Role of Foreign Direct Investment on Employment Generation in Nigeria

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Abstract: This study is targeted at examine the role of foreign direct investment on employment generation in Nigeria. The objectives of this study include: to investigate the impact of FDI on employment; to examine the long-run linear relationship between FDI and employment in Nigeria; and to determine the direction of causality between FDI and employment level. The study therefore 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 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 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. The ADF statistic confirms that the long run relationship is significant at 1%. The results show that, FDI significantly causes employment but employment does not significantly cause FDI. The study therefore recommends that policies should be formulated to exploit the role of FDI on employment in Nigeria in an attempt to reduce unemployment rate.

Keywords: Foreign direct investment, employment generation, gross domestic product, multiple regression

1. INTRODUCTION

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. Also, it is the sum equity capital, reinvestment of earnings, other long term capital, and short term capital, as shown in the balance of payments (IMF, 2007). A recent and specific example is the perceived role of FDI in efforts to stimulate economic growth in many of the world's poorest countries. Partly this is because of the expected continued decline in the role of development assistance, on which these countries have traditionally relied heavily, and the resulting search for alternative sources of foreign capital. More importantly, FDI can be a source not just of badly needed capital, but also of new technology and intangibles such as organizational and managerial skills, and marketing networks.

Foreign direct investment flows might be associated with economic success and they do not exert an independent effect on growth (Carkovic and Levine, 2002). Foreign direct investment promotes growth in countries with sufficiently developed financial systems, a greater degree of trade openness, and an adequate level of human resources development (Balasubramanyaam, 1999). Indeed foreign direct investment has a great potential to increase the rate of technical progress in the recipient country through knowledge diffusion. This can improve efficiency and productivity in local firms that can copy new technology or learn how to use existing technology and resources more efficiently in order to compete in global markets (Lim, 2001).

However, it is also possible for FDI to have very little (or even negative) effects on employment. It may displace local investment, so that the net effect on jobs is lower than the number directly employed by foreign affiliates. Where FDI involves the acquisition of local firms rather than new plants, there is no initial increase in employment and if the foreign owner subsequently rationalizes the firm, employment is even likely to decrease (Jenkins, 2006). Moreover, there may be few local linkages if most inputs used by the foreign affiliates are imported and these constitute an enclave within the local economy. Jobs that are created may be for labour that is relatively skilled rather than for the unskilled who are in excess supply. If investment is footloose and can easily move to alternative locations, then the jobs that are created are likely to be highly unstable (Jenkins, 2006).

Host countries often try to channel FDI investment into new infrastructure and other projects to boost development. Greater competition from new companies can lead to productivity gains and greater efficiency in the host country and it has been suggested that the application of a foreign entity's policies to a domestic subsidiary may improve corporate governance standards. Furthermore, foreign investment can result in the transfer of skills through training and job creation, the availability of more

advanced technology for the domestic market and access to research and development resources. The local population may be able to benefit from the employment opportunities created by new businesses.

According to Pinn, Ching, Kogid, Mulok, Mansor and Loganathan (2011), the effect of FDI on employment can be viewed in three scenarios. He said FDI inflow can increase employment directly through the creation of new business or directly by stimulating employment in distribution stage of production, FDI can maintain employment by acquiring and restructuring the existing firm and finally that FDI can reduce employment through disinvestment and the closure of domestic firms because of intense competitions. Li-wei and He (2006) studied the impact of foreign direct investment on the employment in China and found out that FDI inflow promoted employment in both foreign investment enterprises and the country as a whole in the long-run. Some Caribbean countries, for example Bermuda, the Cayman Islands and Trinidad and Tobago, have been more successful in attracting FDI over the past three decades, largely because these countries have either vibrant international business and financial services industries or abundant natural resources, particularly oil and other petroleum products (Craigwell, 2006). Similarly, studies done in Mexico, Fiji, Tanzania and even in Ghana found that increased FDI flows led to high levels of employment in the country.

For many developing countries, FDI is seen to complement scarce domestic financial resources and so attracting FDI has been a key aspect of their outward oriented development strategy, as investment is considered a crucial element for output growth and employment generation. It is also expected to help modernize production by transferring know-how and technology, while increasing domestic productivity and competition and improving international competitiveness. FDI should also facilitate integration into the world market, domestic participation in globalized production patterns, and the creation of forward and backward linkages with the domestic economy. In so doing, it will have a multiplier effect on the whole economy and could thus be a key element in spurring growth. With the foregoing, most third world countries made policies toattract FDI with the belief that it would bring the required tools for development. These amongother benefits have been some reasons for developing countries like Nigeria to seek funds.

Nigeria is one of the economies with great demand for goods and services and has attracted some FDI over the years. Africa and Nigeria in particular joined the rest of the world to seek FDI as evidenced by the formation of New Partnership for Africa's Development (NEPAD), which has the attraction of foreign investment to Africa as a major component. The Nigerian governments in recognizing the relevance of FDI have been pursuing various strategies involving the incentive policies and regulatory measures geared essentially towards the promotion of inflow of FDI tothe country (Onu, 2012). In 1995, Nigerian Investment Promotion commission (NIPC) which was established, a successor to the Industrial Coordination Committee (IDCC) which was established to encourage foreign investors so as to boost FDI inflows into the country (UNCTAD, 2009).

The Nigerian Investment Promotion Commission Act laid out the framework for Nigeria's investment policy. Under the Act, 100% foreign ownership is allowed in all industries except foroil and gas, where investment is constrained to existing joint ventures or new production-sharing agreements. Investment from both Nigerian and foreign investors is prohibited in a few industries crucial to national security: the production of arms and ammunition, and military uniforms. Also, the National Economic Empowerment and Development Strategy (NEEDS) adopted in 2004, made FDI attraction an explicit goal for the government amongst others (UNCTAD, 2009).

Nigeria's vast oil and gas resources have proven a magnet for foreign investors, especially in times of rising oil prices. Given the prominence of the oil industry in Nigeria, the main source countries for FDI inflows are those that are host countries of the major oil multinational companies (MNCs). The United States of America, present in Nigeria's oil sector through Chevron Texaco and Exxon Mobil, had investment stock of USD3.4 billion in Nigeria in 2008, the latest figures available. The United Kingdom (UK), one of the host countries of Shell, is another key FDI partner. UK FDI into Nigeria accounts for about 20% of Nigeria's total foreign investment. As China seeks to expand its trade relationships with Africa, it too is becoming one of Nigeria's most important sources of FDI; Nigeria is China's second largest trading partner in Africa, next to South Africa. From USD3 billion in 2003, China's direct investment in Nigeria is reported to be now worth around USD6 billion. The oil and gas sector receives 75% of China's FDI in Nigeria. Other significant sources of FDI include Italy, Brazil, the Netherlands, France and South Africa. Fortunately, captivated by high rates of return, investors from all over the world have now set their sights on Nigeria. As Africa's most populous country, Nigeria also boasts of the continent's second largest oil reserves. Nigeria is becoming a rather worthy recipient of foreign capital (World Bank 2012).

The goal of achieving full employment among other macroeconomic goals is an important one in many developing nations where unemployment and underemployment has been a major cause and consequence of widespread poverty (Shodipe and Ogunrinola, 2011).However in many poor nations of the world, Nigeria included, in spite of the very high-sounding electioneering promises of political leaders, the achievement of impressive growth and decent employment remains a mirage. The history of unemployment can be traced back to the 1980s. According to the Central Bank of Nigeria (2003), the national unemployment rate rose from 4.3 percent in 1970 to 6.4 percent in 1980. The high rate of unemployment observed in 1980 was attributed largely to depression in the Nigerian economy during the late 19670s.Specifically, the economic downturn led to the implementation of stabilization measures which included restriction on exports, which caused import dependency of most Nigerian manufacturing enterprises, which in turn resulted in operation of many companies below their installed capacity. This development led to the close down of many

industries, while the survived few were forced to retrench a large proportion of their workforce; furthermore, the Nigerian government also placed an embargo on employment.

Specifically, total disengagement from the Federal Civil Service rose from 2,724 in 1980 to 6,294 in 1984. Owing to this, the national unemployment rate fluctuated around 6.0% until 1987 when it rose to 7.1%. It is important to state here, that the structural adjustment programmed (SAP) adopted in 1986, had serious implications on employment in Nigeria because though unemployment rate declined from 7.1% in 1987, to as low as 1.8% in 1995, it rose to 3.4% in 1996, and hovered between 3.4 and 4.7 % between 1996 and 2000.

The problem in Nigeria might best be interpreted as underemployment in contrast to unemployment proper. Many Nigerians work in the informal sector doing various low paying tasks that do not add up to regular employment, and work performed often corresponds poorly to qualifications. A large number of working age Nigerians are categorized as being out of the labor force. As reported by the, 44.6% of the working age population in Nigeria was categorized in 2011 as being either unemployed or out of the work force.

1.2 Statement of the Problem

The issue of employment is very germane to any economy; this is why one of the main macroeconomic objectives of any country is to attain full employment. In other words, the goal of increasing the level of employment among other macroeconomic objectives is an important one in many developing nations where unemployment and underutilization of resources has led to rising rate of poverty. To increase the level of employment, some scholars have argued that the flow of goods and services (trade flows) could propel employment generation, especially in developing countries (Kareem, 2010). However, employment creation still poses a major challenge to the Nigerian government. World Bank (2013) reported that job creation in Nigeria has been inadequate to keep pace with the expanding working populace. As published by NBS (2010) in the Labour Force sample survey, among the youths in the 15-24 age brackets, the rate of unemployment was observed to be over 40%.

FDI is assumed to benefit a poor country like Nigeria, not only by supplementary domestic investment, but also in terms of employment creation, transfer of technology, increased domestic competition and other positive externalities (Ayanwale, 2007). According to UNCTAD world investment report 2012, Nigeria is the dominant recipient of FDI within the Economic Community of West African countries. Also, Nigeria receives the largest amount of Foreign Direct Investment (FDI) in Africa. Foreign Direct Investment inflows have been growing enormously over the course of the last decade: from USD1.14 billion in 2001 and USD2.1 billion in 2004, Nigeria's FDI reached USD11 billion in 2009 according to UNCTAD, making the country the nineteenth greatest recipient of FDI in the world (Essiet, 2013).

In recapitulation, despite the plethora of programmes implemented to increase the inflow of FDI into the country, Nigeria's employment growth rate is still not substantially high. There is no general agreement in literature however on whether FDI may really increase employment. Several authors like: Abor and Harvey (2008), Mpanju (2012), Craigwell (2006), Xiaoqing and Dwyer (2008), Jayaraman and Singn (2007) claim that FDI affects employment positively. Others like: Jenkins (2006), Rizvi and Nishat (2009) and Pinn et al (2011) emphasize that FDI does not create employment but might instead reduce employment by crowding out domestic firms.

Surprisingly however, only a limited number of studies have looked into the effect of FDI on employment but focused more on the impact of trade on employment, especially in Nigeria. Most of the studies focused more on FDI- growth nexus.

Overall, the impact of FDI on employment is far from clear and the impact varies across countries under different economic conditions. Also, from a cursory look at the Nigerian data, on employment level and FDI respectively, it appears that the recent economic trends and the policies and establishments made specifically to attract FDI into the country have been insufficient to make any appreciable impact on employment generation. This therefore calls to mind pertinent questions such as; How has FDI impacted on employment level in Nigeria? What effect does FDI have on employment in the long- run? And Is there a causality relationship between FDI and employment?

1.2 Research Objectives

This study is to investigate the role of foreign direct investment (FDI) on employment in Nigeria. As such, the objectives are stated as follows:

1. To investigate the impact of FDI on employment.
2. To examine the long-run linear relationship between FDI and employment in Nigeria.
3. To determine the direction of causality between FDI and employment level.

1.3 Research Questions

1. To what extent has FDI affected employment in Nigeria?
2. What is the long-run relationship between FDI and employment in Nigeria?
3. What is the direction of causality between FDI and employment in Nigeria?

2. LITERATURE REVIEW
2.1 Conceptual Review
2.1.1 Foreign Direct Investment

Investor Words (2010) 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 impetus to economic development. Foreign direct investment is an investment made to acquire a lasting management of about 10percent of voting stock in business operating in a country other than that of the investor defined according to residency. The logic behind the FDI is that companies could be seeking for lower resources cost, seeking market share as well as sales growth in foreign countries. It could be aimed at utilizing assets of foreign firms or supplying the foreign firms with input resources as the case may be. According to Shenkar (2007), foreign direct investment is the investment in real or physical assets, such as factories and distribution facilities. He asserted that it is not the foreign portfolio investment that has to do with investment in foreign financial instruments such as government bonds, mutual funds and foreign stocks. In André (2008), FDI is an investment made to acquire lasting interest in enterprise operating outside of the economy of the investor. He added that the parent enterprise and a foreign affiliate form together a transnational or multinational corporation. In order to qualify as FDI, the investor must afford the parent enterprise control over its foreign affiliate and such control exist when the parent company owns 10percent or more of the ordinary shares or voting power of an incorporated firm or equivalent for an unincorporated firm and if does not, it is known as portfolio investment (André, 2008).

2.1.2 Employment

The term employment is used to describe a situation whereby able-bodied men and women who are qualified by the condition to work in any given society can gainfully secure jobs whereby he or she will not exploited on securing the job and equally optimise his or her capability in terms of his marginal labour production. The full employment of labour does not imply that there is no allowable unemployment percentage level but if it is not within the framework of the accepted level considered as full employment for either the developed or developed countries as the case may be, it will not be a serious case for policy decisions.

2.2 Theoretical Review

There are various literatures on Foreign Direct Investment (FDI) and its effect on employment or labour demand. These theories are used in the context that best suits the research work being carried out.

2.2.1 The Theory of FDI spillovers

The Theory of FDI spillovers being found in literature are of two types of productivity spillovers. Javorcik (2004) refers them as horizontal and vertical spillovers; the former taking place when domestic firms benefit from the presence of foreign firms within their sector and the latter when benefits arise in both upstream and downstream production chain when domestic firms interact with foreign ones. One of the most significant aspects of potentially positive spillovers is those associated with and through human capital development. MNCs can influence human capital in the host country in two ways. First, spillovers can occur through direct means, as MNCs contribute to the generation of employment in the host country, which is to say they increase the employment level quantitatively. At the same time, MNCs can also cause direct increases in the quality of the domestic workforce, by providing formal and informal training, as well as through the process of learning-by-doing to transfer their superior technological knowledge to their domestic employees. Second, spillovers can occur through indirect means, also both quantitatively and qualitatively.

2.2.2 Theory of Absorptive capacity

Theory of Absorptive capacity with respect to technological transfer and direct and indirect spill-overs, economic theory focuses on so-called technological gap. This theory stresses technological absorption capability as a key factor that explains differences in economic growth. When domestic firms are able to form linkages with foreign-owned firms, it is assumed that spillover effects occur gradually. In this case, inflow of FDI has multiplying effect; increasing of output or employment (Tobias, 2007). Therefore, positive impact on the increase of output and employment are based on forming of linkages between foreign and domestic firms.

2.2.3 Eclectic Theory

Another theory describing the effect of FDI on employment is the eclectic theory by John Dunning (1993). It comprises of the market, resource and efficiency seeking FDI. These different strategies have different implications for employment. The location advantage is very important for market-seeking FDI, attracting investment flows even under difficult economic and political conditions. This type of investor generally has a particularly strong interest in the efficient functioning of the internal market,

including the labour market. Growth of employment and real wages is important in contributing to an increase in internal demand, which implies that the foreign producer finds a growing number of domestic consumers of goods produced for the host country market.

2.2.4 Labour Demand Theory
Yet another theory in this context is the labour demand theory. The aggregate demand for labour is one of the most important relationships in macroeconomics. Most studies implicitly adopt a neoclassical framework for the formulation of the demand for labour schedule, and hence, according to theory, the aggregate demand for labour is assumed to be negatively related to real wages and positively related to output. The dependent variable is usually total employment or hours worked while independent variables are either real wages, or some other measure such as real unit labour costs, and real gross domestic product. The demand for labour is affected by several variables including wages, economic growth, domestic investment, technology and government (Massoud, 2008). Demand for labour is a derived demand. If there will be a demand for goods and services, there will be a demand for labour as well.

2.2.5 Underpinning Theory
The theoretical model on which this study is based is the labour demand theory. The building of the model showing the impact of FDI on employment is based on the assumption that FDI, where it generates and expands businesses, it can help stimulate employment and raise wages (Zeqiri, Likaj and Bytyqi, 2011).This research focuses on the labour demand theory because the theory tries to analyze links between the demand for labour and a variety of economic factors. This theory best suits this study because it intends to investigate whether FDI adds to the overall employment generation in Nigeria which the labour demand theory captures.

2.3 Empirical Review
Nayyrazeb (2014) conducted an empirical study on FDI and unemployment reduction using Pakistan as a case study. The paper considered how some explanatory variables like population size, inflation level and corruption affects the level of unemployment reduction. The study covered a sixteen years period between 1995 and 2011. Multiple regressions were used in the analysis of the effects of FDI and other explanatory variables on the level of unemployment reduction in Pakistan. The estimated result posits that FDI plays a great role in reducing the level of unemployment rate. The estimated period in this paper does not show the actual accuracy of the result as against the thirty years' time series theoretical background. The various studies reviewed has indicated a non-conformity in the result of each researcher, thus, this paper intends to capture this phenomena as it currently affects the Nigerian economy.

In Nigeria, Salami and Oyewale (2013) investigated the relationship between FDI and employment for the period 1990- 2012. The study employed the Ordinary Least Square (OLS) estimation technique. The variables used for this study includes total employment growth rate, export rate, import rate, exchange rate, inflation rate and FDI. The analysis found a significant link between FDI and employment in Nigeria.

Mpaju (2012) in his work studied the impact of foreign direct investment on the creation of employment in Tanzania within the year 1990 till 2008. This study adopted a study design with quantitative approach which entailed the collection and analysis of similar research reports and data banks which includes UNCTAD, World Bank, World Investment Reports amongst others. The Ordinary Least Square method was used in data analysis using the SPSS software. The results of this study show that there is a strong positive relationship between the dependent and independent variables (that is, employment generation and foreign direct investment). Therefore, the existence of FDI has a great significance on the employment creation in the Tanzanian economy.

Shaari, Huddsin and Halim (2012) examined the impact of foreign direct investment on the unemployment rate and economic growth in Malaysia. The findings indicated that FDI helped to reduce the unemployment rate and increased gross domestic products.

Abor and Harvey (2008), examined the impact of foreign direct investment on employment generation in Ghana. This study provided a clear view into the effect in which FDI inflows has on employment creation from the host nation's perspective. The effect in which FDI inflows has on employment and wages was estimated by the simultaneous panel regression of which the results suggests that FDI has a significant and positive impact on the level of employment generation in Ghana, but there is an insignificant effect on the wages earned. Furthermore, FDI flows do not affect employment quantitatively but qualitatively. The factors considered in this study includes: wages, productivity among others.

Craigwell (2006) examined the relationship between foreign direct investments on employment in English Dutch- speaking Caribbean countries. This study used the correlation estimates and Granger panel causality tests which revealed a positive causal relationship between FDI and employment for the countries. The empirical results, derived using panel data methods, suggested that an increase in FDI in the entire sample of Caribbean countries led to an approximate one-to-one increase in employment, an outcome supported, despite considerable gaps in the employment data, by an evaluation of the stylised facts on FDI flows over the past three decades.

3. METHODOLOGY

3.1 ANALYTICAL FRAMEWORK

The theoretical model on which this empirical analysis is based on is the labour demand function. The estimation of the effect of FDI on employment is done with a simple labour specification. Most studies implicitly adopt a neoclassical framework for the formulation of the demand for labour schedule, and hence, according to theory, the aggregate demand for labour is assumed to be negatively related to real wages and positively related to output. To obtain an empirical estimate of the impact of FDI on employment, the study starts by estimating a basic labor demand function. Following Vacaflores *et al.* (2012), Massoud (2008), the model can be
Specified as:

$$EMPL_t = f(WAGE, GDP, FDI) \dots \dots \dots (3.1)$$

Where
EMPL is employment
WAGE is the real wage rate
GDP is output, which at the economy level is real gross domestic product
FDI is foreign direct investment
t is the time trend
Assuming a linear relation among explanatory variable, the explicit form of equation 3.1 becomes:

$$EMPL_t = \theta_0 + \theta_1 W + \theta_2 GDP + \theta_3 FDI + \text{\euro} \dots \dots \dots (3.2)$$

θ_0 is expected to be negative, since firms would demand less labour if there is an increase in the real wage. On the other hand, θ_1 and θ_3 are expected to be positive since firms would demand more labour if output is rising.

3.2 Model Specification

MODEL 1: Addressing objective 1 and 2, to capture the impact of FDI on employment level, the error correction model using OLS technique would be employed. The functional form of the model is therefore derived from equation (3.2) above

$$N_t = f(W, Q, FDI) \dots \dots \dots (3.3)$$

Where N_t is proxied as the total employment, W is the real wage, Q is the GDP and FDI stands as it is. The linearized form of equation of equation (3.3) is gotten by taking logarithms which is thenspecified as:

$$\ln N_t = \theta_0 + \theta_1 \ln W + \theta_2 \ln Q + \theta_3 \ln FDI + \text{\euro} \dots \dots \dots (3.4)$$

where θ_0 is the error term, which is assumed to have normal properties. If there is an FDI-inducedexpansion in labour the sign of the coefficient θ_3 is expected to be positive.

The above equation can be expressed explicitly as

$$\ln EMPL_t = = \theta_0 + \theta_1 \ln WG + \theta_2 \ln GDP_t + \theta_4 \ln FDI_t + \text{\euro} \dots \dots \dots (3.5)$$

In specifying the model for this study, the estimation equation includes other variables as explanatory variable, real effective exchange rate and inflation rate, based on empirical literatures, Kareem (2010) and Salami & Oyewale (2013). They posit that real exchange rate and inflation rate are important factors that determine employment in Nigeria. The model can therefore be extended to be

$$\ln EMPL_t = = \theta_5 + \theta_1 \ln WG + \theta_2 \ln GDP_t + \theta_4 FDI_t + REX_t + INF_t \text{\euro} \dots \dots \dots (3.6)$$

where:
$EMPL_t$ = Employment to population ratio of 15+ (total % in Nigeria) at time t
WG = Real take- home wages
GDP= Gross domestic product at current basic prices (N'million)
FDI = Foreign direct investment net inflows
REX = Real exchange rate
INF = Inflation rate, consumer prices (annual %)

3.2.1 Unit Root Tests

A co-integrating relationship exists between non-stationary series, if there is a stationary linear combination between them. Therefore, one Δ needs to test stationarity of the time series first. Augmented-Dickey-Fuller (ADF) is used to determine whether or not the series are stationary.
The testing procedure for the ADF is as follows:

3.3 Estimation Procedures

The time series properties of the data will be examined in order to avoid spurious results emanating from the non-stationarity of the data series and to analyze the dynamic structure of the relationship. The estimation begins with a unit root test to confirm the stationarity states of the variables that entered the model. In order to test for stationarity of the data used in this study, the Augmented-Dickey fuller (ADF) test will be used. The first step is to test for stationarity, without constant and trend. If the variables are non- stationary, then the next step is to difference and test for the stationarity of differenced variables. If the variables become stationary after first difference then it is concluded that the variables are integrated of order one i.e 1(1).

After that, co-integrating regression will be obtained from the normalized coefficients of the model generated from co-integrating vector. If co-integration exists, the Error Correction Model (ECM) will be estimated by applying the ECM where the speed of adjustment to equilibrium will be determined. Lastly, diagnostic tests of the stochastic properties of the models would be carried out. The estimation techniques to be employed in the analysis are OLS as the basic technique and the Instrumental Variables (IV) or 2SLS estimations for possible endogeneity problem. In the presence of endogenous regressors, IV estimator is more precise and consistent than OLS estimator because they are unbiased. The Wu-Hausman Test of endogeneity of the regressors will be employed to ascertain whether or not IV regression will be appropriate and test for the validity of the instruments used.

3.4 Source of Data And Statistical Software
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.

4. RESULT AND DISCUSSION

4.1 Impact of FDI on Employment

Multiple regression and Ordinary Least Square Statistical technique were used to ascertain the extent at foreign direct investment impacts on employment.

TABLE 1: MULTIPLE REGRESSION RESULTS FOR THE IMPACT OF FDI ON EMPLOYMENT

Variable	VIF	1/VIF
Foreign Direct Investment	4.90	0.204081
Gross Domestic Product	3.10	0.322580
Wage	3.92	0.255102
Real Exchange Rate	1.96	0.510204
Inflation Rate	1.24	0.806451
Mean VIF	3.02	

Key:
VIF: Variance Inflation Factor
1/VIF: Inverse of Variance Inflation Factor

From the result above, the variance inflation factor for all the variables does not exceeds 5with the mean variance inflation factor is 3.02 meaning moderate correlation. Therefore there exists no significant multi-collinearity between the dependent variable and the independent variables. From Table 1 above. Considering k equal to 5 and degree of freedom equal to 32, the Durbin Watson statistic therefore falls in the zone of No autocorrelation; hence there exist no autocorrelation in the estimation of this model. This model therefore satisfies the condition for Multi collinearity and Auto correlation and the remedy for heteroscedasticity is applied to ensure that its necessary condition is validated. Based on the validation of these assumptions the study therefore proceeded with the estimation of the multiple regression model while employing the OLS technique. The results of the multiple regression, aimed at determining the impact of foreign direct investment on employment is presented on the table below;

TABLE 2: MULTIPLE REGRESSION RESULTS FOR THE IMPACT OF FDI ON EMPLOYMENT

Variables	Coefficients	t statistic	P value

Wage	-.000042***	-4.38	0.000
Gross Domestic Product	.0006433**	2.63	0.013
Foreign Direct Investment	-.3024253 ***	-2.87	0.007
Real Exchange Rate	-.0006981	-1.41	0.162
Inflation Rate	.0023363	0.88	0.38
Constant	58.51153	27.17	0.000
R square	0.8210		
Centered R square	0.9812		
Prob > F of overall test	0.0000		
Durbin Watson (5, 32)	1.180515		

t statistics in parentheses

* p<0.01, ** p<0.05, *** p<0.001

Table 2 above opines that, there exists a very high R square from the estimation which implies that the independent variables explain the dependent variable to a large extent, in fact up to about 85%. And the F probability of 0.000 implies that the overall estimation is significant at 1%. Therefore, the model is robust and the interpretation will illustrate real life scenario to a great extent. The result suggests that wage has a negative and significant impact on employment, given a probability value of 0.000 hence lower than 0.05 and so significant at the standard 5% significant level. In fact, units increase in wage significantly reduces employment rate by 0.000042. The negative relationship between wage and employment is expected a priori as it represents the theoretical relationship that suggests that, as wage increases, cost of production increases and therefore will lead to retrenchment of workers. On the other hand, with lower wages investors and entrepreneurs can afford to increase employment.

This theoretical underpinning is even more visible in economies like that of Nigeria where unemployment is high and so the strength of trade unionism or workers protection is weak since there exist available labour that could be credible alternatives to the labour already employed. The result also suggests that Gross Domestic product is significant at 5% given that its t-value is 2.63 (greater than 1.96), and the probability value is 0.013 (less than 0.05). This implies that GDP is a significant and positive determinant of employment in Nigeria. Units increase in GDP increases employment by 0.0006433, hence a higher coefficient than that of wage. This result is equally expected a priori since employment should naturally increase as the economy progresses. This could be explained by the fact that, GDP increase implies production increases as well as the need for more labour to sustain the increase economic growth.

Surprisingly, foreign direct investment has a significant but negative impact on employment. The probability value of 0.007, and the absolute t-value of 2.87, shows that FDI is significant at 1% and 5% significant level. One would expect that increase in FDI should stimulate economic activities in the receiving country - Nigeria in this case, and therefore create more jobs thereby increasing employment. The negative relationship however suggests the opposite implication and this could only be explained by the fact that the FDI to Nigeria is exploitative as described by some authors in the literature. That is, FDI that comes with its own man power and equipment and therefore little or no need to employ local workers especially for technical posts.

The result shows that, real exchange rate is a negative and non-significant determinant of employment in Nigeria. This implies that, the higher the exchange rate, the lower the employment rate, though not significant. Exchange rate; the price of a currency with respect to other currencies increasing means that, more Naira is given out to get other currencies which is a restrain on the Nigerian economy and hence should reduce employment indirectly. However, it is not significant in Nigeria. Just like exchange rate, inflation rate has a t-value that is less than 1.96 and a probability value that is greater than 0.38 hence not significant.

Inflation rate is therefore a positive but not a significant determinant of employment. This result is equally surprising as it suggest that the higher the inflation the higher the employment. Nevertheless, this could be explained by the faint relationship that often times exist between inflation and growth. As it is assumed that growth often comes with some degree of inflation and therefore, inflation could be increasing due to the growth increase and then lead to increase in employment. However the study notes that it is not a significant determinant of employment.

4.2 Long-Run Relationship between FDI and Employment In Nigeria

To ascertain the long run relationship between FDI and Employment the study employed the Johansen Co-integration test. To ascertain the significance of the long run relationship, the study regressed a simple model of FDI on employment and estimated the unit root of its residual. The result is as shown below;

TABLE 3: ADF CO-INTEGRATION RESULTS

ADF statistic of residual	Critical value	Order of integration
-4.634	1% = -4.122 5% = -3.468 10% = -3.3217	Stationary at 1%

The augmented Dickey fuller confirmed the Johansen co-integration by showing that, the dickey fuller of the residual is significant at 1% critical value hence there exist a significant long run relationship.

DETERMINATION OF CAUSALITY BETWEEN FDI AND EMPLOYMENT IN NIGERIA

The causality result was gotten from estimating a granger causality analysis between FDI and employment. The results are presented on Table 4.3 below;

TABLE 4: GRANGER CAUSALITY RESULTS BETWEEN FDI AND EMPLOYMENT

Equation	Excluded	DF	Prob > chi2	Direction of causality
Employment	FDI	4	0.323	Employment $\neq\rightarrow$ FDI
Employment	ALL	4	0.323	
FDI	Employment	4	0.000*	FDI $\rightarrow$ Employment
FDI	ALL	4	0.000*	

The results suggests a Uni-directional causality as FDI significantly causes employment but employment does not significantly cause FDI, given that the probability chi square for FDI causing employment is 0.000 and that for employment causing FDI is 0.443. FDI causing employment could be explained by the fact that as the FDI stimulates economic activities in the recipient countries that may create jobs hence employment

5. SUMMARY, RECOMMENDATIONAND CONCLUSION
5.1 SUMMARY
The rising unemployment rate and its persistence in developing countries and most especially in Nigeria is alarming and demands urgent policy strengthening to lessen it. The ills of unemployment are numerous and are principally characterized by high crime waves, and most governments have as one of their macroeconomic objective to reduce unemployment to their barest minimum. However, foreign direct investment has been a source of assistance in most developing countries; as such empirical as well as theoretical literatures have established a relationship between the two. It is on this premise that this study examined the impact,

causality and long run relationship between foreign direct investment and employment. The study therefore employed multiple regression, Johansen co-integration and causality to ascertain the specific objectives of the study.

The multiple regressions were estimated with the OLS technique to ascertain the impact of FDI on employment. 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 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.

To ascertain the second objective which was to examine the long run relationship between FDI and employment, the study employed the Johansen co-integration and ADF test to show that there exist a long run relationship between FDI and employment. The ADF statistic confirms that the long run relationship is significant at 1%. Meanwhile, the third objective which is to analyse the direction of causality between FDI and employment was ascertained with the aid of the granger causality and the results show that, FDI significantly causes employment but employment does not significantly cause FDI.

5.2 RECOMMENDATION

The literature on employment and/or FDI abound, however there is still need to exploit other sectors and relationships in an effort to strengthen the economy. This study examined the relationship between FDI and employment, in terms of the impact, causality and long run relationship. Other studies could therefore examine the relationship between the other international flows; remittances and official development assistance (foreign aid) and employment. This is because some of these external influences might play a vital role in creating jobs that will lessen the problem of unemployment. Also, other studies could examine the relationship between FDI and employment in Nigeria using other methods, or in other countries and economies to establish empirical evidence on this relationship. Cross country studies or panel studies could also be made with the same intention.

5.3 CONCLUSION

The increasing unemployment rate and its vices in Nigeria questions the effort/policies that have been made to combat it or the degree of its implementation. The statistics however motivated the study to investigate other means of improving the employment rate by examining its relationship with FDI. The findings of the study suggest that FDI has a significant and positive impact on employment, and other significant determinants of employment include; GDP and wage. Also the results show that there exist a significant long run relationship between FDI and employment.

Finally the results suggest that FDI granger causes employment but employment does not granger cause FDI. This means that FDI has a significant role on employment in Nigeria and this should not be minimized. The study therefore recommends that policies should be formulated to exploit the role of FDI on employment in Nigeria in an attempt to reduce unemployment rate.

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