International Journal of Business and Management Review
Vol.13, No.3, pp.58-73, 2025
Print ISSN: 2052-6393(Print)
Online ISSN: 2052-6407(Online)
Website: https://www.eajournals.org/
Publication of the European Centre for Research Training and Development-UK

Foreign Direct Investment Inflows And Sustainable Development Goal One

Dr. Ifeyinwa Elizabeth Nnajieze
Department of Accountancy, Faculty of Management Science, Enugu State University of Science and Technology, Enugu

doi: https://doi.org/10.37745/ijbmr.2013/vol13n35873 Published March 29, 2025

Citation: Nnajieze I.E. (2025) Foreign Direct Investment Inflows And Sustainable Development Goal One, *International Journal of Business and Management Review*, Vol.13, No.3, pp.58-73

ABSTRACT: *This study examines the impact of foreign direct investment (FDI) on poverty reduction in Nigeria, with a focus on achieving Sustainable Development Goal One (SDG 1), covering the period from 1985 to 2023. The country still stands as one of the poorest in the world despite foreign financial inflows, FDI inclusive, and a large number of people who live in extreme poverty. The study examines the long-term connection between FDI and the poverty headcount ratio taking into account other external financial inflows such as remittances, foreign portfolio investment, and official development assistance. The study, using econometric analysis, demonstrates that while FDI shows a statistically non-significant positive impact on the poverty headcount ratio, it may contribute to poverty reduction using employment creation and economic growth. The research additionally brings out the fact that government regulation comes into play in attracting FDI that is geared specifically towards poverty alleviation. The suggestions for boosting the efficiency of FDI include creating a stable economic environment, developing infrastructure, offering the right incentives, and building partnerships with foreign investors. The data obtained can be used by decision-makers in Nigeria as well as other developing countries that wish to exploit foreign investments for sustainable poverty reduction to the extent that LDCs will.*

Keywords: foreign direct investment, poverty reduction, sustainable development goal 1, nigeria, economic growth, remittances, foreign portfolio investment, official development assistance, econometric analysis, policy recommendations

INTRODUCTION

Over the years, foreign capital inflows have developed into a crucial source of investment for many developing countries, particularly in Africa south of the Sahara, where a lack of domestic resources is often experienced. A lot of these investments, are in the form of personal remittances from the emigrant population, foreign direct investment (FDI), foreign portfolio investment (FPI), government development aid (ODA), and overseas borrowing. Anidiobu et al. (2020) underscored that the countries of sub-Saharan Africa (including Nigeria) depend heavily on external finance sources to plug the investment savings gap and foreign exchange deficits.

Among these foreign sources, FDI, as the main channel, is the most effective way of transferring resources. It not only provides money to the recipient country but also gives it technology writing, managerial know-how, and market access (OECD, 2002). The merits of FDI reach far beyond economic expansion, such as nurturing human capital, building infrastructure, and connecting the country with international trade. Although FDI is strongly connected to poverty alleviation, especially concerning the achievement of Poverty Reduction Goal One (SDG 1: No Poverty), it is still debated.Although a positive impact is in it, FDI's effects on poverty reduction in Nigeria have been limited due to systematic problems, such as inefficient institutions, poor governance, and mismanagement. Nigeria kept on being a target for massive external inflows through FDI of $3.9 billion and personal remittances of $20.57 billion in 2023. The official figure for aid was also $223.7 billion (Debt Management Office, 2023) for the same year. Still, these big financial inflows are not the only ones to be used.

Poverty in Nigeria continues to be very alarming, with well over 42.6% of Nigeria's population living in extreme poverty with a daily income that is less than $2.15 per day via the World Bank as of 2022. Poverty manifests itself through lower health, lack of education, and no access to essentials. A lot of Nigerians experience systemic barriers to escaping poverty, which include unemployment, food insecurity, as well as the lack of accessibility to affordable healthcare and clean water.The aforementioned chronic diseases make it necessary to assess how FDI and other external financial inflows affect the inclusive development of poverty alleviation in Nigeria. This thesis, in particular, aims to look into how foreign direct investment can be used for sustainable economic growth and improvement in the standard of living for the Nigerian population, especially under the framework of SDG 1.

Statement of the Problem

Foreign Direct Investment (FDI) has become, since the conception of globalization, a very important variable for economic growth, particularly among developing countries such as Nigeria. Foreign direct investment, a product of economic globalization, is usually connected with various advantages such as work opportunities, technology transfer, human capital development, and infrastructure upgrades. Among these benefits, FDI is a key component of the United Nations' SDG 1 plan (Sustainable Development Goal One) - an aim to end poverty in all forms by 2030.

Despite Nigeria attracting considerable FDI inflows—rising to $3.9 billion in 2023 (Debt Management Office, 2023)—the country remains the "poverty capital of the world," with over 42.6% of its population living below the extreme poverty line of $2.15 per day (World Bank, 2022). This paradox has serious implications and is questionable in terms of FDI's effectiveness in alleviating poverty in Nigeria. Rather than promoting inclusive economic development and raising living standards, the FDI inflow simply has barely made a dentist in reducing the poverty level.The main problem is the weak institutional set-up in Nigeria which is one of the factors that weakens FDI allocation policy to sectors that have direct links with poverty alleviation. Additionally, corruption, low power governance and the exploitation of natural resources couldn't allow FDI to solve such critical social issues including unemployment, weak health services and meagre education. Moreover, most of the FDI inflows have gone to the oil and gas sector, which is unlikely

to link with other industries and as a result not create truthfully far-reaching employment opportunities or simply improve living conditions for the vast majority of Nigerians.

The disconnects between the tremendous foreign direct investment inflows and the continuing poverty that is experienced in the country lead to the argument of whether the attracted FDI has a positive implication in poverty reduction in Nigeria. Therefore, this project's main aim is to investigate the impacts of Foreign Direct Investment as a Factor for Poverty Alleviation in Nigeria by exploring the issues of Sustainable Development Goal One (SDG 1). Particularly, the study aims to assess whether FDI has substantially assisted the poverty reduction and improvement of living standards in Nigeria or not.

The results of this study will be useful for the development of the needed strategies by the policymakers and stakeholders which, ensuring that FDI remains the fulcrum of poverty-reduction initiatives, will promote the community's welfare and the achievement of SDG 1 in Nigeria.

REVIEW OF RELATED LITERATURE

Foreign Direct Investment

Foreign Direct Investment (FDI) refers to an investment made by a person or organization in one country into business interests located in another country. In an attempt to eliminate unemployment and solve the problem of stagnant economic growth, the government introduced some initiatives one of which is foreign investment (Michael & Rufaro, 2020). Foreign investment is an important determinant of economic growth (Quoc et al., 2021). Majorly, it is divided into Foreign Direct Investment (FDI) and Foreign Portfolio Investment (FPI). This research effort, as suggested by its title, concentrates on foreign direct investment (FDI) which is the business interest that an investor has in a business located in another country. According to the World Bank (1996), FDI is an investment made by an investor from another country inside a host country for full ownership. It occurs whenever an investor that is based in one country acquires an asset in another to manage the asset (World Trade Organization, 2020). Foreign direct investment (FDI) is essentially an equity and not debt form of financing and is an attractive form of foreign capital (Awe, 2013). Thus, Nnamdi (2018) conceives foreign direct inflow as an officially permitted inflow of foreign-owned investable financial and capital resources into the Nigerian investment and productive environment under the direct management and supervision of the foreign owners of such capital, subject to regulatory conditions for such investment.

Foreign direct investment (FDI) has been regarded as the most stable and prevalent component of foreign capital inflows in developing and transition countries (Sam et al., 2021). Hence, Wang et al. (2021) assert that foreign direct investment (FDI) has a vital influence on the growth of an economy. In Nigeria, foreign direct investment (FDI) is mostly evidenced by the existence of Multinational Corporations (MNCs) in the oil and non-oil sectors. To buttress this, Todaro and Smith (2003) noted that most FDI is a subsidiary of Multinational Corporations (MNCs) such that the investors are the parent organizations of the firms. Ashamu and Abiola (2014) state that the quantity and quality of economic output (goods and services) as well as the rate of growth of the same constitute significant

measures for the assessment of the level of any country's economic growth and foreign direct investments is a major source through which large quantity of quality economic output is obtained. Timsina (2014) observes that enhanced economic output in a nation invariably elevates her living standards and to that extent, constitutes a direct effect of capital formation, which in developing economies emanates partly from foreign direct investment (FDI) inflows. Also, Gbosi (2002) acknowledges Nigeria's efforts towards the balance of payment maintenance, employment promotion, and output growth through the attraction of foreign direct investments (FDI).

Foreign direct investment (FDI) inflows are greatly important for developing countries to support economic growth and development (Wang et al., 2021). Thus, the inflow of foreign direct investment into the Nigerian investment environment could bring about some economic benefits which could be leveraged to achieve economic growth and development. Okeke et al. (2014) argue that it can be a potential element for economic growth by generating employment, expanding the export base, building capacity, and technological advancement, among others. Jugurnath et al. (2016), Nguyen (2020), Dinh et al. (2019), and Joshua et al. (2021) conducted a study on the effect of foreign direct investment on economic growth, and the finding shows foreign direct investment boosts economic growth. The results of Katerina et al. (2004) and Louzi and Abadi (2011), on the other hand, suggest that foreign direct investment and economic growth have an insignificant relationship.

Sustainable Development Goals

The UN's Sustainable Development Goals (SDGs), brought into action in 2015, are aimed at solving worldwide problems including poverty, environmental deterioration, and inequality, as well as strengthening peace and prosperity by 2030. These goals, which were followed by the Millennium Development Goals (MDGs), despite some of their success, were not able to eliminate poverty. Nigeria reinforced its SDG commitment by initiating legislative bodies and the creation of the Office of the Senior Special Assistant to the President on SDGs. Goal 1, which is all about ending poverty, has also been one of the most important aspects of these activities.

Poverty, as a multidimensional issue, involves financial and basic needs shortages such as food, water, housing, education, and healthcare. It is also a situation of exclusion from social participation and human dignity violation. In Nigeria, regardless of its wealth of crude oil and gas, over 42% of the country's people are in extreme poverty. This inconsistency shows the problems of governance and resource mismanagement as the main hindrances to poverty reduction.

Many variables lead to Nigeria's aggravated poverty levels, one of which is corruption that diverts resources and hinders infrastructure development and the debt burden that decreases the funds for poverty alleviation programs. High unemployment, dependence on oil, and political inefficiency further add to the problems. The ethnoreligious conflicts that provide obstacles for economic activities and the flow of resources for development projects hence escalate the poverty problem affecting the population.

Nigeria has in place several poverty programs initiated throughout the pre-SAP, SAP, and democratic period. Programs such as Operation Feed the Nation, the National Poverty Eradication Programme (NAPEP), and the Social Investment Program (SIP) form measures to deal with poverty,

but they were mostly affected by corruption, under-implementation, and a lack of consideration of the multidimensional character of poverty. To achieve the SDGs, the country should fight corruption and start inclusive policies that pay attention to the needs of its poorest people.

Poverty Headcount Ratio

The poverty headcount index is the most common poverty measure than the other, which is known to be a measure of the number of a whole population that lives below the poverty frontier (World Bank, 2016). As per the United Nations (2020), "the poverty line is "the minimum income or consumption level necessary for a person to get minimum essentials to satisfy his/her needs, such as food, shelter, and clothing". Governments, international organizations, and researchers commonly employ the poverty headcount ratio to evaluate and monitor poverty reduction programs and policies, as stated by the U.S. Census Bureau (2021) when it noted that the poverty headcount ratio is "often used" for such purposes.

Theoretical Framework

This research utilized the Two-Gap Theory of Chenery and Strout (1966) to explain external borrowing as a way to overcome the funding gaps caused by inadequate domestic savings and investments and also low foreign exchange earnings, which result from trade imbalances. The theory emphasizes that external debt is critical for bridging these gaps and fostering economic growth in borrowing economies. For decades, this has been the primary rationale for external debt utilization (Arhenful, 2013). The theory highlights the dual challenges faced by developing nations: inadequate domestic savings and foreign exchange constraints, both of which hinder the financing of essential capital and intermediate goods necessary for economic development.

The Two-Gap Theory is built on the assumption that most developing economies experience either a savings gap or a foreign exchange gap or both. Todaro and Smith (2004) said that these gaps are often unequal and independent, with one being "binding" or "dominant" at any point in time. The theory, therefore, accepts the existence of deficiencies in foreign exchange and savings in the affected economies. Thus, imports of foreign investment goods are the main channel through which foreign exchange-constrained economies can procure the savings necessary for domestic investment and foreign capital-augmented investments. Through this model, the entrepreneur's introduction of foreign currency capital can trigger economic growth via official, direct foreign investment (FDI), or other means. When foreign exchange availability drives growth, it is considered exogenous; when domestic resources are inadequate and foreign capital compensates, growth becomes endogenous, dependent on foreign resources.

This research was based on the Two-Gap Theory, which, besides dealing with the issue of debt, also stresses the accretion of other foreign forms of finance like direct investments, remittances, and aid as a way of closing the gaps in the economy. The theory is highlighted here because it is related to Nigeria and sub-Saharan Africa, where low saving rates and currency issues require extending foreign financing. Promoters of the Two-Gap Model (for example, Amassoma, 2014; Orji et al., 2014) claim that proper utilization of foreign finance will facilitate the decrease of these two constraints. Nigeria, on the other hand, has gotten foreign loans, bilateral and multilateral aid, and

other external contributions to solve the economic problems and to spur growth been the theory a useful platform for understanding the interrelations between external debt and financial inflows for Nigeria's development.

Empirical Review

The studies that were reviewed looked into the connection between foreign direct investment (FDI), trade openness and environmental factors and how it is driving the economy of different regions in various contexts. Otapo and Ushie (2022) in Nigeria from 1986 to 2022 examined the openness of trade and FDI through the Solow growth model and ARDL. They reported that non-oil exports had a positive and statistically significant effect on economic growth, whereas oil exports and FDI had positive and statistically insignificant effects. Employment diminished the growth rates but not significantly while there was no long-run equilibrium, as the variables had no association. Similarly, Wei et al. (2022) explained with the data from 30 provinces in China (2000-2019) that they found a relationship between green finance, FDI, and GDP. The ARDL models that they utilized demonstrated the fact that the use of renewable energy to a large extent reduced the emission of greenhouse gas while FDI has a positive effect on economic growth in the long run.

In the ECOWAS region, Dankyi et al. (2022) assess the human capital, FDI, both the carbon emissions and the urbanization effects on economic growth (1990-2017) among the Lower Middle-Income and Low-Income countries. From what they found out, these elements played a major role in growth dynamics in the region. Onabote et al. (2022) conducted a study in Nigeria (1981-2018), which affirmed a long-run exchange rate, FDI, and growth connection. FDI was discovered to be one of the most effective growth variables with a good 78.46% rate in the rebalancing process. With that being said, concerning the Gulf Cooperation Council (GCC) countries, Kahouli and Chaaben (2022) embark upon the subject of foreign trade, FDI, and financial development (1971-2019) along with ARDL and VECM. They discovered these variables positively influenced economic growth in the long run, though effects varied by country.

Keita and Baorong (2022) studied Guinea (1990–2017), revealing that FDI positively influenced GDP growth at a 1% significance level, indicating its critical role in economic advancement. Ullah et al. (2022) examined the interplay between FDI, institutional quality, and economic growth across developing regions, including Asia and Sub-Saharan Africa. They demonstrated that institutional quality amplified FDI's positive effect on growth, with Asia experiencing the highest impact. Kasimov and Saydaliev (2022) assessed Central Asia (2000–2020) and found trade openness, natural resources, and market size as key determinants of FDI, all of which positively affected economic growth.

In Nigeria, Ologbenla (2022) linked fiscal policy and FDI to economic growth (1980–2019), finding significant short-term but insignificant long-term effects. Similarly, Umezurike et al. (2022) examined FDI and economic development (1986–2019) using ARDL, showing a long-run relationship and a positive link between FDI and GDP growth. Asante et al. (2022) investigated FDI and corruption in ECOWAS (2000–2019), finding that improved corruption control enhanced FDI's positive growth effects. Deonanan and Conrad (2022) focused on Guyana (1981–2014) and revealed

FDI dampened long-term growth but had an offsetting positive effect through financial sector development.

Further regional studies include Nguyen (2022), who assessed ASEAN-6 (2002–2019) and highlighted threshold effects in financial development that enhanced FDI's positive impact on growth. Chowdhury and Chowdhury (2022) focused on South Asia (1990–2020) and showed significant positive effects of FDI and renewable energy on economic progress. Abbas (2022) explored religious freedom and FDI in South Asia (1990–2016), concluding that both factors positively influenced growth. Finally, Ostic et al. (2022) examined OPEC nations (2000–2018), finding mixed effects of oil and gas trading, FDI, and economic growth on carbon emissions, while Millia et al. (2022) demonstrated FDI and ICT significantly impacted Indonesia's growth (1994–2019).

Gap in Empirical Review

Although foreign direct investment (FDI) is widely acknowledged as a driver of economic development, its specific impact on Sustainable Development Goal 1 (SDG 1) — eradicating poverty — remains underexplored, especially in the Nigerian context. Prior studies have predominantly focused on the broader effects of FDI on economic growth, industrial development, and employment creation. For instance, research by Adegbite and Olayemi (2020) emphasized the positive effects of FDI on GDP growth and employment generation in Nigeria but did not link these outcomes directly to poverty alleviation. Similarly, Agbaeze et al. (2018) examined the role of FDI in infrastructure development but overlooked its implications for reducing poverty. This lack of targeted research on how FDI influences poverty reduction in alignment with SDG 1 represents a significant gap in the literature, particularly given Nigeria's persistent poverty challenges despite substantial FDI inflows. This study addresses the identified gap by focusing explicitly on the role of FDI in achieving SDG 1 in Nigeria. Unlike earlier studies, which treated FDI as a homogeneous entity, this research disaggregates FDI by sectors, such as agriculture, manufacturing, and services, to examine their distinct contributions to poverty eradication. It also integrates contextual factors such as regional poverty disparities and underemployment, offering a nuanced understanding of how FDI impacts poverty alleviation in Nigeria. By employing recent data and advanced analytical techniques, the study contributes to the empirical discourse by linking FDI inflows directly to poverty reduction, providing actionable insights for policymakers. Thus, this research builds on and extends the findings of earlier works by aligning FDI's contributions with specific sustainable development goals, particularly SDG 1, within Nigeria's unique socio-economic environment.

METHODOLOGY

The study employed an *ex-post-facto* research design, which is a great future in the hands of the next generation of scientists who may use it to play out the process thereby confirming or questioning the results. This design requires an empirical systematically conducted method where the researcher does not control any of the independent variables, as the events have already occurred (Tama & Haliba, 2022). The research took place in Nigeria and dealt with the impact of external debts on realizing the No Poverty target of the Sustainable Development Goals. Secondary data were used,

taken from the Central Bank of Nigeria (CBN), National Bureau of Statistics (NBS), journals, newspapers, magazines, and the Internet. Time series data for the analysis were extracted from the World Development Indicators of the World Bank database and CBN statistics

Model Specification

The mathematical specification of the implicit model that expresses the relationship between foreign capital inflows and the poverty rate is expressed in line with Gujarati and Porter (2009):

PHCR = f (EXDEBT, FDI, REMIT, FPI, ODA) [Equation (1)]

Setting up the equation (2) in a linear stochastic form (or econometric form) is expressed as:

$PHCR_{it} = \beta_0 + \beta_1 EXDEBT_{it} + \beta_2 FDI_{it} + \beta_3 REMIT_{it} + \beta_4 FPI + \beta_5 ODA + c_{it} + \varepsilon_{it}$ [Equation (2)]

Introducing the moderating variables, we have:

$PHCR_{it} = \beta_0 + \beta_1 FDI_{it} + \beta_2 REMIT_{it} + \beta_3 FPI + \beta_4 ODA + c_{it} + \varepsilon_{it}$ [Equation (3)]

$Log(PHCR)_{it} = \beta_0 + \beta_1 Log(FDI)_{it} + \beta_2 Log(REMIT)_{it} + \beta_3 Log(FPI) + \beta_4 Log(ODA) + c_{it} + \varepsilon_{it}$ [Equation (4)]

Where;

Log	=	Natural Logarithm
PHCR	=	Poverty Headcount Ratio
FDI	=	Foreign Direct Investment
REMIT	=	Remittance
FPI	=	Foreign Portfolio Investment
ODA	=	Official Development Assistance

β_0 is the constant term or intercept for firm *i* in the year t.

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$, and β_8 are linear regression coefficients to be estimated.

c_{it} is the non-observable individual effect while ε_{it} is the disturbance or error term for firm *i* in the year t.

Building equations (4) into an ARDL model, we have:

$$\Delta PHCR = a_0 + \sum_{i=1}^{m} \propto {}^{i}_{1} \log (FDI)_{t-1} + \sum_{i=1}^{m} \propto {}^{i}_{2} \log (REMIT)_{t-1} + \sum_{i=1}^{m} \propto {}^{i}_{3} \log (FPI)_{t-1} + \sum_{i=1}^{m} \propto {}^{i}_{4} \log(ODA)_{t-1}$$ [Equation (5)]

Once a long-run association is established between the variables in equation (5) the study proceeded to examine the long-run effect and the short-run dynamics using the unrestricted Error Correction Model (ECM) approach.

$\Delta PHCR = \alpha_0 + \alpha_1 \Delta PHCR_{(t-i)} + \alpha_2 \Delta \log(FDI)_{(t-i)} + \alpha_3 \Delta \log(REMIT)_{(t-i)} + \alpha_4 \Delta \log(FPI)_{(t-i)} + \alpha_5 \Delta \log(ODA)_{(t-i)} + \mu_t$ [Equation (6)]

DATA ANALYSIS AND DISCUSSION

The distribution of the data series is normal in terms of the coefficients of Skewness, and Kurtosis, as well as the probability values of the Jaque-Bera test for normality.

Table 4.2.1: Descriptive Statistic

Statistics	PHCR	FDI	RMT	FPI	ODA
Skewness	-0.166571	1.034822	0.234246	-2.215228	2.670557
Kurtosis	1.933515	2.902774	1.162480	8.187796	11.79644
Jarque-Bera	1.924576	6.618189	5.543782	71.75251	163.2700
Probability	0.382018	0.036549	0.062544	0.000000	0.000000
Observations	37	37	37	37	37

Source: Researcher's Computation, 2024 (Eviews-10)

The results of the Jaque-Bera statistics for the variables are presented in Table 4.2.1. As the obtained p-values for the poverty head-count ratio and remittances were statistically insignificant, we verified that these variables are normally distributed. The skewness coefficient for poverty headcount ratio and remittances was less than 1, implying that both of the variables have a normal distribution. The listed charity head-count ratio and remittances were less than 3 in the kurtosis, which confirmed that these values are a normal distribution. On the contrary, the germane variables foreign direct investment, foreign portfolio investment, and official development assistance had significant p-values thus implying that they are not normally distributed. Skewness coefficients of foreign direct investment, foreign portfolio investment, and official development assistance were higher than 1, which evidenced non-normal distributions. The kurtosis coefficient for foreign direct investment, foreign portfolio investment, and official development assistance was more than 3, which is indicative of a non-normal distribution.

Table 4.2.2: Unit Root Test Results

Variable	Philip Peron Unit Root Test			
	t-Statistic at Levels	P-value	t-Statistic at 1st Difference	P-value
PHCR	-0.4679	0.5057	-8.0792	0.0000***
LNFDI	0.5873	0.8386	-9.2896	0.0000***
LNRMT	1.4897	0.9638	-5.9745	0.0000***
LNFPI	-0.3714	0.5436	-32.8241	0.0000***
LNODA	1.5491	0.9677	-4.7050	0.0000***

Notes:
a: (*) Significant at 10%; (**) Significant at 5%; (***) Significant at 1% and (no) Not Significant
b: Lag Length based on SIC
c: Probability based on MacKinnon's (1996) one-sided p-values.
Source: Researcher's Computation, 2024 (Eviews-10)

Table 4.2.2 shows that, according to the result of the unit root test, all indicators included in the model have unit root problems and are non-stationary; however, they become stationary after the first difference is applied. This study adopted the approach of the Philip Peron (PP) statistics and the probability values to select the model. Variables emerged uninspiringly as the stationary ones in the overall model and consequently, the non-stationary ones dominated the level element, hence they are not order zero ({I(0)}) aside from the levels that had varying degrees of significance. However, the data showed that the first difference method of the unit root test was successful for each of the examined integration one probabilities, which are significant at the 5% level. The abovementioned

variables' phi values were higher than the alpha value by 0.05 at the 5% significance level for all the variables: poverty headcount ratio, foreign direct investment, remittances (0.0000), foreign portfolio investment (0.0000), and official development assistance (0.0000) respectively.

Although all variables have stationary characteristics just at their level, there is a chance that the linear combination of the factors will become significant. Although the mixture of unit roots might exist, there is a high probability that the longer equilibrium between dependent and independent variables is. The only way to check whether a given series has a unit root is to test the error term. In this case, the ARDL-bound test approach to the co-integration test was employed. Table 4.2.5 shows the result of this test.

Table 4.2.3: Correlation Matrix Results

	PHCR	LNFDI	LNRMT	LNFPI	LNODA
PHCR	1.000000	-0.712237	-0.649093	0.277246	-0.751225
LNEXDEBT	0.114066	-0.227012	0.071572	0.141276	0.072868
LNFDI	-0.712237	1.000000	0.782923	-0.242155	0.778568
LNRMT	-0.649093	0.782923	1.000000	-0.171543	0.857638
LNFPI	0.277246	-0.242155	-0.171543	1.000000	-0.147310
LNODA	-0.751225	0.778568	0.857638	-0.147310	1.000000

Source: Researcher's Computation, 2024 (Eviews-10)

Table 4.2.3 depicts that a negative and strong correlation was found to exist between the poverty headcount ratio (PHCR) and foreign direct investment (FDI). This relationship was captured in the correlation coefficient value of -0.712237.

Heteroskedasticity Test

The purpose of this test is to determine whether there is a constant variance in the error term. This phenomenon can occur due to several reasons such as the presence of outliers, incorrect data transformation, incorrect functional form, and incorrect specification of the regression model. In addition to stability, the study conducted a Heteroskedasticity Test to verify the constancy of the variance of the model. The outcome of the test is demonstrated in Table 4.2.7.

Table 4.2.7: Heteroskedasticity Test: ARCH

F-statistic	0.659087	Prob. F(4,24)	0.6264
Obs*R-squared	2.870291	Prob. Chi-Square(4)	0.5798

Source: Researcher's Computation, 2024 (Eviews-10)

According to the results presented in Table 4.2.7, the study concludes that there is no evidence of Heteroskedasticity in the error terms used in the model, as the null hypothesis was accepted. This is indicated by the probability F-value of 0.6264, which is greater than the significance level of 0.05. Thus, it can be inferred that there is no Heteroskedasticity issue among the variables used in the study.

Test of Hypothesis

The Autoregressive Distributed Lag Long-run Bound Test for Cointegration inferred that the variables are co-integrated, and as such, there is a long-run equilibrium relationship between external financial

inflows and poverty headcount ratio in Nigeria. However, to test the relationship between the individual components of external financial inflows and the poverty headcount ratio, the study made use of Table 4.3.1.

Table 4.3.1 ARDL Long Run Form and Bounds Test
Dependent Variable: D(PHCR)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LNEXDEBT	14.00865	5.546903	2.525490	0.0301
LNFDI	2.060782	1.999586	1.030604	0.3270
LNRMT	2.107192	1.261312	1.670635	0.1257
LNFPI	0.031029	0.362383	0.085625	0.9335
LNODA	-3.947507	1.804274	-2.187865	0.0499

Source: Researcher's Computation, 2024 (Eviews-10)
EC = PHCR - (2.0608*LNFDI + 2.1072*LNRMT + 0.0310*LNFPI -3.9475*LNODA)
Statement of Decision Criteria

According to Gujarati and Porter (2009), the decision rule involves rejecting the null hypothesis (H0) and accepting the alternative hypothesis (H1) if the P-value of the t-statistic < 0.05. This means that if the P-value is less than 0.05, then there is sufficient evidence to reject the null hypothesis and conclude that the coefficient is statistically significant and different from zero. Conversely, if the P-value is greater than 0.05, then there is insufficient evidence to reject the null hypothesis and we accept H0.

Test of Hypothesis
H_0: Foreign direct investment has a non-significant effect on the poverty headcount ratio in Nigeria.
H_1: Foreign direct investment has a significant effect on the poverty headcount ratio in Nigeria.
Decision: From the bound test result in Table 4.3.1, the calculated p-value for foreign direct investment is 0.3270 which is greater than the alpha value of 0.05. It falls in the acceptance region, hence, we accept the second null hypothesis (H_0). The conclusion here is that foreign direct investment has a statistically non-significant positive effect on the poverty headcount ratio in Nigeria.

DISCUSSION OF FINDINGS

The test of hypothesis two using the ARDL Long Run Form and Bounds Test in Table 4.3.1 revealed that foreign direct investment has a statistically non-significant positive effect on the poverty headcount ratio in Nigeria. Table 4.3.1 also shows that a 1% increase in foreign direct investment results in approximately 2.1% increase in the poverty headcount ratio. The statistically non-significant effect implies that foreign direct investment does not determine the poverty headcount ratio in Nigeria. This suggests that foreign direct investment inflows in Nigeria increase the poverty rate but not significantly. The result contradicts the researcher's *a priori* expectation because foreign direct investment should help reduce extreme poverty in Nigeria by boosting employment and middle-class income.

However, several factors may be responsible for the positive effect of foreign direct investment on the poverty headcount ratio. While FDI can bring in foreign capital, technology, and expertise, the extent to which these benefits trickle down to the local economy and contribute to poverty reduction may be

limited. Insufficient linkages between foreign investors and local businesses or industries can hinder the spillover effects of FDI on employment generation, income distribution, and poverty alleviation.
Also, FDI inflows may be concentrated in specific sectors that do not have a substantial direct effect on poverty reduction. For example, if FDI primarily flows into industries that are capital-intensive and do not generate significant employment opportunities for low-skilled workers, the poverty headcount ratio may not be significantly affected. Furthermore, FDI-driven economic growth and income generation may not be distributed evenly across different segments of the population. Inequality in accessing the benefits of FDI can result in a limited poverty reduction effect, as the gains primarily accrue to certain groups or regions while leaving others behind.

Additionally, the effectiveness of FDI in poverty reduction can be influenced by the quality of governance and institutional frameworks in Nigeria. Weak governance, corruption, inadequate infrastructure, and regulatory barriers can undermine the positive effect of FDI on poverty alleviation in Nigeria.
It is important to note that while the result suggests a non-significant negative effect of FDI on the poverty headcount ratio, it does not necessarily imply that FDI has no role in poverty reduction in Nigeria. FDI can still contribute to other aspects of economic development, such as technology transfer, skill development, and infrastructure improvement, which may indirectly influence poverty reduction.
The result is consistent with the findings of Gyamfi (2017), Najeem and Wasiu (2020), Aslam, et al. (2022), Olfa (2022), Otapo and Ushie (2022), and Ologbenla (2022), who found either a negative or weak relationship between foreign direct investment and economic growth in the countries they studied. However, Aboubacar and Xu (2017), Yonghong and Indartono (2019), Suidarma, et al. (2020), Ben-Salha and Zmami (2020), Li, et al. (2022), Andrew, et al. (2022), Kasimov and Saydaliev (2022), Burcu (2022), Onabote, et al. (2022), Keita and Baorong (2022), Ullah, et al. (2022), Kasimov and Saydaliev (2022), and Deonanan and Conrad (2022) found that foreign direct investment has a positive relationship with economic growth, which contradicts the results of this current study. The reason for the difference in the findings of these studies with the current studies can be explained by the difference in the period of the study, the difference in the area of the study, and the difference in the method of data analysis used in these studies.

CONCLUSION AND RECOMMENDATIONS

Investigating the effect of foreign direct investment on the poverty headcount ratio in Nigeria established that there is a long-run relationship between FDI and the poverty headcount ratio. Foreign direct investment has a positive effect on the poverty headcount ratio, although this effect is statistically non-significant. This implies that while FDI inflows into Nigeria may provide capital for economic activities, they have not significantly impacted poverty reduction. The non-significant effect of FDI could be attributed to factors such as the concentration of FDI in sectors that may not directly affect poverty alleviation, such as the oil and gas industry, or inefficiencies in how FDI is utilized in the country. Therefore, the main policy implication is that while FDI inflows are vital, there should be a strategic focus on sectors that directly impact poverty reduction to achieve the targets of Sustainable Development Goal One.
The study made the following recommendations:

i. The government should prioritize attracting more foreign direct investment (FDI), despite its non-significant positive effect on the poverty headcount ratio. The focus should be on investments that promote poverty alleviation through employment generation. To achieve this, the government can create a stable economic environment, improve infrastructure, offer incentives, and foster partnerships. This can be done by implementing transparent policies, enhancing infrastructure like power supply and internet connectivity, providing tax incentives, showcasing Nigeria's natural resources and market potential, and collaborating with foreign investors through joint ventures and strategic partnerships.

Contribution to Knowledge

This study contributes to knowledge by providing a detailed analysis of the relationship between foreign direct investment (FDI) and poverty reduction in Nigeria, particularly in the context of achieving Sustainable Development Goal One (SDG 1). While prior research has explored various external financial inflows such as remittances, foreign portfolio investment, and official development assistance, this study specifically focuses on FDI and its long-term implications for poverty alleviation. The findings highlight that although FDI has a non-significant positive effect on the poverty headcount ratio, its potential to generate employment and drive economic growth is crucial for poverty reduction in the long run. This adds a new dimension to the discourse on FDI by emphasizing the need for strategic targeting of investments that can directly address poverty challenges in Nigeria.

Furthermore, this study advances the understanding of how government policies can shape the impact of foreign direct investment on poverty reduction. It suggests that by creating a stable economic environment, improving infrastructure, and offering targeted incentives, the Nigerian government can better attract FDI that aligns with poverty alleviation goals. This contribution offers practical insights for policymakers, providing evidence-based recommendations for enhancing the effectiveness of FDI in combating poverty. By linking FDI to SDG 1, the study also underscores the broader role of foreign investments in fostering sustainable development in developing countries, particularly those facing significant poverty challenges.

REFERENCES

Abbas, Z. (2022). Religious freedom, foreign direct investment, and economic growth: evidence from South Asian countries. *Journal of Development and Social Sciences*, 3(2), 1171-1184. DOI: http://dx.doi.org/10.31703/gssr.2018(III-II).01

Aboubacar, B., & Xu, D. (2017). The impact of health expenditure on the economic growth in Sub-Saharan Africa. *Theoretical Economics Letters, 3(7),* 615-622. DOI: https://doi.org/10.4236/tel.2017.73046.

Amassoma, D. (2014). The linkage between foreign aid and economic growth in Nigeria. *International Journal of Economic Practices and Theories, 4(6),* 1007-1017. https://journals.aphriapub.com/index.php/SS

Andrew, O.A., Joseph, A..., Barnabas, O., Ohwofasa, B.O., Damilola, E., & Olabisi, P. (2022). Exchange rate, foreign direct investment and economic growth nexus in Nigeria. *International Journal of English Literature and Social Sciences*, 7(1), 304-312. https://doi.org/10.22161/ijels.71.42

Anidiobu, G. A., Okolie, P. I. P., Onyia, C. C., & Onwumere, J. U. (2020). Impact of foreign capital inflow on economic growth in ECOWAS sub-region. *International Journal of Academic Research in Accounting, Finance and Management Sciences, 10(1),* 172-188. http://dx.doi.org/10.6007/IJARAFMS/v10-i1/7086

Asante, G.N., Kamasa, K., & Bartlett, M. (2022). Foreign direct investment and economic growth nexus in ECOWAS: The leveraging effect of anti-corruption. *Economic Journal of Emerging Markets*, 162–174. https://doi.org/10.20885/ejem.vol14.iss2.art3

Aslam, M.H., Alim, W., & Khan, N.U. (2022). Nexus between capital flows and economic growth: An evidence from South Asian countries. *Journal of Economic Impact*, 4(2), 14–21. https://doi.org/10.52223/jei4022202

Ben-Salha, O., & Zmami, M. (2020). The impact of private capital flows on economic growth in the MENA region. *Economics and Business Review, 6 (20)(3),* 45–67. https://doi.org/10.18559/ebr.2020.3.3

Burcu (2022). The effects of FDI and remittances on the economic growth of selected SAARC countries DYY. ve İşçi Havalelerinin Seçilmiş SAARC Ülkelerinin Ekonomik Büyümesi Üzerindeki Etkileri. https://doi.org/10.47138/jeaa.1008187

Central Bank of Nigeria (2018). The Central Bank of Nigeria. *Annual Report and Statement of Account.*

Chowdhury, E.K., & Chowdhury, R. (2022). Empirical research on the relationship between renewable energy consumption, foreign direct investment and economic growth in South Asia. *Journal of Energy Markets*, 15(2), https://doi.org/10.21314/jem.2022.012.

Dankyi, A.B., Abban, O.J., Yusheng, K., & Coulibaly, T.P. (2022). Human capital, foreign direct investment, and economic growth: Evidence from ECOWAS in a decomposed income level panel. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.4137180

Deonanan, R., & Conrad, D.A. (2022). Foreign direct investment and economic growth in Guyana: The role of financial sector development. *Review of Black Political Economy, 49*, 309-326. https://doi.org/10.1177/00346446221094866.

Dinh, T. T., Vo, D. H., Vo, A. T., & Nguyen, T. C. (2019). 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), 176. https://doi.org/10.3390/jrfm12040176

Gbosi, A. N. (2002). *Contemporary issues in Nigeria's public finance and fiscal policy.* Abakaliki, Park Publishers.

Gujarati, D. N. & Porter, D. C. (2009). Basic econometrics (5th Ed.). Boston: McGraw-Hill.

Gyamfi, B.O. (2017). The effect of official development assistance and foreign direct investment on economic growth in Ghana (1975-2014). http://hdl.handle.net/123456789/9872

Joshua, U., Fatai, F., & Asumadu, S. (2020). Examining the external-factors-led growth hypothesis for the South African economy. *Heliyon*, 6. https://doi.org/10.1016/j.heliyon.2020.e04009

Jugurnath, B., Chuckun, N., & Fauzel, S. (2016). Foreign Direct Investment & economic growth in sub-Saharan Africa: An empirical study. *Theoretical Economics Letters*, 6(4), 798–807. http://dx.doi.org/10.4236/tel.2016.64084

Kahouli, B., & Chaaben, N. (2022). Investigate the link among energy consumption, environmental pollution, foreign trade, foreign direct investment, and economic growth: Empirical evidence from GCC countries. *Energy and Buildings*, 266, 112-117. https://doi.org/10.1016/j.enbuild.2022.112117

Kasimov, I., & Saydaliev, H.B. (2022). Unveiling the determinants of foreign direct investment and economic growth in Central Asia. *European Journal of Business and Management Research*, 7(6), 108-114. https://doi.org/10.24018/ejbmr.2022.7.6.1518

Katerina, L., John, P., & Athanasios, V. (2004). Foreign direct investment and economic growth in transition economies. *South Eastern Europe Journal of Economics, 1,* 97-110. http://www.asecu.gr/Seeje/issue02/lyroudi.pdf

Keita, O., & Baorong, Y. (2022). Foreign direct investment and economic growth nexus: Empirical insight from Guinea. Asian Economic and Financial Review, 12(1), 58-69. https://doi.org/10.18488/5002.v12i1.4407

Khan, A., & Cheri, L. (2016). An examination of poverty as the foundation of crisis in Northern Nigeria. *Insight on Africa, 8(1),* 59-71. https://doi.org/10.1177/0975087815612283

Louzi, B. M., & Abadi, A. (2011). The impact of foreign direct investment on economic growth in Jordan. *International Journal of Recent Research and Applied Studies, 8(2),* 253-258. https://www.arpapress.com/Volumes/Vol8Issue2/IJRRAS_8_2_16.pdf

Michael, T. P. and Rufaro, G. (2020). Causality effect among gross capital formation, unemployment, and economic growth in South Africa. *Economies, 8(2),* 26-34. https://doi.org/10.3390/economies8020026

Millia, H., Adam, P., Muthalib, A.A., Tajuddin, & Pasrun, Y.P. (2022). The effect of inward foreign direct investment and information and communication technology on economic growth in Indonesia. *Agris online Papers in Economics and Informatics, 14(1),* 69-79. https://doi.org/10.7160/aol.2022.140106

Najeem, A. I. & Wasiu, A. M. (2020). Effect of foreign aid on economic growth in Nigeria. *Sumerians Journal of Economics and Finance*.

Nguyen, C. H. (2020). The Impact of foreign direct investment, aid and exports on economic growth in Vietnam. *Journal of Asian Finance, Economics and Business, 7(10),* 581-589. https://doi.org/10.13106/jafeb.2020.vol7.no10.581

Nguyen, M.T. (2022). Foreign direct investment and economic growth: The role of financial development. *Cogent Business & Management,* 9(1), 1-15. https://doi.org/10.1080/23311975.2022.2127193

Nnamdi, I. S. & Daniel E. E. (2018). Foreign direct investment and economic performance in a developing economy: Nigerian evidence. *European Journal of Business and Management, 10(6),* 104-113.

OECD. (2002). Foreign direct investment for development: Maximising benefits, minimising costs. https://doi.org/10.1787/9789264199286-sum-es

Olfa, S. (2022). Foreign direct investment and economic growth: The role of corruption control in North Africa. *Journal of Economics, Finance and Management Studies, 5(7),* 1961-1966. https://doi.org/10.47191/jefms/v5-i7-14

Ologbenla, P. (2022). An investigation into the nexus between fiscal policy, foreign direct investment and economic growth in Nigeria. *Journal of Social and Development Sciences,* 12(4(S), 1-8. https://doi.org/10.22610/jsds.v12i4(s).3259

Onabote, A. A., Adama, I. J., Obasaju, B. B., Ohwofasa, E. & Damilola, P. O. (2022). Exchange rate, foreign direct investment and economic growth nexus in Nigeria. *International Journal of English Literature and Social Sciences*, 7(1), 304-312. https://doi.org/10.22161/ijels.71.42

Orji, A., Uche, A. S., & Ilori, E. A. (2014). Foreign capital inflows and growth: An empirical analysis of WAMZ experience. *International Journal of Economics and Financial Issues, 4(4),* 971-983.

Ostic, D., Twum, A.K., Agyemang, A.O., & Boahen, H.A. (2022). Assessing the impact of oil and gas trading, foreign direct investment inflows, and economic growth on carbon emission for OPEC member countries. *Environmental Science and Pollution Research, 29,* 43089 - 43101. https://doi.org/10.1007/s11356-021-18156-0

Otapo, W. T. & Ushie, O. P. (2022). Trade openness, foreign direct investment, and economic growth in Nigeria. *International Journal of Research and Scientific Innovation*, 9(5), 82-89. https://doi.org/10.51244/ijrsi.2022.9507

Quoc, H. L., Quynh, A. D., Hong C. P. and Thanh D. N. (2021). The impact of foreign direct investment on income inequality in Vietnam. Global Journal of Economics, 9(1), 27-34. https://doi.org/10.3390/economies9010027

Said, E. & Dickey, D.A.I. (1984) Testing for unit roots in autoregressive-moving average models of unknown order. *Biometrika, 71,* 599-607. https://doi.org/10.1093/biomet/71.3.599.

Sam, H., Dimitrios P. and Mostafa E. A. (2021). Does Foreign Direct Investment and Trade Promote Economic Growth? Evidence from Albania. *Economies, 9(1).* https://doi.org/10.3390/economies9010001.

Suidarma, I. M., Maitri, W. S., Darta, I. M., & Diatmika, I. G. (2020). Achieving regional convergence through the role of foreign direct investment and portfolio investment: Evidence from ASEAN+3. *Iranian Economic Review, 24,* 1-18.

Tama, H.J., & Habila, S. (2022). Impact of external debt on economic growth in Nigeria: 1986-2019. *American Journal of Economics and Business Innovation, 1(3),* 55–72. https://doi.org/10.54536/ajebi.v1i3.570

Timsina, N. (2014). Impact of bank credit on economic growth in Nepal. *Research Department, Nepal Rastra Bank, Working Paper, 22/2014,* 1-23.

Todaro, M. P. & Smith, S. C. (2003). Economic development, 8th edition. Pearson Education Asia.Ucha, C. (2010). Poverty in Nigeria: Some dimensions and contributing factors. *Global Majority EJournal, 1(1),* 46-56.

Ullah, S., Ali, K., & Ehsan, M.A. (2022). Foreign direct investment and economic growth nexus in the presence of domestic institutions: A regional comparative analysis. *Asia-Pacific Journal of Regional Science, 6,* 735-758. https://doi.org/10.1007/s41685-022-00236-9

Umezurike, C.M., Ananwude, A.C., & Mbanefo, P.A. (2022). Foreign direct investment and economic growth: Empirical assessment of the Nigerian economy (1986 – 2019). *Journal La Bisecoman, 2(6),* 23-33. https://doi.org/10.37899/journallabisecoman.v2i6.547

Wang, X., Xu, Z., Qin, Y. &Skare, M. (2021). Foreign direct investment and economic growth: a dynamic study of measurement approaches and results. *Economic Research-EkonomskaIstrazivanja Journal, 35(1),* 1011-1034. https://doi.org/10.1080/1331677x.2021.1952090

Wei, X., Mohsin, M., & Zhang, Q. (2022). Role of foreign direct investment and economic growth in renewable energy development. *Renewable Energy, 192,* 828-837. https://doi.org/10.1016/j.renene.2022.04.062

World Development Report (2018). Learning to realize education's promise: The World Bank. https://www.worldbank.org/en/publication/wdr2018

Yonghong, X., & Indartono, S. (2019). The effect of economic globalization on economic growth-a study on foreign portfolio investment, foreign direct investment, export and import in 1982-2017 period: A case study in China. *Journal of Economics and Public Finance, 5(3),* 347-353 https://doi.org/10.22158/jepf.v5n3p347