen).

7. Poor implementation of Privatization programmes: A policy action likely to make an immediate contribution to the improvement of investment conditions in many countries relates to privatization programmes. Judging from the experience of other

countries, privatization programmes with foreign participation can provide a vehicle to increase FDI flows (with potential qualitative contributions to the economy) over a long period of time, since FDI flows can continue after the acquisition of assets through privatization. Such programmes have been a major factor in the rapid increase of FDI flows to Latin America and Central and Eastern Europe. To benefit from privatization related FDI, existing programmes need to be improved upon and perhaps new programmes launched. In some cases, this may require the attainment of a broader political consensus so as to end the stop-go nature of some of these programmes, make them more transparent and expand them to include firms of all sizes and from all sectors of the economy. The last of these considerations may be of special importance to a country like Nigeria that needs to compensate for certain deficiencies in investment conditions by increasing the attractiveness of privatization programmes. Furthermore, including only loss making firms, while excluding profitable firms would certainly not make a privatization programme attractive. The attractiveness of privatization programmes could be further enhanced by linking them to debt-equity swaps.

8. Poor infrastructural support: A major detriment to FDI inflow both to local and foreign investors in Nigeria is poor infrastructure. This had perhaps led to the slow industrial growth of the country which is an indication to investors that all is not well in the country. But for the large size of the Nigerian market, which continues to be a deciding factor for investment location for foreign investors, the lack of industrial base to hook on to for easy production activities would have crippled the ability of the country to attract FDI. The epileptic nature of power supply has increased production cost for manufacturers in Nigeria while poor road network and water supply has ensured that producers have inadequate input materials and thereby

slower return on investment. These conditions have led to undue competition with foreign goods and unfair or inflated cost of locally produced goods as the case may be since producers have to continually be on alternative power supply to avoid colossal loss due to break in production circle. Privatization and reforms of public enterprises have improved but the pace of such reforms is too slow for any meaningful impact to be felt. The unbundling of the Power Holding Company of Nigeria (PHCN) formally NEPA seems to be taking forever due to slow legislative and bureaucratic passage.

2.1.1.6 Strategies Adopted By Nigeria to Encourage FDI Inflow

Attraction of FDI is globally becoming increasingly important, which is often based on the implicit assumption that greater inflows of FDI will bring certain benefits to the country's economy. FDI, like any other flow of capital is simply that a source of capital. Conventional view however, holds that a targeted strategy is the most appropriate approach to attract foreign direct investment. Investment strategies involve the organized use of a range of promotional activities to increase the level of investment in a country[20]. Most strategies use three different but interrelated sets of activities which include activities to enhance the image of the country (image building), those to generate an increased flow of investors (investments generation) and those to help investors (investors servicing). The importance attached to an activity varies by country and over time, but at any given time most strategies include elements of all three activities. Image-building activities include producing and distributing fact sheets, videos, brochures and newsletters, holding briefings and engaging in media relations and advertising. It was opined that-building techniques must be accompanied by investment generation and investor-servicing activities, as on their own they are invariably wasteful[21]. Professionals best

implement some of these techniques, particularly advertising and media and public relations.

Image-building techniques use a number of tools, which include the following:

i. Fact sheets, videos and information briefs that address topics of general interest to investors (fact sheets and videos) and more specific topics and topics subject to quick change (information briefs).

ii. Newsletters that tell a target audience about investment developments, plans and events. They can be produced by desktop publishing and circulated monthly or quarterly.

iii. Media and public relations activities that publicize investment success stories and alert the domestic and international media and selected audiences to upcoming events and new policies. This entails press. Radio and television briefing, conferences, organized tours for national and international journalists and tours by government representatives to promote the country in overseas markets.

iv. Investors guide and brochures that contain essential information on how to do business in the country, including the legal aspects, in an easy –to- read format. They could also show key economic indicators to exhibit the country's comparative strengths. Nowadays they can be produced relatively cheaply by desktop publishing.

v. Advertising, this may be targeted and specific or general and directed at providing an overall message in selected media.

For quite some times, investment incentives as a pricing technique have been adopted by NIPC to attract foreign investors. These incentives were made available to all foreign investors despite the fact that particular incentives were effective in influencing decisions only for certain types of projects. Promotion strategy in this sense includes

communication activities that provide extra value or incentives to investment site. Essentially therefore, the promotional techniques of investment by NIPC involved those aimed at:

(i) Building or changing the investment image through advert, investment mission abroad or trade fairs;

(ii) Generating investment directly; and

(iii) Servicing existing and prospective investors appropriately.

Examining the above strategies; the NIPC promotional programmes tend to engage the three types of investment promotional activities in varying degrees, particularly image building with investment generation through persuasive communication approach, by way of correctly identifying the message, the channel of communication as well as the appropriate audience to talk to.

As FDI promotion policies are gradually evolving, the government through NIPC is simply liberalizing the country's enabling frameworks to attract more investment and secondly, the Commission actively markets the country as preferred destination for FDI. Another promotional strategy used by NIPC is the proactive approach to target investors in accordance with the country's developmental priorities at the level of industries and firms, and seek to meet their location needs. Appraising this strategy, it was pointed out that this targeted approach is not only effective in challenging the growing competition in the area of investment promotion; it is also desirable from the perspective of achieving efficient use of scarce resources. This strategy also helped the Commission to improve on its understanding of corporate strategies and of the specific locational asserts and liabilities that characterize the host country, Nigeria.

NIPC in its effort to attract more investments through a more business-friendly environment capable of promoting local foreign investments has scaled down various bureaucratic obstacles and intervening opportunities that constitute disincentives to foreign investors [27]. Yet, potential foreign investors have discounted the economy as a location for investment because of the negative image the economy conceals, despite the varieties of investments opportunities that await these investors.

Since independence, Nigeria has been associated with pictures of civil disturbances, starvation, deadly diseases as well as macroeconomic mismanagement, distortions and performance[28]. However, reducing the negative image of Nigeria to prospective investors may not be sufficient to improve the investment climate alone, it has to backed with appropriate promotional strategy to catch investors' attention. Hence, NIPC has changed the negative image of the country and thus facilitated investments into the economy. The Commission's promotional strategies at marketing Nigerian investment potentials to both foreign and indigenous investors have considerably improved the flow of foreign capital into Nigeria.

2.1.2 Economic Growth in Nigeria

Among less developed countries (LDCs), Nigeria had the eleventh largest external public debt in 1989 (and the largest among sub-Saharan countries.) Its debt had increased from US$9 billion in 1980 to US$33 billion by 1989. The country faced persistent difficulties servicing its debt; in the 1980s, debt rescheduling was almost continuous. The secondary market price of Nigeria's bank debt in mid-1989 was only 24 cents on the dollar, indicating the markets were heavily discounting the probability that Nigeria would pay its external debt[29].

Official reluctance to devalue the naira between 1981 and 1983, when inflation was more than 20 percent per year, discouraged foreign direct investment, spurred substantial capital flight, and encouraged firms to build up large inventories of imports (often with over invoicing and concomitant foreign deposits) or under pricing exports (with the difference placed on deposit abroad). Having exhausted its official reserves and borrowing limits, Nigeria built up its arrears on trade credit to US$6 billion by the end of 1983[30].

Population growth, inflation, foreign direct investment (FDI), interest rates, exports and private & public investment are the main determinants of economic growth in Nigeria[18].

Nigeria's contractionary fiscal policy in 1986 and 1987 reduced the budget deficit substantially. During early 1988, when the poor 1987 harvest put pressure on food prices and opposition to austerity mounted, authorities eased financial policy, more than doubling the budget deficit. Nigeria also eased monetary and fiscal policy in late 1989. Still, the country had managed to reduce real public spending since the early 1980s[29]. Despite several debt rescheduling in the 1980s and early l990s, Nigeria's debt overhang continued to dampen investment and adjustment in the late 1980s and early l990s. Facing years of austerity and stagnation, Nigeria could not afford to reduce consumption to affect an external transfer; thus a major contributor to adjustment was reduced investment. A lengthy schedule of large loan repayments acted as a tax on investment, since a share of returns had to go to creditors. Substantial debt servicing often meant slowing economic growth to avoid an import surplus. Without concessional funds, rescheduling only postponed an external crisis[30].

Moreover, Nigeria's highly oligopolistic money markets, financial repression of interest rates and exchange rates, and sluggish expansion in response to improved prices in export and import-substitution industries prevented timely adjustments to financial and exchange

rate changes. The early 90's into late 90's saw more policy distortions and political unrest, which was a bad sign for investors both potential and existing. Capital flight was also the order of the day in the early 90's and a lot of Swiss banks were home to stolen money from Nigeria. Needless to say those perpetrators of advanced fee fraud were having a field day. All these happenings coupled with a crippled infrastructure and public sector was sending wrong signals to the investing community[31].

Although the enabling laws that will liberalize the economy and protect investors have been enacted, it lacked implementation and were lost under numerous bureaucracy. Targeted public and private sector initiatives that link industry, education, human capital and institutional capacity-building was required in order for greater FDI to assist in a virtuous cycle of economic growth, job creation and rising incomes. More than four decades after independence, Nigeria still has the distinction of being one of the few countries in the world today that depends almost exclusively on one single export commodity—oil. Until recently, there was a serious decline in production in virtually all other sectors. But in the last few years focus has been on the expansion of economic base. The yielded results include government's encouragement of foreign capital inflow, together with commitment to full funding of its own obligations, which has led to a steady rise in the number of high-profile projects going on simultaneously in Nigeria. Some of these projects/reforms would enable the growth of public, private partnership (PPP), improve service delivery through privatization, provide employment, reduce poverty and create wealth through small business linkages. Also, the promotion of foreign direct investment in Nigeria will improve not only foreign resources but also Nigerian resources abroad[30]. Other resources are more likely to flow into the country when domestic and externally based Nigerian resources are seeking returns in Nigeria. Some of the reform projects embarked on by the government to make the country investment friendly include:

The capitalization of Nigerian banks, Privatization of government owned establishment, The advent of NEEDS (National Economic Empowerment and Development Strategy) and it state counterpart, SEEDS, and recent Economic Recovery and Growth Plan. Public sector reform through SERVICOM, Rigorous pursuit of debt elimination, which culminated into the debt cancellation by the Paris Club. Improvement in the export oriented goods through protection of local industries from undue competition[19]. The ban on some imported goods by the federal government ensured that local manufacturers had fair return on their investment.

2.1.3 FDI and Economic Growth

The connection amid FDI and 'economic development' of a nation can be traced to the 'neoclassical theory'. In line with this theory, both labour and capital are considered as the potent factors that can drive 'economic growth' of a nation. Neoclassical trade theories universally supported international trade even when a country had an 'absolute advantage' in all 'economic growth' variables[32]. It follows from this that the neoclassicals set the groundwork for globalization, which is the foundation of the FDI-led growth concept. Thus, the recent large surge in capital influxes across global markets can be attributed to a constant growth in financial transactions between countries[33]. Furthermore, a key element underpinning this experience has been the growing internationalization of investors wanting greater yield on investment per time and the ability to spread risk worldwide[29].

FDI inflows are determined by diverse factors. These include a wealth of natural resources, modern infrastructure, a standardized system, and an enough supply of inexpensive and skilled labour[33]. Given the fact that the inflow of FDI are determined by factors which bring about that governance (standardized system) can be a key driver of FDI inflows in a nation. Most West African countries' governance indices has indicated

negative values over time. Since Nigeria is the core point of concern, the indices indicated that all the governance indices for the country were negative from 2002 – 2019. Could this affect to the net FDI inflows in the country? An insight into data can provide a succinct result. The net FDI inflow of Nigeria has exhibited high degree of instability over time. Between 1970 to 1981, FDI net inflow as a proportion of 'GDP' in Nigeria exhibited a continuous decline, reaching even a negative value (-1.15%) as at 1980. Therefore, a minute improvement was observed with high volatilities from 1982 to 1984. Within the period, the value averaged 1.91%, with a record high of 2.45% as at 1984[34].

2.1.4 Financial Development

Financial sector is the set of institutions, instruments, markets, as well as the legal and regulatory framework that permit transactions to be made by extending credit. Fundamentally, financial sector development is about overcoming "costs" incurred in the financial system. This process of reducing the costs of acquiring information, enforcing contracts, and making transactions resulted in the emergence of financial contracts, markets, and intermediaries[30].

Financial development has been recognized as an essential factor in promoting economic growth, attracting foreign direct investment (FDI) and improving the overall economic performance of a country. The literature defines financial development as the improvement in the quantity and quality of financial intermediaries, markets, and institutions, which facilitate efficient allocation of resources, mobilization of savings and investment, and risk management[35, 36].

Studies have shown that financial development enhances economic growth in Nigeria by providing adequate funding for investment, reducing information asymmetry and transaction costs, and facilitating international trade[37]. The financial sector in Nigeria has

undergone significant reforms in recent years aimed at strengthening financial institutions, promoting financial inclusion, and improving access to credit for small and medium-sized enterprises (SMEs). These reforms have led to increased credit flow to the private sector, improved efficiency of the financial sector, and enhanced the overall economic performance of the country[38]. However, it is important to note that that financial development alone is not sufficient for promoting economic growth. It must be accompanied by sound macroeconomic policies, good governance, and effective institutional frameworks. In addition, the development of the financial sector should be inclusive, ensuring that marginalized groups such as women, rural dwellers, and low-income earners have access to financial services[35, 38, 39].

Financial sector development can help with the growth of small and medium sized enterprises (SMEs) by providing them with access to finance. SMEs are typically labor intensive and create more jobs than do large firms. They play a major role in economic development particularly in emerging economies. Financial sector development goes beyond just having financial intermediaries and infrastructures in place. It entails having robust policies for regulation and supervision of all the important entities. The global financial crisis underscored the disastrous consequences of weak financial sector policies. The financial crisis has illustrated the potentially disastrous consequences of weak financial sector policies for financial development and their impact on the economic outcomes. Finance matters for development--both when it functions well and when it malfunctions[40].

2.1.4.1 Measures of Financial Development

A good measurement of financial development is crucial to assess the development of the financial sector and understand the impact of financial development on economic growth

and poverty reduction. These measure as highlighted by the world bank are discussed below[40].

Financial Depth

Financial Depth through domestic credit to the private sector as a percentage of GDP is a measure of the amount of credit provided by domestic financial institutions to private individuals and businesses relative to the size of the economy. In other words, it measures the extent to which the private sector is relying on domestic credit to finance its activities. This is a useful indicator of economic growth and the attractiveness of a country to foreign investors. However, it is important to maintain a balance between credit growth and economic growth for sustainable development.

Financial Access

Financial Access through bank deposits to GDP (%)refers to the ratio of the total deposits held by commercial banks in a country to the Gross Domestic Product (GDP) of that country, expressed as a percentage. It is an important indicator of the level of financial intermediation in an economy and provides insights into the extent to which the banking sector is facilitating savings and investments. However, it is important to note that a high ratio of bank deposits to GDP is not necessarily always positive for economic growth or FDI. A high ratio may also indicate a lack of alternative investment opportunities or limited access to credit, which can hinder economic growth. Additionally, foreign investors may be deterred from investing in a country if the banking system is perceived to be too heavily regulated or if the government has too much control over the financial sector.

Financial Efficiency

Financial Efficiency through the bank lending deposit spread refers to the difference between the interest rate banks charge on loans and the interest rate they pay on deposits. This spread represents the profit margin for banks, as they borrow money from depositors and lend it to borrowers at a higher rate. The implications of the bank lending deposit spread on economic growth and foreign direct investment (FDI) can vary depending on a number of factors. Generally speaking, a wider spread indicates a higher profitability for banks, which can encourage them to lend more money to businesses and consumers. This can lead to increased economic activity and growth as businesses have access to capital to invest in new projects and expand their operations. Moreover, higher economic growth can attract more FDI to a country as foreign investors are more likely to invest in a growing economy.

Financial Stability

Financial stability measured through liquidity ratio is a tool used by central banks to regulate the money supply in an economy. The liquidity ratio is the amount of liquid assets that commercial banks are required to hold in relation to their liabilities, and it is expressed as a percentage. The purpose of setting liquidity ratios is to ensure that banks have enough cash and other liquid assets to meet their financial obligations and avoid liquidity problems. While a higher liquidity ratio can promote financial stability and investor confidence, it can also limit the amount of credit available to businesses and individuals, which can have a negative impact on economic growth and FDI. It is important for central banks to strike a balance between ensuring financial stability and promoting economic growth and investment.

2.2 Theoretical Review

2.2.1 The Modernization Theory

The modernization theory of financial development posits that as economies undergo the process of modernization and industrialization, there is an increased demand for financial services[41]. This demand arises from the need for investment capital, working capital, and risk management instruments. Financial institutions adapt to meet these changing needs of the economy. Scholars such as Gerschenkron, Rostow, and Findlay have supported this theory, highlighting the crucial role of financial institutions in mobilizing savings, facilitating investment, and stimulating economic growth during the transition to industrialized societies[42].

The modernization theory of financial development include the observation of financial deepening in economies as they modernize. This involves the expansion of banking sectors, development of stock markets, and improved availability of financial services to cater to the growing needs of businesses and individuals[43]. Additionally, the theory suggests that financial development enhances access to credit, allowing businesses and households to obtain necessary funds for productive investments. Furthermore, studies have linked financial development to economic growth, as it provides the financial resources and mechanisms for efficient resource allocation, risk management, and innovation[41].

However, the modernization theory of financial development is not without criticism. Scholars argue that the heterogeneity of development paths across countries undermines the uniformity of the financial development process. Factors such as institutional quality, governance, and historical legacies significantly influence financial development. Concerns have also been raised regarding financial instability, cautioning against rapid

financial development without proper regulations and risk management mechanisms. Excessive risk-taking and inadequate supervision can lead to financial crises. Moreover, critics emphasize the importance of addressing financial inclusion and reducing inequalities in accessing financial services to ensure that the benefits of financial development are widely shared and marginalized populations have equal access to financial services[43,44].

2.2.2 Market Imperfection Theory

Market Imperfection Theory suggests that foreign direct investment (FDI) occurs in response to market imperfections or failures in the host country. These imperfections may include information asymmetry, incomplete markets, or barriers to entry[45]. The theory posits that FDI serves as a solution to these market deficiencies by providing access to capital, technology, managerial expertise, and market knowledge. It highlights the role of FDI in bridging these gaps and contributing to the economic development of the host country[45].

The theory was initially developed by economist Stephen Hymer, who argued that firms engage in FDI to overcome imperfections in international markets. John Dunning further expanded on this theory with the eclectic paradigm (OLI framework), emphasizing ownership advantages, location advantages, and internalization advantages as determinants of FDI[46]. Market Imperfection Theory finds applications in understanding FDI in developing countries, where institutional weaknesses and market imperfections are more prevalent. FDI is seen as a means to transfer technology, managerial expertise, and financial resources to address these deficiencies[47].

Scholars have inferred that FDI can lead to technology spillovers, benefiting the host country by enhancing its knowledge and technological capabilities. However, the extent

of these spillovers is subject to debate, influenced by factors such as absorptive capacity and institutional quality. Additionally, while FDI can create employment opportunities and improve working conditions, critics argue that it may also lead to labor market segmentation and limited benefits for local workers. The institutional and policy environment of the host country plays a crucial role in determining the effectiveness of FDI in addressing market imperfections[46,47].

However, caution is advised against overdependence on FDI, as it can create vulnerabilities and risks for the host country. Excessive reliance on FDI may result in a loss of domestic competitiveness and limited technology transfer to local firms. Therefore, a balanced approach considering the contextual factors and the host country's institutional framework is necessary to ensure that FDI generates positive spillovers and contributes to long-term development[45].

2.2.3 Endogenous Growth Theory

Endogenous growth theory is a theoretical framework that attempts to explain economic growth by emphasizing the importance of human capital, knowledge, and technological progress as key determinants of long-term growth. In this theory, economic growth is viewed as a self-sustaining process that can be achieved through investments in research and development, education, and innovation. The endogenous growth theory is based on the idea that economic growth is not a result of exogenous factors such as population growth, capital accumulation or technological progress, but rather is driven by endogenous factors such as knowledge creation, innovation, and human capital formation[46].

One of the main proponents of endogenous growth theory is Paul Romer, who argues that economic growth is driven by technological progress, which is in turn influenced by

investments in knowledge and research and development (R&D) activities. According to the theory, knowledge is a non-rival and non-excludable public good, which means that once knowledge is created, it can be used by everyone without reducing its availability to others. Therefore, investments in R&D can have positive spillover effects, leading to higher levels of productivity, innovation, and economic growth[48].

Another key concept in endogenous growth theory is human capital, which refers to the skills, knowledge, and expertise of the workforce. Human capital is considered a key driver of economic growth, as it enables individuals to be more productive, innovative, and adaptable to changes in the economy. This can be achieved through investments in education and training, which can lead to higher levels of human capital and productivity[49].

Studies have shown that financial development also plays a crucial role in promoting economic growth in developing countries like Nigeria. According to scholars, financial development can improve economic growth by providing access to credit, reducing information asymmetry, and promoting entrepreneurship and innovation[50]. However, the impact of financial development on economic growth is not straightforward and can vary depending on the level of financial development, the structure of the financial sector, and the quality of institutions.

2.3 Review of Empirical Studies

Financial Development and Foreign Direct Investment (FDI)

Scholars have examined the effect of financial development and FDI on economic growth in Sudan using annual data from 1970 to 2014. The variables of the study were subject to unit root problem. The time series data are assessed using unit root and cointegration tests with/without structural break. Moreover, the study uses the fully modified ordinary least

squares and the dynamic ordinary least squares techniques to estimate the long-run model. The results of the cointegration tests provide evidence that a long-run relationship exists among variables even after accounting for the structural break. The results show that financial development and FDI are positive and significant in explaining economic growth in Sudan. Financial development is found to be more beneficial to economic growth than FDI. Moreover, the findings reveal that FDI leads to better economic performance through financial development. Interestingly, the findings of the study show that the effect of financial development on economic growth is further enhanced by the inflows of FDI. It was recommended the government should focus on promoting FDI in more productive sectors. In addition, further cooperation with multinational enterprises is needed to increase FDI in the country[50].

Considering the importance of foreign direct investment (FDI) inflows for the sustainable economic advancement of a host country, a study investigated the financial development and FDI nexus, using institutional quality as a moderator. The sample consists of 79 Belt and Road Initiative (BRI) partner countries, as these countries are entering a new age of integration, foreign trade, and mutual development. It was further deduced that the empirical findings of conventional and robust estimators show that the financial development of BRI host countries significantly attracts FDI, while the institutional quality plays a significant moderating role in this relation. The in-depth analysis offers the insight that financial markets are less attractive to FDI relative to financial institutions. Thus, policymakers are admonished to uphold sound financial institutions to make the country more attractive to overseas investors, while concentration on financial markets may multiply the benefits of FDI. The results are robust to alternative proxies of the key variables and alternative methodologies[51].

Similar study also examined the effect of financial development (FD) and foreign direct investment (FDI) on the environmental quality for the panel of 90 belt and road countries from 1990 to 2017. The study advances the knowledge of financial development by using the new comprehensive index, which is based on access, depth, and efficiency of financial markets and financial institutions and incorporated foreign direct investment as an important determinant of environmental quality. By applying the Driscoll-Kraay standard error pooled ordinary least square method, the empirical findings reveal that FD deteriorates the environmental quality by increasing the CO2 emissions, while FDI improves environmental quality and the relationship between economic growth (EG) and CO2 emissions is inverted U-shaped, i.e., presence of EKC hypothesis. The energy consumption and urbanization pollute the environment, while trade openness enhances the quality of the environment. Furthermore, the Dumitrescu-Hurlin (DH) panel causality test result confirms that the bidirectional causality exists among FD, trade openness, energy consumption, and urbanization with CO2 emissions. It was adviced that the governments of belt and road countries should remove the barrier and provide ease of doing business and protection of intellectual property rights to get more FDI inflows. In order to achieve sustainable development goal, this study emphasized to use energy-efficient and environmentfriendly technologies and allocate resources for energy efficiency and renewable energy in order to moderate degradation of the environment and government should implement the latest policies to mitigate carbon emission, i.e., environmental taxation tools for polluters and offers financial benefits to those who promote the sustainability, prioritize green and eco-efficient projects, carbon emission taxes, and emissions trading cap to reduce carbon emissions[52].

In the paper empirically investigated by some scholars about the various effects that source and destination countries' financial development (SFD and DFD respectively)

have on foreign direct investment (FDI).They established causality by exploiting variations in both country-specific financial development and sector-specific financial vulnerability. The approach was made possible by their use of detailed databases on real manufacturing FDI projects worldwide. They found that both SFD and DFD have a large positive influence on greenfield, expansion, and mergers & acquisitions FDI, by directly increasing access to external finance and indirectly promoting manufacturing activity. The overall economic impacts of SFD and DFD tend to be similar but their direct and indirect effects vary across margins and types of FDI[53].

The relationship between financial development indexes and foreign direct investment was examined with the objective of determining the effects of financial development indicators in two groups (the financial markets index and the financial institution index) on the FDI absorption rate. They posits that the effects of these indicators have been evaluated in the form of a panel data model for 11 countries including (Saudi Arabia, Argentina, Sweden, Poland, Belgium, Iran, Thailand, Nigeria, Austria, Norway, and Venezuela) in the period 1990 to 2014. The results show that when the financial institutional index including (FID, FIE), financial market index including (FMD), GDP & DCP increase the FDI increases, and when FIA, FMA & FME increase, the FDI decreases. So Expanding the capital market will increase FDI attraction in selected countries, and for countries with weak capital markets, the financial market access index and the financial institution efficiency index has a significant negative effect on FDI absorption and vice versa[54].

Foreign direct investment (FDI) is seen as a prerequisite for gaining and maintaining competitiveness. Simultaneously, the relationship between FDI and financial development (FD) has important implications for the researched economy and its competitiveness. A study investigates the effect of FDI on FD for the selected 102 Belt

and Road Initiative countries on four continents: Asia, Europe, Africa, and Latin America. Based on data from 1990 to 2017, a set of quantitative techniques, including feasible generalized least squares, and augmented mean group techniques, were used in this study. The findings indicate that FDI, trade openness, government consumption, and inflation have a statistically significant relationship with FD. FDI, trade openness, and government consumption increased FD in Asia, Europe, and Latin America but decreased in Africa. Inflation shows a negative influence on FD in all continents. Furthermore, the Dumitrescu–Harlin panel causality test confirms a two-way causality relationship among FDI, trade openness, and FD in Asia and Europe. In contrast, a unidirectional relationship exists between FDI and FD in Latin America. The income-wise results reveal that low- and middle-income countries attract more FDI than high-income countries due to high factor costs. Through their empirically study, they posit that an increase in FDI net inflows would contribute to the expansion of economic activities and lead to an increase in funds available in the economy, which would boost financial intermediation through available financial markets or the banking system. And a relatively developed stock market increases the liquidity of listed companies and may eventually reduce capital cost, making the country more attractive for foreign investors. Further, policymakers in the BRI economies must concentrate on long-run measures to improve their financial systems. The negative influence of FD in African countries is essential for policymakers, focusing on the improvement of the financial system. As rising FDI inflows accelerate financial activities and result in higher available funds in the country. It also improves financial competitiveness through the existing financial markets. Lastly, the results of a recent study showing that financial prosperity is a precondition for financial stability. A stable financial sector is crucial for overseas investors, which is an issue that should be addressed in the BRI countries[55].

Financial Development and Economic Growth

Studies have shown that financial development also plays a crucial role in promoting economic growth in developing countries like Nigeria. According to scholars, financial development can improve economic growth by providing access to credit, reducing information asymmetry, and promoting entrepreneurship and innovation[12]. However, the impact of financial development on economic growth is not straightforward and can vary depending on the level of financial development, the structure of the financial sector, and the quality of institutions.

Another study investigates the relationship and effect of capital flows, financial deepening, infrastructure and financial development on economic development in Nigeria. The study used annual time series data from 1980 to 2010 and the methodology was OLS. The findings of the study revealed that capital inflow was significant in determining economic development in Nigeria. However, trade openness was significant but had a negative sign[39]. The further review of literature on the impact of FDI on growth suggests that FDI effect is both time- and region-specific. For instance, the impact of FDI, domestic investment, human resource and rate of trained workers on growth in Vietnam was examined by 40. The study makes use of annual data from 2012 to 2015 using panel regression method of fixed effect model. The estimated result indicates that FDI, domestic investment and human resource have positive effect on the level of gross product while rate of trained worker has not affected economic growth during the time period. However, in an earlier in the previous year, which investigated the effect of aggregate and sectoral foreign direct investment on Egypt's economic growth from the period of 1992 to 2007[35]. The study used GMM and made effort to distinguish between FDI in the manufacturing, agricultural and service sectors of the economy. The results from the estimation show that neither aggregate nor sectoral FDI has unconditional effect

on economic growth. The result also rejects human capital as a channel of absorptive capacity and reveals and interesting effect of FDI in the service sector on economic growth in its interaction with domestic private investment. In their analysis also, service FDI promotes economic growth only if the host government has a minimum threshold of DPI to absorb foreign knowledge and technology.

Scholars have also investigated the impact of Inflation on Economic Growth: Evidence From Nigeria. In an attempt to examine the influence of inflation on the growth prospects of the Nigerian economy, the study employs the autoregressive distributed lag on the selected variables, i.e. real gross domestic product (GDP), inflation rate, interest rate, exchange rate, degree of economy`s openness, money supply, and government consumption expenditures for the period 1980–2018. The study findings indicate that inflation and real exchange rate exert a significant negative impact on economic growth, while interest rate and money supply indicate a positive and significant impact on economic growth. Other variables in the model depict no influence on the economic growth of Nigeria. The causality result shows the unidirectional relationships between interest rate, exchange rate, government consumption expenditures and gross domestic product. However, inflation and the degree of openness show no causal relationship with gross domestic product. As a result, the study recommends that a more pragmatic effort is needed by the monetary authorities to target the inflation vigorously to prevent its adverse effect by ensuring a tolerable rate that would stimulate the economic growth of Nigeria[22].

A study on macroeconomic determinants of economic growth in Nigeria between the period of 1991 and 2019 was examined with the objective of investigating some macroeconomic determinants of growth in Nigeria and further assess the variables and their influence on economic growth. The study made use of secondary data sourced from the 2021 Statistical Bulletin of the Central Bank of Nigeria and from the 2021 database of

the World Bank. The Ex Post Facto research design was employed for the study. Both Simple Linear and Multiple regression analysis using SPSS were employed using Gross Domestic Product (GDP) as the dependent variable while Unemployment, Inflation and Foreign Direct Investment were considered as the explanatory variables. The Johansen Co-integration test and the error correction model were also applied in the study. The results showed that Unemployment and FDI had positive effects on Economic growth while Inflation had a negative effect. It also indicated the validity of short run equilibrium relationship between variables under study. The study recommended the need for government to create a business friendly environment and enact policies to encourage foreign investment inflows. Government should further develop critical and urgent policies that will support and drive production activities in all sectors to arrest the rising unemployment then proffer fiscal and monetary policies to assist in tackling inflation[56].

A study also examine the nexus between human capital and economic growth in Nigeria between 1981 and 2017. This is predated by poor policy impact across the key sectors of the economy, such as education and health that would have transformed productivity to economic in Nigeria. In order to address this ugly happening, the study therefore employed vector autoregressive and Johansen techniques. The results disclosed that the estimated coefficients of human capital have long-run significant impact on economic growth in Nigeria. Also, the diagnostic tests were used to check the validity of the techniques adopted in the study. Interestingly, results from normality test, VEC residual serial correlation LM tests and VEC residual heteroskedasticity tests confirm the justification and validity of the estimated results obtained in this research. Drawing way forward, this study therefore recommends the need to sustain economic in Nigeria through increase budgetary allocation to education and health sector to boost human capital skills needed to drive knowledge-based economy. Also, government should

establish special agencies with the responsibility of improving the skills and capabilities of human capital across all educational levels of the federation so as to sustain growth in the long run[57].

The empirical test results on the effect of exchange rate on economic growth in Nigeria with emphasis on asymmetric relationship among the variables (Gross Domestic Product, Exchange Rate and Inflation Rate) using data from 1981 to 2020 was presented. Applying the Non Linear Autoregressive Distributed Lag Model (NARDL) approach to examine asymmetric relationships among variables. The study found that, in the long-run, economic growth is positively affected by positive shocks to exchange rate. Meanwhile, both negative and positive shock to inflation rate was found to have adverse non-contemporaneous effect on growth in the long-run. Since both positive and negative changes affect economic growth adversely, it is recommended that the Nigeria Inflation component is reviewed to identify the key drivers and the policy to optimize the relationship between economic growth and inflation rate. In addition, fiscal, monetary and general trade policies must align with the exchange rate policies for desired output growth. Therefore, the monetary authority should implement policies that will boost Nigeria production base to maximize the benefits from foreign exchange inflows[58].

The impact of exchange rate on economic growth in Nigeria from 1981 to 2016 was examined in a related study using data on GDP, Exchange rate, foreign direct investment (FDI), inflation rate, imports, exports, trade openness, final consumption expenditure (FCE), interest rate, and government expenditure were obtained from the different issues of the CBN Statistical Bulletin. Data series were assessed for stationarity with the aid of the ADF test. Bound test was conducted and the model was estimated within the ARDL framework supported by the relevant post estimation diagnostic tests. The bound test showed that there was long run relationship among the study variables. Model estimation

revealed that import, lag of trade openness, FDI, lag of exchange rate, interest rate and inflation significantly affected the growth of the economy in the short run. In the long run, economic growth was affected by trade openness, FDI, exchange rate, government expenditure and interest rate. It was concluded that the present year exchange rate did not affect economic growth in the short run but itsone year lag did, while exchange rate had negative effect on the growth of the Nigerian economy in the long run. To achieve growth in the economy, effective exchange rate management system alongside expansionary fiscal policy and encouragement of importation of capital goods are recommended[59].

Foreign Direct Investment (FDI) and Economic Growth

A study on inquiry into the nexus of the foreign-direct investment (FDI) led growth hypothesis was carried out by a scholar to examine how it translates into the development of the Nigerian economy as of 1970 – 2018. The study utilized secondary data from the 'World Development Indicators' which were analyzed using the Bounds test for co-integration and the 'autoregressive distributed lag (ARDL) approach to divulge both the short-term cum the long-term influence of foreign direct investment net inflow on 'economic development' of Nigeria. The Bounds test was conducted after the unit root test revealed that the variables were stationary at mixed order of level and first difference. The outcome of the ARDL Bounds test supported confirmation of long-term association among the variables. The ARDL short-run error correction showed that 14.62% of the instability in the model was corrected yearly. In the short-term, it was discovered that FDI wielded a deleterious and substantial weight on 'economic development of Nigeria. Meanwhile, the long-term estimates indicated that FDI influenced economic development positively, though not in a significant manner. The Granger causality test supported the fact that FDI causes 'economic development' in Nigeria. Given this potential of FDI exerting a positive effect on 'economic development', the study recommended that

bottlenecks inherent in FDI influxes in the country should be removed so as to reap the fullest benefits of such inflows in Nigeria[12].

A study to investigate how inflows of FDI can affect the Nigeria's Real GDP using the 'robust GMM' technique of estimation was carried out by another scholar whose findings from the analysis portrayed that the influence of labour quality is desirable and substantial; while the effect of capital concentration was adverse and substantial on RGDP. The result portrayed no better connection between FDI and capital concentration as they move the economy in a progressive manner. Intensified efforts geared towards attracting FDI inflows to the productive sectors was recommended by the study[48]. A novel model for the Rwandan economy that describes the FDI-led growth hypothesis was examined using the Johansen co-integration and ARDL methods. Except for financial development from the banking sector, that was substantial in the short-run but negligible in the long-term, other factors were shown to have a favourable influence on economic development. The long-term result portrayed that financial development wields a deleterious and substantial influence on FDI in Rwanda; while GDP and population generated a positive and significant effect[49].

Other scholars have also examined the Impact of Foreign Direct Investment on Economic Growth in Nigeria. Traditionally, FDI is designed to improve the recipient economies thereby enhancing economic growth and development, it is in this view that many developing countries attract foreign investors with the hope of strengthening their economy by increasing the foreign investment portfolio. However, most empirical analysis of the impact of FDI on economic growth advises otherwise, hence, a controversy. According to the existing literature, some empirical results found a negative relationship between FDI and economic growth, while others opined that as FDI increases, it results in a boost of output productivity, hence a positive relationship between the

variables. Therefore, this study contributes to the existing literature by investigating the effects of FDI both on the owner, and the host country, using Nigeria as a case study[50].

It was found in a study that FDI accounts for the significant variation in Nigeria economic growth compared to other capital inflow into the country. Using quarterly data from 1961Q1-2016Q4, estimated using the Structural Vector Autoregression model (SVAR), to evaluate the effects of shocks of private capital inflow on the growth of the Nigerian economy. The result shows that shocks of FDI and portfolio investment inflow have a positive and direct relationship on economic growth Nigeria and is statistically significant[51].

A study conducted to determine the Influence of Foreign Direct Investment in Economic Growth and Deployment of Nigeria was examined using Ordinary Least Square (OLS) method of estimation using multiple regression analysis. The data generated for this study comprises of Foreign Direct Investment (FDI), Real Gross Domestic Product (RGDP) and Exchange Rate (EXR). The data was sourced from Central Bank of Nigeria statistical bulletin spanning the period of 1989-2019 (30years). The authors found that FDI has positive and significant influence on real economic growth. EXR also has positive and significant impact on economic growth in Nigeria. Results also showed that the overall regression is significant at 5% level of significance given that the F-statistic is 0.0000 which is less than 0.05. Based on the results, the study recommends an improvement in the level of institutional development on which the inflow of FDI is based. The study also recommends that government should as a matter of urgency takes appropriate measures in order to stabilize the exchange rate that may attract more investors in the country for desired economic growth and Development[60].

The impact of foreign direct investment on economic growth overtime in the Nigerian economy was also examined by some researchers. The study considers annual times

series data from 1981 to 2018 using ordinary least square method. The results from the estimation reveals that foreign direct investment has been very instrumental and significant to the growth process of the economy overtimes. The contribution of foreign direct investment to growth is further improved when interacted with the level of human capital in the country. Also, the study found that the contribution of foreign direct investment to growth has exhibited increasing return to growth for the Nigerian economy. The study recommends that efforts should be made to improve the level of human capital while necessary steps should be taken to entice foreign investors into the country[25].

Study on the impact of foreign direct investment on economic growth in Nigeria used secondary source of data was employed in this study from 1986 to 2017 which were sourced from Central Bank of Nigeria Statistical Bulletin published in 2018 and World Development Indicator published in 2019. Descriptive and regression analyses were used as the estimation techniques. The findings of the study revealed that the coefficient value of LFDI is 0.633506 and its p-value is 0.0002 implying that a unit increase in LFDI will increase LGDP with the value of 0.633506. The coefficient value of RINTR is 0.004127 with p-value of 0.310 indicating that a unit increase in real interest rate will increase gross domestic product, but it is not significant. Also, LDI coefficient value is 1.758036 with p-value of 0.0688 implying that a unit increase in domestic investment will increase gross domestic product positively with the value of 1.758036 which is significant at 10% but not significant at 5% alpha level. The coefficient value of exchange rate is 0.835206 with the p-value of 0.0000 signifying that exchange rate is positive and significant to economic growth. It was concluded that foreign direct investment was positive and significant to economic growth of Nigeria while the domestic investment was also positive but not significant at 5% alpha level[26].

The contribution of foreign direct investment (FDI) inflows to the sustainable development of the Nigerian and Ghanaian economies was examined by other scholars. The investigation was prompted by the apparent evidence of rising FDI inflows in the last two decades, which has failed to improve both nations' sustainable development drive significantly. The study employed the ordinary least square (OLS) econometric technique to test the effect of FDI inflows on sustainable development indicators using annual times series data from 2000 to 2018 obtained from both countries' World Development Indicators (WDI) for the period covering the Millennium Development Goals (MDG) era and the earlier stages of the Sustainable Development Goals (SDG) of the United Nations (UN). The findings revealed that Ghana performed better than Nigeria on social sustainability, measured in terms of education and healthcare indicators. However, on environmental and economic sustainability, Nigeria fared better. A percentage increase in FDI inflow to both countries enhances economic growth and economic sustainability by 0.30 percent. However, study indicated that the positive impact is statistically insignificant. This reveals that the difference in economic growth and economic sustainability in both countries is not accounted for by FDI[28].

A study employs dynamic panel models; Pooled Mean Group (PMG) and Mean Group (MG) estimators to assess the growth-differential effects of Foreign Direct Investment (FDI) and Domestic Investment (DI) among 41 selected African countries from 1970 to 2017. The result of Hausman test shows that PMG estimator is preferred. The study found that FDI and DI are important grease for growth of African countries in the long-run. The study also found that inflows of FDI crowds-in DI in Africa and that there is significant difference in the growth effects of foreign direct investment and domestic investment while the joint effects of foreign direct investment and domestic investment on growth of African countries is found to be statistically significant. In the short-run, estimates show

that foreign direct investment has negative influence on growth of 24 countries out of which four (Benin, Madagascar, Nigeria and Equatorial Guinea) are highly significant at 5% level, while the estimated influence of domestic investment on growth of most African countries was positive. This shows that foreign direct investment in Africa has negative effects on growth of host economies in the short-run. The study recommends that African governments should continually encourage domestic savings and investment as major source of growth and only consider FDI as a growth supplement[61].

In another study in which static panel data was used as estimators and found that foreign direct investment does not significantly influence economic growth in aggregated form but varies when the levels of development reached by the countries in the region were incorporated. In a close related findings, it revealed that the effect of foreign direct investment on growth is not significant in developing countries unlike developed economies[62]. The nexus between foreign direct investment and economic growth given the longstanding debate from mixed empirical findings suspected endogeneity issues which was examined The study therefore investigated FDI–growth nexus using a simultaneous system of equations approach of 124 cross country data for the period 1971 to 2010. The study found that the overall effects of FDI on growth are positive and vice versa. The implication is that FDI contributes to economic growth on one hand while growth attracts FDI inflows which in turn stimulates further growth on another hand[63].

Similar studies have also explored the effect of foreign direct investment (FDI) on economic growth in Nigeria, which is currently West Africa's largest economy, and also determined the long-run relationship between FDI and economic growth in Nigeria from 1981 to 2017. The study adopted the autoregressive distributed lag modelling approach and ordinary least square in the analysis. The empirical results revealed that FDI has a positive and significant relationship with economic growth in Nigeria within the period

under review. The study concluded and recommended that Nigerian Government should formulate policies that will attract more FDI in all sectors of the economy especially in the service and manufacturing sectors, so as to improve the infrastructural facilities and production of goods in the country and also expand its labour force. Finally, there is need to improve the educational policy of the country in order to raise the stock of human capital in the country that will make useful policies for the attraction for productive FDIs in the country[30].

The impact of foreign direct investment (FDI) on manufacturing sector output growth in Nigeria for the period 1970 –2016 using OLS and Granger causality tests analysis was conducted by some researchers. The role of the manufacturing sector in economic growth and development cannot be over-emphasized. Economic theory enthuses that economic growth can be further realized when the manufacturing sector makes steady positive contribution in the overall GDP growth rate. Due to various constraints including paucity of funds capital, the positive contribution of the manufacturing sector has not been encouraging. So the need for foreign capital inflow may be a welcome development. Thus, the study estimates a logarithmic model of the impact of FDI inflow on manufacturing output growth in Nigeria in order to assess its possible contribution to economic diversification of the Nigerian economy which has been heavily dependent on the energy sector. The findings of this study reveal that there is a long-run relationship between FDI and manufacturing sector output growth (MSOG) though statistically insignificant. Granger causality result shows that there is a unidirectional causality from FDI and MSOG. The study recommends that the variables; electricity generation, exchange rate, private sector credit and political stability which show significant

relationships to MSOG should be given priority by the government policy makers to diversify the economy through the manufacturing sector[20].

The concern of some authors were on the institutional determinants of FDI in Pakistan, the study was born out of the inadequacy and inconsistent in the findings of existing literature on the subject matter. Using econometric technique, the paper found out certain institutional determinants such as of the government legal structure and strong property rights, freedom to trade and civil liberty have strong positive effect on FDI inflows among the institutional variables, regulation has been found to be most important to influence inward FDI flow to Pakistan. The paper has also found evidence that there was a structural break in FDI flows in Pakistan which coincides with market liberalization programme in early 1990s. This confirms the effectiveness of conducive institutional environment to attract foreign direct investment[64].

2.4 Theoretical Framework

The theoretical framework of this study builds upon Romer's endogenous growth theory, which was introduced in 1986. According to this theory, the growth and development of an economy are influenced by its internal factors. When both the government and the private sector invest in human capital, innovation, and knowledge, it enhances the productivity of the nation[46.] Consequently, economic growth (EG) is dependent on internal factors such as financial development, inflation, interest rates, and other macroeconomic variables. This relationship can be expressed as:

Economic Growth (EG) = *f*(Financial Development and Other Macroeconomic Variables)

2.1

Moreover, the theory suggests that foreign direct investment (FDI) contributes to economic growth through capital formation and technology transfer. FDI facilitates

economic growth by transferring technology from developed countries to developing countries, thereby increasing the level of knowledge and human capital skills through labor and managerial training. As a result, the accumulation of human capital and technological advancements play a significant role in determining the spillover effects of FDI on the economic growth of the host country[48, 63].

Studies suggests that financial development, which encompasses the development of financial institutions, markets, and services within a nation, influences economic growth. A well-developed financial sector can facilitate efficient capital allocation, mobilization of savings, and investment, thereby fostering economic growth[35,39].

Furthermore, the FDI plays a crucial role in economic growth by promoting capital formation and technology transfer. FDI inflows can contribute to the development of physical infrastructure, increase investment levels, and stimulate productivity growth through the introduction of advanced technologies and managerial expertise[49,50].

By incorporating financial development and FDI as an independent variables in the model (2.1), the study aim to examine the relationship between these factors and economic growth. This analysis will shed light on the extent to which financial development and FDI impact the overall economic growth of the host country. After incorporating FDI in the the model, the equation 2.1 can be reexpressedas:

Economic Growth (EG) =*f*(Financial Development, FDI and Other Macroeconomic Variables) 2.2

2.5 Summary of Gaps in the Literature

The existing literature in modern macroeconomics are filled with various studies on both the short and long run link between foreign direct investment FDI and economic growth in Nigeria and other emerging market economies. However, there are areas of knowledge gap on the part of the effects of financial development linkage on FDI inflows to the Nigerian economy. As a result of this knowledge gap and growing concern for commitments to investment promotion and sustainable financial development in the country, it is imperative therefore at this time to assess the effects of FDI on Nigeria's real sector growth. As a result, this study is carried out to investigate empirically foreign direct investment FDI inflows, financial development FD and economic growth in Nigeria.

Endnotes

[1] A. Orji, G. U. Nwagu, J. E. Ogbuabor& O. I. Anthony-Orji.*Foreign Direct Investment and Growth Nexus: Further Evidence from Africa's Largest Economy*. **Journal of Infrastructure Development** 13(1) 2021 65–78, India Development Foundation Reprints and permissions: in.sagepub.com/journals-permissions-india DOI: 10.1177/09749306211024433

[2] UNCTAD. World Investment Report: Global value chains 2022. http://unctad.org/en/publicationslibrary.

[3] L.I. Anochiwa& A. Maduka. *Inflation And Economic Growth in Nigeria: Empirical Evidence?***Journal of Economics and Sustainable Development**, 6(20) 2015, 113-121. Retrieved from https:// www.iiste.org/Journals/index.php/ JEDS/article/view/26596/2724

[4] A. Ndoricimpa. *Threshold Effects of Inflation on Economic Growth in Africa: Evidence from a Dynamic Panel Threshold Regression Approach.***Working Paper Series No 249, African Development Bank, Abidjan, Côte d'Ivoire**. Retrieved from https://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/WPS_No_249_Threshold_Effects_of_Inflation_on_Economic_Growth_in_ Africa.pdf 2017

[5]T. O.Okegbe. *Foreign Direct Investment, and Economic Growth in Nigeria. International.* **Journal of Accounting**, Finance and Risk Management4(1) 2019, 15.

[6]S.A. Ibrahim. *The impact of Foreign Direct Investment on Economic Growth in Nigeria:* Information Management and Business Review,7(4), 2015.90-97.

[7]Y.Bayar &M.D. Gavriletea. Foreign Direct Investment Inflows and Financial Development in Central and Eastern European Union Countries. A Panel Cointegration and Causality. International Journal of Financial Studies, 6(2) 2018, 55.

[8]O.E.Nwajiaku, A. Ananwude& V.O. Obi-Nwosu. Financial Deepening and Entrepreneurial Growth in Nigeria; A Time Series Analysis. International **Journal of Academic Research in Accounting, Financial and Management Science.**10(2) 2020, 257-263.

[9]Alfaro, L., & Charlton, A. *Intra-industry Foreign Direct Investment*. American Economic Review,99, 2009.

[10]Tah, K.C. Czerniak, A. Levine, K. Wiggin&I.Osondu.Foriegn Trade and Economic Growth in South Africa; Asian- Pacific Journal of Accounting and Economics. 28(4), 2021.

[11]O. Obinna.*Effect of Inflation on Household Final Consumption Expenditure in Nigeria*.Journal of Economics and Development Studies, 8(1),2020.104-111.

[12] T. Azid& M. Jamil. *Impact of Exchange Rate and its volatility on Growth and Economic Performance: A case study of Pakistan*. *21st Annual General Meeting & Conference, Pakistan Institute of Development Economics, Islamabad (Pakistan).* **Pakistan Development Review**, 44(4) 2005, 749-775.

[13] Central Bank Of Nigeria (CBN). "Statistical Bulletin", Annual Publication of the Central Bank. 2019.

[14]K. Fadila& A. Olure-Bank. Effect Of Human *Capital Development and Economic Growth of ECOWAS Member States*. An Advance in Sciences and Humanities;5(1), 2019, 229-245

[15]B.M. Akaakohol& I.O. Ogunrinola. *Human Capital Development on Economic GrowthInNigeria*, Lafia Journal Of Economics and Management Science. 3(1) 2018,

[16]B.U. Babangida. *Human Capital Development on Economic Growth in Nigeria.***Polac Management Review;**2(2) 2022.

[17] S. Oluwatobi& I.O. Olurinola. *Government Expenditure onHuman Capital Development: Implications for Economic Growth in Nigeria.* **J Sustain Dev** 4(3) 2011:72–80. https://doi.org/10.5539/jsd.v4n3p72.

[18] J.T. Emery, M.T. Spence, L.T. Wells & T. Buehrer. *Administrative Barriers to Foreign Investment. Reducing Red Tape in Africa*, FIAS Occasional Paper (14) 2000

[19] O. A. Adaramola& O. Dada. *Impact of Inflation on Economic Growth: Evidence from Nigeria. Investment Management and Financial Innovations*, 17(2), 2020.

[20] S. O. Akinbode, O. Fapetu, J. Olabisi & O. T. Ojo. *"Impact of Exchange Rate on Economic Growth in Nigeria* (1981-2016): **An Ardl Approach," Contemporary Economy Journal, Constantin BrancoveanuUniversity**, 4(2) 2019, pages 158-171.

[21] D. Anifowose. *Economic Growth and Exchange Rate Dynamics in Nigeria*. **Imo State University /Business & Finance Journal** 12(1), 2021.

[22] S. A. Keji. *Human Capital andEconomic Growth in Nigeria*.**Keji Future Business Journal,** 7(1) 2021,49 https://doi.org/10.1186/s43093-021-00095-4

[23] T.A. Olaniyi, R.O. Ajayi & G.E. Oyedokun. *Tax Policy Incentives andForeign Direct Investment in Nigeria*. **Fountain University Osogbo Journal of Management**, 3(3) 2018: 59-71.

[24] A.T. Tapang, B.E. Onodi& A.H. Amaraihu. *Effect of Tax Incentives on Foreign Direct Investment in Nigeria*. **IIARD International Journal of Economics and Business Management**, 4(7) 2018: 30-39.

[25] J. Chen. Investment. 2018. Available From: https://www.investopedia.com/terms/i/investment.asp. [Accessed 9th April, 2019]

[26] L. A. Olorogun. M.A Salami, & F.V. Bekun. *Revisiting TheNexus Between FDI, Financial Developmentand Economic Growth; Empirical Evidence from Nigeria.***Journal Of Public Affairs. 22**(3) 2022.

[27] B. A. Giwa, E. O. George, H. Okodua& O.S. Adediran. *Empirical Analysis of the Effects of Foreign Direct Investment Inflows on Nigerian Real Economic Growth: Implications for Sustainable Development Goal-17.* **Cogent Social Sciences**, 6(1) 2020, 1727621. https://doi.org/10.1080/23311886.2020.1727621.

[28] N. Papageorgiadis, F. McDonald, C. Wang &P. Konara. *The Characteristics OfIntellectual Property Rights Regimes: How Formal and Informal Institutions Affect Outward FDI Location*. International Business Review, 29, 2020. 101620

[29] R. Rani &N. Kumar. *On theCausal Dynamics Between Economic Growth, Trade Openness and Gross Capital Formation: Evidence from BRICS Countries*. Global Business Review, 20(3) 2019, 795 – 812.

[30] UNCTAD. United Nations Conference on Trade and Development. World Investment Report. https://unctad.org/en/PublicationsLibrary/wir2018_en.pdf 2018

[31] U. E. Effiong & N. F. Inyang. *Foreign Direct Investment Led GrowthHypothesis and Economic Development in Nigeria.* **Randwick International of Social Sciences (RISS) Journal** 2(4), 2021, Page: 376-393 ISSN Online: 2722-5674 - ISSN Print: 2722-5666

[32] O. E. Oyegoke& O. N. Aras. *Impact of Foreign Direct Investment on Economic Growth in Nigeria*, **Journal of Management, Economics, and Industrial Organization**, 5(1) 2021, 31-38. http://doi.org/10.31039/jomeino.2021.5.1.2.

[33] F. O. Anetor. *Economic Growth effects of Private Capital inflow: A Structural VAR approach for Nigeria*. **Journal of Economics and Development**, 21(1) 2019, 18-29.

[34] F.N. Awa. *Influence of Foreign Direct Investment on Economic Growth in Nigeria* (1989- 2019). **European Journal of Accounting, Auditing and Finance Research** 9,(5) 2021, pp.36-52.

[35]A.E Oyamendan. *FDIand Economic Growth. NigeriaEvidence, International***Journal of Finance and Conteporary Issues.** 3(1) 2022, 38-48.

[36] A. Omoruyi. *International Capital Flows and Development-Financial Openness Matters*: Empirical Evidence from Nigeria**.** 2018.

[37] H. Tran & H. Huyen. *An Investigation into the Impacts Of FDI, Domestic Investment Capital, Human Resources, and Trained Workers on Economic Growth in Vietnam.* 2019. 10.1007/978-3-030-04200-4_69.

[38] S. Hanafy & M. Marktanner. Sectoral FDI, *Absorptive Capacity andEconomic Growth – Empirical Evidence from Egyptian Governorates*. 2018, 57-81 | Received 12 Jun 2017, Accepted 11 Jun 2018, Published online:

[39] V. U. Ijirshar, G. Anjande, J. Fefa&B. N. Mile. *The Growth-Differential Effects of Domestic Investment and Foreign Direct Investment in Africa*. **CBN Journal of Applied Statistics** 10(2) 2019.

[40] Organization for Economic Co-operation and Development. *African economic outlook.* OECD Publishing.2005

[41] United Nations Conference on Trade and Development. *Economic Development in Africa: Trade Performance and Commodity Dependence*. **United Nations Publications**.2017.

[42] World Bank..*The World Bank in Nigeria*. World Bank Group.2019 https://www.worldbank.org/en/country/nigeria/overview

[43] D Ricardo,.*On the Principles of Political Economy and Taxation.*1817.

[44]M.S. Oladimeji, O.A. Amuda & E.A. Essien.Business Innovation and *Comparative Advantage in Nigeria Manufacturing Sector. EMAJ; Emerging Markets Journal*, 9(2) 2019, 37-43.

[45]Dinh, T.T. Huyen, D.H. Vo, A.T. Vo. &T.C. Nguyan. Foreign Direct Investment and Economic Growth in the Short Runand Long Run. Empirical Evidence from Developing Countries, Journal of Risk and Financial Management**,** 12(4) 2019.176.

[46]O.I.Anthony-Orji, A.Orji,& J.E. Ogbuabor. Dis- aggregated Foreign Capital Inflows and Economic Growth in a Developing Economy; Empirical Evidence from Nigeria. Journal of Empirical Studies.5(1)2018, 1-11, .

[47]N.U Sambo, I.S.Farouq, A.U. Ahmad, A.H. Jakada, I.A. Danmaraya & S.S. Sanusi. *Financial Development and Economic Growth in Nigeria: Evidence from a threshold Autoregressive and Assymmetric Analysis*. Journal of Business, Economic and Management**,**8(3), 2021, 207-218.

[48] R. E. Lucas. *On TheMechanics of Economic Development*. **Journal of Monetary Economics**, 22(1) 1988, 3-42.

[49] P. M. Romer .*Endogenous Technological Change*. **Journal of Political Economy**, 98(5) 1990, S71-S102.

[50] I. Nkemdilim& A.E. Ozegbe. *An Assessment of Foreign Direct Investment and Sustainable Development Nexus: The Nigerian and Ghanaian Perspectives.* International Journal of Management, Economics and Social Sciences (IJMESS) ISSN: 2304-1366 (10) 2021.

[51] K. Alabi. *The Impact of Foreign Direct Investment on Economic Growth: Nigeria Experience*. **Open Journal of Applied Sciences**. (09), 2019, 372-385. 10.4236/ojapps.2019.95031.

[52] A. Eze, M. Nnaji & N. Nkalu. *Impact of Foreign Direct Investment on Manufacturing Sector Output Growth in Nigeria*. **International Journal of Applied Economics, Finance and Accounting**. 5.2019, 55-64. 10.33094/8..52.55.64A.

[53] G. U Orji, Nwagu, J. E. Ogbuabor& O. I. Anthony-Orji. *Foreign Direct Investment and Growth Nexus: Further Evidence from Africa's Largest Economy.* **Journal of Infrastructure Development** 13(1) 2021, 65–78, 2021 India Development Foundation Reprints and permissions: in.sagepub.com/journals-permissions-india DOI: 10.1177/09749306211024433 .

[54] O. A. Adaramola& O. Dada. *Impact of inflation on Economic Growth: Evidence from Nigeria*. **Investment Management and Financial Innovations**, 17(2) 2020, 1-13. Retrieved from http://dx.doi.org/10.21511/imfi.17(2).2020.01.

[55] S. O. Akinbode, O. Fapetu, J. Olabisi & O. T. Ojo. *"Impact of Exchange Rate on Economic Growth in Nigeria (1981-2016): An Ardl Approach,"***Contemporary Economy Journal, Constant in Brancoveanu University**, 4(2) 2019 pages 158-171.

[56] A. Anifowose. *Economic Growth and Exchange Rate Dynamics in Nigeria.* (12) 2021, 36-48.

[57] K. S. Keji. *Human Capital And Economic Growth in Nigeria*. **Future Business Journal**. 7. 49. 10.1186/s43093-021-00095-4. 2021

[58] R. Alvarado, M. Iniguez & P. Ponce. *Foreign Direct Investment and Economic Growth in Latin America*. Economic Analysis and Policy, (56), 2017, 176-187. https://doi.org/10.1016/j.eap.2017.09.006

[59] S. Iamsiraroj. *The Foreign Direct Investment–Economic Growth Nexus*. International Review of Economics and Finance, (42), 2016, 116–133. https://doi.org/10.1016/j.iref.2015.10.044

[60] A.Ndoricimpa. *Threshold Effects of Debt On Economic Growth in Africa: Threshold Effects of Debt on Economic Growth*. African Development Review. (29) 2017, 471-484. 10.1111/1467-8268.12282.

[61] M.A. Akinkunmi. *Nigeria"s Economic Growth: Past, Present And Determinants",* **Journal of Economics and Development Studies**, 5(2), (2017) 31- 46.

[62]O.Osei, E.E. Ibrahim & Y.A.Sare. Foreign Direct Investment, Sectorial Effects and Economic Growth in Africa. **International Economic Journal,** 6(1), 2019, 473-492.

[63]M. Ahmad, P. Jiang, A. Majeed, & M. Y. Raza, Does Financial Development and Foreign Direct Investment Improve Environmental Quality? Evidence from Belt and Road Countries, Environmental Science and Pollution Research, 27, (19), 2020, pp. 23586–23601, doi: 10.1007/s11356-020-08748-7.

[64] R. Desbordes & S. J. Wei, The Effects of Financial Development on Foreign Direct Investment, Journal of Development Economics, 127, (February), 2017, pp. 153–168, doi: 10.1016/j.jdeveco.2017.02.008.

[65] M. A. Islam, M. A. Khan, J. Popp, W. Sroka, & J. Oláh, Financial Development and Foreign Direct Investment-the Moderating Role of Quality Institutions, Sustainability (Switzerland), 12, (9), 2020, doi: 10.3390/SU12093556.

Chapter Three

Methodology

This chapter presents the methodology that will be used to achieve the research objectives. It presents the model specification, estimation techniques apriori expectation, definition and sources of data and variable measurement.

3.1 Model Specification

The primary aim of this study is to examine Foreign Direct Investment Inflows, Financial Development and Economic Growth in Nigeria. The general model for this study is adapted from the study of scholars in the area of financial development, FDI and Economic growth[1]. After modifying the model, it can be expressed implicitly as;

$$EG = f(FDI, FD) \quad (3.1)$$

Statistically, the model can be re-expressed as follows

$$EG_t = \beta_0 + \beta_1 FDI_t + \beta_2 FD_t + \mu_t \quad (3.2)$$

Where,

EG = Economic Growth

FDI = Foreign Direct Investment

FD = Financial Development (A vector of financial development; Financial Access (FDA), Financial Depth (FDD), Financial Stability (FDS) and Financial Efficiency (FDE))

μ = Error Term

β_0 = Intercept

$\beta_{1\text{-}2}$= Coefficient of independent variables

t = Time

3.1.1 Model for the Investigation of the Effect of FDI Inflows on Economic Growth in Nigeria.

In order to achieve the first objective of this study which is to investigate the effect of FDI inflows on economic growth in Nigeria, the model in equation 3.2 was modified by incorporating other macroeconomic variable relevant to the study given the findings of others scholars[2,3]. The model can therefore be expressed as:

$$EG_t = \beta_0 + \beta_1 FDI_t + \beta_2 FD_t + \beta_3 INF_t + \beta_4 RIR_t + \beta_5 EXR_t + \mu_t \quad (3.3)$$

Where,

EG = Economic Growth

FDI = Foreign Direct Investment

FD = Financial Development (A vector of financial development; Financial Access (FDA), Financial Depth (FDD), Financial Stability (FDS) and Financial Efficiency (FDE))

INF = Inflation

RIR = Real Interest Rate

EXR = Exchange Rate

μ = Error Term

β_0 = Intercept

$\beta_{1\text{-}5}$= Coefficient of independent variables

t = Time

3.1.2 Model for the Examination of the Effect of Financial Development on FDI Inflow in Nigeria.

In line with a similar study, the equation 3.2 can be re-expressed in order to achieve the second objective of this study where FDI inflows is expressed as dependent on financial development in Nigeria[2].

$$FDI_t = \beta_0 + \beta_1 EG_t + \beta_2 FD_t + \beta_3 INF_t + \beta_4 RIR_t + \beta_5 EXR_t + \mu_t \quad (3.4)$$

3.1.3 Model for the Effect of Financial Development on the Relationship Between FDI and Economic Growth in Nigeria.

To estimate the effect of financial development on the relationship between FDI and economic growth in Nigeria, equation 3.2 is therefore restated as:

$$EG_t = \beta_0 + \beta_1 FDI_t + \beta_2 FD_t + \beta_3 (FDI^* FD)_t + \beta_4 INF_t + \beta_5 RIR_t + \beta_6 EXR_t + \mu_t \quad (3.5)$$

Where FDI*FD measures the interaction of FDI and Financial Development.

3.2 Estimation Procedure

In order to achieve the objectives of this study using the specified model, the variables will be subjected to the test of stationarity using the Augmented Dickey-Fuller test which uses non-parametric statistical methods to take care of the serial correlation in the error terms without adding lagged difference terms.

This study uses Autoregressive Distributed Lagged (ARDL) model to achieve its objectives. The ARDL bound test was used to examine the cointegration relationship among the variables of the study. The ARDL method of estimation was chosen because it can be used when the variables in the model are integrated at order zero [I(0)] and one [I(1)]. It can also be used even with small sample size, and irrespective of whether some of the regressors are endogenous

3.3 Description and Measurement of Data

Based on the objective of this study, the dependent variable is economic growth while the explanatory variables are FDI, Financial Development, Inflation, Interest Rate and Exchange Rate. These variables are defined and measured in the table below.

Table 3.1: Description Measurement of the Variables in the Study

Variable	Indicator	Description
Economic Growth (EG)	GDP Per Capita Growth (Annual %)	This refers to the annual percentage growth rate of GDP per capita based on constant local currency. The GDP per capita measures the gross domestic product divided by midyear population.
Foreign Direct Investment (FDI)	Foreign Direct Investment, Net Inflows (% Of GDP)	Foreign direct investment are the net inflows of investment to acquire a lasting management interest (10 percent or more of voting stock) in an enterprise operating in an economy other than that of the investor.
Financial Development (FD)	**Access** = Bank Deposits To GDP (%) **Depth** = Domestic Credit To Private Sector (% Of GDP) **Efficiency** = Bank Lending-Deposit Spread **Stability** = Liquidity Ratio	Financial development is defined as a combination of depth (size and liquidity of markets), access (ability of individuals and companies to access financial services), efficiency (ability of institutions to provide financial services at low cost and with sustainable revenues, and the level of activity of capital markets) and stability (Capital adequacy ratios, Asset quality ratios and Liquidity ratios)
Inflation (INF)	Inflation, Consumer Prices (Annual %)	Inflation measured by consumer price index (CPI) is described as the change in the prices of a basket of goods and services that are typically purchased by specific groups of households.
Interest Rate (RIR)	Real Interest Rate (%)	Real interest rate is the lending interest rate adjusted for inflation as measured by the GDP deflator.
Exchange Rate (EXR)	Official Exchange Rate (LCU Per US$, Period Average)	Exchange rate is the price of one currency in terms of another currency.

3.4 Data Requirement and Sources

This study aim to investigate the effect of FDI and Financial Development on economic growth in Nigeria using annual time series data from 1981 to 2021. Using secondary data, all data used in this study were obtained from the World Bank World Development Indicators with the exception of Liquidity ratio obtained from the CBN Statistical Bulletin

Endnotes

[1] H. A. Yusuf. W.O. Shittu, S.B. Akanbi, H.M Bello & I..A.Abdulrahman. *The Role of Foreign Direct Investment, Financial Development, Democracy and Political (in)stability on Economic Growth in West Africa*, International Trade, Politics and Development, 4, (1), 2020, pp. 27–46, doi: 10.1108/itpd-01-2020-0002.

[2] K. U. Ehigiamusoe & H. H. Lean, *Foreign Capital Inflows and Economic Growth in Nigeria: any Nexus?*, **Journal of African Business**, 20, (4), 2019, pp. 455–471, doi: 10.1080/15228916.2019.1581010.

[3] A. Musah & E.D. Gekpetor, S.N. Kwaku. *Foreign Direct Investment (FDI), Economic Growth and Bank Performance in Ghana*, (July), 2018, doi: 10.5923/j.ijfa.20180704.02.

Chapter Four

Results and Discussion of Findings

This chapter presents data collected, the analysis and interpretations in accordance with the objectives of the study. The empirical results of the study were discussed starting with the preliminary analysis. The study presents descriptive statistics, trend and correlation analysis while the pre-estimation tests presented were the unit root and co-integration tests. The results and findings were discussed with regard to the three objectives

4.1 Preliminary Analysis

The preliminary analysis of this study presents the descriptive statistics, graphical trend analysis and correlation analysis of the variables for empirical analysis based on objectives of the study.

4.1.1 Presentation of Data

The data used in this study for the analysis of foreign direct investment, financial development and economic growth in Nigeria is presented in Appendix 1 (see Appendix section).

4.1.2 Trend Analysis of Variables

This section presents the findings on the trend and pattern of financial development, foreign direct investment and economic growth in Nigeria using line charts. In exploring the trends, each of the four indicators of financial development are presented in each chart with FDI and Economic growth to show their behaviour over the period under investigation.

The graphical trend of Foreign Direct Investment (FDI) and Economic Growth (EG) as shown in the figures 4.1 to 4.4 shows that the Nigerian Economy having dwindled in negative economic growth in the early 80s, the economy came out of this negative growth for a while in 1987 which could be as a result of a sudden increase in FDI in 1986 to 1990 such that with more money in the economy, there is an increase in economic activities. Further in 1992 the economy experienced a downward economic growth despite a higher increase in FDI within the period of 1991 to 1994. This could be as a result of the global oil market downturn in the early 1990s and since Nigeria's economy is heavily dependent on oil exports, the economy was adversely affected as a result of decline in oil price which negatively impact the economy leading to a negative growth. In addition to this is the poor investment climate such that despite an increase in FDI, there is no favourable investment climate for the foreign investors because of issue such as political instability, weak legal protection and limited access to financing.

Following this period is a drop in the rate of FDI inflows contribution to GDP in the economy which have been below 3% till date. This continued low level of FDI inflows are likely influenced by a combination of factors such as infrastructural challenges, security concerns, policy uncertainty and economic instability. To attract more FDI, Nigeria may need to address these challenges and create a more favorable investment climate that provides greater certainty, stability, and security for foreign investors.

Having explored the trend and patterns of FDI and economic growth, it is necessary to explore the influence of each of the financial indicators on the behaviour of FDI and Economic growth in Nigeria.

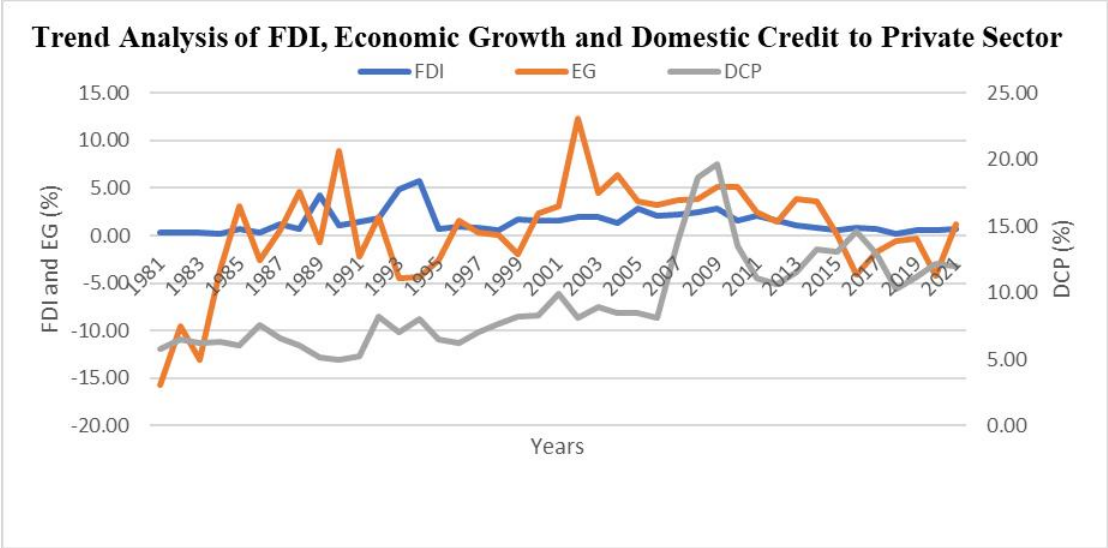


Figure 4.1: Trend Analysis of FDI, Economic Growth and Domestic Credit to Private Sector
Source: Authors Computation (2023)

From the figure 4.1, considering the trend of one of financial depth which is a measures of financial development, this was proxied by domestic credit to private sector as a of GDP (DCP), it could be observed that it has remained below 10% till 2007 when it rose above 10%. This rise could be observed to start from the sudden rise in the growth of the economy between 2000 and 2002. Among the factors that could account for DCP to remain below 10% till 2007 include the reluctance of Nigerian banks to lend to the private sector due to concerns about default risk. This has made it difficult for private sector businesses to obtain credit, which in turn has limited their ability to invest and grow. In addition to this is the high interest rates charged by Nigerian banks to compensate for the perceived risk of lending to the private sector and weak financial infrastructure.

However, moving beyond 2007, the sharp rise in DCP from 2007 is due to a number of factors such as increase in oil prices in 2007 which may have contributed to increased government revenue and liquidity in the financial system. Economic growth is another factor as observed from the figure, Nigeria experienced a period of strong economic growth in the mid-2000s, with real GDP growth averaging over 6% per

year between 2000 and 2006. This growth may have increased demand for credit by private sector businesses and led to an increase in lending by banks. In addition to this is financial sector reforms by the CBN and increase in FDI between 2005 and 2007 which could have increased liquidity in the financial system and led to an increase in lending by banks to the private sector.

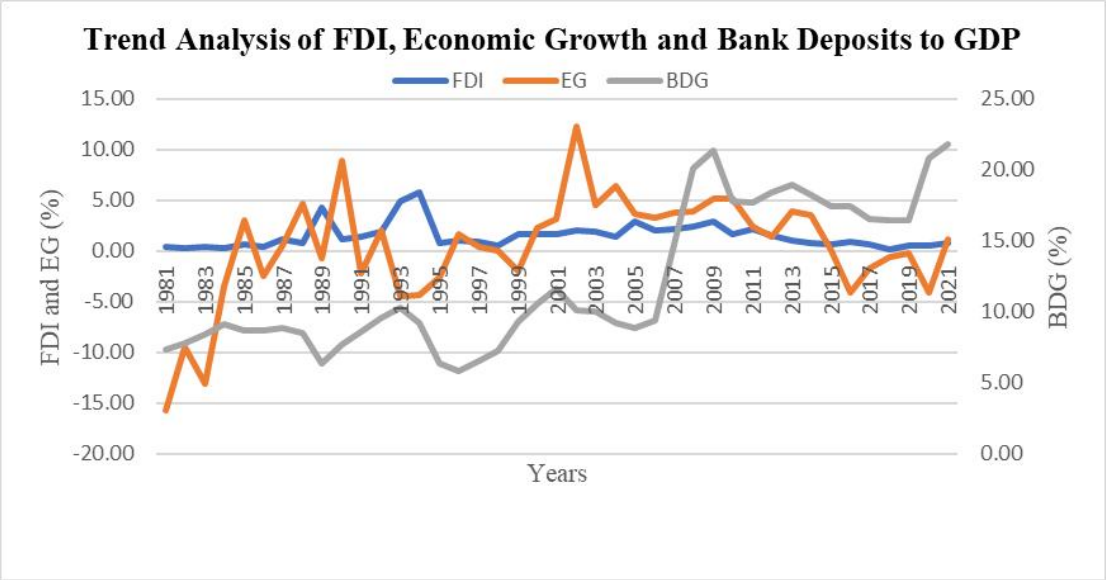


Figure 4.2: Trend Analysis of FDI, Economic Growth and Bank Deposit to GDP
Source: Authors Computation (2023)

The second measure of financial development is financial access proxied by bank deposits to GDP (%) (BDG). As shown in figure 4.2, while there may be no clear relationship between BDG and FDI even though economic policies and various reforms in the country are targeted towards attracting FDI, the effectiveness of these policies may have been limited by other factors, such as political instability and corruption, which could have discouraged foreign investors. Notwithstanding, the relationship between BDG and EG can be seen in two phases which are 1981 to 2007 and 2007 to 2021. In the first phase, a countercyclical pattern can be observed between BDG and EG such that when there is a sharp rise or fall in BDG, economic growth (EG) is experiencing that opposite. In other words, when the economy is doing well and EG is high, bank deposits as a percentage of GDP tend to decline, and

vice versa. The reason for this is that these period of countercyclical pattern could be a reflection of the normal business cycle where in times of economic expansion, businesses may be more likely to invest in capital projects, which require them to draw down on their bank deposits. Conversely, during economic contractions, businesses may be more likely to hold on to their cash, which would increase the percentage of bank deposits as a share of GDP. Another possible reason for this pattern is that in periods of economic growth, the Central Bank of Nigeria may raise interest rates to cool down the economy and prevent inflation from getting out of control. Higher interest rates could discourage deposits in banks as investors seek higher returns in other asset classes. Conversely, during economic downturns, the Central Bank may lower interest rates to encourage lending and boost economic growth, which could lead to an increase in bank deposits.

The second phase started with about 10% rise in BDG between 2006 and 2009 after which it continues to grow at a higher rate up to about 22% in 2021, during the same period, FDI and EG exhibit the same pattern but at a lower rate. The reason for the change in the relationship between bank deposits as a percentage of GDP and economic growth between the two phases could be due to a combination of factors, including changes in economic policy, improved financial sector regulation, and increased investment in the economy.

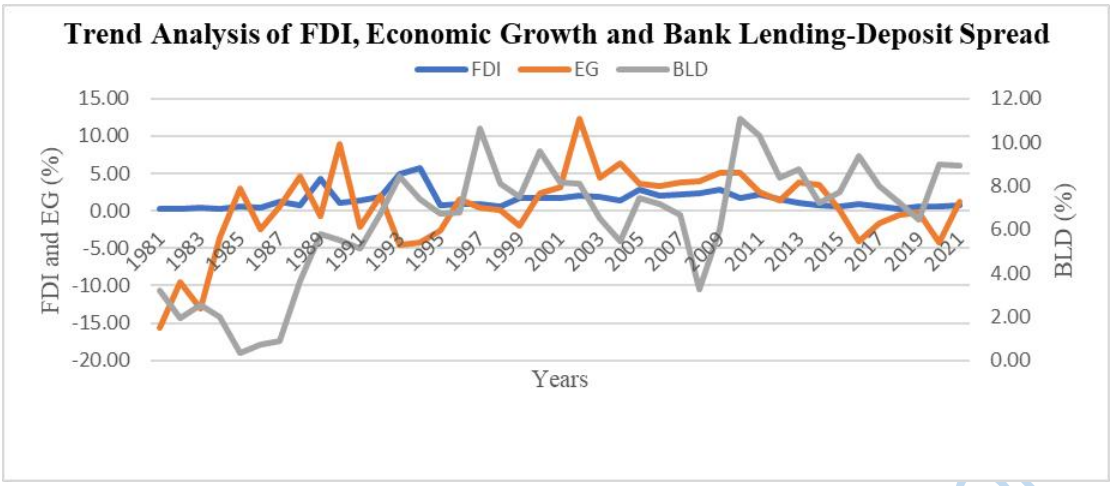


Figure 4.3: Trend Analysis of FDI, Economic Growth and Bank Lending-Deposit Spread
Source: Authors Computation (2023)

The figure 4.3 shows the trend analysis of FDI and EG along with the third measure of financial development which is financial efficiency, proxied by bank lending deposit spread (BLD). It was shown that there was a fall in BLD starting from 1981 to 1986 notwithstanding there is a rise in economic growth and FDI within the same period. This low bank lending deposit spread indicates that banks are not earning much profit on their lending activities, which can affect their ability to lend to customers and earn sufficient returns on their investments. In Nigeria, between 1981 and 1986, there were several factors that contributed to the low bank lending deposit spread such as high inflation which reduced the real value of the interest rates on loans and deposits and restrictions by the Nigerian government intervention which prevented banks from charging high interest rates on loans and reduced their ability to earn sufficient returns on their lending activities.

Beginning from 1986, a growth in BLD is observed till around 1993 which could be as a result of the structural adjustment program introduced in Nigeria in 1986 to address its economic challenges. The SAP involved the devaluation of the Naira, removal of price controls, and reduction of government subsidies. This led to an

increase in the cost of doing business, including borrowing costs for banks, which contributed to the widening of the lending deposit spread.

Similarly, in 2009 despite a decrease in foreign direct investment (FDI) and GDP growth, the bank lending deposit spread sharply increased. This can be attributed to a the economic downturn or instability, which makes banks perceive lending to be more risky and therefore demand higher interest rates to compensate for the increased risk.

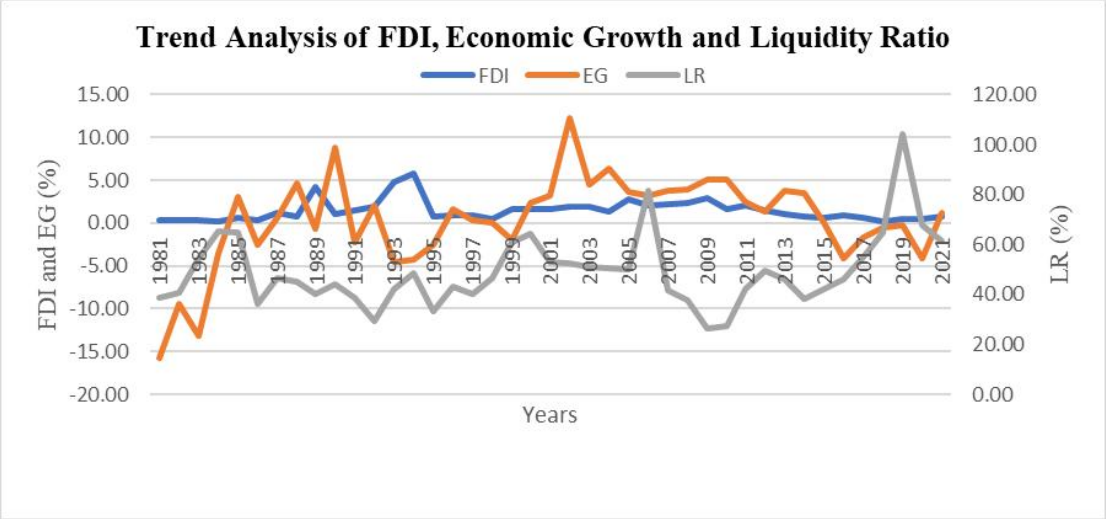


Figure 4.4: Trend Analysis of FDI, Economic Growth and Liquidity Ratio
Source: Authors Computation (2023)

The figure 4.4 above show the trend of FDI and liquidity ratio along with the fourth measure of financial development which is stability, proxied by liquidity ratio. From the figure, it can be observed that liquidity ratio (LR) and economic growth moves in opposite direction from 1981 to 2017 even though there is no clear relationship with FDI. This trend in liquidity ratio was attributed to the complex interplay of various economic factors, including the need for monetary policy to balance short-term and long-term economic goals.

However, the sharp increase in the liquidity ratio in 2017 was mainly due to the need to address the rising inflation rate in the country. Inflation had been on the rise since 2016, partly due to the depreciation of the Naira, which led to an increase in the cost

of imported goods and raw materials. These measures had a short-term impact on economic growth, but helped to stabilize the economy and bring down inflation in the long run.

4.1.1 Descriptive Statistics of Variables

The table 4.1 shows the descriptive statistics for nine variables (RIR, LR, INF, GDP, FDI, EXR, DCP, BLD and BDG) based on 40 observations.

Table 4.1: Descriptive Statistics

	RIR	LR	INF	GDP	FDI	EXR	DCP	BLD	BDG
Mean	0.434	48.763	18.998	0.359	1.496	100.760	9.283	6.393	11.909
Median	4.326	46.092	12.716	0.989	1.124	106.464	8.202	6.959	9.464
Maximum	18.180	104.202	72.835	12.276	5.791	358.810	19.626	11.064	21.318
Minimum	-65.857	26.392	5.3880	-15.698	0.184	0.618	4.958	0.317	5.844
Std. Dev.	14.440	14.724	16.868	5.303	1.245	100.728	3.540	2.765	4.805
Skewness	-2.680	1.533	1.8234	-0.856	1.729	0.889	1.131	-0.639	0.604
Kurtosis	12.583	6.583	5.159	4.668	6.045	2.995	3.879	2.673	1.821
Jarque-Bera	200.968	37.089	29.936	9.527	35.385	5.265	9.816	2.902	4.751
Probability	0.0000	0.000	0.000	0.009	0.000	0.072	0.007	0.234	0.093
Sum	17.37	1950.54	759.95	14.34	59.83	4030.41	371.32	255.72	476.38
Sum Sq. Dev.	8132.34	8455.34	11097.27	1096.80	60.50	395701.7	488.85	298.09	900.43
Observations	40	40	40	40	40	40	40	40	40

Source: Authors Computation (2023)

From the table, it was found that Real Interest Rates (RIR) have a mean of 0.434 and a median of 4.326, indicating that there has been a low average interest rate in Nigeria over the years. This could be interpreted as an effort by the government to encourage investment and boost economic growth. However, the negative skewness and high kurtosis suggest that there have been extreme values in the data, and the Jarque-Bera test indicates that the distribution is not normal. This could indicate that there have been periods of instability in the financial system. For Inflation (INF), it was observed to have mean of 18.998 and a median of 12.716, indicating that inflation has been relatively high in Nigeria over the years. The positive skewness and high kurtosis suggest that there have been periods of high inflation, and the Jarque-Bera test confirms that the distribution is not normal. High inflation could negatively affect the

purchasing power of the population and lead to economic instability. Meanwhile, Gross Domestic Product (GDP) has a mean of 0.359 and a median of 0.989, indicating that there has been low average economic growth in Nigeria over the years. The negative skewness suggests that there have been periods of negative growth, and the Jarque-Bera test indicates that the distribution is not normal. Low economic growth could be a result of various factors such as high inflation, weak infrastructure, low foreign investment, and other structural problems in the economy.

Foreign Direct Investment (FDI) has a mean of 1.496% of GDP and a median of 1.124% of GDP, indicating that foreign investment has been relatively low in Nigeria. The positive skewness suggests that there have been periods of high foreign investment, and the Jarque-Bera test indicates that the distribution is not normal. Low foreign investment could be due to factors such as political instability, weak infrastructure, and low investor confidence. Whereas, for Exchange Rate (EXR) has a mean of 100.760 Naira/USD and a median of 106.464 Naira/USD, indicating that the exchange rate has been relatively stable over the years. However, the high standard deviation and positive skewness suggest that there have been periods of volatility and the distribution is not normal. A stable exchange rate could help to attract foreign investment and promote economic growth.

For the four measures of financial development, the measure of financial stability-liquidity Ratio (LR) has a mean of 48.763 and a median of 46.092, indicating that the CBN has generally maintained a high liquidity ratio over the years. The high standard deviation and positive skewness suggest that there have been periods of volatility and the distribution is not normal. The Jarque-Bera test confirms that the distribution is not normal. A high liquidity ratio could indicate a conservative monetary policy, which may limit credit growth and potentially slow down economic growth. While

the measure of financial depth-Domestic Credit to Private Sector (DCP) has a mean of 9.283% of GDP and a median of 8.202% of GDP, indicating that there has been low average credit growth in Nigeria over the years. The positive skewness and high kurtosis suggest that there have been extreme values in the data, and the Jarque-Bera test confirms that the distribution is not normal. Low credit growth could be a result of a conservative monetary policy and a lack of investment opportunities in the economy.

Financial efficiency measured by Bank Lending-Deposit Spread (BLD) measures the difference between the interest rate charged on loans and the interest rate paid on deposits by banks in Nigeria. The mean value of BLD is 6.393, indicating that on average, banks charge interest rates that are 6.393 percentage points higher on loans than they pay on deposits. The median value of BLD is 6.959, which is slightly higher than the mean value, suggesting that there may be some outliers or skewness in the distribution of this variable. A higher BLD indicates that banks are earning more profit from their lending activities, which could incentivize them to lend more and contribute to economic growth. The fourth measure which is financial access proxied by bank deposits to GDP (%) (BDG) variable measures the ratio of total bank deposits in Nigeria to the country's GDP. The mean value of BDG is 11.909, indicating that bank deposits in Nigeria are equivalent to about 11.9% of the country's GDP. The median value of BDG is 9.464, which is lower than the mean value, suggesting that the distribution of this variable is positively skewed. A higher BDG indicates that there is more liquidity in the banking system, which could contribute to economic growth by increasing the availability of credit and reducing the cost of borrowing for individuals and businesses.

In summary, these statistics provide some insight into the trends and distribution of key economic variables in Nigeria over the past few decades, some variables, such as INF and GDP, have relatively low variability, while others, such as RIR have high variability. The distributions of the variables are also different, with some variables being positively skewed (RIR, LR, FDI, EXR, and DCP), some negatively skewed (BLD), and others being approximately symmetric (INF, GDP, and BLD). The high skewness and kurtosis values for some of the variables suggest that their distributions may not be normal, which could have implications for the accuracy of statistical models or forecasts that rely on these variables. Additionally, the Jarque-Bera tests indicate that several of the variables are not normally distributed, which further underscores the importance of careful data analysis and modeling in order to make accurate predictions or draw meaningful conclusions about the Nigerian economy.

4.1.2 Correlation Analysis

Table 4.2: Correlation Matrix

	RIR	LR	INF	GDP	FDI	EXR	DCP	BLD	BDG
RIR	1								
LR	0.1244	1							
INF	-0.5134	-0.2537	1						
GDP	0.5738	-0.0269	-0.2028	1					
FDI	-0.0557	-0.1969	0.4554	0.1648	1				
EXR	0.3680	0.4151	-0.3418	0.1706	-0.1577	1			
DCP	0.4240	-0.1177	-0.3170	0.2574	0.0702	0.6631	1		
BLD	0.2529	-0.0085	0.0045	0.2868	0.2491	0.5086	0.3332	1	
BDG	0.4355	0.0385	-0.3479	0.1965	-0.0314	0.7827	0.8929	0.3758	1

Source: Authors Computation (2023)

The correlation analysis present the degree of association that exist among the measures of financial development, foreign direct investment, economic growth and other macroeconomic variables. The correlation matrix presented in table 4.2 shows the result of the correlation coefficient between the variables, real interest rate (RIR), liquidity ratio (LR), inflation (INF), economic growth (EG), foreign direct investment (FDI), exchange rate (EXR), domestic credit to private sector (DCP), bank lending

deposit spread (BLD) and bank deposit to GDP (BDG). From the result it can be observed that RIR has a positive correlation with GDP, DCP, and BDG, indicating that as these variables increase, RIR also tends to increase. On the other hand, RIR has a negative correlation with INF, suggesting that as INF increases, RIR tends to decrease.

LR has a weak positive correlation with GDP and a weak negative correlation with INF, while INF has a negative correlation with RIR, EXR, and BDG, indicating that as these variables increase, INF tends to decrease. GDP on the other hand has a positive correlation with RIR, EXR, and DCP, indicating that as these variables increase, GDP tends to increase. FDI has a weak positive correlation with INF and a weak negative correlation with GDP, while EXR has a positive correlation with LR and a weak negative correlation with INF. DCP has a strong positive correlation with BDG and a weak positive correlation with GDP and RIR. While for BLD there is a weak positive correlation with GDP, DCP, and BDG, while, BDG has a strong positive correlation with DCP and a weak positive correlation with RIR and GDP.

This results suggest that there are some significant relationships between the variables. For example, the positive correlation between RIR and GDP suggests that an increase in GDP tends to lead to an increase in RIR. This may be due to the fact that a growing economy creates a demand for credit, which leads to higher interest rates. Similarly, the negative correlation between RIR and INF indicates that as inflation increases, interest rates tend to decrease. This is because central banks often raise interest rates to combat inflation.

4.2 Pre-Estimation Test

This subsection present necessary statistical procedures that are essential before estimating a regression model or conducting any empirical analysis. The purpose of pre-estimation tests is to check whether the data are reasonable and meet the necessary statistical requirements.

4.2.1 Unit Root Test

The unit root test was carried out using the Augmented Dickey-Fuller (ADF) test. The table 4.3 below shows the Augmented Dickey-Fuller (ADF) test results for a set of variables. The ADF test is a common statistical test used to determine whether a time series has a unit root, which indicates the presence of a stochastic trend that makes the series non-stationary. The ADF test results show the test statistic and the critical values at a given level of significance. The null hypothesis for the ADF test is the presence of a unit root, and the alternative hypothesis is the absence of a unit root (that is, the series is stationary). The ADF test statistic is compared to the critical values to determine whether to reject or fail to reject the null hypothesis.

Table 4.3: Summary of the ADF Test

Variable Series	At Levels		At First Difference		Order of Integration
	ADF Test Statistics	Test Critical Values	ADF Test Statistics	Test Critical Values	
Bank Deposits to GDP (BDG)	-0.673	-3.615	-4.885	-3.616***	I(1)
Bank Lending-Deposit Spread (BLD)	-2.159	-3.610	-6.495	-3.621***	I(1)
Domestic Credit to Private Sector (DCP)	-2.246	-3.616	-5.828	-3.627***	I(1)
Official Exchange Rate (EXR)	2.168	-3.610	-4.121	-3.616***	I(1)
Foreign Direct Investment, Net Inflows (FDI)	-3.874	-3.606***	-	-	I(0)
GDP Per Capita Growth (EG)	-3.229	-2.938**	-	-	I(0)
Inflation (INF)	-3.009	-2.937**	-	-	I(0)
Liquidity Ratio (LR)	-3.553	-2.936**	-	-	I(0)
Real Interest Rate (RIR)	-7.477	-3.606***	-	-	I(0)
Interaction of BDG and FDI (BDGFDI)	-3.12	-2.936**	-	-	I(0)
Interaction of BLD and FDI (BLDFDI)	-3.663	-3.606***	-	-	I(0)
Interaction of DCP and FDI (DCPFDI)	-3.145	-2.937**	-	-	I(0)
Interaction of LR and FDI (LRFDI)	-4.211	-3.606***	-	-	I(0)

Note that; ***1%, ** 5%, level of significance Calculated at trend and intercept and lag lengths selected automatically using the Schwarz Info Criterion. See results in appendix 3 for details
Source: Authors Computation (2023)

From the result presented in the table 4.3, it can be seen that four of the variables (BDG, BLD, EXR and DCP) have an order of integration of 1 (I(1)), indicating that they are non-stationary in levels but stationary at first differences. The ADF test statistics for the first differences of all the variables are statistically significant at the 1% level, as they are more negative than the critical values, indicating that we can reject the null hypothesis of a unit root and conclude that the series is stationary in first differences. For the variables that have an order of integration of 0 (I(0)), which are all the other nine variables. The ADF test statistics for the levels of these variables are also statistically significant at the 1% and 5% levels, as they are more negative than the critical values, indicating that we can reject the null hypothesis of a unit root and conclude that the series is stationary in levels.

4.2.2 ARDL Bound Test for Co-integration

Based on the result of the stationarity test which shows that the variables are of different order of integration, the autoregressive distributed lag (ARDL) model approach is adopted as the method of analysis in this study. However, the existence of a long run relationship among the variables need to be estimated using the ARDL bound test. A maximum of three lags was imposed on the variables. This choice is based on Akaike's Information Criterion (AIC) to select the optimum number of lags as shown in the lag length criteria table in appendix 3.14.

The table 4.4 presents the F-statistics estimates for testing the existence of long run relationship for the first and second model. The first model estimates the the relationship between FDI and Economic Growth in Nigeria using ARDL (4,2) with constant and trend while the second model estimates the relationship between Financial Development and Economic Growth in Nigeria using the ARDL (3,2) with restricted constant.

Table 4.4 ARDL Bound Test Result

Test Statistic		Value	k	Remarks	
F-statistics (EG| DCP, BLD, EXR, BDG, LR, INF, FDI, RIR) ARDL(3, 2, 1, 1, 2, 1, 2, 1, 2)		3.9317	8	Cointegration	
Critical Value		**10%**	**5%**	**2.5%**	**1%**
Bounds	**I(0) Bound**	2.26	2.55	2.82	3.15
	I(1) Bound	3.34	3.68	4.02	4.43
F-statistics (FDI| DCP, BLD, EXR, BDG, LR, INF, EG, RIR) ARDL(4, 2, 2, 2, 2, 1, 1, 2, 2)		7.6152	8	Cointegration	
Critical Value		**10%**	**5%**	**2.5%**	**1%**
Bounds	**I(0) Bound**	2.85	3.15	3.42	2.62
	I(1) Bound	1.85	2.11	2.33	3.77

Source: Authors Computation (2023)

From the result reported in table 4.4, the computed F-statistics value for the first model is found to be 3.9317 which is greater than the lower critical bound of 2.55 and the upper critical bound value of 3.68 at the 5% level of significance. Similarly, the

bound test of cointegration result for the second model shows that the F-statistics value of the second model is found to be 7.6152 which is greater that the lower critical bound value of 2.6 and the upper critical value of 3.77 at the 1% level of significance. This indicates that there exist a long run cointegration relationship between the variables in the models. The implication of this is that there is a long run co-movement, such that if there is a short run deviation in their relationship, the series would return to equilibrium in the long-run. The model have equilibrium condition that keeps the variables together in the long-run. Based on the findings of a long run relationship among the dependent and independent variables, the short-run and long-run model can therefore be estimated.

4.3 Analysis of the Effect of FDI Inflow on Economic Growth in Nigeria

The first objective of this study seeks to analyze the effect of FDI on economic growth in Nigeria. In order to achieve this objective, the autoregressive distributed lag (ARDL) model was adopted as the method of analysis having established a long run cointegration among the variables of study. The longrun and short run estimate of the effect of FDI on economic growth in Nigeria was estimated using ARDL (4,2) with constant and trend. The test automatically choose the lag length based on automatic selection of Akaike Information Criterion for each of the variables. The table 4.5 shows the result of the ARDL estimate for the longrun and shortrun effect of FDI, financial development (Liquidity Ratio (LR), Domestic Credit to Private Sector (DCP), Bank Lending Deposit Spread (BLD) and Bank Deposit to GDP (BDG)) and other macroeconomic variables (Real Interest rate (RIR), Inflation (INF), and Exchange Rate (EXR)) on economic growth (EG) in Nigeria.

Table 4.5 ARDL Result of the Analysis of the Effect of FDI on Economic Growth in Nigeria

Dependent Variable: EG
Selected Model: ARDL(4, 2, 2, 2, 2, 1, 1, 2, 2)
Sample: 1981- 2021 Included observations: 40

Short-Run Estimates				
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
C	-56.2752	26.927	-2.0899	0.0700
@TREND	-2.7977	0.8408	-3.3273	0.0104
EG(-1)*	1.3160	0.8186	1.6076	0.1466
FDI(-1)	-8.4809	3.4349	-2.4689	0.0388
BDG(-1)	0.7865	0.5859	1.3423	0.2163
BLD(-1)	3.5174	1.0575	3.3259	0.0104
LR(-1)	0.8687	0.3550	2.4466	0.0401
DCP(-1)	4.8534	1.6093	3.0158	0.0167
RIR(-1)	0.4649	0.2441	1.9048	0.0933
INF(-1)	0.4263	0.2348	1.8153	0.1070
EXR(-1)	0.0232	0.0513	0.4525	0.6629
Δ(FDI)	-3.0360	1.0771	-2.8186	0.0225
Δ(FDI(-1))	1.6502	1.1217	1.4711	0.1795
Δ(BDG)	-0.7546	0.5764	-1.3091	0.2268
Δ(BDG(-1))	-2.8696	1.3796	-2.0799	0.0711
Δ(BLD)	1.1085	0.5214	2.1260	0.0662
Δ(BLD(-1))	-2.0998	0.6900	-3.0427	0.0160
Δ(LR)	0.3061	0.1307	2.3419	0.0473
Δ(LR(-1))	-0.2228	0.1196	-1.8625	0.0995
Δ(DCP)	2.1189	0.8907	2.3788	0.0446
Δ(RIR)	0.2494	0.1520	1.6405	0.1395
Δ(INF)	0.0989	0.1289	0.7673	0.4649
Δ(INF(-1))	-0.1543	0.1486	-1.0380	0.3296
Δ(EXR)	-0.1634	0.0496	-3.2953	0.0109
Δ(EXR(-1))	-0.0681	0.0266	-2.5545	0.0339
CointEq(-1)*	-1.316095	0.1684	-7.8134	0.0001
Long-run Estimates				
FDI	6.4440	1.8102	3.5597	0.0074
BDG	-0.5976	0.2663	-2.2438	0.0551
BLD	-2.6726	1.1660	-2.2921	0.0511
LR	-0.6601	0.2426	-2.7206	0.0262
DCP	-3.6877	1.4135	-2.6087	0.0312
RIR	-0.3533	0.2886	-1.2239	0.2558
INF	-0.3239	0.1089	-2.9728	0.0178
EXR	-0.0176	0.0433	-0.4072	0.6946

Adj. R-squared	0.8268	F-stat	9.792416
D-Watson	2.5987	Prob.(F-Statistics)	0.000015

Source: Authors Computation (2023)

The longrun result presented in the table4.5 shows that foreign direct investment (FDI) has a statistically significant positive effect on economic growth (EG) in Nigeria, with a coefficient of 6.4440 a 5% level of significance. This indicates that a one-unit increase in FDI will lead to a 6.44 unit increase in economic growth, ceteris paribus.

For the financial development measure, financial access (BDG) suggests that an increase in this variable leads to a decrease in economic growth, but this effect is not statistically significant at the 5% level. Similarly, the negative coefficient estimate for financial efficiency (BLD) indicates that an increase in this variable is associated with a decrease in economic growth, but the effect is also not statistically significant at the 5% level. Meanwhile, financial stability (LR) has a statistically significant negative effect on economic growth, with a coefficient of -0.6601 at a 5% level of significance which imply that a one-unit increase in this variable will lead to a 0.66 unit decrease in economic growth, ceteris paribus. Financial depth (DCP) also has a statistically significant negative effect on economic growth, with a coefficient of -3.688 at a 5% level of significance. This implies that a one-unit increase in domestic credit to private sector will lead to a 3.68 unit decrease in economic growth, ceteris paribus.

Other macroeconomic variables also provided some insights. The real interest rate (RIR) has a negative coefficient estimate, indicating that an increase in RIR leads to a decrease in economic growth, but this effect is not statistically significant at the 5% level. Similarly, the exchange rate (EXR) has a negative coefficient estimate, suggesting that an increase in EXR is associated with a decrease in economic growth, but the effect is not statistically significant at the 5% level. Whereas, inflation (INF) has a statistically significant negative effect on economic growth, with a coefficient of -0.3239 at a 5% level of significance. This implies that a one-unit increase in inflation will lead to a 0.32 unit decrease in economic growth, ceteris paribus.

In summary, the results shows that in the long run, foreign direct investment (FDI) has a positive and statistically significant effect on economic growth in Nigeria, while only two of the measures of financial development (financial stability and financial depth) have significant effect on economic growth with both having negative effect on

economic growth. Inflation is also found to be a significant macroeconomic variable with a negative effect on economic growth in Nigeria.

The short run result as shown in the table 4.5 provides information on the effects of foreign direct investment (FDI), financial development, and other macroeconomic variables on economic growth in Nigeria. The results revealed that that foreign direct investment (FDI) has a negative and significant effect on economic growth in Nigeria in the short run, as indicated by the negative coefficient of -8.4809 which is statistically significant at 5%. In other words, a 1% increase in FDI is associated with a decrease in economic growth by approximately 8.48%. This implies that in the short run, FDI may not necessarily be a driver of economic growth in Nigeria. Instead, it could hinder economic growth due to factors such as the repatriation of profits by foreign investors and the potential crowding out of local investors.

Financial development variable all have positive effect on economic growth, however, only three out of the four measures of financial development are significant. The coefficient for Financial Efficiency - Bank Lending Deposit Spread (BLD), the coefficient for Financial Depth - Domestic Credit to Private Sector (DCP) and the coefficient of Financial Stability - Liquidity Ratio (LR) are all found to have positive impact on economic growth in the short run at 5% level of significance indicating that a 1% increase in these variables in the previous period will lead to an increase in economic growth by 3.52%, 4.85%, and 0.87%, respectively, in the current period, ceteris paribus. This implies that financial development plays a crucial role in economic growth in Nigeria.

Among the other macroeconomic variables, only the lagged exchange rate (EXR(-1)) has a negative and statistically significant effect on economic growth, while the other

variables are not statistically significant. This implies that changes in the exchange rate may have a short-run impact on economic growth in Nigeria.

The results further show that the coefficient for the trend variable is negative and statistically significant, indicating a downward trend in economic growth over the sample period. The CointEq(-1) coefficient of -1.316 is negative and statistically significant at 1% level, indicating that there is a long-run equilibrium relationship between economic growth and the variables in the model. In particular, the coefficient tells us that if all other variables in the model are held constant, a 1% increase in the previous period's level of economic growth (CointEq(-1)) leads to a 1.32% increase in the current period's level of economic growth (EG) indicating an over correction of the disequilibrium that may occur in the short run. This indicates that there is a strong relationship between past and current levels of economic growth, and that economic growth tends to be persistent over time. All the variables in the model jointly explains 82.7% of the variations in inflation rate in Nigeria considering the degree of freedom. The Durbin-Watson statistics of 2.59 shows that there is no presence of first order serial correlation in the model. The overall test using the F-statistic (9.7924) is statistically significant at 1% level of significance showing that model is well specified and statistically significant.

In order to determine the suitability of the model described above, four post estimation tests were carried out which are Normality test, Autocorrelation test, Heteroskedasticity test and Stability test.

Table 4.6 Post Estimation Test

Tests	Obs*R-squared / Jarque-Bera	Probability
Normality	0.1635	0.9215
Autocorrelation	28.9522	0.1000
Heteroskedasticity	27.4212	0.5786

Source: Authors Computation (2023)

Table 4.6 summarizes the results of the first three post-estimation tests. According to the Jarque-Bera statistics and its corresponding probability, the residuals are normally distributed, and the null hypothesis that errors are normally distributed is accepted. The Breusch-Godfrey Serial Correlation LM test indicates that there is no significant autocorrelation in the residuals, as the p-value for the test is greater than 0.05. The Breusch-Pagan-Godfrey heteroskedasticity test confirms that there is no significant heteroskedasticity in the residuals, meaning that the mean and variance remain constant throughout the study period. These tests ensure the consistency of the model. The stability tests was also carried out using the Cumulative Sum of recursive residuals (CUSUM) and Cumulative Sum of recursive residual square (CUSUMSQ) tests. The graphical representation of the CUSUM and CUSUMSQ statistics is presented in figure 4.5 and 4.6 respectively. The results for CUSUM and CUSUMSQ test results indicates the absence of any instability of the coefficients because the plot of the CUSUM and CUSUMSQ statistic fall inside the critical bands of the 95% confidence interval of parameter stability. By implication, this model is not suffering from structural change.

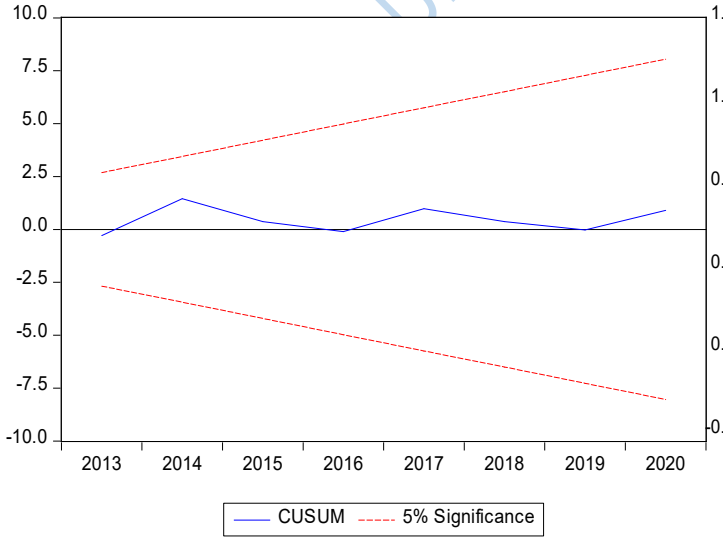


Figure 4.5 Cumulative Sum of recursive residuals (CUSUM)

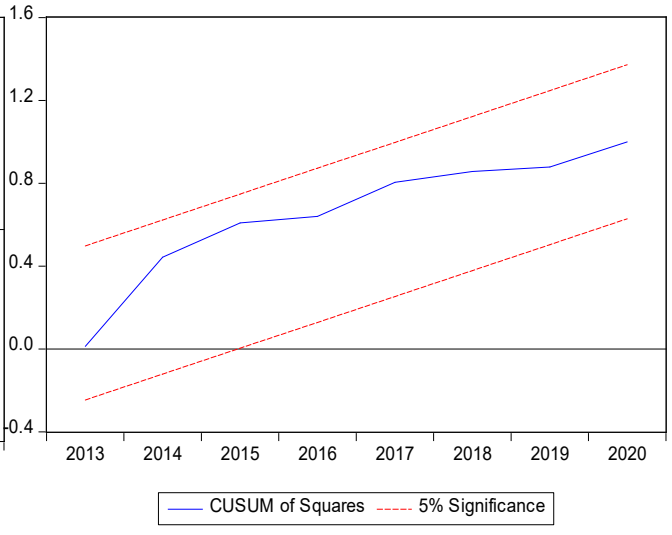


Figure 4.6 Cumulative Sum of recursive residuals Squared (CUSUMSQ)

Source: Author's Computation (2022)

4.4 Examination of the Effect of Financial Development on FDI Inflow in Nigeria

The second objective of this study seeks to examine the effect of Financial development on FDI inflows in Nigeria. In order to achieve this objective, the autoregressive distributed lag (ARDL) model was adopted as the method of analysis having established a long run cointegration among the variables of study as reported in table 4.4 above. The longrun and short run estimate of the effect of financial development on FDI inflows in Nigeria was estimated using ARDL (3,2) with restricted constant. The test automatically choose the lag length based on automatic selection of Akaike Information Criterion for each of the variables as the model was set at 3,2 to ensure sufficient degree of the freedom. The table 4.7 shows the result of the ARDL estimate for the longrun and shortrun effect of financial development (Liquidity Ratio (LR), Domestic Credit to Private Sector (DCP), Bank Lending Deposit Spread (BLD) and Bank Deposit to GDP (BDG)) and other macroeconomic variables (Real Interest rate (RIR), Inflation (INF), Exchange Rate (EXR)) and economic growth (EG) on FDI inflows in Nigeria.

Table 4.7 ARDL Result of the Examination of the Effect of Financial Development on FDI in Nigeria

Dependent Variable: FDI
Selected Model: ARDL(3, 2, 1, 1, 2, 1, 2, 1, 2)
Sample: 1981- 2021 Included observations: 40

Short-Run Estimates				
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
Δ(FDI(-1))	1.672733	0.187435	8.924321	0.0000
Δ(FDI(-2))	0.866227	0.126450	6.850342	0.0000
Δ(BDG)	-0.032580	0.078646	-0.414259	0.6854
Δ(BDG(-1))	1.078850	0.121965	8.845574	0.0000
Δ(BLD)	0.159833	0.063930	2.500141	0.0266
Δ(LR)	-0.059318	0.010405	-5.700863	0.0001
Δ(DCP)	0.124187	0.079769	1.556823	0.1435
Δ(DCP(-1))	-0.508657	0.080976	-6.281544	0.0000
Δ(EG)	0.065463	0.027186	2.407993	0.0316
Δ(RIR)	-0.171442	0.019928	-8.603295	0.0000
Δ(RIR(-1))	0.028038	0.012673	2.212425	0.0454
Δ(INF)	-0.074921	0.011101	-6.749077	0.0000
Δ(EXR)	0.024140	0.005284	4.568426	0.0005
Δ(EXR(-1))	-0.023902	0.005607	-4.263117	0.0009
CointEq(-1)*	-2.839430	0.250121	-11.35223	0.0000
Long-run Estimates				
BDG	-0.002852	0.033299	-0.085649	0.9331
BLD	0.102249	0.023840	4.288864	0.0009
LR	-0.041450	0.010776	-3.846408	0.0020
DCP	-0.021760	0.052624	-0.413503	0.6860
EG	0.090946	0.020023	4.542015	0.0006
RIR	-0.115685	0.022916	-5.048165	0.0002
INF	-0.008622	0.010371	-0.831280	0.4208
EXR	0.003166	0.002146	1.475455	0.1639
C	3.101365	0.942897	3.289186	0.0059

Adj. R-squared	0.8576	F-stat	4.8885
D-Watson	1.8778	Prob.(F-Statistics)	0.0023

Source: Authors Computation (2023)

The short-run ARDL results as presented in the table 4.7 shows the effect of financial development and other macroeconomic variables on FDI inflows in Nigeria. From the table, it can be seen that lagged FDI (Δ(FDI(-1)) and Δ(FDI(-2))) have a positive and statistically significant effect on FDI inflows in the short run, indicating that previous levels of FDI have a significant impact on current FDI inflows.

Among the financial development indicators, the first lag of financial access measured by bank deposit to GDP (Δ(BDG(-1))) has a positive and statistically significant effect on FDI inflows in the short run, while financial stability measured by liquidity ratio (LR) has a negative and statistically significant effect on FDI inflows (Δ(LR)). This

implies that an increase in bank deposits to GDP ratio attracts more FDI inflows, while a decrease in liquidity ratio (i.e., more liquid assets) reduces FDI inflows.

However, financial depth (DCP) and financial efficiency (BLD) have mixed results. DCP has a positive but insignificant effect on FDI inflows, while BLD has a positive and statistically significant effect on FDI inflows in the short run. However, the first lag of DCP, Δ(DCP(-1)), has a negative and significant effect on FDI inflow in Nigeria. This imply that domestic credit to the private sector in the past period decreases the inflow of FDI in the current period. The positive effect of BLD implies that a higher lending-deposit spread (i.e., higher bank profitability) attracts more FDI inflows.

For the macroeconomic variables, real interest rate (RIR), inflation rate (INF), and exchange rate (EXR) have significant effects on FDI inflows. RIR has a negative and statistically significant effect, implying that higher real interest rates discourage FDI inflows. INF has a negative and statistically significant effect, implying that higher inflation rates also discourage FDI inflows. On the other hand, EXR has a positive and statistically significant effect, implying that a depreciation of the exchange rate increases FDI inflows.

The CointEq(-1) coefficient (-2.839430) shows the speed of adjustment of the FDI inflows towards the long-run equilibrium. The negative coefficient implies that there is a tendency for FDI inflows to converge to the long-run equilibrium value after a shock, indicating that the long-run relationship between FDI inflows and the explanatory variables is stable.

Overall, the results suggest that financial development, macroeconomic stability, and the investment climate are important factors that influence FDI inflows in Nigeria.

Improving financial access, ensuring financial stability, and maintaining macroeconomic stability may be key policy measures to attract and sustain FDI inflows in Nigeria. Additionally, reducing interest rates, controlling inflation, and promoting exchange rate stability may also help to attract foreign investment into the country.

In the long run however, the result as reported in the table 4.7 shows that the financial development, as measured by BLD and LR, has a positive and negative significant effect on FDI inflows in Nigeria, respectively at 1% level of significant. The coefficient of BLD of 0.1022 suggests that a 1% increase in BLD will lead to a 0.10% increase in FDI inflows in Nigeria. On the other hand, the negative coefficient of LR (-0.0415) implies that a 1% increase in LR will lead to a 0.04% decrease in FDI inflows in Nigeria. While the other other measures of financial development, bank deposit to GDP (BDG), and domestic credit to private sector (DCP) have no significant impact on FDI inflows in Nigeria.

The results also shows that economic growth (EG) has a positive and significant effect on FDI inflows in Nigeria, as indicated by the coefficient value of 0.0909 at 1% level of significance. The real interest rate (RIR) has a negative and significant impact on FDI inflows in Nigeria, as suggested by the coefficient value of -0.1156 at 1% level of significance. This means that a 1% increase in RIR will lead to a 0.11% decrease in FDI inflows in Nigeria.

Furthermore, inflation (INF), and exchange rate (EXR) both have no significant influence on FDI inflows in Nigeria in the long run. The long-run ARDL results suggest that financial development and economic growth are crucial factors in attracting FDI inflows into Nigeria.

The coefficient of determination (adjusted R-squared) value of 0.8576 suggests that the model can explain 85.76% of the variation in the dependent variable, FDI. The F-statistic value of 4.8885 is statistically significant at a 1% level of significance, indicating that the model as a whole is statistically significant. The Durbin-Watson statistics of 1.88 shows that there is no presence of first order serial correlation in the model.

In order to verify the validity of the statistical test and provide insights into the underlying relationships in the data, post estimation tests were carried out. These tests include Normality test, Autocorrelation test, Heteroskedasticity test and Stability test.

Table 4.8 Post Estimation Test

Tests	Obs*R-squared / Jarque-Bera	Probability
Normality	1.2486	0.5356
Autocorrelation	0.1896	0.9721
Heteroskedasticity	23.1419	0.5644

Source: Authors Computation (2023)

Table 4.8 presents the results of the first three post-estimation tests. According to the Jarque-Bera statistics and its corresponding probability, the residuals are normally distributed, and the null hypothesis that errors are normally distributed is accepted. The Breusch-Godfrey Serial Correlation LM test indicates that there is no significant autocorrelation in the residuals, as the p-value for the test is greater than 0.05. The Breusch-Pagan-Godfrey heteroskedasticity test confirms that there is no significant heteroskedasticity in the residuals, meaning that the mean and variance remain constant throughout the study period. These tests ensure the consistency of the model. The stability tests was also carried out using the Cumulative Sum of recursive residuals (CUSUM) and Cumulative Sum of recursive residual square (CUSUMSQ) tests. The graphical representation of the CUSUM and CUSUMSQ statistics is presented in figure 4.7 and 4.8 respectively. The results for CUSUM and CUSUMSQ test results indicates the absence of any instability of the coefficients of FDI and

financial development variables because the plot of the CUSUM and CUSUMSQ statistic fall inside the critical bands of the 95% confidence interval of parameter stability. By implication, this model is not suffering from structural change.

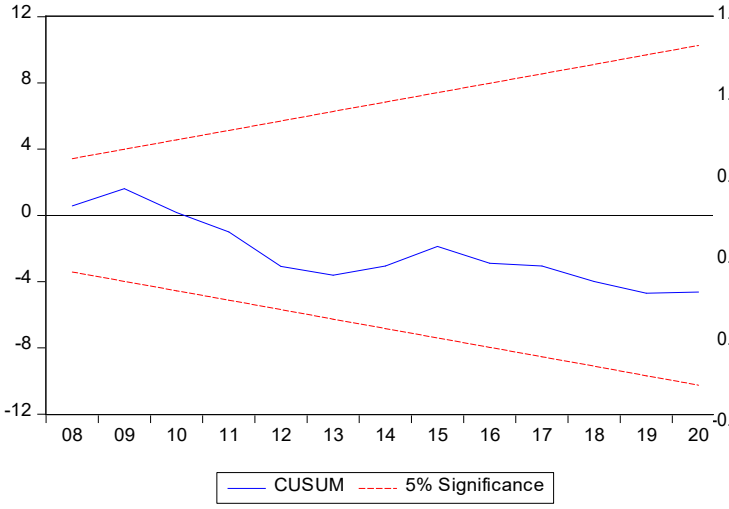


Figure 4.7 Cumulative Sum of recursive residuals (CUSUM)

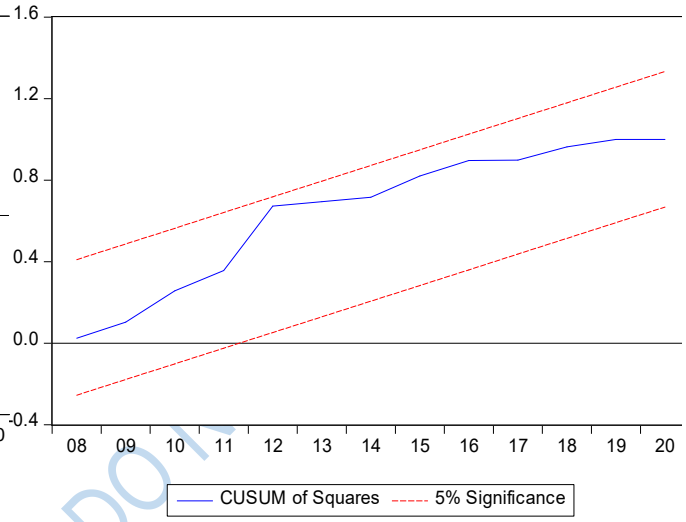


Figure 4.8 Cumulative Sum of recursive residuals Squared (CUSUMSQ)

Source: Author's Computation

4.5 Analysis of the Effect of Financial Development on the Relationship Between FDI and Economic Growth in Nigeria

The third objective seek to analyze the effect of financial development on the relationship between FDI and economic growth in Nigeria. That is, when FDI interact with the level of financial development in the economy, what effect does the interaction have on the growth of the economy. In order to achieve this objective, four new variables are introduced measuring the interaction of FDI and each of the four measures of financial development as specified in equation 3.5. These are DCPFDI (interaction of Domestic Credit to Private Sector and FDI), BLDFDI (Bank Lending-Deposit Spread and FDI), BDGFDI (Bank Deposit as a percentage of GDP and FDI) and LRFDI (Liquidity Ratio and FDI). With the introduction of the new variables, the

ARDL bound test for cointegration was carried out to test for the long run cointegration of the variables in the models.

Based on the result of the ADF test which shows that the variables are of different order of integration, the existence of a long run relationship among the variables need to be estimated using the ARDL bound test. A maximum of three lags was imposed on the variables. The table 4.9 presents the F-statistics estimates for testing the existence of long run relationship for the four models test for the analysis of the effect of financial development on the relationship between FDI and Economic growth in Nigeria. Each of the models were estimated using ARDL (4,3) with restricted constant.

Table 4.9 ARDL Bound Test for Cointegration Result

Test Statistic	Value	k	Remarks
F-statistics (EG| FDI, DCP, DCPFDI, INF, RIR, EXR) ARDL(2, 3, 3, 2, 3, 3, 2)	6.3996	6	Cointegration
F-statistics (EG|FDI, BDG, BDGFDI, EXR, INF, RIR) ARDL(3, 3, 1, 3, 3, 3, 3)	11.8212	6	Cointegration
F-statistics (EG| FDI, DCP, BLDFDI, INF, RIR, EXR) ARDL(4, 3, 3, 1, 3, 1, 3)	5.0119	6	Cointegration
F-statistics (EG| FDI, LR, LRFDI, INF, RIR, EXR) ARDL(4, 3, 3, 2, 3, 3, 3)	20.7390	6	Cointegration

Critical Value Bounds	**10%**	**5%**	**2.5%**	**1%**
I(0) Bound	1.99	2.27	2.55	2.88
I(1) Bound	2.94	3.28	3.61	3.99

Source: Authors Computation (2023)

From the result reported in table 4.9, the computed F-statistics value for each of the four models (6.3996, 11.8212, 5.0119 and 20.7390) is found to be greater than the lower critical bound of 2.88 and the upper critical bound value of 3.99 at the 1% level of significance.This indicates that there exist a long run cointegration relationship between the variables in the models. The implication of this is that there is a long run co-movement, such that if there is a short run deviation in their relationship, the series would return to equilibrium in the long-run. The model have equilibrium condition

that keeps the variables together in the long-run. Based on the findings of a long run relationship among the dependent and independent variables, the short-run and long-run model can therefore be estimated.

The Autoregressive Distributed Lag (ARDL) method of estimation was adopted as the method of analysis having established a long run cointegration among the variables in the models.The test automatically choose the lag length based on automatic selection of Akaike Information Criterion for each of the variables as the models. The ARDL was set at 4,3 to ensure sufficient degree of the freedom. The table 4.10 shows the result of the ARDL estimate for the longrun and shortrun effect of each of the four models with each showing the effect of the interaction of a measure of financial development and FDI on economic growth in Nigeria.

Table 4.10 ARDL Result for the Effect of Financial Development on the Relationship Between FDI and Economic Growth in Nigeria

Variables	Dependent Variable: Economic Growth (EG)			
	DCPFDI	**BDGFDI**	**BLDFDI**	**LRFDI**
	1	**2**	**3**	**4**
Δ(DCP)	-1.4556 (-4.3612)***	--	--	--
Δ(DCPFDI)	0.4995 (4.1982)***	--	--	--
Δ(DCPFDI(-1))	-0.4925 (-3.8791)***	--	--	--
Δ(BDG)	--	-1.1885 (-4.9399)***	--	--
Δ(BDGFDI)	--	0.1663 (2.4262)**	--	--
Δ(BDGFDI(-1))	--	-0.0174 (-0.3344)	--	--
Δ(BLD)	--	--	0.2443 (0.5981)	--
Δ(BLDFDI)	--	--	-0.1313 (-0.6667)	--
Δ(LR)	--	--	--	0.0692 (2.5608)**
Δ(LRFDI)	--	--	--	0.0528 (2.9939)**
Δ(LRFDI(-1))	--	--	--	0.0775 (4.0641)***
Δ(EG(-1))	-0.1565 (-1.6296)	0.2098 (2.4682)**	0.0477 (0.3820)	-0.6823 (-11.1784)***
Δ(FDI)	-6.0688 (-6.0621)***	-2.4964 (-3.6392)***	-0.0939 (-0.0660)	-4.3431 (-5.2750)***
Δ(FDI(-1))	0.8658 (0.9521)	-4.1733 (-6.9045)***	-1.7891 (-3.5730)***	-8.1582 (-7.9925)***
Δ(INF)	0.0750 (2.2828)**	0.1506 (4.9056)***	-0.0385 (-0.8857)	0.0609 (2.0859)*
Δ(INF(-1))	0.2699 (7.4981)***	0.2469 (9.4099)***	0.3585 (7.9502)***	0.3676 (14.4570)***
Δ(RIR)	0.2505 (4.8542)***	0.5580 (9.6823)***	-0.2143 (-3.4252)***	0.3093 (8.2270)***
Δ(RIR(-1))	0.0358 (0.6943)	-0.2944 (-5.2869)***	0.3077 (4.9445)***	0.2052 (5.6486)***
Δ(EXR)	-0.0366 (-2.3593)**	-0.1121 (-8.8663)***	-0.0990 (-5.2674)***	-0.1353 (-12.4929)***
Δ(EXR(-1))	0.0124 (0.6927)	-0.0825 (-4.4184)***	0.0743 (2.0874)*	0.0712 (6.3326)***
CointEq(-1)*	-0.8282 (-9.0034)***	-1.8766 (-12.4398)***	-1.1210 (-8.1001)***	-0.6406 (-17.6376)***
	Long Run Estimates			
DCP	-4.0904 (-3.0493)**	--	--	--
DCPFDI	1.1266 (2.3040)**	--	--	--
BDG	--	-1.0145 (-5.5813)***	--	--
BDGFDI	--	0.0943 (1.0918)	--	--
BLD	--	--	2.5446 (3.2663)***	--
BLDFDI	--	--	-1.4698 (-3.3010)***	--
LR	--	--	--	0.7937 (1.6569)
LRFDI	--	--	--	-0.0617 (-0.4597)
FDI	-6.8941 (-1.4810)	1.4458 (1.2003)	9.9115 (3.6247)***	7.0432 (0.9696)
INF	-0.0751 (-0.6732)	0.0245 (5.0792)***	-0.4378 (-2.9780)**	0.0007 (0.0053)
RIR	0.6489(3.6672)***	-0.0373 (-0.9232)	-0.0219 (-2.1088)*	0.8931 (3.2646)**
EXR	0.0397 (2.3723)**	0.6750 (9.9988)***	-0.5001 (-1.6420)	-0.0719 (-1.8651)*
C	30.2376 (3.0234)**	7.8498 (3.9984)***	-2.1903 (-0.5489)	-37.4118 (-1.7709)
Adjusted R-squared	0.8717	0.8117	0.7971	0.9553
Durbin-Watson stat	2.9267	2.3528	2.0574	2.2609
F-statistic	4.5402	7.2073	2.7761	11.0889
Prob(F-statistic)	0.0044	0.0007	0.0404	0.0007

Note: ***, ** &* denotes significant level at the 1%, 5% and 10% level respectively.

Source: Authors Computation (2023)

The results as presented in the table 4.10 shows that in the short run, financial development has a significant effect on the relationship between FDI and economic growth in Nigeria. Specifically, the interaction of domestic credit to the private sector and FDI (DCPFDI) has a positive (0.4995) and significant effect on economic growth in Nigeria at 1% level of significance. This suggests that FDI and domestic credit to the private sector have a complementary relationship that boosts economic growth in Nigeria. Similarly, bank deposit as a percentage of GDP and FDI (BDGFDI) has a positive (0.1663) and significant effect on economic growth in Nigeria at 5% level of significance. This suggests that FDI and financial access through bank deposits have a complementary relationship that enhance economic growth in Nigeria.

On the other hand, liquidity ratio and FDI (LRFDI) have a positive (0.0528) and significant effect on economic growth in Nigeria at 5% level of significance. This imply that FDI and financial stability through liquidity ratio have a complementary interaction that improves the growth of the Nigerian economy. Meanwhile, financial efficiency through bank lending-deposit spread have a negative (-0.1313) but insignificant effect on economic growth in Nigeria.

This interaction relationship exhibited by DCPFDI, BDGFDI and LRFDI are the marginal effect which only shows how economic growth changes as a result of changes in the value of interacting variables (DCPFDI, BDGFDI and LRFDI) while keeping the other variables fixed. It is therefore essential to estimate the net effect of these interacting variables to show how much economic growth changes when the value of the interacting (DCPFDI, BDGFDI and LRFDI) variable changes, taking into account the effects of other variables in the model. To achieve this, partial derivative of equation 3.5 is taken with respect to DCP for the first model and BDG for the second model and LR for the fourth model.

Inserting the coefficients of the variables into the model using the current level of of the variables, it can be expressed as;

Model 1:

EG = -6.0688*FDI -1.4556*DCP + 0.4995*DCPFDI +0.0750 *INF + 0.2505*RIR - 0.0366*EXR (4.1)

Taking the partial derivative,

$$\frac{\delta EG}{\delta DCP} = -1.4556 + 0.4995\ (\text{DCP}) \quad (4.2)$$

Where the DCP is the mean of the domestic credit to private sector. Injecting the mean of DCP into the model, the net effect (NE) of the interaction of financial depth (DCP) and FDI on economic growth can therefore be estimated

$$\frac{\delta EG}{\delta DCP} = -1.4556 + 0.4995(9.283) \quad (4.3)$$

NE = 3.1813

The net effect (NE) of the interaction of Financial depth through Domestic credit to private sector and FDI on economic growth is found to be positive with a coefficient of 3.18. This finding implies that if Nigeria can deepen its financial sector by increasing domestic credit to the private sector and attracting more FDI, it could lead to increased economic growth in the short run. This could potentially result in more job opportunities, higher wages, and overall improvements in the standard of living for Nigerian citizens.

Model 2:

EG = -2.4964*FDI -1.1885*BDG + 0.1663*BDGFDI +0.1506*INF + 0.5580 *RIR-0.1121*EXR

(4.4)

Taking the partial derivative,

$$\frac{\delta EG}{\delta BDG} = -1.1885 + 0.1663(\text{BDG}) \quad (4.5)$$

Where the BDG is the mean of the bank deposit as a percentage of GDP. Injecting the mean of BDG into the model, the net effect (NE) of the interaction of financial access (BDG) and FDI on economic growth can therefore be estimated

$$\frac{\delta EG}{\delta BDG} = -1.1885 + 0.1663\ (11.909) \quad (4.6)$$

NE = 0.7920

The net effect (NE) of the interaction of Financial access through bank deposit as a percentage of GDP and FDI on economic growth is found to be positive with a coefficient of 0.79. This means that an increase in financial access through bank deposits and FDI can lead to a boost in economic growth in the short run. This finding implies that policies aimed at promoting financial inclusion, such as expanding access to banking services and increasing the proportion of bank deposits to GDP, can attract FDI inflows and help to stimulate economic growth in Nigeria.

Model 4:

EG = -4.3431*FDI + 0.0692*LR + 0.0528*LRFDI +0.0609 *INF + 0.3093 *RIR - 0.1353*EXR (4.7)

Taking the partial derivative,

$$\frac{\delta EG}{\delta LR} = + \ 0.0692 + \ 0.0528(\text{LR}) \qquad (4.8)$$

Where the LR is the mean of the liquidity ratio. Injecting the mean of LR into the model, the net effect (NE) of the interaction of financial stability (LR) and FDI on economic growth can therefore be estimated

$$\frac{\delta EG}{\delta LR} = \ + \ 0.0692 + \ 0.0528(48.763) \qquad (4.10)$$

NE = 2.6439

The net effect (NE) of the interaction of Financial stability through liquidity ratio and FDI on economic growth is found to be positive with a coefficient of 2.64. This implies that policies aimed at promoting financial stability can attract FDI and have a positive impact on economic growth in the short run. The Nigerian economy may benefit from increased liquidity in the financial sector and increased investment from foreign sources. This could lead to increased access to credit and investment capital, which could support the growth of businesses and industries in the country.

The CointEq(-1) coefficient for each of the four models (-0.8282, -1.8766, -1.1210 and -0.6406 respectively) shows the speed of adjustment of the FDI inflows towards the long-run equilibrium. The negative coefficient implies that there is a tendency for financial development and FDI inflows to converge to the long-run equilibrium value after a shock, indicating that the long-run relationship among financial development, FDI inflows and economic growth in Nigeria is stable.

In the long run, the result as reported in the table 4.10 shows that that the interaction of Financial Development and FDI have significant effect on Economic Growth in Nigeria. Specifically, the coefficients of BLDFDI (-1.4698) and DCPFDI (1.1266) indicate that as FDI inflows interacted with Bank Lending-Deposit Spread (Financial

Efficiency), this interaction bring about a negative effect on the growth of the economy in Nigeria, this suggest that suggests that improving financial efficiency by reducing bank lending-deposit spread could enhance the positive impact of FDI on economic growth in Nigeria. Lowering the bank lending-deposit spread can enhance the positive effect of FDI by reducing the cost of borrowing for firms and individuals, which can increase investment and stimulate economic growth. This can also increase competition among banks, leading to more efficient allocation of resources and better access to credit, which can attract more FDI to the country. While as FDI interacted with Domestic Credit to Private Sector (Financial Depth) there is a positive and significant effect on Economic Growth in Nigeria. This implies that an increase in FDI inflows that are channeled through the financial sector can stimulate economic growth in Nigeria.

On the other hand, the coefficients of BDGFDI and LRFDI are not significant, indicating that interaction of FDI and Financial Stability (LR) and the interaction of FDI and financial Access (BDG) does not have a significant effect on Economic Growth in Nigeria.

Meanwhile, this relationship exhibited by BLDFDI and DCPFDI are the marginal effect which only shows how economic growth changes as a result of changes in the value of interacting variables (BLDFDI and DCPFDI) while keeping the other variables fixed. Meanwhile it is essential to test for the net effect of these interacting variables to show how much economic growth changes when the value of the interacting (BLDFDI and DCPFDI) variable changes, taking into account the effects of other variables in the model. To achieve this, partial derivative of equation 3.5 is taken with respect to DCP for the first model and BLD for the third model.

Inserting the coefficients of the variables into the model using the current level of of the variables, it can be expressed as;

Model 1:

EG = -6.8942*FDI -4.0905*DCP + 1.1266*DCPFDI -0.0751*INF + 0.6490*RIR + 0.0397*EXR + 30.2377

(4.10)

Taking the partial derivative,

$$\frac{\delta EG}{\delta DCP} = -4.0905 + 1.1266\ (\text{DCP}) \qquad (4.11)$$

Where the DCP is the mean of the domestic credit to private sector. Injecting the mean of DCP into the model, the net effect (NE) of the interaction of financial depth (DCP) and FDI on economic growth can therefore be estimated

$$\frac{\delta EG}{\delta DCP} = -4.0905 + 1.1266\ (9.283) \qquad (4.12)$$

NE = 6.3677

The net effect (NE) of the interaction of financial depth through Domestic credit to private sector and FDI on economic growth is found to be positive with a coefficient of 6.37. This implies that increasing domestic credit to private sector has the potential to create a favorable environment for businesses to expand and invest, which can in turn attract FDI inflows and ultimately boost the growth of the economy. This is because FDI investors typically seek out countries with well-functioning financial markets and institutions that can provide reliable sources of financing for their investments.

Model 3:

EG = 9.9115*FDI + 2.5447*BLD -1.4699*BLDFDI -0.4379*INF -0.0220*EXR - 0.5001*RIR -2.1904 (4.13)

Taking the partial derivative,

$$\frac{\delta EG}{\delta BLD} = 2.5447 - 1.4699 \text{ (BLD)} \quad (4.14)$$

Where the BLD is the mean of the bank lending-deposit spread. Injecting the mean of BLD into the model, the net effect (NE) of the interaction of financial efficiency (BLD) and FDI on economic growth can therefore be estimated

$$\frac{\delta EG}{\delta BLD} = 2.5447 - 1.4699 \text{ (6.393)} \quad (4.15)$$

NE = -6.8524

The net effect (NE) of the interaction of financial efficiency through bank lending-deposit spread and FDI on economic growth is found to be negative with a coefficient of -6.85. The negative net effect of the interaction of bank lending-deposit spread and FDI on economic growth implies that the presence of a wide spread between lending and deposit rates in Nigerian banks may be hindering the positive impact of foreign direct investment on economic growth in Nigeria. This result suggests that policymakers and regulatory authorities in Nigeria should focus on reducing the spread between lending and deposit rates in order to enhance the positive impact of FDI on economic growth in Nigeria.

The coefficient of determination (adjusted R-squared) value for each of the models suggests that the models 87%, 81%, 80% and 96% respectively the variation in economic growth in Nigeria. The F-statistic value of the first (4.54), second (7.21) and fourth (11.09) model are significant at 1% level of significance while the third

(2.77) model is significant at 5% level of significance indicating that the models are statistically significant. Only the Durbin-Watson statistics of the first model which was found to be 2.93 revealed the presence of first order serial correlation while that of model 2, 3 and 4 (2.35, 2.06 and 2.26 respectively) shows that there is no presence of first order serial correlation in the model.

Post estimation test were carried out to determine the suitability and reliability of the models reported above. These test include Normality test, Autocorrelation test, Heteroskedasticity test and Stability test.

Table 4.11 Post Estimation Test

Models	Tests	Obs*R-squared / Jarque-Bera	Probability
Model 1 (DCPFDI)	Normality	1.0039	0.6053
	Autocorrelation	20.5003	0.1272
	Heteroskedasticity	19.7057	0.8836
	Stability Test	Stable	
Model 2 (BDGFDI)	Normality	0.1026	0.9499
	Autocorrelation	20.3186	0.1798
	Heteroskedasticity	27.8606	0.3131
	Stability Test	Stable	
Model 3 (BLDFDI)	Normality	1.3638	0.5057
	Autocorrelation	6.0278	0.6704
	Heteroskedasticity	14.4789	0.9923
	Stability Test	Stable	
Model 4 (LRFDI)	Normality	2.4821	0.2891
	Autocorrelation	20.0989	0.2180
	Heteroskedasticity	22.9672	0.9011
	Stability Test	Stable	

Source: Authors Computation (2023)

The table 4.11 summarizes the post estimation result for the four models. The Jarque-Bera statistics and its corresponding probability value shows that the residuals for the models are normally distributed, and the null hypothesis that errors are normally distributed is accepted. The Breusch-Godfrey Serial Correlation LM test for each of the models indicates that there is no significant autocorrelation in the residuals, as the p-value for the test is greater than 0.05. The Breusch-Pagan-Godfrey heteroskedasticity test also confirms that there is no significant heteroskedasticity in the residuals of the models, meaning that the mean and variance remain constant

throughout the study period. These tests ensure the consistency of the models. The stability tests was also carried out using the Cumulative Sum of recursive residuals (CUSUM) and Cumulative Sum of recursive residual square (CUSUMSQ) tests. The graphical representation of the CUSUM and CUSUMSQ statistics is presented in the appendix which shows that the each of the models are stable.

4.6 Discussion of Findings

This study explored the relationship that exist among foreign direct investment, financial development and economic growth in Nigeria. The objectives were to examine the effect of FDI inflows on economic growth, analyse the effect of financial development on FDI and to establish the effect of financial development on the relationship between FDI and economic growth in Nigeria.

The result of the first objective establish that foreign direct investment (FDI) has a significant positive impact on economic growth in Nigeria in the long run, but it has a significant negative effect on economic growth in the short run. This is consistent with the findings of previous studies such as those who found that FDI has a positive long-run effect on economic growth, but its short-run effect is negative[1, 2]. On the other hand, some studies such as that which was found by some scholars that FDI has a significant positive effect on economic growth in both the short and long run[3].

The findings further indicates that financial development plays a crucial role in economic growth in Nigeria. Financial depth and financial stability have a negative impact on economic growth in the long run. This is consistent with the findings of previous studies[4, 5]. However, the short-run effect of financial development (as indicated by the four measures) on economic growth is positive, as indicated by the findings of this study. This is in line with the findings of other study where financial

development has a positive short-run effect on economic growth[6]. These findings provide important policy implications for the Nigerian government in terms of attracting FDI and promoting financial development to enhance economic growth.

The findings from the second objective as presented in the study indicates that financial development is a significant determinant of FDI inflows in Nigeria. The study shows that financial stability has a negative effect on FDI inflows in both the short run and long run, while financial efficiency have a positive effect on FDI inflows both in the long and short run. Meanwhile, financial access and financial depth only have significant positive and negative effect on FDI inflows in Nigeria. The results suggest that improving financial development may be key policy measures to attract and sustain FDI inflows in Nigeria. The study also highlights the importance of macroeconomic stability and the investment climate in attracting FDI inflows. The results suggest that reducing interest rates, controlling inflation, promoting exchange rate stability, improving financial access, ensuring financial stability, and maintaining macroeconomic stability are key policy measures to attract and sustain FDI inflows in Nigeria.

Similar studies have also found that financial development is a significant determinant of FDI inflows in Nigeria. Some scholars in their study found that financial development has a significant positive effect on FDI inflows in Nigeria[7, 8]. On the other hand, other studies have also found that financial development has a negative effect on FDI inflows in Nigeria[9, 10]. This opposing finding may be due to differences in the measurement of financial development variables and the sample size used in the study.

The result from the third objective establish that the interaction of Financial depth through Domestic credit to private sector and FDI on economic growth is found to be

positive which implies that if Nigeria can deepen its financial sector by increasing domestic credit to the private sector and attracting more FDI, it could lead to an increased economic growth in the short run. While in the long run, this interaction is also found to be positive which mean that in the long run, increasing domestic credit to private sector has the potential to create a favorable environment for businesses to expand and invest, which can in turn attract FDI inflows and ultimately boost the growth of the economy. This is because FDI investors typically seek out countries with well-functioning financial markets and institutions that can provide reliable sources of financing for their investments.

Similarly, the interaction of Financial access through bank deposit as a percentage of GDP and FDI on economic growth is found to be positive which means that an increase in financial access through bank deposits and FDI can lead to a boost in economic growth in the short run. This finding implies that policies aimed at promoting financial inclusion, such as expanding access to banking services and increasing the proportion of bank deposits to GDP, can attract FDI inflows and help to stimulate economic growth in Nigeria. The result of the interaction of Financial stability through liquidity ratio and FDI on economic growth is found to be positive which implies that policies aimed at promoting financial stability can attract FDI and have a positive impact on economic growth in the short run. The Nigerian economy may benefit from increased liquidity in the financial sector and increased investment from foreign sources. This could lead to increased access to credit and investment capital, which could support the growth of businesses and industries in the country. While in the long run, the interaction of financial efficiency through bank lending-deposit spread and FDI on economic growth is found to be negative which implies that the presence of a wide spread between lending and deposit rates in Nigerian

banks may be hindering the positive impact of foreign direct investment on economic growth in Nigeria.

The findings of this study are in line with similar studies of some scholars who found that financial development plays a significant role in attracting FDI inflows and promoting economic growth in Nigeria and that an increase in financial access and stability leads to increased FDI inflows and economic growth in Nigeria[11, 12]. Whereas, other studies have found that financial development has a negative effect on FDI inflows and economic growth in Nigeria. These opposing findings could be due to differences in methodology, sample size, and data sources[13, 14].

In summary, the findings of this study suggest that financial development can enhance the positive impact of FDI on economic growth in Nigeria. Specifically, policies aimed at promoting financial depth, access, and stability can attract more FDI inflows and contribute to the growth of the economy. Therefore, financial development is an essential factor in the relationship between FDI inflows and economic growth in Nigeria.

Endnotes

[1]F.O.Anetor, Economic Growth Effects of Private Capital Inflow; A Structural VAR Approach for Nigeria. Journal of Economics and Development,21(1) 2019, 18-29.

[2] A. Sule, I.D. Mohammad&E. J. Ebeh. *Foreign Direct Investment, Trade Openness and Economic Performance in Nigeria; Does Governance Quality Matter? African* **Journal of Economic Review,** 11(3) 2023.

[3] F. O. Olokoyo, O. J. Adelegan, & T. O. Olokoyo. *Foreign Direct Investment and Economic Growth in Nigeria: Evidence from Regression and ARDL Co-Integration Approach.* **International Journal of Business and Social Science**, 4(6) 2013, 219-225.

[4] A. S. Adekunle & O.A.Adedipe. Impact of ***Financial Sector Development on the Nigeria Economic Growth: American Journal of Business and Management***, 2(4) 2013, 347-356.

[5]C. N. Patricia, S.E. Okoebo & G. C. .Eje. *An Empirical Analysis of the Relationship Between Financial Development and Economic Growth in Nigeria. International* **Journal of Multidisciplinary Research and Growth Evaluation.** 3(6) 2022, 418-424.

[6]R.C. Paudel & C.P. Acharya. Financial Development and Economic Growth. Evidence from Napal- NRB Economic Review. 2021, 1-22.

[7]F.B Adegboye, R. Osabohien & O. Adediran*, Institutional Quality, Foreign Direct Investment and Economic Development in Sub-Saharan Africa. Humanities and Social Sciences Communications.* 7(38) 2020.

[8] M. Ogunbiyi & A. E. Akinlo. *Financial Development and Foreign Direct Investment in Nigeria: a Toda-Yamamoto Causality Approach.* Cogent Economics & Finance, 8(1) 2020, 1809761.

[9] E.O.Abanikanda &T. O.Akinbobola. *Does Financial Deepening Matter in the Nexus Between Exchange Rate Volatility and Foreign Direct Investment? Insight from Nigeria. African Journal of Economic Review*, 11(1) 2023.

[10]E. Amissah. Trade and the Role of The *Financial System; Modern Economy,*9(1) 2018.

[11]O. E Adebayo & S. Purokayo. Economic Analysis of the Determinants of *Foreign Direct Investment in Nigeria. Archives Business Research,*8(1) 2020, pp. 74-81.

[12]Ibhagui&W. Oyakhilome. *Economic Performance Effects of Capital Inflows and Economic Growth; Evidence from OPEC Countries. The Quarterly Review of Economics and Financ.75, 2020. 67-83.*

[13]A. Khan, M.Ahmed & S. Bibi. *Financial Development and Economic Growth Nexus in Pakistan; A Revisit Using Maximum Entropy bootsrap Approach. Empirical Economics,* 57(4) 2019, 1157-1169.

[14]S.O. Okafor &. U.C. Lilian. *Financial Deepening and Economic Growth in Nigeria Nexus: Evidence from*. International Journal of Innovation in Engineering, 2(3) 2022.

Chapter Five

Summary, Conclusion and Recommendations

This chapter presents a summary of the major findings of this study based on the objectives along with the conclusion and recommendations. Suggestions were also given for further studies.

5.1 Summary of Findings

This study explored the interaction that exist among foreign direct investment, financial development and economic growth in Nigeria with the objective of establishing the relationship between FDI and Economic growth, Financial development and FDI and the effect of financial development on the relationship between FDI and Economic growth. Secondary time series annual data was employed. The data was subjected to statistical analysis starting with the trend and descriptive analysis which provides some insight into the trends and distribution of key economic variables in Nigeria over the past few decades, some variables, such as INF and GDP, have relatively low variability, while others, such as RIR have high variability. The distributions of the variables are also different, with some variables being positively skewed (RIR, LR, FDI, EXR, and DCP), some negatively skewed (BLD), and others being approximately symmetric (INF, GDP, and BLD). The high skewness and kurtosis values for some of the variables suggest that their distributions may not be normal, which could have implications for the accuracy of statistical models or forecasts that rely on these variables. Additionally, the Jarque-Bera tests indicate that several of the variables are not normally distributed, which further underscores the importance of careful data analysis and modeling in order to make accurate predictions or draw meaningful conclusions about the Nigerian economy.

The correlation results suggest that there are some significant relationships between the variables. For example, the positive correlation between RIR and GDP suggests that an increase in GDP tends to lead to an increase in RIR. This may be due to the fact that a growing economy creates a demand for credit, which leads to higher interest rates. Similarly, the negative correlation between RIR and INF indicates that as inflation increases, interest rates tend to decrease. This is because central banks often raise interest rates to combat inflation. The stationarity level of the variables were also tested using the ADF Test. The result shows a combination of stationarity at level and at first difference. As a result, the ARDL method of estimation was adopted. The result of the analysis shows some insight into the interaction that exist among FDI, Financial Development and Economic Growth in Nigeria.

The first objective revealed that in the long run, FDI has a positive and significant effect on economic growth, whereas, financial stability and financial depth have negative effects on economic growth. Additionally, inflation has a significant negative effect on economic growth. In the short run, FDI has a negative and significant effect on economic growth, while financial development has a positive effect on economic growth. Only changes in the exchange rate have a short-run impact on economic growth in Nigeria. This suggests that FDI has a positive impact on economic growth in the long run but may not necessarily be a driver of economic growth in the short run. Additionally, financial development and inflation are critical factors that affect economic growth in Nigeria.

From the result of the second objective, it was discovered that in the short-run, lagged FDI, financial access (measured by bank deposit to GDP), financial stability (measured by liquidity ratio), financial efficiency (measured by lending-deposit spread), real interest rate, inflation rate, and exchange rate were found to significantly

affect FDI inflows. Meanwhile, in the long-run, financial development (measured by lending-deposit spread and liquidity ratio) and economic growth were found to have significant impacts on FDI inflows, while other financial development indicators (bank deposit to GDP and domestic credit to private sector), inflation rate, and exchange rate had no significant influence. This imply that improving financial access, ensuring financial stability, and maintaining macroeconomic stability may be key policy measures to attract and sustain FDI inflows in Nigeria. Additionally, promoting economic growth and reducing interest rates may also help to attract foreign investment into the country.

With respect to the third objective, the interaction of Financial depth through Domestic credit to private sector and FDI on economic growth is found to be positive which implies that if Nigeria can deepen its financial sector by increasing domestic credit to the private sector and attracting more FDI, it could lead to an increased economic growth in the short run. While in the long run, this interaction is also found to be positive. Similarly, the interaction of Financial access through bank deposit as a percentage of GDP and FDI on economic growth is found to be positive which means that an increase in financial access through bank deposits and FDI can lead to a boost in economic growth in the short run. The result of the interaction of Financial stability through liquidity ratio and FDI on economic growth is found to be positive which implies that policies aimed at promoting financial stability can attract FDI and have a positive impact on economic growth in the short run. The Nigerian economy may benefit from increased liquidity in the financial sector and increased investment from foreign sources. This could lead to increased access to credit and investment capital, which could support the growth of businesses and industries in the country. While in the long run, the interaction of financial efficiency through bank lending-deposit

spread and FDI on economic growth is found to be negative which implies that the presence of a wide spread between lending and deposit rates in Nigerian banks could affect the positive impact of foreign direct investment on economic growth in Nigeria.

5.2 Conclusion

This study provides valuable insights into the interaction that exists among foreign direct investment, financial development and economic growth in Nigeria. The findings suggest that FDI can have a positive impact on economic growth in the long run, but its short-term impact may be negative. Additionally, financial development and inflation are critical factors that affect economic growth in Nigeria. The study also suggests that policies aimed at promoting financial stability, improving financial access, and maintaining macroeconomic stability may be key measures to attract and sustain FDI inflows in Nigeria.

Furthermore, the study highlights the importance of deepening the financial sector by increasing domestic credit to the private sector, promoting financial stability, and improving financial access through bank deposits to boost economic growth in Nigeria in the short run. The findings of this study have important implications for policymakers, investors, and other stakeholders interested in understanding the dynamics of FDI, financial development, and economic growth in Nigeria. However, there is a need to address the issues identified in the negative net effect of financial efficiency, which could be hindering the positive impact of FDI on economic growth in Nigeria. Overall, the findings of this study provide valuable insights into the relationship between financial development, FDI, and economic growth in Nigeria.

5.3 Recommendations

Based on the findings of this study, the following recommendations are suggested.

1. Policymakers should focus on improving the financial development indicators such as deposit credit to private sector, liquidity ratio, bank deposit as a percentage of GDP to attract more FDI inflows into the country.
2. Measures should be taken to improve the regulatory frameworks to ensure financial stability, reducing barriers to entry for foreign investors, and providing incentives to attract foreign investment.
3. Policymakers should focus on enhancing financial access, stability, efficiency, and depth to complement FDI and boost economic growth in the short run. Additionally, policymakers should address the negative effect of FDI on economic growth in the short run by addressing factors that limit absorptive capacity and promoting policies that encourage domestic investment.
4. The regulatory authorities in Nigeria should focus on reducing the spread between lending and deposit rates in order to enhance the positive impact of FDI on economic growth in Nigeria.

5.4 Contribution to Knowledge

This study contributed to the body of knowledge by providing valuable insights into the interaction that exists among foreign direct investment, financial development and economic growth in Nigeria. The study establish that FDI can have a positive impact on economic growth in the long run, but its short-term impact may be negative. Financial development and inflation are also found to be critical factors that affect economic growth in Nigeria. In addition, the study also found that policies aimed at promoting financial stability, improving financial access, and maintaining

macroeconomic stability may be key measures to attract and sustain FDI inflows in Nigeria.

Furthermore, the study highlights the importance of deepening the financial sector by increasing domestic credit to the private sector, promoting financial stability, and improving financial access through bank deposits to boost economic growth in Nigeria in the short run. The findings of this study have important implications for policymakers, investors, and other stakeholders interested in understanding the dynamics of FDI, financial development, and economic growth in Nigeria.

5.5 Areas for Further Studies

This study have explored the interaction of FDI, Financial Development and Economic Growth in Nigeria, however, further research is needed to investigate the potential channels through which FDI affects economic growth, such as technology transfer, human capital development, and access to international markets.

Bibliography

Textbook.
Ricardo. D. *On the Principles of Political Economy and Taxation.*1817.

Online Resource.
Central Bank of Nigeria (CBN). "Statistical Bulletin", Annual Publication of the Central. 2019.
Hanafy.S. & Marktanner. M. "Sectoral FDI, *Absorptive Capacity And Economic Growth – Empirical Evidence From Egyptian Governorates*. 2018, 57-81 | Received
12 Jun 2017, Accepted 11 Jun 2018, Published online.

UNCTAD United Nations Conference on Trade and Development. *World Investment Report*. (2018) https://unctad.org/en/PublicationsLibrary/wir2018_en.pdf

UNCTAD. United Nations Conference on Trade and Development. World Investment Report. https://unctad.org/en/PublicationsLibrary/wir2018_en.pdf 2018

UNCTAD. World Investment Report: Global value chains 2022. http://unctad.org/en/publicationslibrary.

United Nations Conference on Trade and Development. *Economic Development in Africa: Trade Performance and Commodity Dependence*. United Nations Publications.2017.

United Nations Conference on Trade and Development-UNCTAD .*WIR-Foreign direct investment to Africa fell by 21% in 2017, says United Nations report, Switzerland*. Retrieved from https://unctad.org/en/pages/PressRelease.aspx?

World Bank. *The World Bank in Nigeria*. World Bank Group.2019 https://www.worldbank.org/en/country/nigeria/overview

Journal.

Abanikanda.E.O. & Akinbobola.T.O. *" Does Financial Deepening Matter in the Nexus Between Exchange Rate Volatility and Foreign Direct Investment? Insight from Nigeria. African Journal of Economic Review*, 11(1) 2023.

Acquah.A.M. & Ibrahim. M. *" Foreign Direct Investment, Economic Growth and Financial Sector Development in Africa.* Journal of Sustainable Finance and Investment, 10(4) 2020: 315-334. https://doi.org/10.1080/20430795.2019.1683504

Adaramola .O.A. & Dada.O. *" Impact of inflation on Economic Growth: Evidence from Nigeria*. **Investment Management and Financial Innovations**, 17(2) 2020, 1-13. Retrieved from http://dx.doi.org/10.21511/imfi.17(2).2020.01.

Adebayo. O.E. & Purokayo.S. " Economic Analysis of The Determinants of *Foreign Direct Investment in Nigeria. Archives Business Research,* 8(1) 2020, pp. 74-81.

Adediran .O. George. E. Alege. P.& Obasaju.*O. "Is there any relationship between monetary policy tools and external credit-growth nexus in Nigeria?* Cogent Economics & Finance, 7, 2019. 1625100. doi:10.1080/ 23322039.2019.1625100.

Adegboye, Osabohien. R.& O. Adediran .O. *"Institutional Quality, Foreign Direct Investment and Economic Development in Sub-Saharan Africa. Humanities and Social Sciences Communications.* 7(38) 2020.

Adekunle .A.S.& Adedipe.O.A "Impact of *Financial Sector Development on the Nigeria Economic Growth: American Journal of Business and Management*, 2(4) 2013, 347-356.

Ahmad. M. Jiang.P. Majeed. A.&. Raza. M.Y."Does Financial Development and Foreign Direct Investment Improve Environmental Quality? Evidence from Belt and Road Countries, Environmental Science and Pollution Research, 27, (19), 2020, pp. 23586–23601, doi: 10.1007/s11356-020-08748-7.

Akaakohol .B.M. & Ogunrinola.I.O." *Human Capital Development on Economic Growth in Nigeria*, Lafia Journal of Economics and Management Science. 3(1) 2018,

Akinbode. S.O.Fapetu. O.Olabisi .O.J& O. T. Ojo.O.T. *"Impact of Exchange Rate on Economic Growth in Nigeria* (1981-2016): An Ardl Approach," Contemporary Economy Journal, Constantin Brancoveanu University, 4(2) 2019, pages 158-171.

Akinkunmi. M.A *"Nigeria's Economic Growth: Past, Present and Determinants",* Journal of Economics and Development Studies, 5(2), (2017) 31- 46.

Alabi. *The Impact of Foreign Direct Investment on Economic Growth: Nigeria Experience*. Open Journal of Applied Sciences. (09), 2019, 372-385. 10.4236/ojapps.2019.95031.

Alfaro, L., & Charlton, A. *"Intra-industry Foreign Direct Investment*. American Economic Review, 99, 2009.

Alphonsus. S.A. *"Effect of Foreign Direct Investment on Economic Growth in Nigeria*. Journal of Accounting and Financial Management, 5(2), 2019, E-ISSN 2504-8856.

Alvarado.R. Iniguez.M.&. Ponce.P.*"Foreign Direct Investment and Economic Growth in Latin America*. Economic Analysis and Policy, (56), 2017, 176-187. https://doi.org/10.1016/j.eap.2017.09.006

Amissah.E. "Trade and the Role of the *Financial System; Modern Economy,* 9(1) 2018.

Amoo.E.O. *"Introduction to special edition on Covenant University's perspectives on Nigeria demography and achievement of SDGs-2030*. Africa Population Studies**,** 32(1).2018. http://aps.journals.ac.za/ pub/article/view/1170.

Anetor. F.O. *"Economic Growth effects of Private Capital inflow: A Structural VAR approach for Nigeria*. Journal of Economics and Development, 21(1) 2019, 18-29.

Anifowose.A. *"Economic Growth and Exchange Rate Dynamics in Nigeria*. Imo State University /Business & Finance Journal 12(1), 2021.

Anochiwa. L.I.&. Maduka. .A.*"Inflation and Economic Growth in Nigeria: Empirical Evidence?* Journal of Economics and Sustainable Development, 6(20) 2015, 113-121. Retrieved from https:// www.iiste.org/Journals/index.php/ JEDS/article/view/26596/2724

Anthony-Orji. O.I.Orji. A. & Ogbuabor.J.E. Dis-aggregated Foreign Capital Inflows and Economic Growth in a Developing Economy; Empirical Evidence from Nigeria. Journal of Empirical Studies. 5(1) 2018, 1-11.

Approach for Nigeria. Journal of Economics and Development, 21(1) 2019, 18-29.

Awa.F.N. *Influence of Foreign Direct Investment on Economic Growth in Nigeria* (1989- 2019). European Journal of Accounting, Auditing and Finance Research 9,(5) 2021, pp.36-52.

Azid. T.& Jamil.M. "*Impact of exchange rate and its volatility on growth and economic performance: A case study of Pakistan*. *21st Annual General Meeting & Conference, Pakistan Institute of Development Economics, Islamabad (Pakistan).* **Pakistan Development Review**, 44(4) 2005, 749-775.

Babangida. B.U. "*Human Capital Development on Economic Growth in Nigeria.*Polac Management Review; 2(2) 2022.

Bayar.Y.& Gavriletea. M.D. Foreign Direct Investment Inflows and Financial Development in Central and Eastern European Union Countries. A Panel Cointegration and Causality. International Journal of Financial Studies, 6(2) 2018, 55.

Chen.J. Investment. 2018. Available From: https://www.investopedia.com/terms/i/investment.asp. [Accessed 9th April, 2019]

Desbordes .R.& Wei.S.J. "The Effects of Financial Development on Foreign Direct Investment, Journal of Development Economics, 127, (February), 2017, pp. 153–168, doi: 10.1016/j.jdeveco.2017.02.008.

Dinh,T.T. Huyen,D.H. Vo, A.T. Vo. & Nguyan. T.C..Foreign Direct Investment and Economic Growth in the Short Run And Long Run. Empirical Evidence from Developing Countries, Journal of Risk and Financial Management**,** 12(4) 2019.176.

Effiong. U.E& Inyang. N.F. "*Foreign Direct Investment Led Growth Hypothesis and Economic Development in Nigeria.* **Randwick International of Social Sciences (RISS) Journal** 2(4), 2021, Page: 376-393 ISSN Online: 2722-5674 - ISSN Print: 2722-5666.

Egbide.B. Financial Deepening and Economic Growth Nexus; Evidence from Nigeria. Cogent Economics and Finance 8(1), 2020.

Ehigiamusoe. K.U.&Lean .H.H. *Foreign Capital Inflows and Economic Growth in Nigeria: Any Nexus?*, **Journal of African Business**, 20, (4), 2019, pp. 455–471, doi: 10.1080/15228916.2019.1581010.

Emery. J.T. Spence .M.T. Wells. .L.T.& Buehrer.T. "*Administrative Barriers to Foreign Investment. Reducing Red Tape in Africa*, FIAS Occasional Paper (14) 2000

Eze.A. Nnaji. M& Nkalu.N. "*Impact of Foreign Direct Investment on Manufacturing Sector Output Growth in Nigeria*. International Journal of Applied Economics, Finance And Accounting. 5.2019, 55-64. 10.33094/8..52.55.64A.

Fadila.K.&Olure-Bank.A. "Effect Of Human *Capital Development and Economic Growth of ECOWAS Member States*. An Advance in Sciences and Humanities; 5(1), 2019, 229-245

Giwa. B.A.George.E.O, Okodua .H.& Adediran.O.S. *Empirical Analysis of the Effects of Foreign Direct Investment Inflows on Nigerian Real Economic Growth: Implications for Sustainable Development Goal-17,*Cogent Social Sciences, 6(1), 2020 1727621, DOI: 10.1080/23311886.2020.1727621.

Iamsiraroj. S. *The Foreign Direct Investment–Economic Growth Nexus*. International Review of Economics and Finance**,** (42), 2016, 116–133. https://doi.org/10.1016/j.iref.2015.10.044

Ibhagui& W. Oyakhilome. W."*Economic Performance Effects of Capital Inflows and Economic Growth; Evidence from OPEC Countries. The Quarterly Review of Economics and Finance.75, 2020. 67-83.*

Ibrahim. *The Impact of Foreign Direct Investment on Economic Growth in Nigeria:* Information Management and Business Review, 7(4), 2015. 90-97.

Ijirshar, G. Anjande, J. Fefa & B. N. Mile. *The Growth-Differential Effects of Domestic Investment and Foreign Direct Investment in Africa*. CBN Journal of Applied Statistics 10(2) 2019.

Islam, M. A. Khan.M.A.Popp.J.Sroka,W & J. Oláh.J. Financial Development and Foreign Direct Investment-the Moderating Role of Quality Institutions, Sustainability (Switzerland), 12, (9), 2020, doi: 10.3390/SU12093556.

Keji.S.A. "*Human Capital and Economic Growth in Nigeria*. Keji Future Business Journal, 7(1) 2021,49 https://doi.org/10.1186/s43093-021-00095-4

Khan.A. Ahmed. M.& S. Bibi. "*Financial Development and Economic Growth Nexus in Pakistan; A Revisit Using Maximum Entropy bootsrap Approach. Empirical Economics,* 57(4) 2019, 1157-1169.

Kukaj.H.&Ahmeti.F.B. "*The Importance of Foreign Direct Investments on Economic Development in Transitional Countries: a Case Study of Kosovo*. **European Scientific Journal**, 12(7), 2016. 288-305. https://doi.org/10.19044/esj.2016.v12n7

Lucas.R.E. "*On the Mechanics of Economic Development*. Journal of Monetary Economics, 22(1) 1988, 3-42.

Musah.A.*et al.*, *Foreign Direct Investment (FDI), Economic Growth and Bank Performance in Ghana*, (July), 2018, doi: 10.5923/j.ijfa.20180704.02.

Ndoricimpa A. *Threshold Effects of Inflation on Economic Growth in Africa: Evidence from a Dynamic Panel Threshold Regression Approach.* Working Paper Series No 249, African Development Bank, Abidjan, Côte d'Ivoire. Retrieved from https://www.afdb. org/fileadmin/uploads/afdb/ Documents/Publications/WPS_No_249_Threshold_Effects_of_Inflation_on_Economic_Growth_in_Africa.pdf 2017

NkemdilimI. &Ozegbe.A.E. "*An Assessment of Foreign Direct Investment and Sustainable Development Nexus: The Nigerian and Ghanaian Perspectives.* International Journal of Management, Economics and Social Sciences (IJMESS) ISSN: 2304-1366 (10) 2021.

Nwajiaku.E.O. Ananwude.A&Obi-Nwosu.V.O.."Financial Deepening and Entrepreneurial Growth in Nigeria; A Time Series Analysis. InternationalJournal of Academic Research in Accounting, Financial and Management Science.10(2) 2020, 257-263.

Obinna.O. "*Effect of Inflation on Household Final Consumption Expenditure in Nigeria*. Journal of Economics and Development Studies, 8(1), 2020.104-111.

Ogunbiyi& A. E. Akinlo. *Financial Development and Foreign Direct Investment in Nigeria: a Toda-Yamamoto Causality Approach.* Cogent Economics and Finance, 8(1) 2020, 1809761.

Okafor.S.O.&Lilian.U.C. *Financial Deepening and Economic Growth in Nigeria Nexus: Evidence from*. International Journal of Innovation in Engineering, 2(3) 2022.

Okegbe. *Foreign Direct Investment, and Economic Growth in Nigeria. International* **Journal of Accounting**, Finance and Risk Management 4(1) 2019, 15.

Oladimej.M.S.Amuda.O.A & Essien.E.A. Business Innovation and *Comparative Advantage in Nigeria Manufacturing Sector. EMAJ; Emerging Markets Journal*, 9(2) 2019, 37-43.

Olaniyi.T.A. Ajayi.R.O.& Oyedokun.G.E. *Tax Policy Incentives and Foreign Direct Investment in Nigeria*. Fountain University Osogbo Journal of Management, 3(3) 2018: 59-71.

Olokoyo.F.O. Adelegan.O.J. & Olokoyo.T.O. *Foreign Direct Investment and Economic Growth in Nigeria: Evidence from Regression and ARDL Co-Integration Approach.* International Journal of Business and Social Science, 4(6) 2013, 219-225.

Olorogun.L.A.Salami.M.A.& Bekun..F.V. *Revisiting the Nexus Between FDI, Financial Development and Economic Growth; Empirical Evidence from Nigeria.* Journal of Public Affairs. 22(3) 2022.

Oluwatobi. S.& I.O. OlurinolaI.O. *Government Expenditure on Human Capital Development: Implications for Economic Growth in Nigeria.* J Sustain Dev 4(3) 2011:72–80. https://doi.org/10.5539/jsd.v4n3p72.

Omoruyi.A. *International Capital Flows and Development-Financial Openness Matters*: Empirical Evidence from Nigeria**.** 2018.

Organization for Economic Co-operation and Development. *African Economic outlook*. OECD Publishing.2005

Orji.A.Nwagu G.U.Ogbuabor.J.E & Anthony-Orji.O.I. *Foreign Direct Investment and Growth Nexus: Further Evidence from Africa's Largest Economy.* Journal of Infrastructure Development 13(1) 2021, 65–78, 2021 India Development Foundation Reprints and permissions: in.sagepub.com/journals-permissions-india DOI: 10.1177/09749306211024433 .

Osei.O.Ibrahim.E.E & Sare.Y.A Foreign Direct Investment, Sectorial Effects and Economic Growth in Africa. International Economic Journal, 6(1), 2019, 473-492.

Osemene.O.F.Kolawole.K.D & Olanipekun.I.D. Determinants of Foreign Direct Investment and its Causal Effect on Economic Growth in Nigeria. KJBM, 8(1) 2019.

Oyamendan. *FDI And Economic Growth. Nigeria Evidence, International* Journal of Finance and Contemporary Issues. 3(1) 2022, 38-48.

Oyegoke .O.E.& Aras. O.N. *Impact of Foreign Direct Investment on Economic Growth in Nigeria*, Journal of Management, Economics, and Industrial Organization, 5(1) 2021, 31-38. http://doi.org/10.31039/jomeino.2021.5.1.2.

Oyero. *Foreign Direct Investment Trends and Economic Growth in Africa: Nigeria Experience in Pre Recession Era. International* Journal of Academic Accounting, Finance and Management Research, 3(2), 2019, 1-7.

Papageorgiadis.N.McDonald.F. Wang .C .& Konara.P. *The Characteristics of Intellectual Property Rights Regimes: How Formal and Informal Institutions Affect Outward FDI Location*. International Business Review, 29, 2020. 101620

Patricia.C.NOkoebo.S.E.&.Eje.G.C.*An Empirical Analysis of The Relationship Between Financial Development and Economic Growth in Nigeria. International* Journal of Multidisciplinary Research and Growth Evaluation. 3(6) 2022, 418-424.

Paudel.R.C. &Acharya.C.P. Financial Development and Economic Growth. Evidence from Napal- NRB Economic Review. 2021, 1-22.

Rani.R.& N. Kumar.N.*On the Causal Dynamics Between Economic Growth, Trade Openness and Gross Capital Formation: Evidence from BRICS Countries*. Global Business Review, 20(3) 2019, 795 – 812.

Romer. P.M. *Endogenous Technological Change*. Journal of Political Economy, 98(5) 1990, S71-S102.

Sambo.N.U. Farouq. I.S. Ahmad. A.U.Jakada.A.H.Danmaraya.I.A.&Sanusi.S.S.*Financial Development and Economic Growth in Nigeria: Evidence From A Threshold Autoregressive and Assymmetric Analysis*. Journal of Business, Economic and Management**,** 8(3), 2021, 207-218.

Sule. A. Mohammad.I.D & E. J. Ebeh. E.J. *Foreign Direct Investment, Trade Openness and Economic Performance in Nigeria; Does Governance Quality Matter? African* Journal Of Economic Review, 11(3) 2023.

Tah, Czerniak. K.C.Levine.A.Wiggin.K.&Osondu.I.Foriegn Trade and Economic Growth in South Africa; Asian- Pacific Journal of Accounting and Economics. 28(4), 2021.

Tapang. A.T.Onodi.B.E.&Amaraihu.A.H.*Effect of Tax Incentives on Foreign Direct Investment in Nigeria*. IIARD International Journal of Economics and Business Management, 4(7) 2018: 30-39.

Tran.H.&Huyen.H. *An Investigation into the Impacts of FDI, Domestic Investment Capital, Human Resources, and Trained Workers on Economic Growth in Vietnam.* 2019. 10.1007/978-3-030-04200-4_69.

Yusuf. H.A., *The Role of Foreign Direct Investment, Financial Development, Democracy and Political (in)stability on Economic Growth in West Africa*,

International Trade, Politics and Development, 4, (1), 2020, pp. 27–46, doi: 10.1108/itpd-01-2020-0002.

Appendices

Appendix I: Preliminary Analysis

1. Descriptive Statistics

	RIR	LRFDI	LR	INF	GDP	FDI	EXR	DCPFDI	DCP	BLDFDI	BLD	BDGFDI	BDG
Mean	0.434	69.412	48.763	18.998	0.359	1.496	100.760	14.186	9.283	10.399	6.393	17.629	11.909
Median	4.326	51.525	46.092	12.716	0.989	1.124	106.464	11.275	8.202	7.728	6.959	13.805	9.464
Maximum	18.180	280.856	104.202	72.835	12.276	5.791	358.810	56.919	19.626	42.804	11.064	61.828	21.318
Minimum	-65.857	11.956	26.392	5.3880	-15.698	0.184	0.618	1.613	4.958	0.208	0.317	2.342	5.844
Std. Dev.	14.440	57.500	14.724	16.868	5.303	1.245	100.728	12.983	3.540	9.806	2.765	15.122	4.805
Skewness	-2.680	1.762	1.533	1.8234	-0.856	1.729	0.889	1.628	1.131	1.649	-0.639	1.324	0.604
Kurtosis	12.583	6.357	6.583	5.159	4.668	6.045	2.995	5.336	3.879	6.019	2.673	4.103	1.821
Jarque-Bera	200.968	39.489	37.089	29.936	9.527	35.385	5.265	26.763	9.816	33.332	2.902	13.706	4.751
Probability	0.0000	0.000	0.000	0.000	0.009	0.000	0.072	0.000	0.007	0.000	0.234	0.001	0.093
Sum	17.37	2776.52	1950.54	759.95	14.34	59.83	4030.41	567.45	371.32	415.94	255.72	705.19	476.38
Sum Sq. Dev.	8132.34	128945.6	8455.34	11097.27	1096.80	60.50	395701.7	6573.81	488.85	3749.96	298.09	8918.70	900.43
Observations	40	40	40	40	40	40	40	40	40	40	40	40	40

p

2. Correlation

	RIR	LRFDI	LR	INF	GDP	FDI	EXR	DCPFDI	DCP	BLDFDI	BLD	BDGFDI	BDG
RIR	1												
LRFDI	-0.0637	1											
LR	0.1244	0.0841	1										
INF	-0.5134	0.3669	-0.2537	1									
GDP	0.5738	0.1586	-0.0269	-0.2028	1								
FDI	-0.0557	0.9386	-0.1969	0.4554	0.1648	1							
EXR	0.3680	-0.0905	0.4151	-0.3418	0.1706	-0.1577	1						
DCPFDI	0.1398	0.6884	-0.2916	0.1752	0.2758	0.8151	0.0744	1					
DCP	0.4240	-0.0349	-0.1177	-0.3170	0.2574	0.0702	0.6631	0.5626	1				
BLDFDI	-0.0284	0.9038	-0.1629	0.4183	0.1551	0.9436	-0.0498	0.7442	0.0783	1			
BLD	0.2529	0.2604	-0.0085	0.0045	0.2868	0.2491	0.5086	0.2425	0.3332	0.4851	1		
BDGFDI	0.1489	0.7094	-0.2791	0.1882	0.2658	0.8353	0.1012	0.9768	0.5346	0.7997	0.3078	1	
BDG	0.4355	-0.1023	0.0385	-0.3479	0.1965	-0.0314	0.7827	0.3718	0.8929	0.0308	0.3758	0.4240	1

Appendix II: Unit Root Test (ADF Test)

1. Bank Deposits to GDP (%) (BDG)

At Level

Null Hypothesis: BDG has a unit root
Exogenous: Constant
Lag Length: 2 (Automatic - based on SIC, maxlag=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-0.673636	0.8414
Test critical values:	1% level	-3.615588	
	5% level	-2.941145	
	10% level	-2.609066	

*MacKinnon (1996) one-sided p-values.

First Difference

Null Hypothesis: D(BDG) has a unit root
Exogenous: Constant
Lag Length: 1 (Automatic - based on SIC, maxlag=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-4.884505	0.0003
Test critical values:	1% level	-3.615588	
	5% level	-2.941145	
	10% level	-2.609066	

*MacKinnon (1996) one-sided p-values.

2. Bank Lending-Deposit Spread (BLD)

At Level

Null Hypothesis: BLD has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-2.159547	0.2237
Test critical values:	1% level	-3.610453	
	5% level	-2.938987	
	10% level	-2.607932	

*MacKinnon (1996) one-sided p-values.

First Difference

Null Hypothesis: D(BLD) has a unit root
Exogenous: Constant
Lag Length: 1 (Automatic - based on SIC, maxlag=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-6.494682	0.0000
Test critical values:	1% level	-3.621023	
	5% level	-2.943427	
	10% level	-2.610263	

*MacKinnon (1996) one-sided p-values.

3. Domestic Credit To Private Sector (% Of GDP) (DCP)

At Level

Null Hypothesis: DCP has a unit root
Exogenous: Constant
Lag Length: 1 (Automatic - based on SIC, maxlag=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-2.246259	0.1941
Test critical values:	1% level	-3.615588	
	5% level	-2.941145	
	10% level	-2.609066	

*MacKinnon (1996) one-sided p-values.

First Difference

Null Hypothesis: D(DCP) has a unit root
Exogenous: Constant
Lag Length: 2 (Automatic - based on SIC, maxlag=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-5.827536	0.0000
Test critical values:	1% level	-3.626784	
	5% level	-2.945842	
	10% level	-2.611531	

*MacKinnon (1996) one-sided p-values.

4. Official Exchange Rate (LCU Per US$, Period Average)(EXR)

At Level

Null Hypothesis: EXR has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		2.168856	0.9999
Test critical values:	1% level	-3.610453	
	5% level	-2.938987	
	10% level	-2.607932	

*MacKinnon (1996) one-sided p-values.

First Difference

Null Hypothesis: D(EXR) has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-4.120537	0.0026
Test critical values:	1% level	-3.615588	
	5% level	-2.941145	
	10% level	-2.609066	

*MacKinnon (1996) one-sided p-values.

5 Foreign Direct Investment, Net Inflows (% of GDP) (FDI)

At Level
Null Hypothesis: FDI has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-3.874288	0.0049
Test critical values:	1% level	-3.605593	
	5% level	-2.936942	
	10% level	-2.606857	

*MacKinnon (1996) one-sided p-values.

6 GDP Per Capita Growth (Annual %) (EG)

At Level
Null Hypothesis: GDP has a unit root
Exogenous: Constant
Lag Length: 1 (Automatic - based on SIC, maxlag=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-3.229876	0.0257
Test critical values:	1% level	-3.610453	
	5% level	-2.938987	
	10% level	-2.607932	

*MacKinnon (1996) one-sided p-values.

7 Inflation, Consumer Prices (Annual %) (INF)

At Level
Null Hypothesis: INF has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-3.009107	0.0426
Test critical values:	1% level	-3.605593	
	5% level	-2.936942	
	10% level	-2.606857	

*MacKinnon (1996) one-sided p-values.

8 Liquidity Ratio (LR)

At Level
Null Hypothesis: LR has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-3.553888	0.0114
Test critical values:	1% level	-3.605593	
	5% level	-2.936942	
	10% level	-2.606857	

*MacKinnon (1996) one-sided p-values.

9 Real Interest Rate (%) (RIR)

At Level

Null Hypothesis: RIR has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-7.477454	0.0000
Test critical values:	1% level	-3.605593	
	5% level	-2.936942	
	10% level	-2.606857	

*MacKinnon (1996) one-sided p-values.

10 Interaction of BDG and FDI (BDGFDI)

At Level

Null Hypothesis: BDGFDI has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-3.119696	0.0330
Test critical values:	1% level	-3.605593	
	5% level	-2.936942	
	10% level	-2.606857	

*MacKinnon (1996) one-sided p-values.

11 Interaction of BLD and FDI (BLDFDI)

At Level

Null Hypothesis: BLDFDI has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-3.662800	0.0086
Test critical values:	1% level	-3.605593	
	5% level	-2.936942	
	10% level	-2.606857	

*MacKinnon (1996) one-sided p-values.

12 Interaction of DCP and FDI (DCPFDI)

At Level

Null Hypothesis: DCPFDI has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-3.144964	0.0311
Test critical values:	1% level	-3.605593	
	5% level	-2.936942	
	10% level	-2.606857	

*MacKinnon (1996) one-sided p-values.

13 Interaction of LR and FDI (LRFDI)

At Level

Null Hypothesis: LRFDI has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-4.211034	0.0019
Test critical values:	1% level	-3.605593	
	5% level	-2.936942	
	10% level	-2.606857	

*MacKinnon (1996) one-sided p-values.

14 Lag Length Criteria

VAR Lag Order Selection Criteria
Endogenous variables: EG FDI BDG BLD LR DCP RIR INF EXR
Exogenous variables: C
Date: 03/02/23 Time: 16:13
Sample: 1981 2021
Included observations: 37

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-1026.311	NA	1.63e+13	55.96278	56.35462	56.10092
1	-861.4563	240.5993	1.98e+11	51.43007	55.34852	52.81151
2	-732.2169	125.7464	3.41e+10	48.82254	56.26759	51.44727
3	-454.5133	135.0990*	20213428*	38.18991*	49.16157*	42.05793*

Appendix III: Analysis Result of Objective One

1. ARDL Long Run Form and Bounds Test

ARDL Long Run Form and Bounds Test
Dependent Variable: D(EG)
Selected Model: ARDL(4, 2, 2, 2, 2, 1, 1, 2, 2)
Case 5: Unrestricted Constant and Unrestricted Trend
Date: 03/02/23 Time: 15:26
Sample: 1981 2021
Included observations: 36

Conditional Error Correction Regression

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-56.27592	26.92708	-2.089938	0.0700
@TREND	-2.797761	0.840847	-3.327311	0.0104
EG(-1)*	1.316095	0.818642	1.607656	0.1466
FDI(-1)	-8.480940	3.434977	-2.468994	0.0388
BDG(-1)	0.786536	0.585958	1.342306	0.2163
BLD(-1)	3.517493	1.057585	3.325966	0.0104
LR(-1)	0.868756	0.355078	2.446662	0.0401
DCP(-1)	4.853425	1.609332	3.015800	0.0167
RIR(-1)	0.464990	0.244105	1.904874	0.0933
INF(-1)	0.426368	0.234868	1.815352	0.1070
EXR(-1)	0.023231	0.051333	0.452559	0.6629
Δ(EG(-1))	-2.639405	0.846523	-3.117938	0.0143
Δ(EG(-2))	-1.774126	0.595990	-2.976773	0.0177
Δ(EG(-3))	-0.648236	0.291575	-2.223223	0.0569
Δ(FDI)	-3.036007	1.077127	-2.818616	0.0225
ΔFDI(-1))	1.650224	1.121749	1.471118	0.1795
Δ(BDG)	-0.754643	0.576431	-1.309165	0.2268
Δ(BDG(-1))	-2.869686	1.379675	-2.079972	0.0711
Δ(BLD)	1.108544	0.521416	2.126024	0.0662
Δ(BLD(-1))	-2.099806	0.690099	-3.042760	0.0160
Δ(LR)	0.306178	0.130735	2.341976	0.0473
Δ(LR(-1))	-0.222826	0.119632	-1.862592	0.0995
Δ(DCP)	2.118953	0.890732	2.378891	0.0446
Δ(RIR)	0.249428	0.152035	1.640596	0.1395
Δ(INF)	0.098985	0.128993	0.767368	0.4649
Δ(INF(-1))	-0.154339	0.148683	-1.038043	0.3296
Δ(EXR)	-0.163449	0.049601	-3.295300	0.0109
Δ(EXR(-1))	-0.068130	0.055258	-1.232927	0.2526

* p-value incompatible with t-Bounds distribution.

Levels Equation
Case 5: Unrestricted Constant and Unrestricted Trend

Variable	Coefficient	Std. Error	t-Statistic	Prob.
FDI	6.444019	1.810226	3.559787	0.0074
BDG	-0.597628	0.266344	-2.243825	0.0551
BLD	-2.672674	1.166024	-2.292126	0.0511
LR	-0.660101	0.242622	-2.720697	0.0262
DCP	-3.687747	1.413584	-2.608792	0.0312
RIR	-0.353310	0.288662	-1.223959	0.2558
INF	-0.323964	0.108975	-2.972826	0.0178
EXR	-0.017652	0.043352	-0.407168	0.6946

EC = EG - (6.4440*FDI -0.5976*BDG -2.6727*BLD -0.6601*LR -3.6877
*DCP -0.3533*RIR -0.3240*INF -0.0177*EXR)

F-Bounds Test — Null Hypothesis: No levels relationship

Test Statistic	Value	Signif.	I(0)	I(1)
			Asymptotic: n=1000	
F-statistic	3.391690	10%	2.26	3.34
k	8	5%	2.55	3.68
		2.5%	2.82	4.02
		1%	3.15	4.43
Actual Sample Size	36		Finite Sample: n=40	
		10%	-1	-1
		5%	-1	-1
		1%	-1	-1
			Finite Sample: n=35	
		10%	-1	-1
		5%	-1	-1
		1%	-1	-1

t-Bounds Test — Null Hypothesis: No levels relationship

Test Statistic	Value	Signif.	I(0)	I(1)
t-statistic	1.607656	10%	-3.13	-4.68
		5%	-3.41	-5.01
		2.5%	-3.65	-5.3
		1%	-3.96	-5.65

2. ARDL Result

Dependent Variable: EG
Method: ARDL
Date: 03/02/23 Time: 15:25
Sample (adjusted): 1985 2020
Included observations: 36 after adjustments
Maximum dependent lags: 4 (Automatic selection)
Model selection method: Akaike info criterion (AIC)
Dynamic regressors (2 lags, automatic): FDI BDG BLD LR DCP RIR INF EXR
Fixed regressors: C @TREND
Number of models evalulated: 26244
Selected Model: ARDL(4, 2, 2, 2, 2, 1, 1, 2, 2)

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
EG(-1)	-0.323310	0.281393	-1.148961	0.2838
EG(-2)	0.865279	0.351823	2.459412	0.0394
EG(-3)	1.125890	0.367362	3.064799	0.0155
EG(-4)	0.648236	0.291575	2.223223	0.0569
FDI	-3.036007	1.077127	-2.818616	0.0225
FDI(-1)	-3.794708	1.892384	-2.005252	0.0799
FDI(-2)	-1.650224	1.121749	-1.471118	0.1795
BDG	-0.754643	0.576431	-1.309165	0.2268
BDG(-1)	-1.328507	1.480094	-0.897583	0.3956
BDG(-2)	2.869686	1.379675	2.079972	0.0711
BLD	1.108544	0.521416	2.126024	0.0662
BLD(-1)	0.309143	0.616673	0.501308	0.6297
BLD(-2)	2.099806	0.690099	3.042760	0.0160
LR	0.306178	0.130735	2.341976	0.0473
LR(-1)	0.339751	0.149427	2.273694	0.0526

LR(-2)	0.222826	0.119632	1.862592	0.0995
DCP	2.118953	0.890732	2.378891	0.0446
DCP(-1)	2.734472	1.230045	2.223066	0.0569
RIR	0.249428	0.152035	1.640596	0.1395
RIR(-1)	0.215561	0.155865	1.383003	0.2040
INF	0.098985	0.128993	0.767368	0.4649
INF(-1)	0.173044	0.109477	1.580647	0.1526
INF(-2)	0.154339	0.148683	1.038043	0.3296
EXR	-0.163449	0.049601	-3.295300	0.0109
EXR(-1)	0.118551	0.056140	2.111713	0.0677
EXR(-2)	0.068130	0.055258	1.232927	0.2526
C	-56.27592	26.92708	-2.089938	0.0700
@TREND	-2.797761	0.840847	-3.327311	0.0104

R-squared	0.892483	Mean dependent var	1.560231
Adjusted R-squared	0.529614	S.D. dependent var	3.754739
S.E. of regression	2.575175	Akaike info criterion	4.781190
Sum squared resid	53.05221	Schwarz criterion	6.012816
Log likelihood	-58.06142	Hannan-Quinn criter.	5.211061
F-statistic	2.459520	Durbin-Watson stat	2.598715
Prob(F-statistic)	0.093166		

*Note: p-values and any subsequent tests do not account for model selection.

3 Short Run ECM Result

ARDL Error Correction Regression
Dependent Variable: D(EG)
Selected Model: ARDL(4, 2, 2, 2, 2, 1, 1, 2, 2)
Case 5: Unrestricted Constant and Unrestricted Trend
Date: 03/02/23 Time: 15:30
Sample: 1981 2021
Included observations: 36

ECM Regression
Case 5: Unrestricted Constant and Unrestricted Trend

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-56.27592	7.529650	-7.473909	0.0001
@TREND	-2.797761	0.346333	-8.078237	0.0000
Δ(EG(-1))	-2.639405	0.306916	-8.599755	0.0000
Δ(EG(-2))	-1.774126	0.286511	-6.192166	0.0003
Δ(EG(-3))	-0.648236	0.159917	-4.053586	0.0037
Δ(FDI)	-3.036007	0.435137	-6.977123	0.0001
Δ(FDI(-1))	1.650224	0.444719	3.710712	0.0060
Δ(BDG)	-0.754643	0.331414	-2.277044	0.0523
Δ(BDG(-1))	-2.869686	0.621838	-4.614842	0.0017
Δ(BLD)	1.108544	0.279892	3.960617	0.0042
Δ(BLD(-1))	-2.099806	0.330137	-6.360401	0.0002
Δ(LR)	0.306178	0.044796	6.834866	0.0001
Δ(LR(-1))	-0.222826	0.052723	-4.226341	0.0029
Δ(DCP)	2.118953	0.453168	4.675868	0.0016
Δ(RIR)	0.249428	0.049987	4.989865	0.0011
Δ(INF)	0.098985	0.036693	2.697659	0.0272
Δ(INF(-1))	-0.154339	0.048233	-3.199861	0.0126
Δ(EXR)	-0.163449	0.024358	-6.710385	0.0002
Δ(EXR(-1))	-0.068130	0.026670	-2.554509	0.0339
CointEq(-1)*	-1.316095	0.168439	-7.813477	0.0001

R-squared	0.920814	Mean dependent var	-0.017557
Adjusted R-squared	0.826781	S.D. dependent var	4.375156
S.E. of regression	1.820924	Akaike info criterion	4.336746

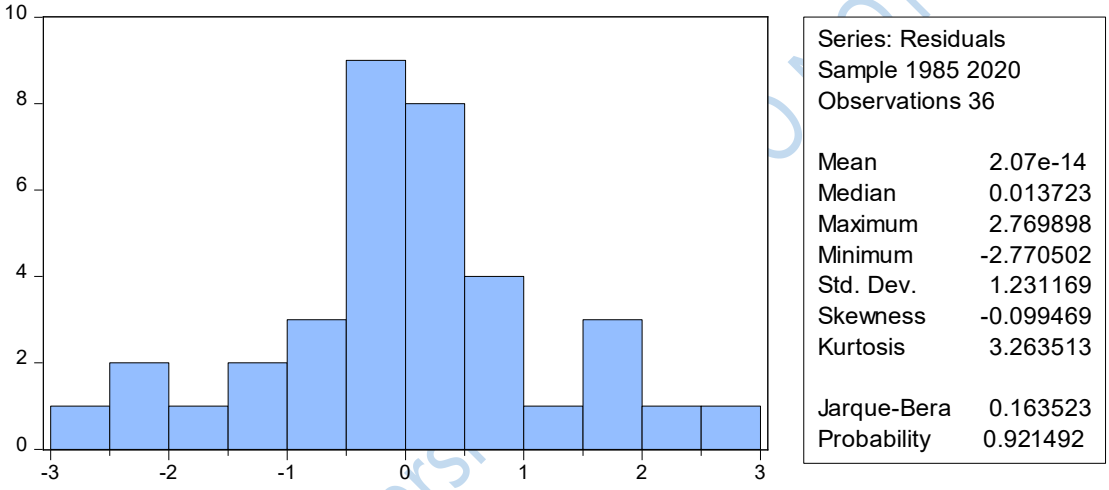
Sum squared resid	53.05221	Schwarz criterion	5.216479
Log likelihood	-58.06142	Hannan-Quinn criter.	4.643796
F-statistic	9.792416	Durbin-Watson stat	2.598715
Prob(F-statistic)	0.000015		

* p-value incompatible with t-Bounds distribution.

F-Bounds Test — Null Hypothesis: No levels relationship

Test Statistic	Value	Signif.	I(0)	I(1)
F-statistic	3.391690	10%	2.26	3.34
k	8	5%	2.55	3.68
		2.5%	2.82	4.02
		1%	3.15	4.43

4. Normality Test



5. Serial Correlation Test

Breusch-Godfrey Serial Correlation LM Test:

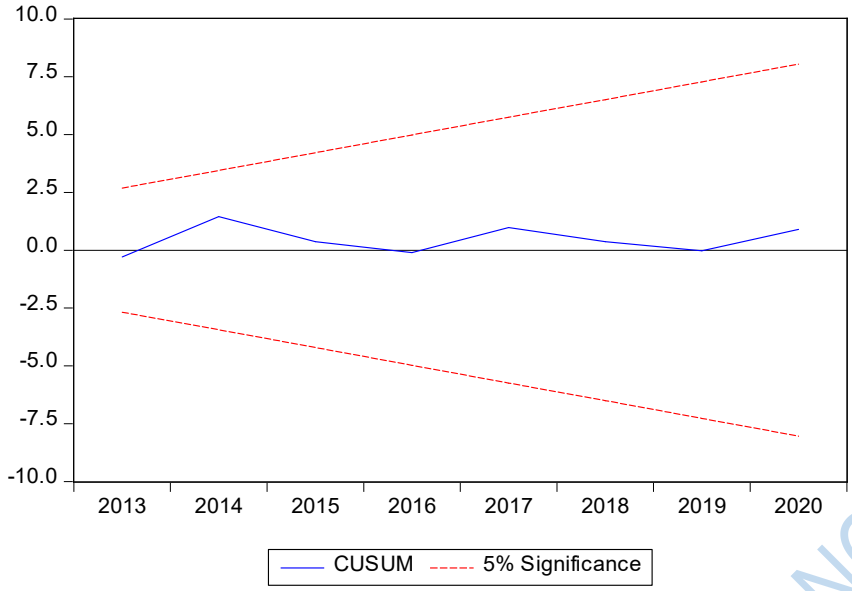
F-statistic	4.107992	Prob. F(4,4)	0.1000
Obs*R-squared	28.95222	Prob. Chi-Square(4)	0.0000

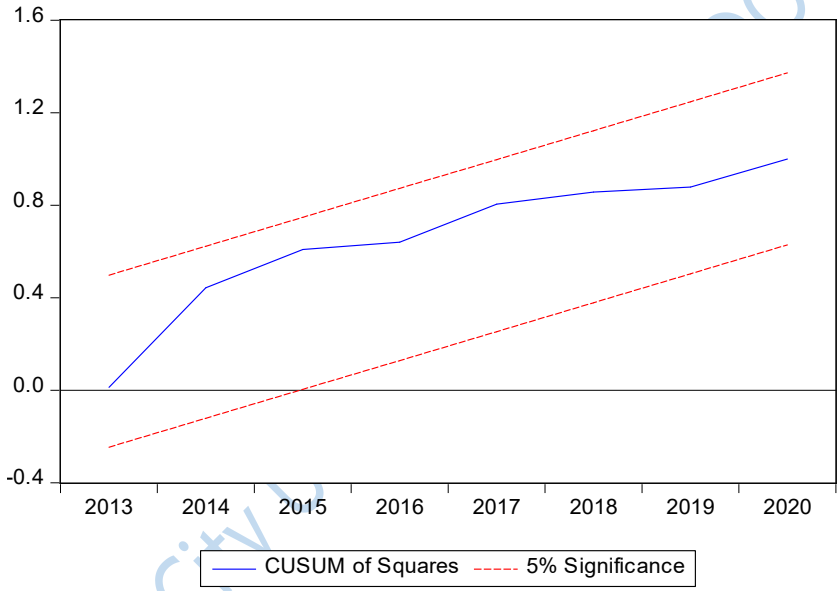
6. Heteroskedasticity

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	0.947085	Prob. F(27,8)	0.5786
Obs*R-squared	27.42124	Prob. Chi-Square(27)	0.4413
Scaled explained SS	1.532552	Prob. Chi-Square(27)	1.0000

7. Stability Test (CUSUM and CUSUM of Squares)





Appendix IV: Analysis Result of Objective Two

1. ARDL Output

Dependent Variable: FDI
Method: ARDL
Date: 03/02/23 Time: 16:03
Sample (adjusted): 1984 2020
Included observations: 37 after adjustments
Maximum dependent lags: 3 (Automatic selection)
Model selection method: Akaike info criterion (AIC)
Dynamic regressors (2 lags, automatic): BDG BLD LR DCP EG RIR INF EXR

Fixed regressors: C
Number of models evalulated: 19683
Selected Model: ARDL(3, 2, 1, 1, 2, 1, 2, 1, 2)

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
FDI(-1)	-0.166697	0.147710	-1.128543	0.2795
FDI(-2)	-0.806506	0.179604	-4.490480	0.0006
FDI(-3)	-0.866227	0.231695	-3.738652	0.0025
BDG	-0.032580	0.138150	-0.235828	0.8172
BDG(-1)	1.103332	0.337216	3.271885	0.0061
BDG(-2)	-1.078850	0.257671	-4.186924	0.0011
BLD	0.159833	0.102923	1.552942	0.1444
BLD(-1)	0.130495	0.095074	1.372561	0.1931
LR	-0.059318	0.024805	-2.391351	0.0326
LR(-1)	-0.058375	0.019663	-2.968812	0.0109
DCP	0.124187	0.129460	0.959266	0.3549
DCP(-1)	-0.694630	0.208964	-3.324161	0.0055
DCP(-2)	0.508657	0.141526	3.594101	0.0033
EG	0.065463	0.051273	1.276758	0.2240
EG(-1)	0.192771	0.041950	4.595246	0.0005
RIR	-0.171442	0.038420	-4.462270	0.0006
RIR(-1)	-0.128999	0.044410	-2.904731	0.0123
RIR(-2)	-0.028038	0.026730	-1.048916	0.3133
INF	-0.074921	0.024465	-3.062352	0.0091
INF(-1)	0.050441	0.018095	2.787489	0.0154
EXR	0.024140	0.013562	1.780036	0.0984
EXR(-1)	-0.039052	0.015868	-2.461054	0.0286
EXR(-2)	0.023902	0.011543	2.070697	0.0589
C	8.806108	3.223326	2.731994	0.0171

R-squared	0.896361	Mean dependent var	1.589746
Adjusted R-squared	0.713000	S.D. dependent var	1.248710
S.E. of regression	0.668964	Akaike info criterion	2.285156
Sum squared resid	5.817668	Schwarz criterion	3.330076
Log likelihood	-18.27538	Hannan-Quinn criter.	2.653539
F-statistic	4.888496	Durbin-Watson stat	1.877769
Prob(F-statistic)	0.002394		

*Note: p-values and any subsequent tests do not account for model selection.

2 Long Run and Bound Test

ARDL Long Run Form and Bounds Test
Dependent Variable: D(FDI)
Selected Model: ARDL(3, 2, 1, 1, 2, 1, 2, 1, 2)
Case 2: Restricted Constant and No Trend
Date: 03/02/23 Time: 16:05
Sample: 1981 2021
Included observations: 37

Conditional Error Correction Regression

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	8.806108	3.223326	2.731994	0.0171
FDI(-1)*	-2.839430	0.400226	-7.094564	0.0000
BDG(-1)	-0.008098	0.094561	-0.085639	0.9331
BLD(-1)	0.290328	0.084190	3.448492	0.0043
LR(-1)	-0.117693	0.038900	-3.025516	0.0097
DCP(-1)	-0.061786	0.150433	-0.410721	0.6880
EG(-1)	0.258234	0.066174	3.902325	0.0018
RIR(-1)	-0.328479	0.092891	-3.536181	0.0037
INF(-1)	-0.024480	0.031085	-0.787537	0.4451
EXR(-1)	0.008991	0.006498	1.383591	0.1898
Δ(FDI(-1))	1.672733	0.340332	4.915005	0.0003
Δ(FDI(-2))	0.866227	0.231695	3.738652	0.0025
Δ(BDG)	-0.032580	0.138150	-0.235828	0.8172
Δ(BDG(-1))	1.078850	0.257671	4.186924	0.0011
Δ(BLD)	0.159833	0.102923	1.552942	0.1444
Δ(LR)	-0.059318	0.024805	-2.391351	0.0326
Δ(DCP)	0.124187	0.129460	0.959266	0.3549
Δ(DCP(-1))	-0.508657	0.141526	-3.594101	0.0033
Δ(EG)	0.065463	0.051273	1.276758	0.2240
Δ(RIR)	-0.171442	0.038420	-4.462270	0.0006
Δ(RIR(-1))	0.028038	0.026730	1.048916	0.3133
Δ(INF)	-0.074921	0.024465	-3.062352	0.0091
Δ(EXR)	0.024140	0.013562	1.780036	0.0984
Δ(EXR(-1))	-0.023902	0.011543	-2.070697	0.0589

* p-value incompatible with t-Bounds distribution.

Levels Equation
Case 2: Restricted Constant and No Trend

Variable	Coefficient	Std. Error	t-Statistic	Prob.
BDG	-0.002852	0.033299	-0.085649	0.9331
BLD	0.102249	0.023840	4.288864	0.0009
LR	-0.041450	0.010776	-3.846408	0.0020
DCP	-0.021760	0.052624	-0.413503	0.6860
EG	0.090946	0.020023	4.542015	0.0006
RIR	-0.115685	0.022916	-5.048165	0.0002
INF	-0.008622	0.010371	-0.831280	0.4208
EXR	0.003166	0.002146	1.475455	0.1639
C	3.101365	0.942897	3.289186	0.0059

EC = FDI - (-0.0029*BDG + 0.1022*BLD -0.0414*LR -0.0218*DCP + 0.0909
*EG -0.1157*RIR -0.0086*INF + 0.0032*EXR + 3.1014)

F-Bounds Test		Null Hypothesis: No levels relationship		
Test Statistic	Value	Signif.	I(0)	I(1)
			Asymptotic: n=1000	
F-statistic	7.615237	10%	1.85	2.85
k	8	5%	2.11	3.15
		2.5%	2.33	3.42
		1%	2.62	3.77

3 Short Run (ECM) Resutl

ARDL Error Correction Regression
Dependent Variable: D(FDI)
Selected Model: ARDL(3, 2, 1, 1, 2, 1, 2, 1, 2)
Case 2: Restricted Constant and No Trend
Date: 03/02/23 Time: 16:06
Sample: 1981 2021
Included observations: 37

ECM Regression
Case 2: Restricted Constant and No Trend

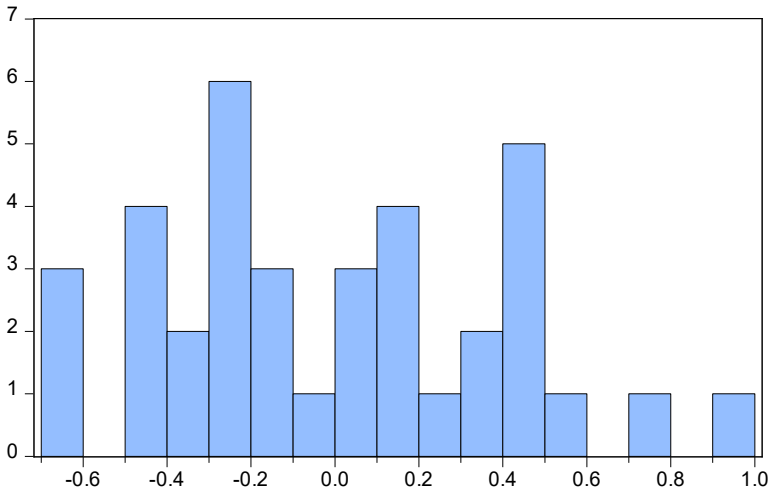
Variable	Coefficient	Std. Error	t-Statistic	Prob.
Δ(FDI(-1))	1.672733	0.187435	8.924321	0.0000
Δ(FDI(-2))	0.866227	0.126450	6.850342	0.0000
Δ(BDG)	-0.032580	0.078646	-0.414259	0.6854
Δ(BDG(-1))	1.078850	0.121965	8.845574	0.0000
Δ(BLD)	0.159833	0.063930	2.500141	0.0266
Δ(LR)	-0.059318	0.010405	-5.700863	0.0001
Δ(DCP)	0.124187	0.079769	1.556823	0.1435
Δ(DCP(-1))	-0.508657	0.080976	-6.281544	0.0000
Δ(EG)	0.065463	0.027186	2.407993	0.0316
Δ(RIR)	-0.171442	0.019928	-8.603295	0.0000
Δ(RIR(-1))	0.028038	0.012673	2.212425	0.0454
Δ(INF)	-0.074921	0.011101	-6.749077	0.0000
Δ(EXR)	0.024140	0.005284	4.568426	0.0005
Δ(EXR(-1))	-0.023902	0.005607	-4.263117	0.0009
CointEq(-1)*	-2.839430	0.250121	-11.35223	0.0000

R-squared	0.912978	Mean dependent var	0.004772
Adjusted R-squared	0.857601	S.D. dependent var	1.362727
S.E. of regression	0.514237	Akaike info criterion	1.798669
Sum squared resid	5.817668	Schwarz criterion	2.451744
Log likelihood	-18.27538	Hannan-Quinn criter.	2.028909
Durbin-Watson stat	1.877769		

* p-value incompatible with t-Bounds distribution.

4 Post Estimation Test

Normality



Series: Residuals	
Sample 1984 2020	
Observations 37	
Mean	3.37e-15
Median	-0.014683
Maximum	0.910397
Minimum	-0.672679
Std. Dev.	0.401997
Skewness	0.309184
Kurtosis	2.346124
Jarque-Bera	1.248646
Probability	0.535624

Serial Correlation

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	0.028333	Prob. F(2,11)	0.9721
Obs*R-squared	0.189628	Prob. Chi-Square(2)	0.9095

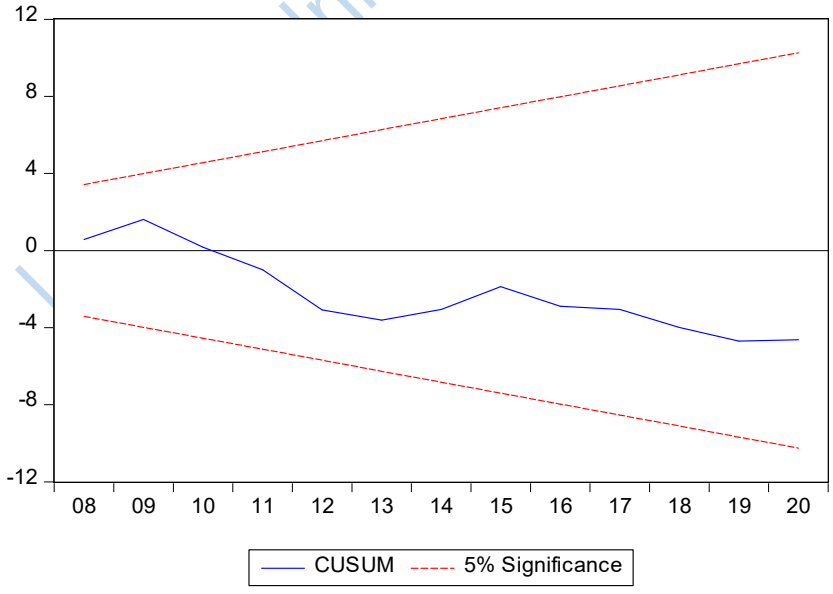
Heteroskedasticity

Heteroskedasticity Test: Breusch-Pagan-Godfrey

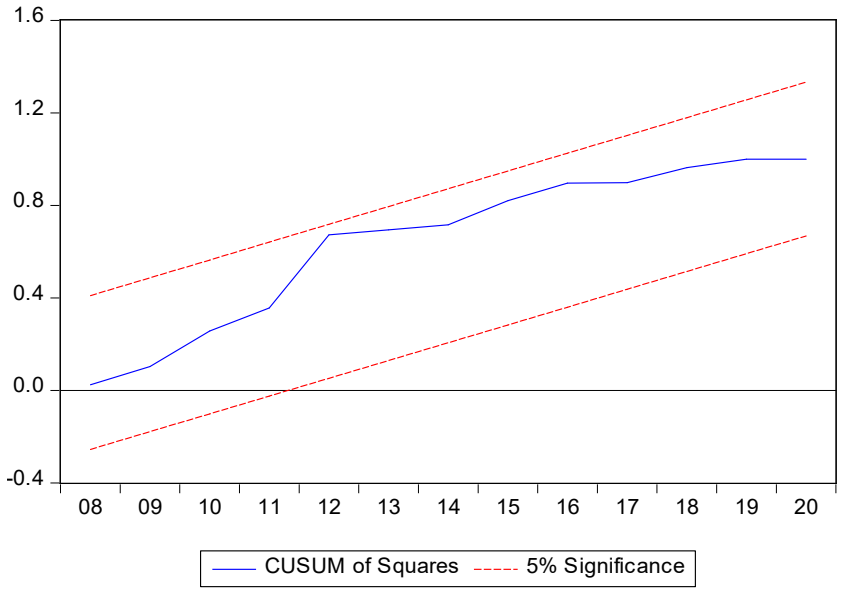
F-statistic	0.943869	Prob. F(23,13)	0.5644
Obs*R-squared	23.14191	Prob. Chi-Square(23)	0.4525
Scaled explained SS	1.922815	Prob. Chi-Square(23)	1.0000

Stability

Cusum



CusumSq



Appendix V: Analysis Result of Objective Three (DCPFDI)

1 ARDL Output: DCPFDI

Dependent Variable: EG
Method: ARDL
Date: 03/03/23 Time: 13:42
Sample (adjusted): 1984 2020
Included observations: 37 after adjustments
Maximum dependent lags: 4 (Automatic selection)
Model selection method: Akaike info criterion (AIC)
Dynamic regressors (3 lags, automatic): FDI DCP DCPFDI INF RIR EXR

Fixed regressors: C
Number of models evalulated: 16384
Selected Model: ARDL(2, 3, 3, 2, 3, 3, 2)
Note: final equation sample is larger than selection sample

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
EG(-1)	0.015183	0.186884	0.081244	0.9366
EG(-2)	0.156533	0.155304	1.007917	0.3334
FDI	-6.068830	1.619447	-3.747470	0.0028
FDI(-1)	1.224306	1.883384	0.650057	0.5279
FDI(-2)	-2.458877	1.656041	-1.484793	0.1634
FDI(-3)	1.593064	0.508445	3.133208	0.0086
DCP	-1.455620	0.456014	-3.192049	0.0077
DCP(-1)	-0.274708	0.665455	-0.412812	0.6870
DCP(-2)	-1.113651	0.701630	-1.587233	0.1384
DCP(-3)	-0.544082	0.277678	-1.959401	0.0737
DCPFDI	0.499503	0.179667	2.780162	0.0166
DCPFDI(-1)	-0.058917	0.212797	-0.276868	0.7866
DCPFDI(-2)	0.492582	0.227198	2.168071	0.0510
INF	0.075054	0.055546	1.351215	0.2016
INF(-1)	0.132634	0.066758	1.986780	0.0703
INF(-2)	-0.161897	0.083527	-1.938267	0.0765
INF(-3)	-0.108010	0.056066	-1.926499	0.0781
RIR	0.250520	0.087021	2.878836	0.0139
RIR(-1)	0.322857	0.091197	3.540220	0.0041
RIR(-2)	-0.102399	0.093409	-1.096240	0.2945
RIR(-3)	0.066577	0.046295	1.438100	0.1760
EXR	-0.036633	0.027541	-1.330141	0.2082
EXR(-1)	0.081997	0.037803	2.169059	0.0509
EXR(-2)	-0.012462	0.031073	-0.401073	0.6954
C	25.04538	5.454199	4.591945	0.0006

R-squared	0.900799	Mean dependent var	1.422657
Adjusted R-squared	0.702398	S.D. dependent var	3.795621
S.E. of regression	2.070622	Akaike info criterion	4.518915
Sum squared resid	51.44968	Schwarz criterion	5.607373
Log likelihood	-58.59992	Hannan-Quinn criter.	4.902647
F-statistic	4.540290	Durbin-Watson stat	2.926742
Prob(F-statistic)	0.004484		

*Note: p-values and any subsequent tests do not account for model selection.

2 Bound Test and Long Run

ARDL Long Run Form and Bounds Test
Dependent Variable: D(EG)
Selected Model: ARDL(2, 3, 3, 2, 3, 3, 2)
Case 2: Restricted Constant and No Trend
Date: 03/03/23 Time: 13:49
Sample: 1981 2021
Included observations: 37

Conditional Error Correction Regression

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	25.04538	5.454199	4.591945	0.0006
EG(-1)*	-0.828284	0.200537	-4.130319	0.0014
FDI(-1)	-5.710337	3.236459	-1.764378	0.1031
DCP(-1)	-3.388061	0.849950	-3.986189	0.0018
DCPFDI(-1)	0.933167	0.324969	2.871554	0.0140
INF(-1)	-0.062219	0.092307	-0.674045	0.5131
RIR(-1)	0.537555	0.183617	2.927593	0.0127
EXR(-1)	0.032902	0.012716	2.587365	0.0238
Δ(EG(-1))	-0.156533	0.155304	-1.007917	0.3334
Δ(FDI)	-6.068830	1.619447	-3.747470	0.0028
Δ(FDI(-1))	0.865813	1.836927	0.471338	0.6459
Δ(FDI(-2))	-1.593064	0.508445	-3.133208	0.0086
Δ(DCP)	-1.455620	0.456014	-3.192049	0.0077
Δ(DCP(-1))	1.657733	0.659836	2.512340	0.0273
Δ(DCP(-2))	0.544082	0.277678	1.959401	0.0737
Δ(DCPFDI)	0.499503	0.179667	2.780162	0.0166
Δ(DCPFDI(-1))	-0.492582	0.227198	-2.168071	0.0510
Δ(INF)	0.075054	0.055546	1.351215	0.2016
Δ(INF(-1))	0.269907	0.062425	4.323673	0.0010
Δ(INF(-2))	0.108010	0.056066	1.926499	0.0781
Δ(RIR)	0.250520	0.087021	2.878836	0.0139
Δ(RIR(-1))	0.035822	0.103063	0.347575	0.7342
Δ(RIR(-2))	-0.066577	0.046295	-1.438100	0.1760
Δ(EXR)	-0.036633	0.027541	-1.330141	0.2082
Δ(EXR(-1))	0.012462	0.031073	0.401073	0.6954

* p-value incompatible with t-Bounds distribution.

Levels Equation
Case 2: Restricted Constant and No Trend

Variable	Coefficient	Std. Error	t-Statistic	Prob.
FDI	-6.894180	4.654967	-1.481038	0.1644
DCP	-4.090460	1.341436	-3.049315	0.0101
DCPFDI	1.126628	0.488976	2.304054	0.0399
INF	-0.075118	0.111574	-0.673261	0.5135
RIR	0.648999	0.176972	3.667239	0.0032
EXR	0.039723	0.016744	2.372316	0.0353
C	30.23768	10.00101	3.023463	0.0106

EC = EG - (-6.8942*FDI -4.0905*DCP + 1.1266*DCPFDI -0.0751*INF +
0.6490*RIR + 0.0397*EXR + 30.2377)

F-Bounds Test — Null Hypothesis: No levels relationship

Test Statistic	Value	Signif.	I(0)	I(1)
			Asymptotic: n=1000	
F-statistic	6.399620	10%	1.99	2.94
k	6	5%	2.27	3.28
		2.5%	2.55	3.61
		1%	2.88	3.99
Actual Sample Size	37		Finite Sample: n=40	
		10%	2.218	3.314
		5%	2.618	3.863
		1%	3.505	5.121

	Finite Sample: n=35	
10%	2.254	3.388
5%	2.685	3.96
1%	3.713	5.326

3 Short Run (ECM Result)

ARDL Error Correction Regression
Dependent Variable: D(EG)
Selected Model: ARDL(2, 3, 3, 2, 3, 3, 2)
Case 2: Restricted Constant and No Trend
Date: 03/03/23 Time: 13:50
Sample: 1981 2021
Included observations: 37

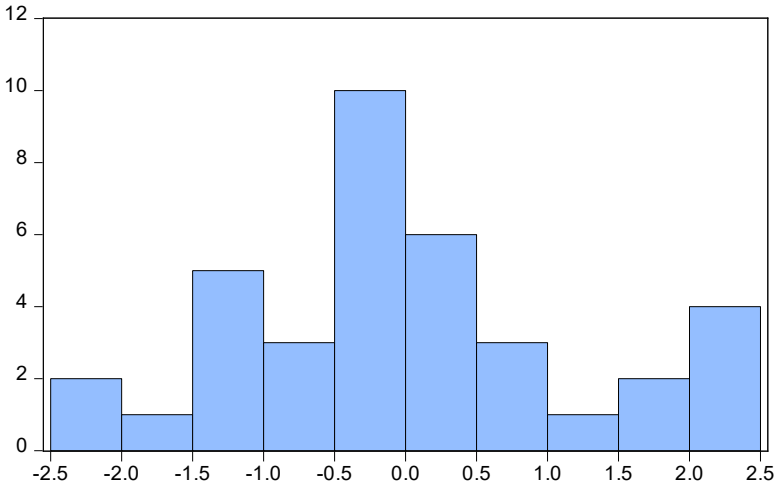
ECM Regression
Case 2: Restricted Constant and No Trend

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Δ(EG(-1))	-0.156533	0.096056	-1.629609	0.1291
Δ(FDI)	-6.068830	1.001101	-6.062154	0.0001
Δ(FDI(-1))	0.865813	0.909362	0.952111	0.3598
Δ(FDI(-2))	-1.593064	0.290261	-5.488380	0.0001
Δ(DCP)	-1.455620	0.333762	-4.361248	0.0009
Δ(DCP(-1))	1.657733	0.391788	4.231201	0.0012
Δ(DCP(-2))	0.544082	0.182015	2.989212	0.0113
ΔDCPFDI)	0.499503	0.118980	4.198213	0.0012
Δ(DCPFDI(-1))	-0.492582	0.126982	-3.879129	0.0022
Δ(INF)	0.075054	0.032878	2.282831	0.0415
Δ(INF(-1))	0.269907	0.035997	7.498109	0.0000
Δ(INF(-2))	0.108010	0.041331	2.613301	0.0227
Δ(RIR)	0.250520	0.051608	4.854269	0.0004
Δ(RIR(-1))	0.035822	0.051589	0.694375	0.5007
Δ(RIR(-2))	-0.066577	0.033091	-2.011950	0.0672
Δ(EXR)	-0.036633	0.015527	-2.359301	0.0361
Δ(EXR(-1))	0.012462	0.017989	0.692792	0.5016
CointEq(-1)*	-0.828284	0.091996	-9.003436	0.0000

R-squared	0.932297	Mean dependent var	0.242329
Adjusted R-squared	0.871721	S.D. dependent var	4.594482
S.E. of regression	1.645563	Akaike info criterion	4.140536
Sum squared resid	51.44968	Schwarz criterion	4.924226
Log likelihood	-58.59992	Hannan-Quinn criter.	4.416824
Durbin-Watson stat	2.926742		

* p-value incompatible with t-Bounds distribution.

4 Normality Test



Series: Residuals	
Sample 1984 2020	
Observations 37	
Mean	6.47e-15
Median	-0.091638
Maximum	2.352662
Minimum	-2.200898
Std. Dev.	1.195474
Skewness	0.349894
Kurtosis	2.598130
Jarque-Bera	1.003938
Probability	0.605337

5 Auto Correlation Test

Breusch-Godfrey Serial Correlation LM Test:

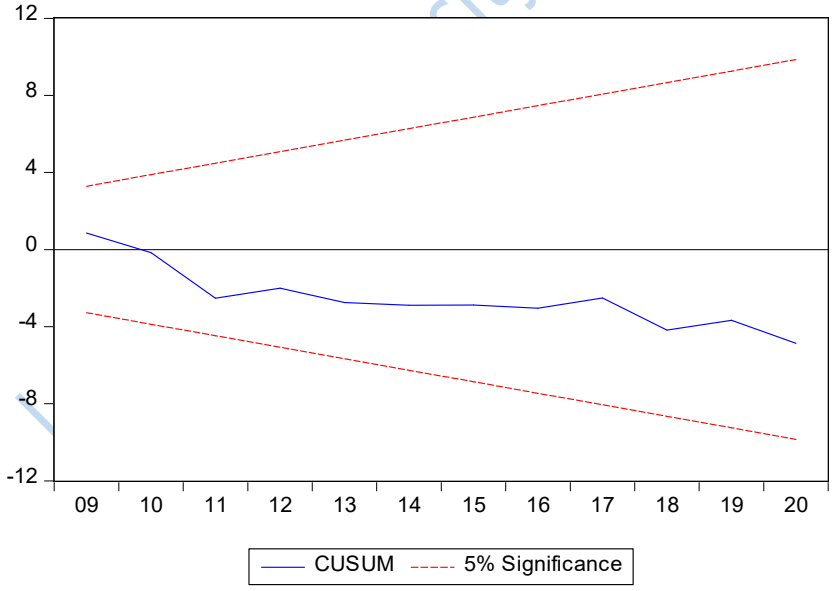
F-statistic	2.484920	Prob. F(4,8)	0.1272
Obs*R-squared	20.50026	Prob. Chi-Square(4)	0.0004

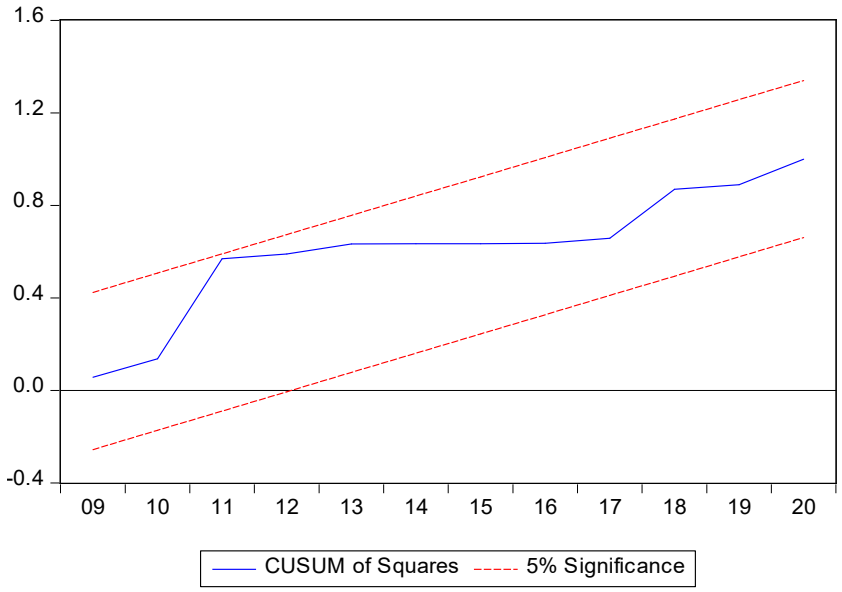
6 Heteroskedasticity Test

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	0.569721	Prob. F(24,12)	0.8836
Obs*R-squared	19.70577	Prob. Chi-Square(24)	0.7134
Scaled explained SS	1.656284	Prob. Chi-Square(24)	1.0000

7 Stablity Test





Appendix VI: Analysis Result of Objective Three (BDGFDI)

1 ARDL Output: BDGFDI

Dependent Variable: EG
Method: ARDL
Date: 03/03/23 Time: 14:32
Sample (adjusted): 1984 2020
Included observations: 37 after adjustments
Maximum dependent lags: 3 (Automatic selection)
Model selection method: Akaike info criterion (AIC)
Dynamic regressors (3 lags, automatic): FDI BDG BDGFDI EXR INF RIR

Fixed regressors: C
Number of models evalulated: 12288
Selected Model: ARDL(3, 3, 1, 3, 3, 3, 3)

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
EG(-1)	-0.666812	0.190533	-3.499725	0.0050
EG(-2)	-0.093177	0.134745	-0.691510	0.5036
EG(-3)	-0.116652	0.118710	-0.982660	0.3469
FDI	-2.496453	1.231733	-2.026781	0.0676
FDI(-1)	1.036328	1.442932	0.718210	0.4876
FDI(-2)	0.813321	0.914805	0.889065	0.3930
FDI(-3)	3.360069	0.700644	4.795686	0.0006
BDG	-1.188516	0.397050	-2.993368	0.0122
BDG(-1)	-0.715415	0.467848	-1.529161	0.1545
BDGFDI	0.166339	0.112620	1.476998	0.1677
BDGFDI(-1)	-0.006776	0.127539	-0.053126	0.9586
BDGFDI(-2)	0.173118	0.098286	1.761374	0.1059
BDGFDI(-3)	-0.155697	0.068157	-2.284369	0.0432
EXR	-0.112114	0.022874	-4.901428	0.0005
EXR(-1)	0.075670	0.032109	2.356672	0.0380
EXR(-2)	-0.028789	0.040341	-0.713647	0.4903
EXR(-3)	0.111371	0.037288	2.986772	0.0124
INF	0.150631	0.057665	2.612168	0.0242
INF(-1)	0.026224	0.064263	0.408079	0.6910
INF(-2)	-0.111569	0.056907	-1.960570	0.0757

INF(-3)	-0.135334	0.046149	-2.932520	0.0136
RIR	0.558002	0.112082	4.978508	0.0004
RIR(-1)	0.414428	0.091967	4.506296	0.0009
RIR(-2)	0.112215	0.082006	1.368366	0.1985
RIR(-3)	0.182224	0.048328	3.770533	0.0031
C	14.73135	3.096756	4.757027	0.0006

R-squared	0.942464	Mean dependent var	1.422657
Adjusted R-squared	0.811701	S.D. dependent var	3.795621
S.E. of regression	1.647052	Akaike info criterion	4.028234
Sum squared resid	29.84058	Schwarz criterion	5.160230
Log likelihood	-48.52233	Hannan-Quinn criter.	4.427316
F-statistic	7.207397	Durbin-Watson stat	2.352886
Prob(F-statistic)	0.000772		

*Note: p-values and any subsequent tests do not account for model selection.

2 Long run and Bounds Test

ARDL Long Run Form and Bounds Test
Dependent Variable: D(EG)
Selected Model: ARDL(3, 3, 1, 3, 3, 3, 3)
Case 2: Restricted Constant and No Trend
Date: 03/03/23 Time: 14:33
Sample: 1981 2021
Included observations: 37

Conditional Error Correction Regression

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	14.73135	3.096756	4.757027	0.0006
EG(-1)*	-1.876641	0.301650	-6.221250	0.0001
FDI(-1)	2.713265	2.402208	1.129488	0.2827
BDG(-1)	-1.903931	0.412659	-4.613814	0.0007
BDGFDI(-1)	0.176984	0.161974	1.092671	0.2979
EXR(-1)	0.046138	0.013231	3.487012	0.0051
INF(-1)	-0.070048	0.074067	-0.945735	0.3646
RIR(-1)	1.266869	0.239671	5.285875	0.0003
Δ(EG(-1))	0.209829	0.184293	1.138563	0.2791
Δ(EG(-2))	0.116652	0.118710	0.982660	0.3469
Δ(FDI)	-2.496453	1.231733	-2.026781	0.0676
Δ(FDI(-1))	-4.173390	1.030848	-4.048502	0.0019
Δ(FDI(-2))	-3.360069	0.700644	-4.795686	0.0006
Δ(BDG)	-1.188516	0.397050	-2.993368	0.0122
Δ(BDGFDI)	0.166339	0.112620	1.476998	0.1677
Δ(BDGFDI(-1))	-0.017421	0.087002	-0.200237	0.8449
Δ(BDGFDI(-2))	0.155697	0.068157	2.284369	0.0432
Δ(EXR)	-0.112114	0.022874	-4.901428	0.0005
Δ(EXR(-1))	-0.082582	0.026392	-3.129018	0.0096
Δ(EXR(-2))	-0.111371	0.037288	-2.986772	0.0124
Δ(INF)	0.150631	0.057665	2.612168	0.0242
Δ(INF(-1))	0.246903	0.045815	5.389137	0.0002
Δ(INF(-2))	0.135334	0.046149	2.932520	0.0136
Δ(RIR)	0.558002	0.112082	4.978508	0.0004
Δ(RIR(-1))	-0.294439	0.103606	-2.841912	0.0160
Δ(RIR(-2))	-0.182224	0.048328	-3.770533	0.0031

* p-value incompatible with t-Bounds distribution.

Levels Equation
Case 2: Restricted Constant and No Trend

Variable	Coefficient	Std. Error	t-Statistic	Prob.
FDI	1.445809	1.204534	1.200306	0.2552
BDG	-1.014542	0.181772	-5.581386	0.0002
BDGFDI	0.094309	0.086374	1.091873	0.2982
EXR	0.024585	0.004840	5.079210	0.0004
INF	-0.037326	0.040427	-0.923296	0.3757
RIR	0.675072	0.067515	9.998874	0.0000
C	7.849852	1.963234	3.998428	0.0021

EC = EG - (1.4458*FDI -1.0145*BDG + 0.0943*BDGFDI + 0.0246*EXR
-0.0373*INF + 0.6751*RIR + 7.8499)

F-Bounds Test — Null Hypothesis: No levels relationship

Test Statistic	Value	Signif.	I(0)	I(1)
		Asymptotic: n=1000		
F-statistic	11.82116	10%	1.99	2.94
k	6	5%	2.27	3.28
		2.5%	2.55	3.61
		1%	2.88	3.99
Actual Sample Size	37	Finite Sample: n=40		
		10%	2.218	3.314
		5%	2.618	3.863
		1%	3.505	5.121
		Finite Sample: n=35		
		10%	2.254	3.388
		5%	2.685	3.96
		1%	3.713	5.326

3 Short run (ECM Result)

ARDL Error Correction Regression
Dependent Variable: D(EG)
Selected Model: ARDL(3, 3, 1, 3, 3, 3, 3)
Case 2: Restricted Constant and No Trend
Date: 03/03/23 Time: 14:34
Sample: 1981 2021
Included observations: 37

ECM Regression
Case 2: Restricted Constant and No Trend

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Δ(EG(-1))	0.209829	0.085011	2.468260	0.0312
Δ(EG(-2))	0.116652	0.069500	1.678447	0.1214
Δ(FDI)	-2.496453	0.685983	-3.639235	0.0039
Δ(FDI(-1))	-4.173390	0.604438	-6.904585	0.0000
Δ(FDI(-2))	-3.360069	0.454068	-7.399925	0.0000
Δ(BDG)	-1.188516	0.240591	-4.939981	0.0004
Δ(BDGFDI)	0.166339	0.068557	2.426281	0.0336
Δ(BDGFDI(-1))	-0.017421	0.052095	-0.334410	0.7444
Δ(BDGFDI(-2))	0.155697	0.043871	3.548929	0.0046
Δ(EXR)	-0.112114	0.012645	-8.866350	0.0000
Δ(EXR(-1))	-0.082582	0.018690	-4.418449	0.0010
Δ(EXR(-2))	-0.111371	0.018078	-6.160444	0.0001

Δ(INF)	0.150631	0.030706	4.905625	0.0005
Δ(INF(-1))	0.246903	0.026239	9.409901	0.0000
Δ(INF(-2))	0.135334	0.030923	4.376451	0.0011
Δ(RIR)	0.558002	0.057631	9.682371	0.0000
Δ(RIR(-1))	-0.294439	0.055692	-5.286921	0.0003
Δ(RIR(-2))	-0.182224	0.032034	-5.688410	0.0001
CointEq(-1)*	-1.876641	0.150857	-12.43985	0.0000

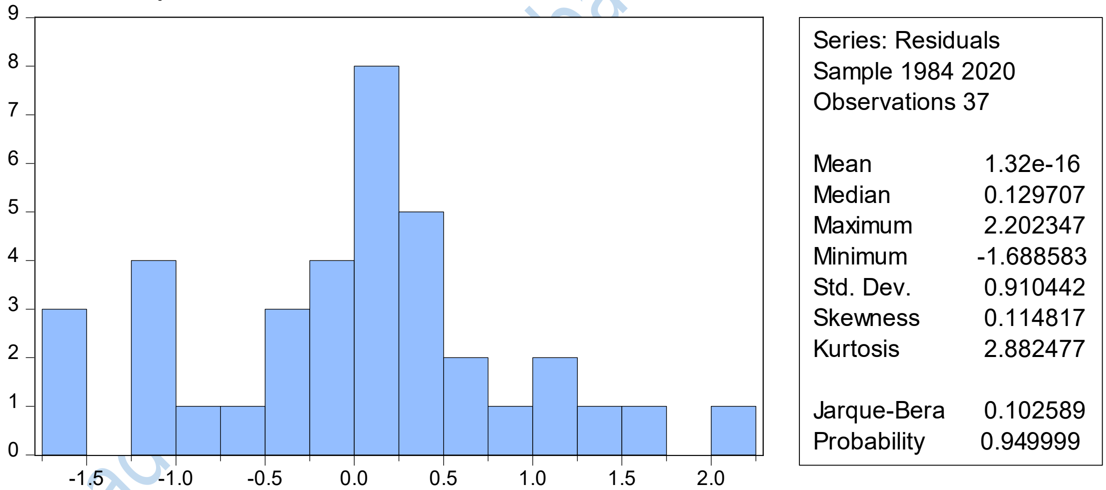
R-squared	0.960733	Mean dependent var	0.242329
Adjusted R-squared	0.921465	S.D. dependent var	4.594482
S.E. of regression	1.287560	Akaike info criterion	3.649855
Sum squared resid	29.84058	Schwarz criterion	4.477084
Log likelihood	-48.52233	Hannan-Quinn criter.	3.941492
Durbin-Watson stat	2.352886		

* p-value incompatible with t-Bounds distribution.

F-Bounds Test — Null Hypothesis: No levels relationship

Test Statistic	Value	Signif.	I(0)	I(1)
F-statistic	11.82116	10%	1.99	2.94
k	6	5%	2.27	3.28
		2.5%	2.55	3.61
		1%	2.88	3.99

4 Normality Test



5 Autocrorelation Test

Breusch-Godfrey Serial Correlation LM Test:

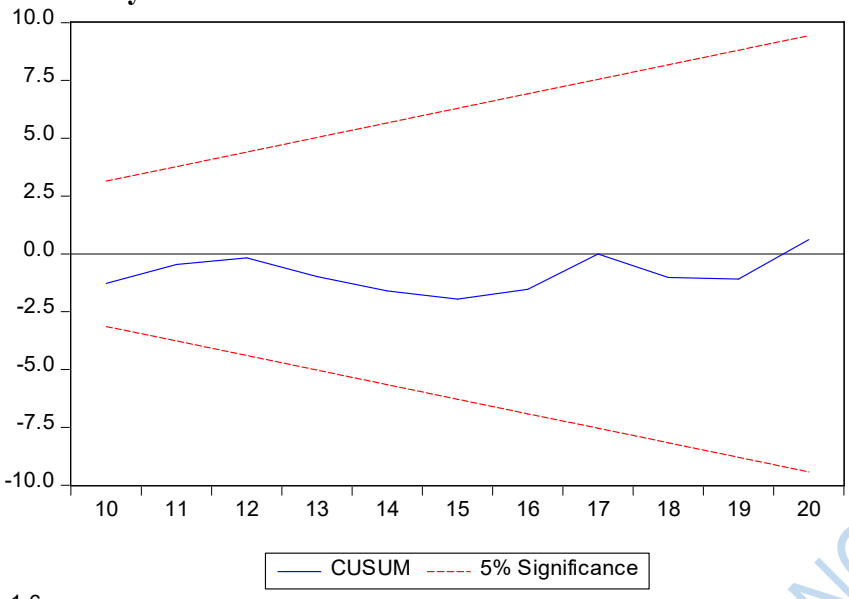
F-statistic	2.131581	Prob. F(4,7)	0.1798
Obs*R-squared	20.31865	Prob. Chi-Square(4)	0.0004

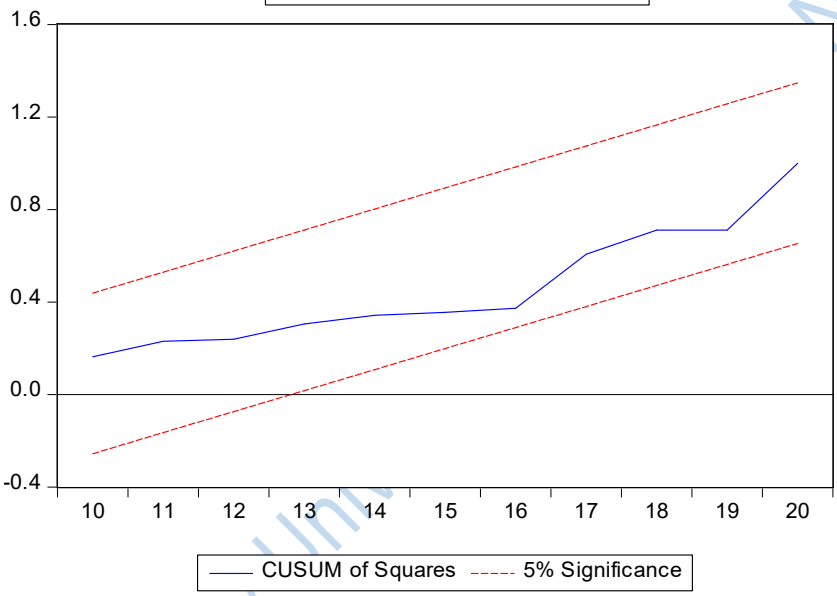
6 Heteroskedasticity Test

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	1.341316	Prob. F(25,11)	0.3131
Obs*R-squared	27.86069	Prob. Chi-Square(25)	0.3143
Scaled explained SS	2.317786	Prob. Chi-Square(25)	1.0000

7 StabilityTest





Appendix VII: Analysis Result of Objective Three (BLDGFDI)

1 ARDL Output: BLDFDI
Dependent Variable: EG
Method: ARDL
Date: 03/03/23 Time: 14:48
Sample (adjusted): 1985 2020
Included observations: 36 after adjustments
Maximum dependent lags: 4 (Automatic selection)
Model selection method: Akaike info criterion (AIC)
Dynamic regressors (3 lags, automatic): FDI BLD BLDFDI INF EXR RIR

Fixed regressors: C
Number of models evalulated: 16384
Selected Model: ARDL(4, 3, 3, 1, 3, 1, 3)

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
EG(-1)	-0.073304	0.189611	-0.386602	0.7064
EG(-2)	0.463937	0.214815	2.159709	0.0537
EG(-3)	-0.285715	0.193890	-1.473594	0.1686
EG(-4)	-0.225957	0.162470	-1.390755	0.1918
FDI	-0.093948	2.652371	-0.035420	0.9724
FDI(-1)	9.415959	3.117054	3.020788	0.0116
FDI(-2)	1.179432	0.658280	1.791688	0.1007
FDI(-3)	0.609755	0.571675	1.066611	0.3090
BLD	0.244352	0.644037	0.379407	0.7116
BLD(-1)	2.397795	0.950230	2.523384	0.0283
BLD(-2)	0.519732	0.395408	1.314422	0.2155
BLD(-3)	-0.309206	0.308358	-1.002751	0.3375
BLDFDI	-0.131341	0.349741	-0.375537	0.7144
BLDFDI(-1)	-1.516445	0.494626	-3.065838	0.0107
INF	-0.038479	0.059920	-0.642170	0.5339
INF(-1)	-0.093937	0.094662	-0.992337	0.3424
INF(-2)	-0.015741	0.085450	-0.184217	0.8572
INF(-3)	-0.342730	0.106452	-3.219591	0.0082
EXR	-0.099035	0.034617	-2.860848	0.0155
EXR(-1)	0.074384	0.035634	2.087458	0.0609
RIR	-0.214280	0.126854	-1.689191	0.1193
RIR(-1)	-0.038615	0.091943	-0.419992	0.6826
RIR(-2)	-0.146256	0.103772	-1.409395	0.1864
RIR(-3)	-0.161448	0.103605	-1.558305	0.1474
C	-2.455521	4.916680	-0.499427	0.6273

R-squared	0.858294	Mean dependent var	1.560231
Adjusted R-squared	0.549117	S.D. dependent var	3.754739
S.E. of regression	2.521224	Akaike info criterion	4.890632
Sum squared resid	69.92229	Schwarz criterion	5.990297
Log likelihood	-63.03137	Hannan-Quinn criter.	5.274444
F-statistic	2.776064	Durbin-Watson stat	2.057356
Prob(F-statistic)	0.040394		

*Note: p-values and any subsequent tests do not account for model selection.

2 Longrun and Bound Test

ARDL Long Run Form and Bounds Test
Dependent Variable: D(EG)
Selected Model: ARDL(4, 3, 3, 1, 3, 1, 3)
Case 2: Restricted Constant and No Trend
Date: 03/03/23 Time: 14:50
Sample: 1981 2021
Included observations: 36

Conditional Error Correction Regression

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-2.455521	4.916680	-0.499427	0.6273
EG(-1)*	-1.121038	0.299272	-3.745882	0.0032
FDI(-1)	11.11120	4.302537	2.582476	0.0255
BLD(-1)	2.852673	0.930382	3.066133	0.0107
BLDFDI(-1)	-1.647785	0.576138	-2.860051	0.0155
INF(-1)	-0.490887	0.129824	-3.781181	0.0030
EXR(-1)	-0.024651	0.009734	-2.532297	0.0279
RIR(-1)	-0.560600	0.282884	-1.981732	0.0731
Δ(EG(-1))	0.047734	0.275923	0.172999	0.8658
Δ(EG(-2))	0.511672	0.261048	1.960069	0.0758
Δ(EG(-3))	0.225957	0.162470	1.390755	0.1918
Δ(FDI)	-0.093948	2.652371	-0.035420	0.9724
Δ(FDI(-1))	-1.789187	0.798600	-2.240404	0.0467
Δ(FDI(-2))	-0.609755	0.571675	-1.066611	0.3090
Δ(BLD)	0.244352	0.644037	0.379407	0.7116
Δ(BLD(-1))	-0.210526	0.316068	-0.666079	0.5191
Δ(BLD(-2))	0.309206	0.308358	1.002751	0.3375
Δ(BLDFDI)	-0.131341	0.349741	-0.375537	0.7144
Δ(INF)	-0.038479	0.059920	-0.642170	0.5339
Δ(INF(-1))	0.358472	0.080977	4.426832	0.0010
Δ(INF(-2))	0.342730	0.106452	3.219591	0.0082
Δ(EXR)	-0.099035	0.034617	-2.860848	0.0155
Δ(RIR)	-0.214280	0.126854	-1.689191	0.1193
Δ(RIR(-1))	0.307704	0.164473	1.870853	0.0882
Δ(RIR(-2))	0.161448	0.103605	1.558305	0.1474

* p-value incompatible with t-Bounds distribution.

Levels Equation
Case 2: Restricted Constant and No Trend

Variable	Coefficient	Std. Error	t-Statistic	Prob.
FDI	9.911525	2.734402	3.624751	0.0040
BLD	2.544671	0.779055	3.266357	0.0075
BLDFDI	-1.469874	0.445271	-3.301079	0.0071
INF	-0.437886	0.147037	-2.978073	0.0126
EXR	-0.021989	0.010427	-2.108885	0.0587
RIR	-0.500072	0.304533	-1.642096	0.1288
C	-2.190399	3.990078	-0.548962	0.5940

EC = EG - (9.9115*FDI + 2.5447*BLD -1.4699*BLDFDI -0.4379*INF -0.0220 *EXR -0.5001*RIR -2.1904)

F-Bounds Test — Null Hypothesis: No levels relationship

Test Statistic	Value	Signif.	I(0)	I(1)
		Asymptotic: n=1000		
F-statistic	5.011881	10%	1.99	2.94
k	6	5%	2.27	3.28
		2.5%	2.55	3.61
		1%	2.88	3.99
Actual Sample Size	36	Finite Sample: n=40		
		10%	2.218	3.314
		5%	2.618	3.863
		1%	3.505	5.121
		Finite Sample: n=35		
		10%	2.254	3.388
		5%	2.685	3.96

1%	3.713	5.326	

3 Short run ECM Test

ARDL Error Correction Regression
Dependent Variable: D(EG)
Selected Model: ARDL(4, 3, 3, 1, 3, 1, 3)
Case 2: Restricted Constant and No Trend
Date: 03/03/23 Time: 14:51
Sample: 1981 2021
Included observations: 36

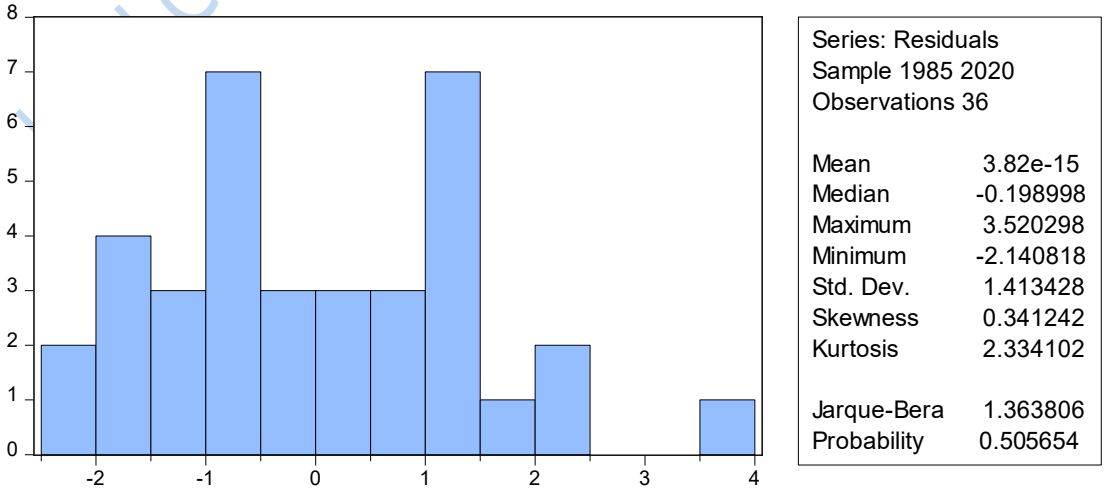
ECM Regression
Case 2: Restricted Constant and No Trend

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Δ(EG(-1))	0.047734	0.124937	0.382068	0.7097
Δ(EG(-2))	0.511672	0.127646	4.008511	0.0021
Δ(EG(-3))	0.225957	0.089332	2.529394	0.0280
Δ(FDI)	-0.093948	1.422704	-0.066035	0.9485
Δ(FDI(-1))	-1.789187	0.500740	-3.573088	0.0044
Δ(FDI(-2))	-0.609755	0.368625	-1.654133	0.1263
Δ(BLD)	0.244352	0.408568	0.598070	0.5619
Δ(BLD(-1))	-0.210526	0.194857	-1.080412	0.3031
Δ(BLD(-2))	0.309206	0.218627	1.414307	0.1849
Δ(BLDFDI)	-0.131341	0.196998	-0.666710	0.5187
Δ(INF)	-0.038479	0.043441	-0.885781	0.3947
Δ(INF(-1))	0.358472	0.045090	7.950182	0.0000
Δ(INF(-2))	0.342730	0.063390	5.406674	0.0002
Δ(EXR)	-0.099035	0.018801	-5.267414	0.0003
Δ(RIR)	-0.214280	0.062561	-3.425164	0.0057
Δ(RIR(-1))	0.307704	0.062231	4.944572	0.0004
Δ(RIR(-2))	0.161448	0.055247	2.922280	0.0139
CointEq(-1)*	-1.121038	0.138400	-8.100005	0.0000

R-squared	0.895634	Mean dependent var	-0.017557
Adjusted R-squared	0.797065	S.D. dependent var	4.375156
S.E. of regression	1.970932	Akaike info criterion	4.501743
Sum squared resid	69.92229	Schwarz criterion	5.293502
Log likelihood	-63.03137	Hannan-Quinn criter.	4.778088
Durbin-Watson stat	2.057356		

* p-value incompatible with t-Bounds distribution.

4 Nomality Test



5 AutoCorrelation Test

Breusch-Godfrey Serial Correlation LM Test:

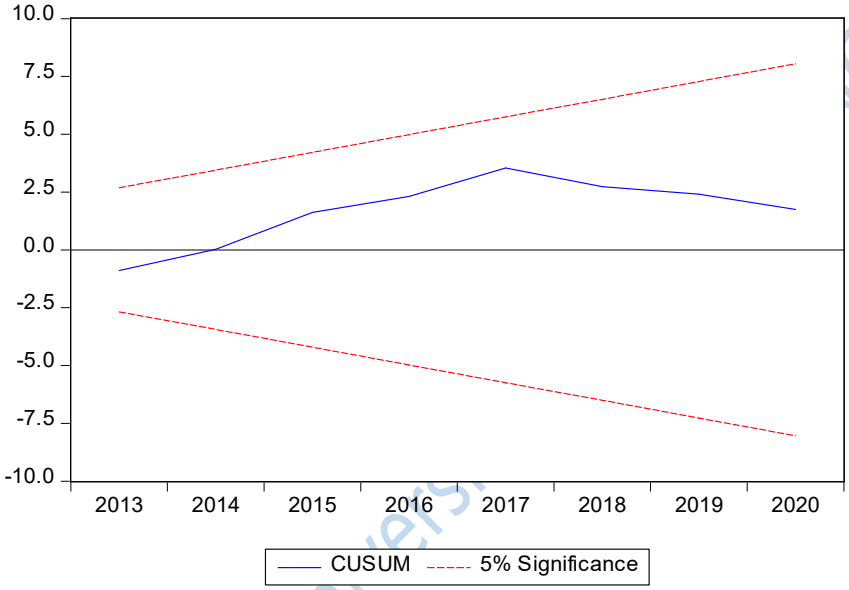
F-statistic	0.536303	Prob. F(3,8)	0.6704
Obs*R-squared	6.027819	Prob. Chi-Square(3)	0.1103

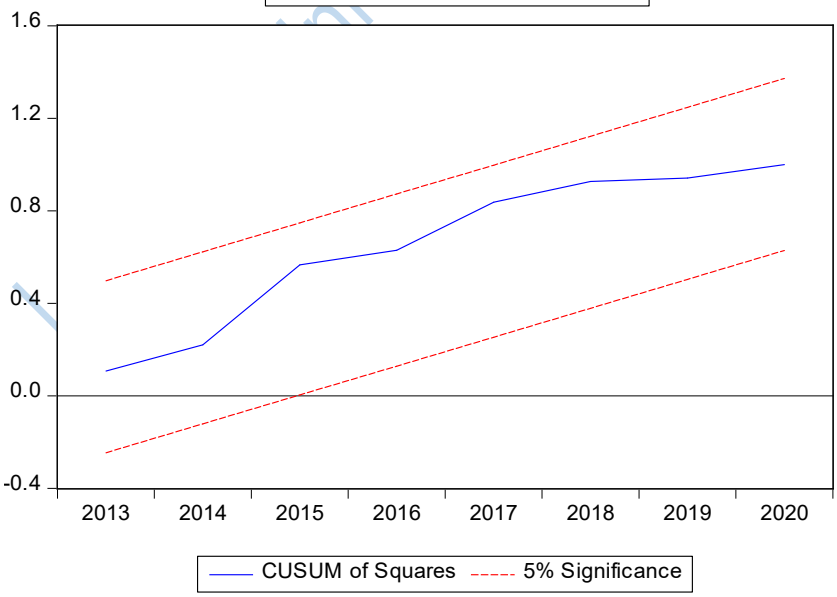
6

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	0.308359	Prob. F(24,11)	0.9923
Obs*R-squared	14.47898	Prob. Chi-Square(24)	0.9351
Scaled explained SS	0.901732	Prob. Chi-Square(24)	1.0000

7 Stability Test





Appendix VIII: Analysis Result of Objective Three (LRGFDI)

1 ARDL Output: LRFDI
Dependent Variable: EG
Method: ARDL
Date: 03/03/23 Time: 15:10
Sample (adjusted): 1985 2020
Included observations: 36 after adjustments
Maximum dependent lags: 4 (Automatic selection)
Model selection method: Akaike info criterion (AIC)
Dynamic regressors (3 lags, automatic): FDI LR LRFDI INF RIR EXR
Fixed regressors: C
Number of models evalulated: 16384
Selected Model: ARDL(4, 3, 3, 2, 3, 3, 3)

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
EG(-1)	-0.322989	0.121976	-2.647982	0.0293
EG(-2)	0.319552	0.134808	2.370416	0.0452
EG(-3)	0.521511	0.118623	4.396360	0.0023
EG(-4)	-0.158750	0.101865	-1.558441	0.1577
FDI	-4.343169	1.371405	-3.166948	0.0133
FDI(-1)	0.697384	1.439924	0.484320	0.6411
FDI(-2)	5.157799	3.065046	1.682780	0.1309
FDI(-3)	3.000426	0.456027	6.579488	0.0002
LR	0.069271	0.056270	1.231063	0.2533
LR(-1)	0.173324	0.049052	3.533461	0.0077
LR(-2)	0.117687	0.125295	0.939279	0.3751
LR(-3)	0.148258	0.034121	4.345037	0.0025
LRFDI	0.052829	0.032698	1.615663	0.1448
LRFDI(-1)	-0.014909	0.032808	-0.454430	0.6616
LRFDI(-2)	-0.077503	0.064983	-1.192659	0.2672
INF	0.060907	0.057650	1.056493	0.3216
INF(-1)	0.307197	0.056367	5.449971	0.0006
INF(-2)	-0.231878	0.049477	-4.686560	0.0016
INF(-3)	-0.135798	0.052019	-2.610554	0.0311
RIR	0.309324	0.089748	3.446570	0.0087
RIR(-1)	0.468161	0.077489	6.041670	0.0003
RIR(-2)	-0.019951	0.077744	-0.256623	0.8039
RIR(-3)	-0.185290	0.068116	-2.720209	0.0262
EXR	-0.135332	0.023721	-5.705122	0.0005
EXR(-1)	0.160529	0.030614	5.243714	0.0008
EXR(-2)	-0.004403	0.035714	-0.123287	0.9049
EXR(-3)	-0.066878	0.022787	-2.934955	0.0189
C	-23.96893	7.408141	-3.235486	0.0120

R-squared	0.973975	Mean dependent var	1.560231
Adjusted R-squared	0.886142	S.D. dependent var	3.754739
S.E. of regression	1.266954	Akaike info criterion	3.362586
Sum squared resid	12.84137	Schwarz criterion	4.594211
Log likelihood	-32.52654	Hannan-Quinn criter.	3.792456
F-statistic	11.08895	Durbin-Watson stat	2.260955
Prob(F-statistic)	0.000737		

*Note: p-values and any subsequent tests do not account for model selection.

2 Long Run and Bound Test

ARDL Long Run Form and Bounds Test
Dependent Variable: D(EG)
Selected Model: ARDL(4, 3, 3, 2, 3, 3, 3)
Case 2: Restricted Constant and No Trend
Date: 03/03/23 Time: 15:14
Sample: 1981 2021
Included observations: 36

Conditional Error Correction Regression

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-23.96893	7.408141	-3.235486	0.0120
EG(-1)*	-0.640677	0.240770	-2.660949	0.0288
FDI(-1)	4.512440	3.322665	1.358079	0.2115
LR(-1)	0.508540	0.150313	3.383195	0.0096
LRFDI(-1)	-0.039583	0.073805	-0.536317	0.6063
INF(-1)	0.000429	0.081536	0.005257	0.9959
RIR(-1)	0.572244	0.201470	2.840345	0.0218
EXR(-1)	-0.046084	0.009117	-5.054910	0.0010
Δ(EG(-1))	-0.682312	0.219830	-3.103815	0.0146
Δ(EG(-2))	-0.362761	0.171607	-2.113907	0.0675
Δ(EG(-3))	0.158750	0.101865	1.558441	0.1577
Δ(FDI)	-4.343169	1.371405	-3.166948	0.0133
Δ(FDI(-1))	-8.158225	3.391387	-2.405571	0.0428
Δ(FDI(-2))	-3.000426	0.456027	-6.579488	0.0002
Δ(LR)	0.069271	0.056270	1.231063	0.2533
Δ(LR(-1))	-0.265945	0.124340	-2.138851	0.0649
Δ(LR(-2))	-0.148258	0.034121	-4.345037	0.0025
Δ(LRFDI)	0.052829	0.032698	1.615663	0.1448
Δ(LRFDI(-1))	0.077503	0.064983	1.192659	0.2672
Δ(INF)	0.060907	0.057650	1.056493	0.3216
Δ(INF(-1))	0.367676	0.059457	6.183926	0.0003
Δ(INF(-2))	0.135798	0.052019	2.610554	0.0311
Δ(RIR)	0.309324	0.089748	3.446570	0.0087
Δ(RIR(-1))	0.205241	0.129071	1.590131	0.1505
Δ(RIR(-2))	0.185290	0.068116	2.720209	0.0262
Δ(EXR)	-0.135332	0.023721	-5.705122	0.0005
Δ(EXR(-1))	0.071281	0.028576	2.494391	0.0373
Δ(EXR(-2))	0.066878	0.022787	2.934955	0.0189

* p-value incompatible with t-Bounds distribution.

Levels Equation
Case 2: Restricted Constant and No Trend

Variable	Coefficient	Std. Error	t-Statistic	Prob.
FDI	7.043235	7.263538	0.969670	0.3606
LR	0.793753	0.479058	1.656903	0.1361
LRFDI	-0.061783	0.134375	-0.459779	0.6579
INF	0.000669	0.127142	0.005262	0.9959
RIR	0.893186	0.273591	3.264676	0.0114
EXR	-0.071930	0.038565	-1.865136	0.0991
C	-37.41187	21.12477	-1.770996	0.1145

EC = EG - (7.0432*FDI + 0.7938*LR -0.0618*LRFDI + 0.0007*INF + 0.8932 *RIR -0.0719*EXR -37.4119)

F-Bounds Test — Null Hypothesis: No levels relationship

Test Statistic	Value	Signif.	I(0)	I(1)
		Asymptotic: n=1000		
F-statistic	20.73902	10%	1.99	2.94
k	6	5%	2.27	3.28
		2.5%	2.55	3.61
		1%	2.88	3.99
Actual Sample Size	36	Finite Sample: n=40		
		10%	2.218	3.314
		5%	2.618	3.863

1%	3.505	5.121
	Finite Sample: n=35	
10%	2.254	3.388
5%	2.685	3.96
1%	3.713	5.326

3 Short run ECM Test

ARDL Error Correction Regression
Dependent Variable: D(EG)
Selected Model: ARDL(4, 3, 3, 2, 3, 3, 3)
Case 2: Restricted Constant and No Trend
Date: 03/16/23 Time: 13:06
Sample: 1981 2021
Included observations: 36

ECM Regression
Case 2: Restricted Constant and No Trend

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Δ(EG(-1))	-0.682312	0.061038	-11.17841	0.0000
Δ(EG(-2))	-0.362761	0.064232	-5.647629	0.0005
Δ(EG(-3))	0.158750	0.045775	3.468077	0.0085
Δ(FDI)	-4.343169	0.823338	-5.275073	0.0008
Δ(FDI(-1))	-8.158225	1.020726	-7.992570	0.0000
Δ(FDI(-2))	-3.000426	0.222328	-13.49550	0.0000
Δ(LR)	0.069271	0.027050	2.560897	0.0336
Δ(LR(-1))	-0.265945	0.035087	-7.579566	0.0001
Δ(LR(-2))	-0.148258	0.020293	-7.305965	0.0001
Δ(LRFDI)	0.052829	0.017645	2.993972	0.0172
Δ(LRFDI(-1))	0.077503	0.019070	4.064158	0.0036
Δ(INF)	0.060907	0.029198	2.085998	0.0705
Δ(INF(-1))	0.367676	0.025432	14.45704	0.0000
Δ(INF(-2))	0.135798	0.027793	4.886087	0.0012
Δ(RIR)	0.309324	0.037598	8.227093	0.0000
Δ(RIR(-1))	0.205241	0.036335	5.648629	0.0005
Δ(RIR(-2))	0.185290	0.030253	6.124631	0.0003
Δ(EXR)	-0.135332	0.010833	-12.49294	0.0000
Δ(EXR(-1))	0.071281	0.011256	6.332679	0.0002
Δ(EXR(-2))	0.066878	0.013139	5.090190	0.0009
CointEq(-1)*	-0.640677	0.036324	-17.63761	0.0000

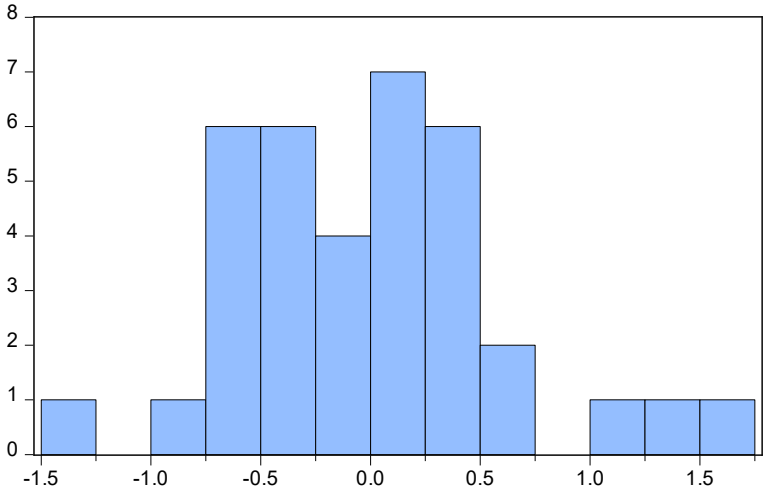
R-squared	0.980833	Mean dependent var	-0.017557
Adjusted R-squared	0.955277	S.D. dependent var	4.375156
S.E. of regression	0.925252	Akaike info criterion	2.973697
Sum squared resid	12.84137	Schwarz criterion	3.897416
Log likelihood	-32.52654	Hannan-Quinn criter.	3.296100
Durbin-Watson stat	2.260955		

* p-value incompatible with t-Bounds distribution.

F-Bounds Test — Null Hypothesis: No levels relationship

Test Statistic	Value	Signif.	I(0)	I(1)
F-statistic	20.73902	10%	1.99	2.94
k	6	5%	2.27	3.28
		2.5%	2.55	3.61
		1%	2.88	3.99

4 NormalityTest



Series: Residuals	
Sample 1985 2020	
Observations 36	
Mean	3.19e-15
Median	-0.048025
Maximum	1.523528
Minimum	-1.294275
Std. Dev.	0.605720
Skewness	0.590112
Kurtosis	3.511702
Jarque-Bera	2.482149
Probability	0.289073

5 Autocorrelation Test

Breusch-Godfrey Serial Correlation LM Test:

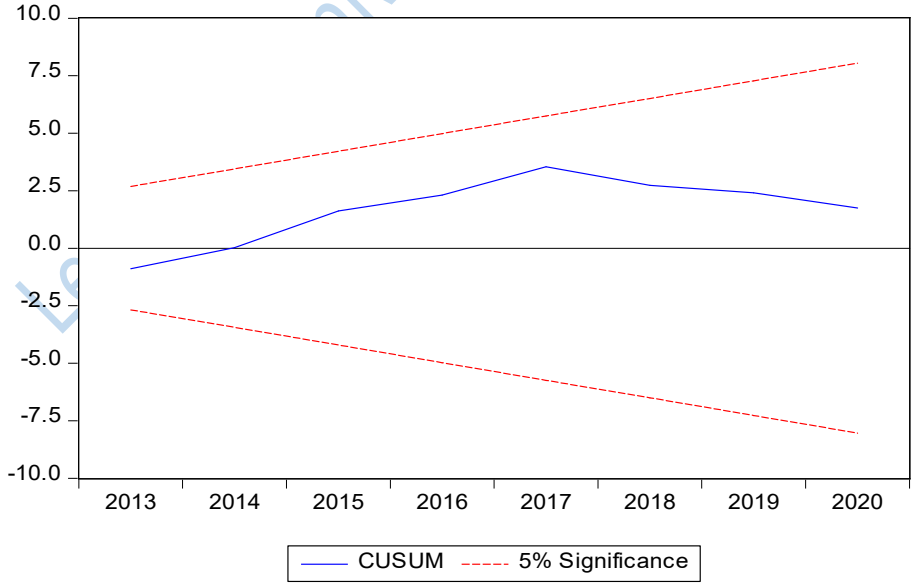
F-statistic	2.106656	Prob. F(3,5)	0.2180
Obs*R-squared	20.09890	Prob. Chi-Square(3)	0.0002

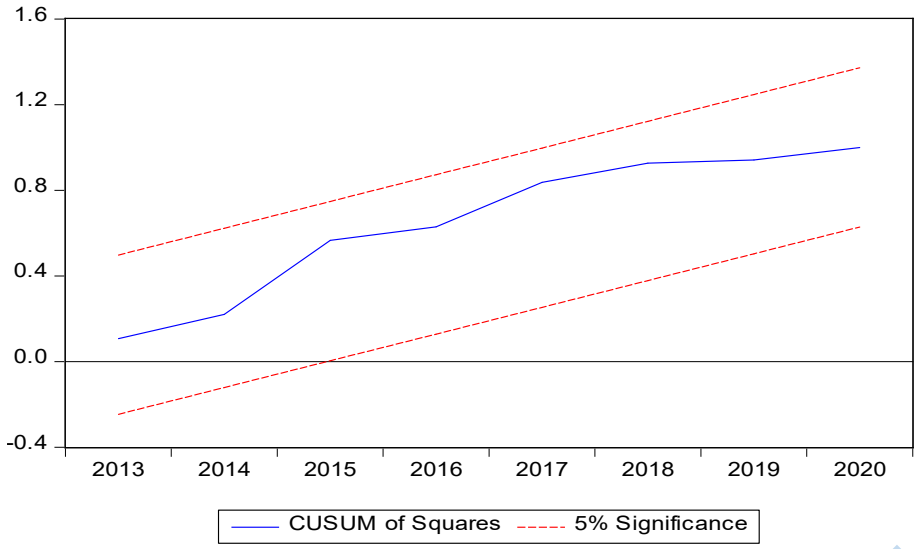
6 HeteroskedasticityTest

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	0.522149	Prob. F(27,8)	0.9011
Obs*R-squared	22.96716	Prob. Chi-Square(27)	0.6868
Scaled explained SS	1.424362	Prob. Chi-Square(27)	1.0000

7 Stabilty Test





Biodata

A. Personal Data:

Name: Olusegun Johnson BOLAJI

Email address: bolajiolusegun221@gmail.com

Phone number: 07047988336

House address: 35,Shittu Felele Ibadan, Oyo State

Date of birth: 02/06/1977

Place of birth: Iyemero, Ekiti

Nationality: Nigerian

Marital Status: Married

Name and address of next of kin: Bolaji Funmilayo Taiwo, 35 Shittu FeleleIbadan.

B. **Educational Background**

Educational Institution Attended With Dates

i. Primary Education: St John Anglican Primary School, Iyemero Ekiti, Ekiti State.[1984-1989]

ii. Secondary Education: Methodist High School, ErukuKwaraState.[1991-1996]

iii. Higher Educational Institution: University of Uyo, Akwa Ibom State [1999-2002]. Lead City University, Ibadan. [2005-2008]

C. **Working Experience With Dates**. Akintola Williams Deliotte [2009-2010]. Sumal Foods, Ibadan [2013-2014]. Syprus Pre-versity, Ibadan [2015-2018]

D. **Awards and Fellowships (if any).** Best Graduating Student in Insurance and Risk Management [2008] Lead City University, Ibadan.

E. Membership of Academic Professional Bodies N/A

F. Publications (if any)

1 Thesis/Dissertations. Foreign Direct Investment, Financial Development and Economic Growth in Nigeria, 2023.Lead City University, Ibadan.

2 Books N/A

3 Scholarly Articles N/A

4 Notable Scholarly or Professional Accomplishments N/A

5 Major Conferences/ Workshop Attended N/A

Signature **Date**

The University Compliance Certification

This is to certify that this thesis written by Olusegun Johnson BOLAJI with Matriculation Number LCU/PG/000761 in the Department of Economics, Faculty of Management and Social Sciences, Lead City University, Ibadan is in full compliance with the approved University format and style.

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Signature **Date**