



FOREIGN DIRECT INVESTMENT AND EMPLOYMENT GENERATION IN NIGERIA

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ABSTRACT

This study examined Foreign Direct Investment (FDI) and Employment Generation in Nigeria using time series data sourced from the Central Bank of Nigeria (CBN) Statistical Bulletin for the period of 38 years spanning from 1985 to 2023. Foreign Direct Investment into Nigeria and other control variables as Openness to trade, Gross Domestic Product, Exchange Interest Rate and Interest rate collectively stood as the exogenous variables while Employment rate functioned as endogenous or dependent variable. The model of the study followed the Autoregressive Distributive Lag (ARDL) Bound test based on the mixed order of the data in $I(0)$ and $I(1)$ as indicated by the Augmented Dickey Fuller (ADF). The study found a long run positive relationship between Foreign Direct Investment and Employment Generation in Nigeria. Exchange Rate is positive (0.013501) and statistically insignificant in Employment Generation, FDI is positive (6.29E-10) and statistically significant in employment generation, GDP was negative (-4.04E-06) but statistically significant in Employment Generation in Nigeria, Interest rate was positive (0.090283) and statistically significant. OTP was negative (-0.161787) and statistically insignificant in employment generation in Nigeria. The study concludes that foreign direct investment shares long run positive relationship with employment generation in Nigeria. The study therefore suggested that government should invest in infrastructure and security in the country to attract more foreign investors into the country since finding of this study indicates that FDI impact positively on employment generation in Nigeria and also, policy makers should make policies that will promote conducive business environment, stable political and macroeconomic environment that will boost further attraction of FDI into all sectors of the Nigerian economy.

Keywords: Foreign Direct Investment, FDI and employment, Employment generation, ARDL Bound test and employment rate in Nigeria.

JEL Classification: F21, F23, F36, J21, J23.

1.1 INTRODUCTION

Foreign Direct Investment (FDI) has been recognized as a driver of employment generation in developing economies. According to Aderemi, et al, (2022), Foreign Direct Investment (FDI) has significant contributing towards economic growth and development through job creation and technological transfer in many developing nations.

The rapid growth of population and labour force among nations of the world has call for the need to proffer lifelong solutions to the problem of unemployment in order to achieving the macroeconomic objective of attaining full employment (Osuka,et al, 2022).

The significance of the influx of foreign investment can be viewed from two angles: the multiplier effect on the recipient or host country and the multiplier effect on the investing multinational corporations. By implication, foreign investment is said to be a key propellant of employment generation, capital formation, managerial skill, technical know-how, technological progress, productivity improvement, economic growth and also an important determinant of globalization and world economy. (Oloruntuyi,2020). Mean while, direct channels through which FDI impacts the host economy is sacrosanct because every investment in a new project requires the engagement of labour, which has a positive effect on local employment rates. Whereas indirect channels manifest via either spillover effects, crowding out effects, or distributional effects. Firstly, the effects of technology and pecuniary spillovers can manifest in the form of improved efficiency in the production function of indigenous firms and later cause changes in demand of local labour. Furthermore, crowdingout-effectinthelabourmarketscouldbeexperiencedsincenewemployment opportunities arise at the expense of job in already-established firms (Babasanya, 2018)

According to Oloruntuyi, (2020), FDI inflow can lead to an increase in employment when new businesses string up and also becoming a key stimulant of employment in the distribution phase of production. Furthermore, through the acquisition and restructuring of an existing firm, FDI can sustain employment and lastly, it can shrink employment by divesting and when domestic firms are forced to close down due to extreme competitions. Recent studies have shown that Foreign Direct Investment (FDI) rose by 64% measured by project number attracting 733 projects, \$194 billion in capital and attracting 154000 jobs in Africa in 2023 (Joseph, & Victor 2023). According to Bashir, (2022), the capital inflow in Nigeria rose toUS\$1.1billion in 2023 due to the implementation of pro-market reforms, fuel subsidy removal and exchange rate harmonization creating about 25,000 jobs. What is needed to bridge that unemployment gap that exists in Nigeria (Ebunoluwa, et al, 2021). The encouragement of cross-border investments is one of the attributes of globalization drive. This necessitates the need for countries to require foreign investments to complement the capacity of domestic investment for creating employment as well as achieving economic growth (Osabohien, et al,(2020).

Despite the huge resource-base of the country, Nigeria has not been able to attract a high level of foreign investors that is commensurate with its potentials. In addition to the government's efforts in attracting FDI into the Nigerian economy, it is necessary to ascertain the impact of FDI in employment generation in Nigeria. In order to achieve the objectives of the study, the following questions are raised: what is the impact of (FDI) in employment generation in Nigeria?. What is the causal relationship between foreign direct investment and employment generation in Nigeria? This study thus aims at determining the impact of foreign direct investment (FDI) on employment generation in Nigeria and the causal relationship between foreign direct investment (FDI) and employment generation in Nigeria. The study is divided into five sections. Section 1 focus on the introduction, section 2 on the literature review, section 3 on the methodology, section 4 on presentation of results and discussion of findings, while section five deals with the conclusion and recommendation

2.1 CONCEPTUAL LITERATURE.

Concept of Foreign Direct Investment

Foreign direct investment is 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 (Babasanya, 2018). Foreign direct investment (FDI) is a direct investment into production or business in a country by an individual or company of another country, either by buying a company in the target country or by expanding operations of an existing business in that country (Ajayi, et al. 2019). Agrawal, (2015) defined foreign direct investment as a category of international investment that reflect the objective of residents in one country (the direct investors) obtaining a lasting interest in an enterprise resident in another country (the direct investment enterprise). The lasting interest implies the existence of a long-term relationship between the direct investors and the direct investment enterprise and the significant degree of influence by the investor on the management of the enterprise. Enemali, et al, (2023) defined foreign direct investment as productive assets by a company incorporated in a foreign country, as opposed to investment in shares of local companies by foreign entities and stand as an important feature of an increasingly globalized economic system. Foreign direct investment plays an extraordinary and growing role in global business. It can provide a firm with new markets and marketing channels, cheaper production facilities, access to new technology, products skills and financing. For a host country which receives the investment, it can provide a source of new technologies, capital, processes, products, organizational technologies and management skills, and as such can provide a strong stimulus to economic development.

The Concept of Employment

According to the International Labour Organization (2012), an employed person is a person aged 15 years or older who have worked (for pay or profit for at least one hour during a given week or having a job from which being absent under conditions on the reason of absence (due to holidays, sick leave, maternity leave, etc.) or duration. Employees, self-employed or family workers are covered. Illegal workers are also included. Persons who declare having a job from which they are absent are classified as employed if they are absent due to annual leave, maternity/paternity leave, working time arrangement, job-related training, short-time working (or technically unemployed), strike, bad weather, regardless the duration, sick leave if the duration is one year or less, parental leave or other unpaid leave if the duration is 3 months or less (Ebire, et al, 2018).

Employment may refer to the position of a person in the service of another or performance of services under a contract of service" (Oloruntuji,2022). The importance of the term surfaces in workmen compensation schemes where entitlement to benefits depends on the injury occurring in the course of employment. Other instance where the distinction may be essential is the area of vicarious liability for employees; whether the tort caused by the employee occurred inside or outside of the employment.

Employment is not just in simple term denoting the mere holding of a job, in which a wage is paid or the operating of one's business venture. Rather, it entails the state of someone who is working under the circumstances he most wants. Such a person is said to be gainfully employed. Aderemi, et al, (2022) defined employment as a situation in which people who are willing to work at the prevailing wage rate are

able to find jobs. In his view, Saucedo, et al, (2020), perceived employment as a situation in which remuneration in cash or in kind is received in exchange for active, direct participation in the production process.

However, this study defined employment as 'the state of being gainfully occupied; this includes self-employment as well as working for somebody else'. Therefore, full employment is a state in which every body wishing to be employed is gainfully employed.

2.2 THEORETICAL REVIEW

Theory of Eclectic Paradigm

This study adopts the theory of eclectic paradigm developed by John Dunning (1993). The theory combines the key components that are important to other assumptions of FDI; Location-specific advantages (L), Internalization advantages (I), and Ownership-specific advantages (O) (Anisiobi, et al,(2022). According to them, the latter refers to those assets of a firm that allow successful competition in foreign markets despite lack of knowledge and the costs of setting up of a subsidiary abroad. Right advantage must be present in a host country that is sufficient enough to counter challenge competition with firms in their home country (Sean-Leigh, 2007 cited in Aladelusi & Olayiwola, 2021). This also explains the benefits in terms of effective productivity and marketing and at the same time having foreign competitive advantage over local companies. On the other hands, location advantages involve those benefits that a host country can offer a business. These include large markets, good infrastructure, low labour or production costs or both. In the view of Aladelusi & Olayiwola (2021), cited in Anisiobi, et al,(2022), there must be rise in profits from exploiting a firm's ownership advantage in a distinguished location than its local market and thereby leading to either cultural, economic, or market prospects benefits. Internalization advantage involves transaction costs and arises when it is cheaper to exploit ownership and location advantages through FDI rather than exporting. With internalization, firms have opportunities to fully exploit the ownership advantage which originated or come from the knowledge of marketing a commodity. Succulently, internalization and ownership advantages are determinants by investor while the location advantage is determines by the host country Aladelusi & Olayiwola, (2021) cited in (Anisiobi, et al, 2022).

2.3 EMPIRICAL LITERATURE

Omolara, and Friday, (2024), examines Foreign Direct Investment On Employment Generation In Nigeria for the past 24 years, from 1999 to 2022. Ex-post research design was used in the study. The Central Bank of Nigeria statistical bulletin was used for the study's data collection. The Augmented Dickey- Fuller (ADF) test was used in the study's unit root test and pre-test analysis. Regression was utilized after analyzing the unit root test. The study discovered a positive and considerable effect of foreign direct investment on employment generation in Nigeria.

Sokunbi, et al, (2023), investigated FDI and Employment generation in Agricultural Sector in Nigeria. The study employed DOLS to assess nexus between FDI and employment in agricultural sector in Nigeria from 1990 to 2021. The findings from the study are summarized as follows; both agricultural gross production (AGP) and government expenditure on agriculture (GEA) contribute a significant negative impact on employment in agricultural sector in Nigeria. Meanwhile, FDI contributes an insignificant impact on

employment generation in agriculture in Nigeria. Against these findings, the study makes the following recommendations; the Nigerian policymakers should establish a conducive and supportive ecosystem that can effectively facilitate the expansion prospects and influx of foreign investments in the agricultural industry.

Timothy et al (2022) examine the effect of FDI on employment in ECOWAS subregion between 1990 and 2019. The study utilizes a panel autoregressive distributed lag model to analyze the short run and long run relationship between FDI and employment across ECOWAS sub region. In the short run, the impact of FDI on employment is negative and statistically not significant. Meanwhile, in the long run FDI has a positive and statistically significant impact on employment rate. This implies that FDI has the capacity to generate employment in countries in ECOWAS sub region.

Osabohien, et al, (2020) carried out a research on foreign direct investment inflow and employment in Nigeria for the period of 1985–2017. The study used the Fully Modified Ordinary Least Squares (FMOLS) and the Johansen co-integration econometric approach on the data, which were gathered from the World Development Indicators (WDI) and the Central Bank of Nigeria (CBN) statistical bulletin. The results obtained show that foreign direct investment is statistically significant and positively related to the employment level in Nigeria.

Aderemi, et al, (2022) The aim of this study is to examine the effect of FDI on employment in ECOWAS sub region between 1990 and 2019. The study utilizes a panel autoregressive distributed lag model to analyze the short run and long run relationship between FDI and employment across ECOWAS sub region. In the short run, the impact of FDI on employment is negative and statistically not significant. Meanwhile, in the long run FDI has a positive and statistically significant impact on employment rate. This implies that FDI has the capacity to generate employment in countries in ECOWAS sub-region.

Adeyemi, et al, (2020), examine the role of foreign direct investment on employment generation in Nigeria. The study employed multiple regression, Johansen co-integration and causality to ascertain the specific objectives of the study. The instrument used for this study is secondary data. The data for the study was obtained from CBN Statistical Bulletin, 2019, National Bureau of Statistics, 2019, and World Bank indicators, 2019. Stata- 12 statistical package was used for the estimation. The study further shows that foreign direct investment has a significant but negative impact on employment, Also, the result shows that, real exchange rate is a negative and non-significant determinant of employment in Nigeria while, inflation rate is a positive but not a significant determinant of employment

Ojochide et al (2023), modeled the impact of employment creation on the independent variables' Foreign direct investment, GDP Per-Capita, GDP growth, GNI and Government revenue. The study used secondary data obtained from World Bank and the CBN bulletin between 1981 to 2021. The study indicated that there is a positive long-term association between foreign direct investment and employment creation. This implied that FDI has a significant role on employment creation in Nigeria and this should not be minimized.

Anisiobi, et al, (2022), investigated the impact of foreign direct investment on employment generation in Nigeria within the period 1991 to 2021. The variables used in the study include employment rate, foreign direct investment, trade openness and real exchange rate. The paper used the autoregressive distributed lag (ARDL) model for its regression analysis. The data was sourced from CBN statistical bulletin and world bank development indicator. The study finds that foreign direct investment and Trade openness have a positive impact on employment generation in Nigeria. Real exchange rate has a negative impact on

employment generation in Nigeria. The paper finds that a short run relationship exists between foreign direct investment, real exchange rate, trade openness and employment generation in Nigeria.

Poumie and Claude (2021) made use of the augmented mean group (AMG), dynamic ordinary least square (DOLS) and the common correlated effects means group (CCEMG) in analyzing how foreign capitals such as FDI, migrant remittances influenced both the overall employment and sectoral job creation using 43 African economies between 2002 and 2018. The outcomes of the study established that FDI and migrant remittances led to a direct influence on overall employment. But, it was only FDI that motivated both direct and significant influence job creation in industry, agriculture and service sectors the African economies.

Adeyemi, et al, (2020) study is targeted at examine the role of foreign direct investment on employment generation in Nigeria. The study therefore employed multiple regression, Johansen co-integration and causality to ascertain the specific objectives of the study. The result of the multiple regressions suggests that wage has a negative and significant impact on employment, while Gross Domestic product is significant and positive as well. The study also shows that foreign direct investment has a significant but negative impact on employment.

Osabohien et al, (2020), assessed the level of the Nigerian employment due to FDI inflows from 1985 to 2017, using the Fully Modified Ordinary Least Squares (FMOLS). The authors submitted that FDI contributed a noticeable direct impact on the Nigerian level of employment.

Aladelus, and Olayiwola, (2020), investigated the impact of foreign direct investment on employment creation in Nigeria for the period of 35 years (1985-2019). The data were culled from the World Bank Development Indicators and analysis was carried out using unit root test, ordinary least square and granger causality test. The findings revealed that there is negative and insignificant relationship between trade openness, government expenditure, infrastructures and employment rate. However, positive relationship exists between foreign direct investment, exchange rate and employment but statistically insignificant at 5% level of significance.

3.1 METHODOLOGY

Model Specification

To analyze the impact of FDI on economic growth in Nigeria, the variables considered include employment rate as the dependent variables, while Foreign Direct Investment (FDI) Exchange Rate (EXCHR), Interest rate (INTR), Openness to trade (OPT) and Gross Domestic Product (GDP) are consider as the independent variables. The data for this study were extracted from the CBN statistical Bulletins 2022 and National Bureau of Statistics (NBS) 2020. The data collected covered a period of 38 years spanning from 1985 to 2023. The study adopts the model used by Adeyemi, (2018). The model is written below as:

$$EMP = f(GDP, FDI, EXR) \dots \dots \dots (1)$$

Where:

EMP_t = employment rate

GDP = gross domestic product (proxy for economic growth)

FDI = foreign direct investment

EXR = exchange rate

The modified version of the model adopted for this study takes the form:

$$EMPR = f(FDI, OPT, INTR, EXCHR, GDP) \dots \dots \dots (2)$$

Where:

EMPR = Employment rate (EMPR) from 1985-2023

FDI = Foreign Direct Investment, from 1985-2023

OPT = Openness to Trade from 1985- 2023

INTR= Interest Rate from 1985-2023

EXCH= Exchange Rate from 1985-2023

GDP =Gross Domestic Product from 1985-2023

The econometric model:

$$EMPR = \beta_0 + \beta_1 FDI + \beta_2 OPT + \beta_3 INTR + \beta_4 EXTR + \beta_5 GDP + \mu \dots \dots \dots (3)$$

The estimation technique used for this study is Autoregressive Distributed Lag to establish both the short run and long-run relationship among variables. To ascertain the stationarity of the variables employed, the researchers will employ Philip-Peron Unit Root tests. The following equations would display ARDL model for the short and long run:

$$\begin{aligned} EMPR_t = & \alpha_0 + \alpha_1 \sum_{i=1}^n \ln FDI_{t-1} + \alpha_2 \sum_{i=1}^n \ln OPT_{t-1} + \alpha_3 \sum_{i=1}^n \ln INTR_{t-1} + \\ & \alpha_4 \sum_{i=1}^n \ln EXCHR_{t-1} + \alpha_5 \sum_{i=1}^n \ln GDP_{t-1} + \lambda ECT_{t-1} + \beta_1 \sum_{i=1}^n \ln cblsme_{t-1} + \beta_2 \sum_{i=1}^n \ln tncps_{t-1} + \\ & \beta_3 \sum_{i=1}^n \ln smeo + \\ & \beta_4 \sum_{i=1}^n \ln lnr_{t-1} + \sum_{i=1}^n e_{t-1} \dots \dots \dots 3 \end{aligned}$$

This test is adopted to estimate the short run relationship between foreign direct investment and employment generation in Nigeria. The test checks whether the inclusion of the past values of a variable, say X improves the prediction of present values of another variable, say Y. So, if the prediction of Y improved by including past values of X using the past values of Y, then X is said to granger cause Y. Similarly, if the past values of Y improve the prediction of X relative to using only the last values of X, then Y is said to granger cause X. However, if both X is found to granger cause Y and Y is found to granger cause X, then a feedback relationship exists. The granger causality model is thus specified below:

$$EMPR_t = \alpha_0 + \alpha_1 \sum_{i=1}^n \ln EMPR_{t-1} + \alpha_2 \sum_{i=2}^n \ln FDI_{t-2} + \alpha_3 \sum_{i=3}^n \ln OPT_{t-3} + \alpha_4 \sum_{i=4}^n \ln INTR_{t-4} + \sum_{i=5}^n \ln EXCHR_{t-5} + \sum_{i=1}^n \ln GDP_{t-6} \dots \dots \dots 4$$

$$\begin{aligned} FDI_t = & \alpha_0 + \alpha_1 \sum_{i=1}^n \ln FDI_{t-1} + \alpha_2 \sum_{i=2}^n \ln OPT_{t-2} + \alpha_3 \sum_{i=3}^n \ln INTR_{t-3} + \\ & + \alpha_4 \sum_{i=4}^n \ln EXCHR_{t-4} + \sum_{i=5}^n \ln GDP_{t-5} + \alpha_6 \sum_{i=1}^n \ln EMPR_{t-6} \dots \dots \dots 5 \end{aligned}$$

$$\begin{aligned} OPT_t = & \alpha_0 + \alpha_1 \sum_{i=1}^n \ln OPT_{t-1} + \alpha_2 \sum_{i=2}^n \ln INTR_{t-2} + \alpha_3 \sum_{i=3}^n \ln EXCHR_{t-3} + \alpha_4 \sum_{i=4}^n \ln GDP + \sum_{i=5}^n \ln EMPR_{t-5} + \\ & \alpha_6 \sum_{i=1}^n \ln FDI_{t-6} \dots \dots \dots 6 \end{aligned}$$

$$\begin{aligned} INTR_t = & \alpha_0 + \alpha_1 \sum_{i=1}^n \ln INTR_{t-1} + \alpha_2 \sum_{i=2}^n \ln EXCHR_{t-2} + \alpha_3 \sum_{i=3}^n \ln GDP_{t-3} + \alpha_4 \sum_{i=4}^n \ln EMPR_{t-4} + \sum_{i=5}^n \ln FDI_{t-5} + \\ & \alpha_6 \sum_{i=1}^n \ln OPT_{t-1} \dots \dots \dots 7 \end{aligned}$$

$$\begin{aligned} GDP_t = & \alpha_0 + \alpha_1 \sum_{i=1}^n \ln GDP_{t-1} + \alpha_2 \sum_{i=2}^n \ln EMPR_{t-2} + \alpha_3 \sum_{i=3}^n \ln FDI_{t-3} + \alpha_4 \sum_{i=4}^n \ln OPT_{t-4} + \sum_{i=5}^n \ln INTR_{t-5} + \\ & \alpha_6 \sum_{i=1}^n \ln EXCHR_{t-1} \dots \dots \dots 8 \end{aligned}$$

4.1 RESULTS AND DISCUSSION OF FINDINGS

4.2.1 Pre-Diagnostic Analysis

Table 4.1: Descriptive statistics

	EMPR	FDI	OPT	INTR	EXCHR	GDP
Mean	196.1848	2.512250	0.447500	100.7608	47.07050	2.823835
Median	101.0000	1.610000	4.325000	106.4650	33.95000	3.044148
Maximum	546.6800	8.840000	18.18000	358.8100	633.5900	3.320354
Minimum	27.75000	0.190000	-65.86000	0.620000	9.140000	1.234983
Std.Dev.	169.4005	2.565050	14.43531	100.7272	95.91298	0.657266
Skewness	0.689709	1.168582	-2.685489	0.888724	5.925627	1.533427
Kurtosis	1.889585	3.155759	12.61239	2.994807	36.77905	3.879443
Jarque-Bera Probability	5.226357 0.073301	9.144332 0.010336	202.0757 0.000000	5.265578 0.071878	2135.794 0.000000	8.906633 0.011640
Sum	7847.390	100.4900	17.90000	4030.430	1882.820	59.30053
SumSq.Dev.	1119164.	256.5997	8126.753	395692.5	358772.7	8.639969
Observations	40	40	40	40	40	40

Source: authors computation

This Table examined the nature of the data distribution .from the results, the value of the highestmeanis196.1848forEmployment rateandthelowestmeanvalueis0.447500 for openness to trade (OPT).The standard deviation is all of positive values which ranged from 0.657266 (GDP) to 169.4005 (EMPR).It is indicated that EMPR and small and Interest rate have normal skewness of zero, while OPT has a negative skewness value below the normal skewness value. The estimated values of kurtosis showed that FDI and GDP has normal kurtosis of 3 whereas OPT and EXCHR are having values greater than 3 indicating they are leptokurtic, while EMPR and INTR have lesser than 3 showing they are platokurtic. The Jarque-Bera measures the normality of the variables and it is revealed from the p-value of the Jarque-Bera that GDP and SMEO are normally distributed among the variables employed.

4.1 RESULTS AND DISCUSSIONs

Data Presentation and Analyses

The data as gathered from secondary sources for this study in their basic natural values were transformed into logarithm forms as a measure of standardization. They were analyzed as well as interpreted based on the outcome of the results

Unit Root Test for Stationary

Most often, macroeconomic data are associated with the non -stationary time series properties. Unfortunately, a regression conducted with such non - stationary time series leads to spurious results. In order to do away with such non-stationary regression, the time series data used in this study were checked to ascertain the presence of unit root using Augmented Dickey-Fuller test statistic at 5 per cent level of significant. The tests were performed on all series (EMPR, FDI, GDP,OPT, INTR and EXCHR) using the Augmented Dickey-Fuller Unit root test. The result of the

Augmented Dickey fuller (ADF) unit root test is presented in table 1

Table 1 : Augmented Dickey Fuller (ADF) Unit Root Test Result

Variables	Levels			1 st difference			Order of integration
	ADF Statistics	Critical Values	Prob.	ADF Statistics	Critical value	Prob.	
EMPR	-5.382990	-3.043639	0.0001	-	-	-	I[0]
FDI	-1.550931	-3.621023	0.4971	-7.279632	-1.218346	0.0000	I[1]
INTR	-3.305660	-0.164891	0.0227	-	-	-	I[0]
OPT	-0.380828	-3.268038	0.0238	-	-	-	I[0]
EXCHR	1.696660	-3.621023	0.9995	-4.870277	-3.626784	0.0003	I[1]
GDP	-4.996696	-0.831326	0.0002	-	-	-	I[0]

Source: Author's Computation, using E-view 10.

Table 1 is the unit root table that presents the stationarity status of the variables used in the study using the Augmented Dickey Fuller (ADF-Test) in the E-view 10 output. The unit root test on the variables were carried out at levels and first differencing to ascertain the suitability of the data collected in the estimation and analysis. The result revealed that, EMPR, INTR, OPT and GDP were stationary at level I[0] while, FDI and EXCGR were stationary at first difference I[1]. With this, the variables are certified stationary and therefore considered suitable for the study. Since some variables exhibit stationary at first differencing and others at levels, this justifies the use of ARDL.

Bounds Test for Co-Integration

To test the long run relationship between employment generation and FDI in Nigeria, the bound test for cointegration technique proposed by Pearson, Shin & Smith (2001) was applied.

Table 2: Bounds Test Result

TEST STATISTIC	VALUE	SIGNIFIANCE	I(0)	I(1)
F-Statistic	5.801190	10%	2.08	3.0
K	5	5%	2.39	3.38
		2%	2.7	3.73
		1%	3.06	4.15

Source: authors computation using E-views 10,

The bound test result in table 2 is used in testing for the long run relationship between Employment generation and FDI. The outcome shows that at 5% level of significance, the F-statistic value of 5.801190 is greater than both the lower bound of 2.08 and the upper bound of 4.15. Following the established rule of bound test analysis this result is interpreted to imply that there is a long run relationship between FDI and employment generation in Nigeria at 5% level of significance.

Table 3: ARDL Short Run Result

Variable	Coefficient	Std. Error	t-Statistic	Prob.
EXCHR	-0.007978	0.017458	-0.456979	0.6558
FDI	3.72E-10	3.15E-10	1.180927	0.2605
GDP	2.38E-06	1.89E-06	1.259031	0.2320
INTR	-0.053351	0.218169	-0.244539	0.8109
OTP	0.095605	0.101537	0.941579	0.3650
CointEq(-1)*	-0.521003	0.015012	-34.705768	0.0000

Source: Authors Computation Using E-views 10 Output

The results in table 3 show the ARDL short run relationship between FDI and Employment creation in Nigeria over the period under study. The result shows that EXCHR and INTR are negative. This shows that a 1% increase in exchange rate (EXCHR) and interest rate (INTR) will lead to a -0.007978 % decrease in employment rate in Nigeria. The result also showed that GDP, OTP and FDI are all positive and statistically insignificant in employment generation in Nigeria. Thus, a 1% increase GD, FDI and OTP will brings about increase employment rate in Nigeria. The result is in agreement with the approri expectation. The result of the error correction (ECM) of the model to equilibrium form was found to be correctly signed and significant at (-0.521003, 0.0002).This basically implies that any occurrence of disequilibrium within the model in the short run is corrected to its previous equilibrium period at a speed of approximately 52% in the next circle annually. Therefore any distortion on the short run performance of the variables is reestablished at the speed of 52% towards long run equilibrium. The speed of 52% means that it will take the model some few years to correct short run destabilization and realign to equilibrium.

Table 4: ARDL Long Run Result

Conditional Error Correction Regression				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
EMPR(-1)*	1.692251	1.220925	1.386041	0.1910
EXCHR(-1)	0.013502	0.026941	0.501112	0.6253
FDI(-1)	6.29E-10	4.84E-10	1.299339	0.0182
GDP(-1)	-4.04E-06	1.95E-06	-2.065968	0.0211
INTR(-1)	0.090283	0.397398	0.227186	0.0241
OTP(-1)	-0.161787	0.195259	-0.828576	0.4235

Source: Authors Computation Using E-views 10

The results in table 3 show the ARDL long run relationship between Exchange rate (EXCHR) Foreign direct investment (FDI), Gross Domestic Product (GDP), Interest Rate (INTR) and Openness to Trade (OTP) and Employment Generation in Nigeria over the period under study. The result indicates that Exchange rate (EXCHR) is

positive (0.013502) and statistically insignificant in employment generation in Nigeria with the p-value (0.6253). The positive and insignificant contribution of exchange rate in employment generation in Nigeria may be due the exchange rate volatility policy introduce in Nigeria recently. This result explains that though not statistically significant, the positive sign implies that an increase in the exchange rate at a tolerable rate attracted more inflow of external investment into the Nigerian capital market. The result is in line with the study carried by Poumie and Claude (2021), on the impact of FDI on employment generation in Nigeria. It was found out from the study that exchange rate had a positive and statistically insignificant in employment generation during the period. The result also shows that FDI is positive (6.29E-10) and statistically significant with p-value of (0.0182) during the period under review which agrees with the priori expectations. This shows that a 1% increase FDI let to 6.29E-10 increase in employment rate in Nigeria. The result in line with the result of the study carried out Adeyemi, et al, (2020), on the role of FDI in employment creation in Nigeria. It was found out from the result of the findings that FDI had a positive impact on employment rate during the period.

The coefficient of GDP is negative (-4.04E-06) and statistically significant in employment generation in Nigeria during the period under review with the p-value (0.0211). The result is in agreement with the result of the study carried out by Sunday, et al, (2021) who examined the FDI and employment generation in Nigeria. It was found out from the result that the coefficient of GDP was negative but statistically significant in employment creation during the period. The coefficient of INTR was also positive (0.090283) and statistically significant in employment generation in Nigeria with the p-value (0.0241) during the period under review. OTP was negative (-0.161787) and statistically insignificant in employment generation in Nigeria with the p-value of (0.4235) during the period under review. This is also a negation to the apriori expectation. This means that Nigeria still have to do more in times of foreign trade restriction in order to enhance it contribution to employment generation.

Table 5: Granger Causality Test

Null Hypothesis:	Obs	F-Statistic	Prob.	Decision
EXCHR does not Granger Cause EMPR	37	6.51765	0.0153	unidirectional
EMPR does not Granger Cause EXCHR		0.51022	0.4799	
FDI does not Granger Cause EMPR	37	0.04164	0.0395	unidirectional
EMPR does not Granger Cause FDI		0.45844	0.5029	
GDP does not Granger Cause EMPR	37	0.01981	0.8889	No causality
EMPR does not Granger Cause GDP		0.00618	0.9378	
INTR does not Granger Cause EMPR	37	0.40330	0.5296	No causality
EMPR does not Granger Cause INTR		0.12379	0.7271	
OTP does not Granger Cause EMPR	37	0.12053	0.0306	Bidirectional
EMPR does not Granger Cause OTP		2.30557	0.0382	

Source: Authors computation, using Eview 10

The granger causality test in table 6 shows that there is unidirectional relationship between EXCHR and EMPR in Nigeria since the probability values are; EXCHR=0.0153 and EMPR = 0.4799 . The direction of causality is from EXCHR to EMPR. Also, a unidirectional relationship exist FDI and EMPR, their probability value: FDI=0.04164 and EMPR=0.5029.the direction of causality is from FDI to EMPR. There was no causal relationship between GDP and EMPR and INTR and EMPR since their probability values are greater than 0.05 percent. OTP and EMPR indicated a bidirectional relationship. This is because their probability values are less than the level of significance. The overall results showed that foreign direct investment (FDI) granger cause economic growth in Nigeria within the period under study.

The Breusch-Pagan-Godfrey test for Heteroskedasticity

Ho: Constant variance H₁: Variance not constant

Table 6. Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	0.178107	Prob. F(5,19)	0.9675
Obs*R-squared	1.119292	Prob. Chi-Square(5)	0.9524

Results in Table 6, indicate the absence of Heteroskedasticity since the probabilities of both F-statistic and R-squared are greater than 0.05. Thus, the errors are homoscedastic that is, devoid of Heteroskedasticity.

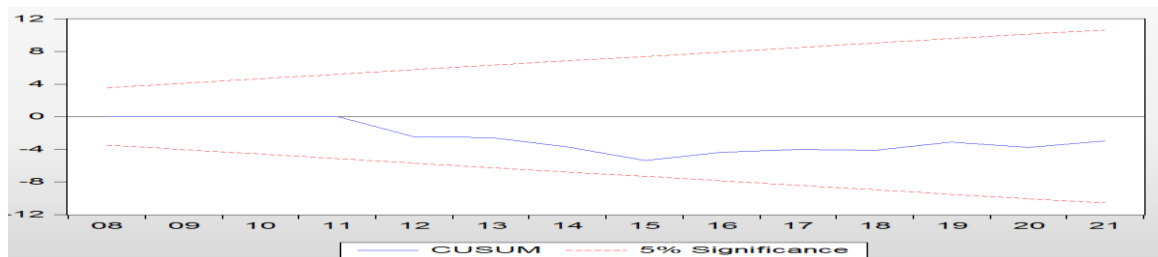
Cusum Test for Stability

H₀: The model is punctually stable H₁: The model is punctually unstable

The rule is that, the curve of the Cusum in blue print does not exceed the confidence intervals in the red corridors.

Stability Diagnostic

The CUSUM test and CUSUM square test are were performed with the results displayed in the figure below:



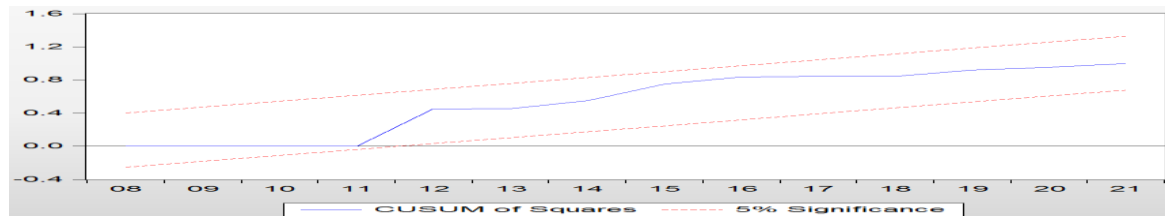
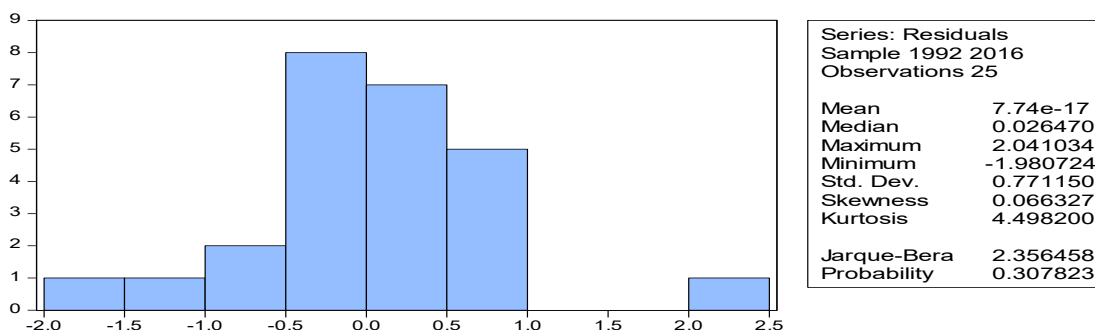


Figure 1 and figure 2 plot the results for CUSUM and CUSUMSQ tests. The results indicate the absence of any instability of the coefficients because the plots of the CUSUM and CUSUMSQ statistics fall inside the critical bands of the 5 percent confidence interval of parameter stability. Therefore, there exists stability in the coefficients over the sample period.

From Figure 1 and Figure 2, it was concluded that the model is stable at 5% level of significance. Therefore, the model is said to be stable.

Fig. 3 Histogram Normality test



Source: Author’s computation using E views.

Since Jarque-Berra statistic (2.356458) is greater than the P-value (0.307823), the data are normally distributed.

Conclusion and recommendation

Employment creation remains an important goal and priority of the Nigerian Government, as reflected in the various macroeconomic policies and frameworks that have been implemented over the years. The positive relationship between FDI and employment implies that increased FDI will result in increased employment in Nigeria. The study therefore suggested that government should invest in infrastructure and security in the country to attract more foreign investors into the country since finding of this study indicates that FDI impact positively on employment generation in Nigeria and also, Also, policy makers should make policies and programmes that will create conducive business environment, stable political and macroeconomic environment that will boost further attraction of FDI into all sectors of the Nigerian economy.

REFERENCES

- Ajayi,A., (2019) Impact of Foreign Direct Investment on Employment and Unemployment Rate in Nigeria: Application of Vector Autoregression (VAR) Models (1960-2014). *Acient Journal of advance research and report*, 6(1), 1-15.
- Anisiobi, C.A. et al,(2022) , Foreign Direct Investment and Employment Generation in Nigeria. *International Journal of Research and Innovation in Social Science*,4(11) ,2454-6186
- Aladelus, B. K. and Olayiwola, H. O., (2021), Foreign Direct Investment And Employment Creation In Nigeria. *Canadian Social Science Journal*,17(1),1712-8056
- Aderemi,T.A, et al, (2022) Effect of FDI Inflows on Employment Generation in Selected ECOWAS Countries: Heterogeneous Panel Analysis. *CBN Journal of Applied Statistics*, 13(1)241-263
- Aladelusi, K. B. and Olaywola, H.O.,(2021),Foreign Direct Investment and Employment Creation in Nigeria. *Canadian Social Science*,17(1),16-24
- Adeyemi, A. A., et al, (2020), Role Of Foreign Direct Investment on Employment Generation in Nigeria. *International Journal of Academic Multidisciplinary Research* , 4(9) 117-127
- Aladelusi, K.B. and Olayiwola, H.O., (2021). Foiegn Direct Investment and Employment generation in Nigeria. *Canadian Journal of Social Science*, 17(1), 16-24
- Adeyemi,A. A.,et al, (2020),Role of Foreign Direct Investment on Employment Generation in Nigeria. *International Journal of Academic Multidisciplinary Research*, 4(9),117-127
- Adeyemi, B., (2018), Foreign Direct Investment and Employment Generation in Nigeria. *Journal of Economics and Sustainable Development*,9 (.4),2222-2855
- Ajayi, A., et al, (2019). Impact of foreign direct investment on employment and unemployment rate in Nigeria: Application of Vector Autoregression Model(VAR) models. *Asian Journal of Advanced Research and Reports*,6(1), 1-15
- Babasanya, A.O. (2018). Foreign direct investment and employment generation in Nigeria. *Journal of Economics and Sustainable Development*, 9(4), pp. 42-47.
- Bashir, D.,(2022), Effect Of Foreign Direct Investment On Economic Growth In Nigeria. Does Exchange Rate Matters? *International Journal Of Accounting And Finance Studies*, 5(2), 2576-2001
- Enemali,M.O, et,al, (2023), Modeling The Impact of Foreign Direct Investment on employment creation in Nigeria,1981 – 2021. *International Journal of Recent Research in Mathematics Computer Science and Information Technology*, 10(1): 62-71
- Ebire, K. et al, (2018), Effect Of The Determinant Of Foreign Direct Investment In Nigeria. Error Correction Mechanism. *Assian Journal of Economic and Empirical research*, 5(2), 155-2018
- Johnny,N.,et al,(2018). Impact of foreign direct investment on unemployment rate in Nigeria. *International Journal of Academic Research in Business and Social Sciences*, 8(2),58-69

- Joseph O.O and Victor C. E.,(2023), Foreign Portfolio Investment Flow (Fpif) And Nigerian Stock Exchange (Nse). *International Journal Of Management & Entrepreneurship Research*, 5(2), 2664-3596,
- Obunoluwa, O.O., and Nuri, A.O.,(2021), Impact Of Foreign Direct Investment on Economic Growth In Nigeria. *International Journal of Academic Research in Economics and Management Sciences*, 4(3), pp. 16-28.
- Ojochide E. M., et al (2023), Modeling The Impact of Foreign Direct Investment on employment creation in Nigeria,1981 – 2021. *International Journal of Recent Research in Mathematics Computer Science and Information Technology*,10 (1), 62-71),
- Osabohien, R., et al, (2020), Foreign direct investment inflows and employment in Nigeria. *Investment Management and Financial Innovations*, 17(1), 77-84.
- Oloruntuyi,A.O., (2022) The Impact Of Foreign Direct Investment On Unemployment Rate In Nigeria (1986-2018). *International Journal of Economics, Business and Management Research*, 4,(6),2456-776
- Omolara, A. and Friday, A., (2024), Foreign Direct Investment On EmploymentGeneration In Nigeria. *African Journal of Art and Humanities*, 10(2), 2488-9210
- Saucedo, E., et al, (2020). The effect of FDI on low and high-skilled employment and wages in Mexico: a study for the manufacture and service sectors. *JournalforLabourMarketResearch*,54(9),2-15
- Osuka, B.O.,et al, (2022), impact of fiscal policy on Economic Development in Nigeria. *Novelty Journal*, 9(2), 34.67
- Sokunbi, G.M., et al, (2023), Foreign Direct Investment and Employment in AgriculturalSector in Nigeria. *Journal of Accounting and Management*, 13(2), 2284-9459
- Timothy, A. A., et al, (2022). Eeffect of FDI Inflows on Employment Generation in Selected ECOWAS Countries: Heterogeneous Panel Analysis. *Journal of Applied Statistics*, 13(1) 241-263
- Wang, J.Y. and Blomstrom,M., (1992),Foreign investment and technology transfer. A simple Model. *European Economic review*, 36(10),137-155