



Insight on the Linkage between Foreign Direct Investment and Unemployment: Evidence from Nigerian Data

Sunday Ojo Akinmulegun*, Oludayo Elijah Adekunle

Department of Banking and Finance, Adekunle Ajasin University, Akungba-Akoko, Nigeria

*Corresponding Author: mrakinmuleguns@yahoo.com

Abstract

Objective – The menace of unemployment has continued to pose a great challenge to policymakers, practitioners, and scholars in Nigeria. This is despite the government's diverse efforts at reducing unemployment. This study gave new insight into the short and long-run effects of foreign direct investment (FDI) on the unemployment rate in Nigeria.

Design/methodology – The data for the study cover the period from 1986 to 2018. Data were gathered from CBN Statistical Bulletin, World Bank Data, and the National Bureau of Statistics. Data were analyzed with the Augmented-Dickey Fuller technique for a preliminary test while the Autoregressive Distributed Lag technique was used for inferential analysis.

Results – Based on findings, evidence of a long-run association-ship existed between FDI and the unemployment rate in Nigeria. The short and long-run estimates suggested that foreign direct investment contributed significantly to the unemployment rate in Nigeria.

Research limitations/implications – These findings imply that FDI through assets expansion, technology, and knowledge diffusion generates employment opportunities thereby pushing the unemployment trend downward in the economy.

Novelty/Originality – The novelty of this study lies in using the more rigorous technique of the Autoregressive Distributed Lag-Bound co-integration framework to give new insight into the nexus between FDI and unemployment.

Keywords: foreign direct investment, unemployment rate, co-integration

1. Introduction

Foreign direct investment has been regarded as the panacea to the advancement of emerging economies. It can stimulate private investments, facilitate the transfer of knowledge, and technological skills, enhance output, and, create employment opportunities (Mello, 1999; Djambaska & Lozanoska, 2015; Dunning, 1993; Mkombe, et al., 2020). In most developing countries, FDI plays a crucial role in promoting required output and development by creating expansion opportunities for local businesses, increase in income, improving living standards, and reducing poverty (Akinmulegun, 2012; Adekunle, 2020; Driffield, 1999; Dunning, 1993; Habib & Sarwar, 2013).

Akinwale et al. (2018); Haddad (2016); Wall et al. (2018), and Akib et al. (2017) averred that foreign direct investment provides developing countries with the required resources such as finance, know-how, management capability, entrepreneurship acumen, and access to markets which are essential for industrialization and employment generations. As a result of the significant role of FDI in the economy (Javorcik, 2015; Sarwar, et al., 2016) opined that the governments of developing nations have initiated policies to stimulate the inflow of FDI into the economy. Hence, foreign direct invest-

ment increased from 6.5% in 1990 to 17% (United Nations Conference on Trade and Development, 2013).

One of the major challenges that often lead to the government initiating policies is to reduce unemployment. The menace of unemployment has continued to pose a great challenge to the government, policymakers, and practitioners in developing countries and Nigeria due to the negative effects of unemployment on the economy at large. The unemployment rate shoot up to 23.3% in 2012 from 11.8% in 2004 (National Bureau of Statistics, NBS 2012). The NBS (2015) reported that the unemployment rate in Nigeria rose from 30% in 2014 to 36% in 2015 before falling to 14.2% in 2016 with urban unemployment being 12.9% while rural unemployment was 6.8%. However, the unemployment rate rose to 20.42% in 2017 and 23.3% in 2018 (NBS, 2018).

To curb escalating unemployment in Nigeria, the government formulated policies and schemes like the N-Power Programme and other previous schemes' Microfinance policies. Despite policy frameworks and initiatives of the government to curb rising unemployment in the economy, unemployment has remained a marauding challenge to the Nigerian economy with a falling standard of living and rising poverty rate.

Though studies have attempted to look into the implication of FDI in Nigeria, however, few studies investigated the linkage between FDI and unemployment in Nigeria (Johnny et al., 2018; Matthew & Ogunlusi, 2017; Onimisi, 2014; Ozughalu & Ogwumike, 2013). Studies mainly analyzed the implication and effects of FDI on sectoral performance and overall growth in Nigeria (Adeleke, et al., 2014; Alobari, et al., 2016; Awolusi, 2012; Collins et al., 2016; John, 2016; Olatunji & Shahid, 2015; Uwubanmwen & Ogiemudia, 2016; Otapo, 2017). Despite a series of policies recommendation proposed in these studies the problem of unemployment remained unsolved. Investigating the effect of FDI on unemployment is germane in this crucial period of societal challenges, rising poverty rate, and deteriorating standard of living. This study thus offers new insight into the significant effect of FDI in curbing unemployment in Nigeria by using a more thorough procedure of the Autoregressive Distributed Lag Dynamic approach. Shin and Shin (2001) stated that the ARDL procedure is a powerful technique for capturing a new equilibrium state through the estimation of the short and long-run coefficients. Also, the ARDL approach has the capacity of correcting the problem of endogeneity among time series data. Thus, the main objective is to examine the effect of FDI on the unemployment rate in Nigeria. Following the introductory aspect, another part of the article is subdivided into a literature review, methodology, findings, and conclusion.

2. Literature Review, Theoretical Framework, and Hypothesis Development

Theoretical Framework

Theoretically, the Neo-liberal school asserted that foreign direct investment can facilitate technological improvement, aid industrialization of domestic investment, and contributes to national outputs which reduce unemployment in the economy (Chenery & Strout, 1996; Dunning, 1999; Mello, 1999; Penros, 1961; Pinn et al., 2011) asserted that foreign direct investment reduces unemployment by creating a linkage with domestic firms through knowledge and technology transfer which are required for business expansion thereby increasing domestic employment level in the economy. Apart from the direct linkage and benefits of foreign direct investment in

terms of employment generation, boosting of domestic investment capacity, and contribution to overall growth, it also aids spillovers effect through knowledge and technology diffusion and optimal resources allocation (Alalawneh & Nessa, 2020; Demena & van Bergeijk, 2019; Farole & Winkler, 2014; OECD, 2002; Otapo & Adekunle, 2020).

Empirical Review

Following this theoretical innovation, (Palát, 2011) found that the inflows of investment improve the employment rate in Japan. Similarly, it was found by Fibus, (2015); Stanković et al., (2015); Wei, (2013) discovered that increase in FDI would lead fall in the rate of unemployment in Serbia, Slovakia, and China respectively. However, contrary to these findings, Strat, et al., (2015) established that FDI has no reducing effect on unemployment in European Union countries. This was also found by Kurtovic et al., (2015) whose studies indicated that foreign direct investment did not affect reducing unemployment in Western Balkans between 1998 and 2012. However, according to (Alalawneh & Nessa, 2020; Grahovac & Softić, 2017) foreign direct investment contributed negatively and help reduce unemployment in Western Balkan countries and the Middle East and North Africa respectively. Additionally, (Mohd, et al., 2012) also found a negative effect of FDI on the unemployment rate in Malaysia.

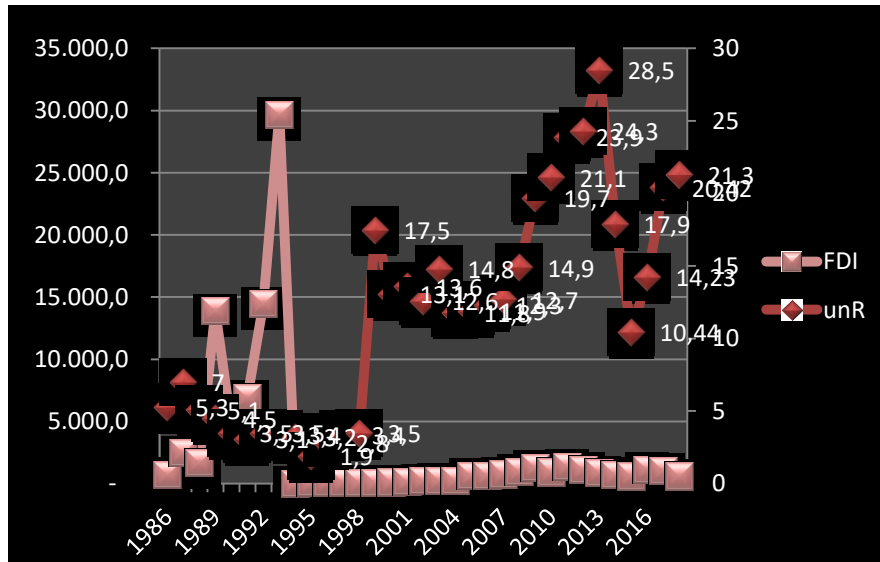
Also, the findings of (Mucuk & Demirsel, 2013) based on a study that focused on namely Argentina, Chile, Colombia, Philippines, Thailand, Turkey, and Uruguay revealed a long-term linkage between FDI and unemployment. In addition, (Djambaske & Lozanoska, 2015) estimated data from the Republic of Macedonia from 1999 to 2013 established a negative effect of FDI on unemployment. This is supported by the findings of (Haddad, 2016)(Jingga et al., 2017) based on data from Jordan from 1998 to 2015; revealing that foreign direct investment contributed to unemployment reduction. (Mkombe, et al., 2020) a study conducted in Sothern African Development Community found the immaterial effect of FDI on unemployment.

Based on studies from Nigeria, there are few studies on the effect of FDI on unemployment. Amongst these include the empirical study of (Onimisi, 2014) who explored the implication of FDI on employment generation, from 2002 to 2012 and found that foreign direct investment did not generate employment. However, (Matthew, and Ogunlusi, 2017) showed that FDI had contributed positively to employment generation. Also, (Johnny et al., 2018) using OLS to estimate data between 1980 and 2015 discovered that FDI had a reducing implication on the unemployment rate in Nigeria.

Evidence from the review indicates that studies on the impact of FDI on unemployment were largely tailored towards developed countries with few studies being conducted in developing countries, Nigeria inclusive. In addition, the findings were highly sparse and diverse. Some empirical findings have shown that foreign direct investment can contribute to unemployment reduction through improvement in production capacity, technological innovations, and enhancement of national economic performance (Alalawneh & Nessa, 2020; Djambaske & Lozanoska, 2015; Fibus, 2015; Grahovac & Softić, 2017; Haddad, 2016; Mohd, et al., 2012; Palát, 2011; Stanković et al., 2015; Wei, 2013). However, the authors revealed that foreign direct investment did not contribute to the reduction of unemployment (Kurtovic et al., 2015; Mkombe, et al., 2020; Mucuk & Demirsel, 2013; Strat et al., 2015). This situation was also discov-

ered in studies from Nigeria (Johnny et al., 2018; Matthew & Ogunlusi, 2017; Onimisi, 2014). Few studies on the debate between FDI and unemployment in developing countries and Nigeria despite efforts of the government to tackle rising unemployment are a pointer to the need to offer new insight into the subject matter in developing countries with Nigeria as a model using more advanced techniques.

foreign direct investment, unemployment rate, co-integration



Sources: NBS, CBN (2019)

Figure 1. Trends of Foreign Direct Investment and Unemployment Rate in Nigeria

The figure 1 shows the trend of FDI and unemployment in Nigeria. It reveals that FDI inflow into the country was very high between 1989 and 1993 following the adoption of the Structural Adjustment Programme. During this period unemployment rate was low in the economy. However, following the annulment of the general election in 1993 and its consequent challenges, FDI inflows into the economy experienced downward between 1994 and 1999. This country started witnessing a rising unemployment rate during this period. M During this period unemployment rate was low not as expected. However, the inflow of foreign direct investment dropped in 2010 and 2015 which result in political instability and insecurity in the economy. During this period the nation is faced with challenges of insecurity in the north, and east, recession, and a looming election crisis. This greatly affected the unemployment situation in the country.

3. Research Method

This research is based on the usage of the quantitative data set. The data are time series in nature covering the period of 1986 to 2018. This study thus employed Autoregressive Distributed-Bounds Test Approach which is suitable for estimating times series data with a small size compared to other co-integration techniques like the Johansen Co-integration technique (Gujarati, 1995; Jalil & Ma, 2008; Narayan, 2005; M Hashem Pesaran et al., 1999). Annual data on foreign direct investment, market capitalization sector as a percentage of gross domestic product, money supply as a percentage of gross domestic product, exchange rate, inflation rate, and the unemployment rate were extracted from the Central Bank of Nigerian Statistical Bulletin (2018), National Bureau of Statistics (2018), and World Development Indicators (2018). The

variables employed were selected in line with previously reviewed literature and theory for adequate analysis and findings (Fabus, 2015; Mkombe, et al., 2020; Strat et al., 2015).

Model Specification

This article modeled the linkage between FDI and unemployment following the study (Fabus, 2015; Kokko, 1992; Palát, 2011; Pinn et al., 2011; Strat et al., 2015). However, for robust analysis, certain control variables were captured in the model. Thus, the simple linear model for the research is given as:

$$\text{UNR} = f(\text{FDI}, \text{GDP}, \text{MSGDP}, \text{MCAPGDP}, \text{INF}, \text{EXR}) \quad (1)$$

The econometric model for the study is given as:

$$\text{UNR} = \beta_0 + \beta_1 \text{LFDIt} + \beta_2 \text{LGDPt} + \beta_3 \text{MSGDPt} + \beta_4 \text{MKAPGDPt} + \beta_5 \text{LEXRt} + \mu t \quad (2)$$

In model 2, foreign direct investment, and exchange rate were logged for the reason of equal units in measurement. Where UNR represents the unemployment rate, LFDI is the log of foreign direct investment, LGDP is the log of gross domestic product, MS is money supply as a percentage of gross domestic product, MCAP is market capitalization as a percentage of gross domestic product, INF is inflation rate and, EXR referents exchange rate. Theoretically, the inflow of foreign direct investment alongside effectiveness in terms of money supply, capital market performance, exchange rate and increase size of the economy and stable inflation is expected to reduce the unemployment rate in the economy (Chenery & Strout, 1996; Fisher & Gelb, 1991; Penros, 1961).

Data Analysis Method

Since the study focuses on the short and long-run implications of foreign direct investment on unemployment, model 1 is remodeled into a short and long-run linear model following the suggestion of (M Hashem Pesaran et al., 1999). The modeling commenced with the derivation of the ARDL-Bound Co-integration which takes the form of the form:

$$\Delta \text{UNR}_t = \alpha_{01} + \beta_1 \text{UNR}_{t-1} + \beta_2 \text{LFDI}_{t-1} + \beta_3 \text{LGDP}_{t-1} + \beta_4 \text{MSGDP}_{t-1} + \beta_5 \text{MCAPGDP}_{t-1} + \beta_6 \text{INF}_{t-1} + \beta_7 \text{LEXR}_{t-1} + \sum_{i=1}^q \alpha_1 \text{UNR}_{t-i} + \sum_{i=1}^q \alpha_2 \text{LFDI}_{t-i} + \sum_{i=1}^q \alpha_3 \text{LGDP}_{t-i} + \sum_{i=1}^q \alpha_4 \text{MSGDP}_{t-i} + \sum_{i=1}^q \alpha_5 \text{MCAPGDP}_{t-i} + \sum_{i=1}^q \alpha_6 \text{INF}_{t-i} + \sum_{i=1}^q \alpha_7 \text{LEXR}_{t-i} + \varepsilon_t \quad (3)$$

Where, LFDI, LGDP, MSGDP, MCAPGDP, INF, and EXR are variables of the study, D is the first difference and ε is the error term. Under the above equation, the null hypothesis is that no co-integration or long-run relationship exists among the variables while the alternative hypothesis is that a co-integration or long-run relationship exists among the variables.

Following the estimation of the long run co-integration equilibrium relationship among the variables, it is of necessity to estimate the short and long run coefficient or parameters of the effect of foreign direct investment. The long run coefficient of the ARDL model is thus specify as:

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$$\Delta \text{UNR}_t = \alpha_{01} + \sum_{i=1}^p \Theta_1 \text{LFDI}_{t-1} + \sum_{i=1}^p \Theta_2 \text{LGDP}_{t-1} + \sum_{i=1}^p \Theta_3 \text{MSGDP}_{t-1} + \sum_{i=1}^p \Theta_4 \text{MCAPGDP}_{t-1} + \sum_{i=1}^p \Theta_5 \text{INF}_{t-1} + \sum_{i=1}^p \Theta_6 \text{LEXR}_{t-1} + e_t \quad (4)$$

Where, $\Theta_1 - \Theta_7$ are the coefficients of the variables e = Error Term. Δ = differencing.

The short run coefficient adopting the ECM-ARDL short run approach is given as:

$$\Delta \text{UNR}_t = \alpha_0 + \sum_{i=1}^p \lambda_1 \Delta \text{UNR}_{t-1} + \sum_{i=1}^p \lambda_2 \Delta \text{LFDI}_{t-1} + \sum_{i=1}^p \lambda_3 \Delta \text{LGDP}_{t-1} + \sum_{i=1}^p \lambda_4 \Delta \text{MSGDP}_{t-1} + \sum_{i=1}^p \lambda_5 \Delta \text{MCAPGDP}_{t-1} + \sum_{i=1}^p \lambda_6 \Delta \text{INF}_{t-1} + \sum_{i=1}^p \lambda_7 \Delta \text{EXR}_{t-1} + \phi \text{ECT}_{t-1} + \mu_t \quad (5)$$

From equation 4, λ is the coefficient of the equilibrium, Δ represents differencing, while ECT_{t-1} represents the error correction term

4. Results and Discussions

Stationarity Analysis

ADF technique was employed to determine the order of integration and stationarity level of the data. The data should not contain unit roots to avoid spurious results and find meaningful relationships. The Augmented Dickey-Fuller (ADF) is preferable to the Philips-Perron Test because it takes care of distortion in small sample data (Perron & Serena, 1996)(Spilioti, 2015). The test is conducted both at the level and first difference under the assumption of constant and trend. The Mackinnon Critical value is used to decide decisions significant level.

Series	ADF Test (Level)	Probability Value	ADF Test (First Difference)	Probability Value	Remarks
UNR	-2.419993	0.3630	-5.893715	0.0002	1(1)
LFDI	-2.063220	0.5451	-6.991737	0.0000	1(1)
LGDP	-2.957110	0.0085	-	-	1(0)
INF	-2.533244	0.1174	-4.746238	0.0007	1(1)
MCAPGDP	-3.160022	0.1115	-5.151718	0.0012	1(1)
MSGDP	-3.006478	0.1461	-5.926250	0.0002	1(1)
EXR	-2.435753	0.3556	-5.830855	0.0002	1(1)

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

From the table 1, the ADF result log of GDP is stationary at the level of the data series of the unemployment rate, log of FDI, market capitalization, money supply, and exchange rate containing unit root at a level. However, when taken at I(1), the unemployment rate, log of FDI, market capitalization, money supply, and exchange rate become stationary. To establish the effect of FDI and the set of control variables on the unemployment rate in Nigeria, the appropriate econometric method is to employ the co-integration technique. Thus, the Autoregressive Distributed Lag (ARDL) approach (bounds test approach to cointegration) was developed and popularized by Pesaran et al., (1999); and Pesaran et al, (2001) was employed in this study. The Autoregressive Distributed Lag (ARDL) approach requires that all variables are either mixture of 1(0) and 1(1) or purely 1(1) The ARDL is considered suitable because it incorporates a suffi-

cient number of lags to capture the data generating process general to specific modeling framework (Jalil & Ma, 2008; Salaudeen & Eze, 2018). Also, the problem of endogeneity is adequately addressed. In this approach (M Hashem Pesaran et al., 1999) maintain that modeling ARDL with the appropriate number of lags will address autocorrelation and endogeneity problems.

Lag Selection Criteria

Before estimating the Autoregressive Distributed Lag Bound Co-integration model, it is important to select appropriate lag for efficiency; this will ensure that appropriate lags are selected and also avoid the problem of a degree of freedom (Gujarati, 1995; Hakkio & Rush, 1995; Jalil & Ma, 2008; Wooldridge, 2013). To select the appropriate lags for the autoregressive distributed model, the study employed Akaike Information Criterion (AIC). Akaike Information Criterion (AIC) provides the best fit for an autoregressive model to a set of data.

Table 2.
VAR Lag Order
Selection Criteria

Endogenous variables: UNR LGDP LPDI MCAPGDP MSGDP EXR INFR					
Lag	LogL	FPE	AIC	SC	HQ
0	-752.0266	4.36e+12	48.96946	49.29326	49.07501
1	-540.5204	1.33e+08*	38.48519*	41.07562*	39.32960*
2	-493.1238	2.51e+08	38.58863	43.44569	40.17191

* indicates lag order selected by the criterion

The table reveals the lag selection criteria model according to VAR and it is indicated that the best lag for the regression model is lag 1 according to the Akaike Information Criteria being the lowest value. Thus, lag 1 is selected for estimating the Autoregressive Distributed Lag model.

ARDL Bound Co-Integration Test

Since the data series are integrated at I(0) and I(1) this study employed Autoregressive Distributed Lag (ARDL) popularized by Pesaran, (1999); Pesaren et.al., (2001)(Frank, 1981) to accept there is the long run connection between the variables, the F-statistic must be greater than lower or upper bound value.

The Bound test result for the model is presented in Table 3.

Table 3.
Table ARDL
Bounds Test

Critical Value Bounds (Significance)	10%	5%	2.5%	1%
Io Bound	2.12	2.45	2.75	3.15
I1 Bound	3.23	3.61	3.99	4.33
K = 5				
Computed F-statistic: UNR = LFDI, LGDP, MSGDP, MKAPGDP, EXR, INFR = 2.774				

K is the number of regressors.

Note: Critical values were obtained from (Pesaran & Pesaran, 1997).

Table 3 shows the Bound Cointegration between FDI and the unemployment rate in Nigeria. The computed F-statistic is compared against the Lower Bound (01 Bound). The result shows that for the equation estimated, F-statistic is greater than the Lower Bound Critical value at 5%. That is as in $2.2.45 > 3.79$. Thus, it is established

there is a long-run association-ship among the variables. This implies that foreign directed investment in conjunction with the sector control variables namely has a long-run relationship unemployment rate.

Autoregressive Distributed Lag Model Result

As a result of the existence of Co-integration among the variables in the table above, the long-run and short-run estimates of the Autoregressive Distributed Lag model are estimated to obtain the long and short-run coefficients and their standard errors. The estimation was done using Akaike Information Criteria (AIC) at lag one (1).

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Dependent Variable: UNR

Selected Model: ARDL (1, 2, 2, 0, 2, 1)

Co-integrating Form				
Variables	Coefficient	Std. Error	t-Statistic	Prob.
D(LFDI)	-0.454698	0.150730	-3.016639	0.0066**
D(LGDP)	0.001120	0.000504	2.222267	0.0374**
D(LEXR)	7.219938	1.066606	6.769080	0.0000**
D(MSGDP)	0.925464	0.305635	3.028000	0.0064**
D(MCAPGDP)	0.087248	0.129603	0.673193	0.5082
D(INF)	-0.055772	0.014250	-3.913824	0.0008**
CointEq(-1)	-0.542023	0.123768	-4.379336	0.0003**

Note: ** Denote significance at 5%

Table 4.
ARDL Short Run Coefficients

The short-run coefficients (co-integrating form) are displayed in Table 4. It is found that FDI and inflation rates have a negative and significant effect on the unemployment rate in the short run. Log of GDP, log of the exchange rate, and money supply have positive and significant effects on the unemployment rate in Nigeria while marketing capitalization is insignificant. The co-integration equation result shows that the short-run result has a co-integrating factor of -0.500400 which is highly significant at 5%. This implies that the model has self-adjustment equitation such that any disequilibrium in the short run will be corrected at a speed of 54% in the long run. This result implies that the model will converge to long-run equilibrium.

Dependent Variable: UNR

Long Run Coefficients				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
LFDI	-0.838890	0.278500	-3.012171	0.0066**
LGDP	-0.000210	0.000077	-2.737527	0.0123**
LEXR	0.472185	0.952066	0.495958	0.6251**
MSGDP	1.707424	0.469379	3.637621	0.0015**
MCAPGDP	-0.245348	0.160654	-1.527185	0.1416**
INF	-0.102896	0.022555	-4.561974	0.0002**
C	-9.282841	3.403203	-2.727678	0.0126**

Note: ** Denote significance at 5%

Table 5.
Long-Run Relationship

The long-run coefficients which are reported in the table reveal that the log of FDI has a coefficient of -0.838890, this indicates that rising FDI would lead to falling

in the unemployment rate. This implies that foreign direct investment inflow contributes significantly to unemployment reduction in Nigeria through technological and knowledge diffusion and productivity improvement.

In the long run, is found also that size of the economy measured with a log of the gross domestic product is negative and significant in determining the unemployment rate in Nigeria which suggests that improvements in overall economic performance will bring about an increase in employment opportunities and thus a fall in the unemployment rate. Similarly as reported in table 5 market capitalization and inflation rate have a negative and significant effect on the unemployed rate in Nigeria. Finally, the money supply and exchange rate have a positive and significant effect on the unemployment rate in Nigeria in the long run.

The findings on the negative and significant relationship between foreign direct investment confirmed the empirical suggestion of (Alalawneh & Nessa, 2020; Djambaska & Lozanoska, 2015; Fibus, 2015; Grahovac & Softić, 2017; Haddad, 2016; Mohd, et al., 2012; Palát, 2011; Stanković et al., 2015; Wei, 2013). These findings to the Nigerian economy imply that the foreign direct investment inflow contributes to unemployment reduction through improvement in production capacity, technological innovations, and enhancement of national economic performance.

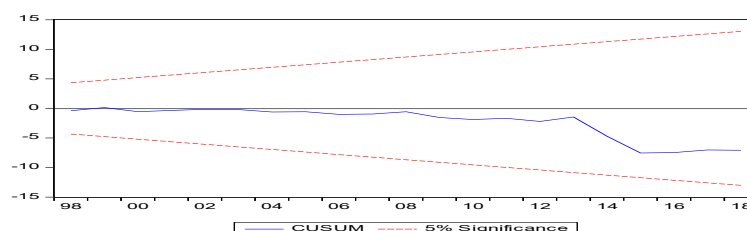
Table 6.
Summary of
Residual Test

Diagnostics test	Chi-square value	P-value
Breusch-Godfrey Serial Correlation LM Test	3.5644	0.1683
Breusch-Pagan-Godfrey test of Heteroskedasticity	11.434	0.3247
Ramsey RESET test of Omitted Variables	0.1372	0.7149

As reported in the table 6, the ARDL model is found to be robust against serial correlation. This evidence as the probability value of 0.1683 is greater than the 0.05 acceptance region. Also, the Breusch-Pagan-Godfrey test confirms that the residuals are Homoscedastic and not Heteroskedastic. Finally, the Ramsey RESET test indicates that the model is rightly designed with no sign of variable exclusion. Thus, it is concluded that the ARDL result satisfies the requirement regression and best fit for this study.

Cusum Stability Test

Figure 2.
Stability Test
Result



The stability test is conducted based on the method proposed by Brown et al., (1975). The result of the Cusum Stability test is given in the figure and it shows that the Cusum stability line is within the acceptance region of the 5% significance level which implies that the result of the regression estimate is stable.

5. Conclusion

This study provided new insight into the impact of FDI on unemployment based on data from the Nigerian economy. In line with the findings, a long-run relationship was discovered between FDI and the unemployment rate. Furthermore, it was found that foreign direct investment contributes significantly to unemployment rate reduction both in the short and long run. This conformed to the theory of a negative and significant relationship between foreign direction and the unemployment rate (Alalawneh & Nessa, 2020; Chenery & Strout, 1996; Fibus, 2015; Fisher & Gelb, 1991; Djambaska & Lozanoska, 2015; Grahovac & Softić, 2017; Haddad, 2016; Mohd, et al., 2012; Palát, 2011; Penros, 1961; Stanković et al., 2015; Wei, 2013).

Based on the findings of the study, it was suggested that government policies on foreign direct investment should be sustained and improved. Easy policies on profit expatriation, exchange rate, and taxation should be initiated by the government. This would encourage the inflow of foreign direct investment into the economy and will also reduce the rate of divestment that is experienced in the country recently. A stable macroeconomic environment should be provided and sustained to support both foreign investments. Macroeconomic variables like the exchange rate and inflation rate should be stabilized to encourage the inflow of foreign investments into the country.

foreign direct investment, unemployment rate, co-integration

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