

Emmanuel (2012) employed the Ordinary Least Square in the analysis of the investigation into the impact of FDI on the Nigerian economy for the period of 1992-2008. The study recommended greater policy sensitivity towards the openness of the economy to allow for free flow of FDI in the country. Also, government should strengthen regulations and legislations guiding businesses to enhance a conducive business environment for the attraction of more foreign investors.

Eravwoke and Eshanake (2012) assessed the direction of causality between FDI and economic growth in Nigeria. They reported that economic growth does not granger cause FDI in Nigeria. They suggested that the government must appreciate the basic elements of successful development strategy and encourage domestic investors before going after foreign investors considering the fact that they contribute the bulk of investment activities in the economy.

### 3. Methodology

This work is designs to examine foreign direct investment in Nigeria (1986-2016).

### 4. Analysis, Results and Discussion

**TABLE 1: Descriptive statistics of the model**

	Interest rate	LFDI	LRGDP
Mean	0.065136	21.42812	17.23048
Median	4.190484	21.35136	17.04503
Maximum	25.28227	22.90268	18.04996
Minimum	-43.57266	19.07931	16.53930
Std. dev	17.81384	0.992337	0.506179
Skewness	-0.914190	-0.249069	0.327195
Kurtosis	3.369716	2.362492	1.642651
Jarque-Bera	4.494567	0.845470	2.932886
Probability	0.105686	0.655252	0.230745
Sum	2.019204	664.2716	534.1447
Sum Sq Dev	9519.991	29.54201	7.686510
Observations	31	31	31

*Source: Researcher's computation via e-views 9*

The research work will make use of secondary data collected from the world bank and Central Bank of Nigeria Statistical Bulletin. The linear relationship between the dependent and independent variables in this study is functionally expressed thus:

$$RGDP = f(FDI, INT) \dots\dots\dots(1)$$

$$\ln RGDP_t = \beta_0 + \beta_1 \ln FDI_t + \beta_2 INT_t + \epsilon_t \dots\dots\dots(2)$$

Where:

lnGDP = Log of real gross domestic products

lnFDI = Log of foreign direct investment

INT = Interest rate

$\epsilon_t$  = Error term

Available data used for the estimation of parameters were extracted from World Bank Indicators and Central Bank of Nigeria (CBN) Statistical bulletin. Pre estimation test was carried out to determine the level the level of stationary of respective data sets using Augumented Dickey Fuller test (ADF) in order to avert spurious regression result. Ordinary least squares (OLS) test was carried to estimate the parameters.

The descriptive statistics shows the statistical properties of the model and each of the variables. The output was generated using E-views and it gives the background statistics of each variable on a yearly movement of 30 observations (30 years). For proper description of statistics, Foreign direct Investment (FDI) and Real Gross Domestic Product (RGDP) was logged because of their large values of millions and billions respectively and to avoid having a spurious result. The average of LFDI is 21.42812, for LRGDP is 17.23048, and for Interest rate is 0.065136. The median of LFDI is 21.35136, for LRGDP is 17.04503, and for Interest rate is 4.190484. The values of LFDI ranges from a maximum of 22.90268 to a minimum of 19.07931, LRGDP ranges from a maximum of 18.04996 to a minimum of 16.53930 and Interest rate ranges from a maximum of 25.28227 to a minimum of -43.57266. LFDI is skewed negatively to the left by -0.249069, LRGDP is positively skewed to the right by 0.327195 and Interest rate is negatively skewed to the left by -0.914190. The values of LFDI, LRGDP and Interest rate are 2.362492, 1.642651 and 3.369716 respectively and are platykurtic in nature

**TABLE 2: Unit root test**

Variables	10% Critical Value	ADF test (Probability)	Equation Specification	Order of Integration	Remarks
Interest rate	-2.621007	0.0001	Intercept	I(0)	Not significant
LFDI	-2.622989	0.0000	Intercept	I(1)	Significant
LRGDP	-2.622989	0.0542	Intercept	I(1)	Significant

Source: Researcher's computation via e-views 9

At 10% significance level, we accept the alternative hypothesis that at first difference, LFDI and LRGDP are stationary. At 10% significance level, we accept the alternative hypothesis that at levels, Interest rate is stationary.

**TABLE 3: Short Run Autoregressive Distributed Lag Model**

Variable	Coefficient	Std. Error	t-statistic	Prob.
D(LFDI)	-0.059805	0.028593	-2.091629	0.0814
D(INTEREST_RATE)	0.000006	0.000338	0.017483	0.9866
CointEq(-1)	-0.124068	0.051409	-2.413374	0.0523

Source: Researcher's computation via e-views 9

**TABLE 4: Long run Autoregressive Distributed Lag Model**

Variable	Coefficient	Std. Error	t-statistic	Prob.
LFDI	0.033587	0.208658	0.160965	0.8774
INTEREST_RATE	0.062826	0.024075	2.609583	0.0401
C	16.648694	4.485561	3.711619	0.0100
R2 = 0.999533 Adj. R2 = 0.998133 F-Statistics = 713.7668 Prob (F-statistic) = 0.000000 Durbin Watson stat = 2.376119				

Source: Researcher's computation via e-views 9

$$LRGDP = 16.648694 - 0.033587LFDI - 0.062826INT$$

**5. Model Analysis and Interpretation**

The study observed that Interest rate was stationary at levels while FDI and RGDP are stationary at first difference so we use ARDL bounds test which is used when there

are different stationarity levels in a model. The t-statistics value of -2.413374 emphasized the short run relationship between interest rate, FDI and RGDP. The error correction value of -0.124068 shows

12.4% of corrections to the disequilibrium can be corrected. Approximately 12.4% of the disequilibria from the previous year converged back to the long run equilibrium of the present year. The Durbin Watson test indicates presence of no autocorrelation where (d) is 2 as seen in the estimation output. In the short run, FDI has a negative but significant impact on RGDP of the Nigerian economy while Interest rate has a negative but insignificant impact on RGDP. However, in the long run, there is a negative but insignificant relationship between FDI and RGDP and a negative but significant relationship between Interest rate and RGDP. A unit increase in FDI will lead to a 0.033587unit decrease in RGDP and a unit increase in interest rate will lead to a 6.3% decrease in RGDP.

## 6. Summary of Findings, Conclusion and Policy Recommendations

Foreign direct investment did not meet Apriori expectations as it has an inverse relationship with economic but however, Interest rate fulfilled Apriori expectation by having an inverse relationship with economic growth

Interest rate was stationary at levels while FDI and RGDP were stationary at first difference.

The ARDL bounds test indicates that there is a long run relationship albeit a negative one between FDI and RGDP

There is no autocorrelation. The normality test indicates that the residual in this model is normally distributed and the Ramsey RESET test indicates that the model is correctly specified.

### 6.1 Policy Recommendations

Due to the results obtained from this study, the following are recommendations on Foreign direct investment in Nigeria:

- Government should place less focus on incentives for attracting FDI but instead on providing adequate infrastructure in order to ease industrialization in the country as this will serve as a means of increasing production of goods and services in the country will inadvertently lead to economic growth
- An enabling environment should be created by addressing security challenges in the country and a stable regulatory policy to encourage domestic investment in the country.
- Also, Government should place focus on the development of human capital, education and firms as this has a spill over effect on the economy as a whole.

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